

CATALOGUE

UNIVERSITY OF WASHINGTON

FOR 1922-1923

ANNOUNCEMENTS

FOR 1923-1924

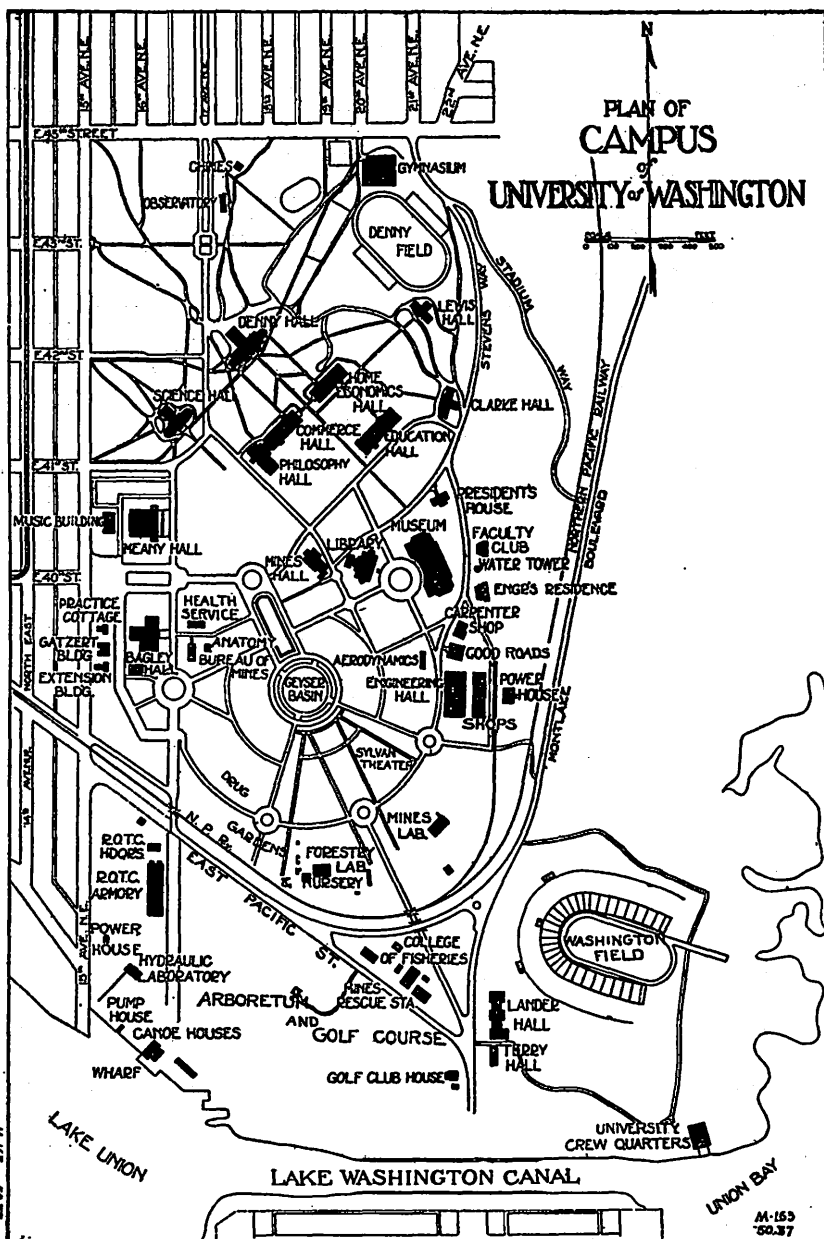


SEATTLE, WASHINGTON

Seattle
University of Washington Press
1923

NOTICE

The University and its various schools and departments reserve the right to change the rules regulating admission to the University and its schools, and any other regulations affecting the student body, or the granting of degrees. Such regulations shall go into force whenever the proper authorities may determine, and shall apply not only to prospective students, but also to those who may, at such time, be matriculated in the University. The University also reserves the right to withdraw courses at any time.



The University Campus, comprising 582 acres, lies between Fifteenth Avenue Northeast and Lake Washington, and East Forty-fifth Street and Lake Union. Ravenna and Cowen Park cars run one block west of the campus. The offices of administration are located in Education Hall and are best reached by leaving the car at East Forty-second Street and University Way.

M-153
52.37
Plan 22-1000
Revised July, 1924

CONTENTS

	Page
LOCATION OF UNIVERSITY.....	3
CALENDAR.....	6
BOARD OF REGENTS.....	7
OFFICERS OF ADMINISTRATION.....	8
FACULTY.....	11
BOARDS AND COMMITTEES.....	24
THE UNIVERSITY.....	25
Historical Sketch.....	25
Equipment.....	27
GENERAL INFORMATION.....	39
The University Organization.....	39
Admission to the University.....	41
Requirements for Admission to the University, and Colleges, and Curricula.....	42
List of Accredited Schools.....	44
Registration.....	49
Expenses.....	50
Student Help.....	54
Academic and Vocational Guidance.....	55
Degrees.....	55
Normal Diplomas.....	56
Fellowships, Scholarships and Aid.....	56
Prizes.....	58
Student Loan Funds.....	59
Associations and Clubs.....	60
General Scholastic Regulations.....	62
COLLEGE OF LIBERAL ARTS.....	69
Admission.....	70
Requirements for the degree of Bachelor of Arts.....	71
Curriculum.....	74
COLLEGE OF SCIENCE.....	75
Admission.....	77
Requirements for the degree of Bachelor of Science.....	77
Curricula.....	77
SCHOOL OF EDUCATION.....	89
Admission.....	92
Requirements for the degree of Bachelor of Education.....	92
Requirements for Normal and Life Diplomas.....	94
Curricula.....	96
LIBRARY SCHOOL.....	102
Admission.....	102
Curricula.....	103
COLLEGE OF BUSINESS ADMINISTRATION.....	104
Admission.....	105
Curricula.....	106
SCHOOL OF JOURNALISM.....	114
Admission.....	115
Curriculum.....	117
COLLEGE OF ENGINEERING.....	119
Degrees.....	120
Admission.....	121
Curricula.....	121
Engineering Experiment Station.....	124
COLLEGE OF FINE ARTS.....	125
Degrees.....	126
Admission.....	127
Curricula.....	127
COLLEGE OF FISHERIES.....	135
Degrees.....	136
Curricula.....	138
Short Course in Fisheries.....	140
COLLEGE OF FORESTRY.....	141
Degrees.....	142
Admission.....	143
Curriculum.....	143
Short Courses in Forestry.....	144
SCHOOL OF LAW.....	146
Admission.....	147
Degrees.....	147

Note.—See Index, pages 354-355, for detailed information.

CONTENTS

5

COLLEGE OF MINES.....	150
Degrees.....	151
Admission.....	153
Curricula.....	153
Winter Session.....	153
COLLEGE OF PHARMACY.....	158
Admission.....	161
Degrees.....	162
Curricula.....	163
GRADUATE SCHOOL.....	166
Admission.....	169
Degrees.....	170
DEPARTMENTS OF INSTRUCTION.....	174
Aeronautical Engineering.....	175
Anatomy.....	175
Anthropology.....	176
Architecture.....	176
Astronomy.....	178
Bacteriology.....	178
Botany.....	180
Ceramics.....	182
Chemistry.....	182
Civil Engineering.....	187
Classical Languages and Literature (Greek, Latin).....	190
Dramatic Art.....	192
Economics and Business Administration.....	193
Education.....	200
Electrical Engineering.....	204
English.....	206
Fisheries.....	210
Forestry and Lumbering.....	212
Geology.....	215
German.....	218
History.....	220
Home Economics.....	220
Journalism.....	223
Law.....	223
Liberal Arts.....	228
Library Science.....	230
Mathematics.....	231
Mechanical Engineering.....	233
Metallurgy.....	236
Military Science and Tactics.....	235
Mining.....	238
Music.....	240
Nursing.....	245
Oriental History, Literature and Languages.....	245
Painting, Sculpture and Design.....	246
Pharmacy, Pharmaceutical Chemistry, Materia Medica and Food Chemistry.....	248
Philosophy.....	249
Physical Education and Hygiene.....	251
Physics.....	255
Political Science.....	256
Psychology.....	258
Romanic Languages.....	259
Scandinavian Languages and Literature.....	263
Sociology.....	264
Zoology.....	267
Physiology.....	268
SUMMER QUARTER.....	269
PUGET SOUND BIOLOGICAL STATION.....	271
EXTENSION SERVICE.....	274
PUBLICATIONS.....	277
BIBLIOGRAPHY.....	277
DEGREES CONFERRED, 1922.....	288
SCHOLARSHIPS AND PRIZES AWARDED, 1922.....	301
UNDERGRADUATE HONORS.....	294
REGISTER OF STUDENTS.....	303
SUMMARY OF ENROLLMENT.....	352
INDEX.....	354

Note.—See Index, pages 354-355, for detailed information.

THE UNIVERSITY CALENDAR

1923-1924

AUTUMN QUARTER

Examinations for admission and for exemption from Freshman English....Wednesday, Thursday and Friday, September 26, 27, and 28
Consultation day; Blanks released 1 to 4 p.m.....Monday, October 1
Registration day.....Tuesday, October 2
Instruction begins.....Wednesday, October 3, 8 a.m.
President's Annual Address.....Friday, October 5, 10 a.m.
Regular Meeting of the Faculty.....Tuesday, October 23, 4 p.m.
Thanksgiving Recess begins.....Wednesday, November 28, 6 p.m.
Thanksgiving Recess ends.....Monday, December 3, 8 a.m.
Regular Meeting of the Faculty.....Tuesday, December 19, 4 p.m.
Examinations for Admission.....Wednesday, Thursday, and Friday, December 19, 20 and 21.
Instruction ends.....Friday, December 21, 6 p.m.

WINTER QUARTER

Consultation day; Blanks released 1 to 4 p.m.....Wednesday, January 2
Registration day.....Thursday, January 3
Instruction begins.....Friday, January 4, 8 a.m.
Regular Meeting of the Faculty.....Tuesday, January 29, 4 p.m.
Washington's Birthday, holiday.....Friday, February 22
Regular Meeting of the Faculty.....Tuesday, March 11, 4 p.m.
Examinations for Admission.....Tuesday, Wednesday and Thursday, March 18, 19 and 20.
Instruction ends.....Thursday, March 20, 6 p.m.

SPRING QUARTER

Consultation day; Blanks released 1 to 4 p.m.....Tuesday, March 25
Registration day.....Wednesday, March 26
Instruction begins.....Thursday, March 27, 8 a.m.
Campus Day.....Friday, April 18
Regular Meeting of the Faculty.....Tuesday, April 22, 4 p.m.
Memorial Day, holiday.....Friday, May 30
Regular Meeting of the Faculty.....Tuesday, June 10, 4 p.m.
Examinations for Admission.....Wednesday, Thursday and Friday, June 11, 12 and 13.
Instruction ends.....Friday, June 13, 6 p.m.
Class Day and Alumni Day.....Saturday, June 14
Baccalaureate Sunday.....Sunday, June 15
Commencement.....Monday, June 16

SUMMER QUARTER

Consultation day; Blanks released 9 to 4 p.m.....Tuesday, June 17
Registration day.....Wednesday, June 18
Instruction begins.....Thursday, June 19, 8 a.m.
Independence Day, holiday.....Friday, July 4
First term ends, second term begins.....Friday, July 25
Instruction ends.....Friday, August 29, 6 p.m.

THE BOARD OF REGENTS

RUTH KARR McKEE, President.....	Kelso
Term ends March, 1929	
WINLOCK W. MILLER, Vice-President.....	Seattle
Term ends March, 1928	
ROGER R. ROGERS.....	Spokane
Term ends March, 1928	
WERNER A. RUPP	Aberdeen
Term ends March, 1927	
OSCAR A. FECHTER	Yakima
Term ends March 1928	
JAMES H. DAVIS	Tacoma
Term ends March 1928	
GEORGE DONWORTH	Seattle
Term ends March, 1929	

WILLIAM MARKHAM, Secretary to the Board

COMMITTEES OF THE BOARD OF REGENTS

March 1923 to March 1924

AUDITING AND FINANCE.....	Davis (chairman), Miller, Rogers
BUILDINGS AND GROUNDS.....	Miller (chairman), Rupp, Donworth
EDUCATION AND COOPERATIONS.....	Donworth (chairman), McKee, Davis
LANDS AND DEMONSTRATION FOREST.....	Rupp (chairman), Fechter, McKee
METROPOLITAN LEASE.....	Fechter (chairman), Rupp, Miller
BIOLOGICAL STATION.....	Davis (chairman), Fechter, Rogers
STUDENT WELFARE.....	Rogers (chairman), McKee, Donworth

OFFICERS OF ADMINISTRATION

THE UNIVERSITY

HENRY SUZZALLO, Ph.D., LL.D.....President of the University
Education Hall

JOHN THOMAS CONDON, LL.M.....Dean of Faculties
Education Hall

HERBERT THOMAS CONDON, LL.B.....Comptroller
Education Hall

EDWARD NOBLE STONE, A.M.....Registrar
Education Hall

EDWIN BICKNELL STEVENS, A.M.....Executive Secretary
Education Hall

JAMES EDWARD GOULD, A.M.....Dean of Men
Education Hall

WINNIFRED SUNDERLIN HAGGETT, A.M.....Dean of Women
Education Hall

THE COLLEGES AND SCHOOLS

DAVID THOMSON, B.A.....Dean of the College of Liberal Arts
Denny Hall

HENRY LANDES, A.M.....Dean of the College of Science
Science Hall

HOWARD THOMPSON LEWIS, A.M.....
.....Dean of the College of Business Administration
Commerce Hall

FREDERICK ELMER BOLTON, Ph.D....Dean of the School of Education
Education Hall

CARL EDWARD MAGNUSSON, Ph.D., E.E.....
.....Dean of the College of Engineering
Engineering Hall

IRVING MACKEY GLEN, A.M.....Dean of the College of Fine Arts
Music Building

JOHN NATHAN COBB.....Director of the College of Fisheries
Fisheries Hall

HUGO WINKENWERDER, M.F.....Dean of the College of Forestry
Forest Products Laboratory

MATTHEW LYLE SPENCER, Ph.D...Director of the School of Journalism
Commerce Hall

JOHN THOMAS CONDON, LL.M.....Dean of the School of Law
Commerce Hall

WILLIAM ELMER HENRY, A.M.....Director of the Library School
Library

MILNOR ROBERTS, A.B.....Dean of the College of Mines
Mines Hall

CHARLES WILLIS JOHNSON, Ph.C., Ph.D..Dean of the College of Pharmacy
Bagley Hall

FREDERICK MORGAN PADELFORD, Ph.D...Dean of the Graduate School
Denny Hall

ASSISTANT ADMINISTRATIVE OFFICERS

LILLIAN BROWN GETTY.....Secretary to the President
 JAMES GARFIELD FLETCHER, A.B.....Vocational Secretary
 JAMES MATTHEW O'CONNOR, JR., A.B.....Editorial Secretary
 MAY WARD, A.M.....Assistant Dean of Women
 MAX HUFSON.....Assistant Purchasing Agent
 WILLIAM BEACH JONES, A.B.....Cashier
 ALMERE WILSON.....Secretary to the Comptroller
 SARAH NORRIS MARK, A.B.....Assistant Registrar
 ETHEL ORVIS REINHARD, A.B.....Secretary to the Registrar
 LOIS J. WENTWORTH, A.B.....Secretary to the Dean of the Graduate School

LIBRARY STAFF

WILLIAM ELMER HENRY, A.M., (Indiana)....Librarian and Director of the Library School
 CHARLES WESLEY SMITH, A.B., B.L.S. (Illinois).....Reference Librarian and Associate Professor of Library Economy.
 EMMA PEARL McDONNELL, A.B. (Washington).....Periodicals Librarian
 ROBINSON SPENCER, A.B. (Wesleyan), B.L.S. (Illinois).....Catalogue Librarian and Instructor in Library Economy.
 ELLEN F. HOWE, A.B. (Washington), (Carnegie Library School).....Assistant Reference Librarian and Instructor in Library Economy.
 LYDIA MCCUTCHEON, A.B. (Iowa), (Washington Library School).....Assistant Reference Librarian.
 BARBARA BOLLES COITEUX, A.B. (Boston), B.S. (Simmons)....First Assistant Cataloguer
 MARIE ALPHONSO, A.B. (Nebraska).....Circulation Librarian
 MARGUERITE PUTNAM, A.B. (Washington).....Order and Accession Librarian
 EDNA STONEBROOK, A.B. (California), (Los Angeles Library School).....First Assistant Circulation Librarian.
 MARJORIE JEANETTE ZINKIS, A.B. (Washington); (New York Public Library).....Acting First Assistant Cataloguer
 JESSIE HOTSON, A.B. (California).....First Assistant Order Librarian
 LUELLA LABSON, B.S.Second Assistant Circulation Librarian
 ELYA BATCHELLER, A.B. (Washington).....Third Assistant Reference Librarian
 LOUISE HOWARD.....Third Assistant Catalog Librarian
 BURGER LUNDELL, A.B. (Washington).....Second Assistant in Circulation
 MARIE SNED.....Assistant in Circulation

THE MUSEUM

FRANK STEVENS HALL.....Director of the Museum
 CLARENCE JOHN ALBRECHT, A.B.Curator of Zoological Exhibits
 SAMUEL F. RATHBUN.....Honorary Curator of Birds
 MARTHA FLAUBAUT, A.B.Assistant

THE EXTENSION SERVICE

EDWIN AUGUSTUS START, A.M.Director

ENGINEERING EXPERIMENT STATION

CARL EDWARD MAGNUSON, Ph.D.Director

PUGET SOUND BIOLOGICAL STATION

THEODORE CHRISTIAN FRYE, Ph.D.Director

UNITED STATES ARMY RESERVE OFFICERS' TRAINING CORPS

EARLE D'ARCY PEAROE.....Colonel, U.S.A.
 SIDNEY DERBY MALZE.....Lieut.-Colonel, Cavalry
 SAMUEL WHEELAN NOTES.....Lieut.-Colonel, Infantry
 WILLIAM DAVID FRAZER.....Major, C.A.C.
 KEITH SUMNER GREGORY.....Major, U.S.A., Retired
 EDNEY CLINTON KRESS MUELENBERG.....Major, C.A.C.
 ARTHUR EUGENE ROWLAND.....Major, C.A.C.
 HAROLD RAGAN PRIEST.....Captain, Infantry
 WILLIAM ALLEN HALE.....Captain, Infantry
 EDGAR HARRISON UNDERWOOD.....Captain, C.A.C.
 JOHN EDWARD NOLAN.....First Lieutenant, Infantry.
 BRYAN SEWALL HALTER.....Second Lieutenant, Infantry
 HARRY BARRE WHITE.....Warrant Officer, U.S.A.
 EARL THOMAS.....First Sergeant, C.A.C.
 EMIL H. WUNDERLICH.....Quartermaster Sergeant, U.S.A.

UNIVERSITY OF WASHINGTON

WALTER LANG.....	Sergeant, C.A.C.
RAY A. BAILEY.....	Sergeant, C.A.C.
CHARLES BOYLE.....	Sergeant, Infantry
LESTER A. KENT.....	Sergeant, Infantry
HARRY BECKETT.....	Sergeant, Infantry
WILLIAM G. PALMS.....	Sergeant, Infantry
PATRICK J. MAUGHAN.....	Private, First Class, Air Service
CHARLES E. FREEMAN.....	Private, First Class, C.A.C.
WILLIAM H. HONBAS.....	Private, First Class, C.A.A.

UNIVERSITY OF WASHINGTON STATION OF THE UNITED STATES FOREST SERVICE

CONRAD W. ZIMMERMAN, A.B.....	Engineer in Timber Tests, in charge
-------------------------------	-------------------------------------

NORTHWEST EXPERIMENT STATION UNITED STATES BUREAU OF MINES

CLYDE E. WILLIAMS, B.S.....	Superintendent
EDWARD P. BARRETT, B.S.....	Assistant Metallurgist
CLARENCE E. SIMS, M.S.....	Electrometallurgist
BYRON M. BIRD, B.S. in Met. E.....	Assistant Mining Engineer
BERNARD M. LARSEN, M.S.....	Junior Chemist

STATE CHEMIST

CHARLES WILLIS JOHNSON, Ph.C., Ph.D.....	State Chemist
JEAN ROBIN WILKES, B.S.....	Assistant State Chemist and Bacteriologist
FRANK A. LEE.....	Assistant State Chemist

UNITED STATES VETERANS' BUREAU REHABILITATION DIVISION

A. S. CHITTENDEN, A.B.....	In Charge
----------------------------	-----------

BUILDINGS AND GROUNDS

FREDERICK ELWELL.....	Superintendent
NORMAN DONALD MORRISON.....	General Foreman
SANDY MORROW KANE.....	Engineer
L. R. KETTENRING.....	Electrician
STANLEY O. CARPENTER.....	Head Carpenter
GEORGE WARNER.....	Head Gardener

UNIVERSITY DINING AND RESIDENCE HALLS

RUTH MARGARET LUSBY, A.M.....	Supervisor of Dining Halls
-------------------------------	----------------------------

UNIVERSITY HEALTH SERVICE

DAVID CONNOLLY HALL, M.D.....	University Health Officer
LILIAN COLLISON IRWIN, M.D.....	Medical Examiner for Women
MAUDE REEDER, R.N.....	Resident Nurse
MARY E. SHIACH, R.N.....	Public Health Nurse
VIOLET GILBERTSON.....	Nurse

UNIVERSITY FACULTY

In this list the names of the faculty are arranged in five groups—professors, associate professors, assistant professors, lecturers and associates, and instructors—followed by the names of the assistants and teaching fellows. In each of the five groups the names occur in the order of academic seniority. An alphabetical list of the faculty is given on page 15.

HENRY SUZZALLO, President of the University, *ex-officio* Chairman
EDWARD NOBLE STONE, Registrar, *ex-officio* Secretary.

PROFESSORS

HENRY LANDES
EDMOND STEPHEN MBANY
J. ALLEN SMITH
CAROLINE HAVEN ORSB
JOHN THOMAS CONDON
TREVOR KINCAID
FREDERICK MORGAN PADELFORD
MILNOR ROBERTS
WILLIAM SAVERY
FREDERICK ARTHUR OSBORN
DAVID THOMSON
CHARLES WILLIS JOHNSON
PIERRE JOSEPH FREIN
THEODORE CHRISTIAN FEYE
ROBERT EDOUARD MORIS
CARL EDWARD MAGNUSSON
HARVEY LANTZ
EVERETT OWEN EASTWOOD
WILLIAM ELMER HENRY
DAVID CONNOLLY HALL
**HERBERT HENRY GOWEN
OLIVER HUNTINGTON RICHARDSON
IVAN WILBUR GOODNER
IRVING MACKAY GLEN
EDWIN AUGUSTUS START
CHARLES CHURCH MORE
HENRY KREITZER BENSON
JOHN WEINZIERL
HUGO WINKENWERDER
VERNON LOUIS FARRINGTON

FREDERICK ELMER BOLTON
EDWIN JOHN VICHNER
EFFIE ISABEL RAITT
WILLIAM FRANKLIN ALLISON
STEVENSON SMITH
WILLIAM PIERCE GORSTUCH
CLARK FRESKOTT BISSETT
ETHEL HUNLEY COLDWELL
ALLEN ROGERS BENHAM
**LESLIE JAMES AYER
STEPHEN IVAN MILLER, JR.
FRED CARLETON AYER
JOHN NATHAN COBB
WILLIAM MAURICE DEHN
HOWARD WOOLSTON
MATTHEW LYLE SPENCER
GEORGE MOPHAIL SMITH
BRET PERSONS KIRKLAND
THOMAS KIBLER
HOWARD THOMPSON LEWIS
JAMES EDWARD GOULD
*CHARLES EDWIN WEAVER
ERIO TEMPLE BELL
GEORGE WALLACE UMPHREY
CARL FREILINGHUYSEN GOULD
JOHN LOCKE WORCESTER
HOWARD HALL PRESTON
EDGAR DUNNINGTON RANDOLPH
EARLE D'ARCY PRABOE

ASSOCIATE PROFESSORS

LOREN DOUGLAS MILLIMAN
THOMAS KAY SIDNEY
EDWARD McMAHON
CHARLES WESLEY SMITH
GEORGE SAMUEL WILSON
OTTO PATZER
CHARLES WILLIAM HARRIS
*VANDERVEER CURTIS
EDGAR ALLEN LOWE
JOSEPH DANIELS
EDWARD GODFREY COX
ALLEN FULLER CARPENTER
HENRY LOUIS BRAKEL
GEORGE BURTON RIGG
WILLIAM DANIEL MORIARTY
HARRY EDWIN SMITH

ARTHUR MELVIN WINSLOW
HARRY RUREY
*ELIAS TRENT CLARK
WILLIAM EDWARD COX
CHARLES GOGGIO
ROBERT DUNCAN MCKENZIE
ROBERT MAX GARRETT
FRIEDRICH KURT KIRSTEN
HERMAN VANCE TARTAR
ROY MARTIN WINGER
MORITZ ROSEN
ALBERT FRANZ VENINO
CARL PAIGS WOOD
ELDIN VERNÉ LYNN
HENRY AUGUST LANGENHEAN
*WALTER ISAACS

ASSISTANT PROFESSORS

EDWIN JAMES SAUNDERS
GEORGE IRVING GAVETT
ELI VICTOR SMITH
HARVEY BRUCE DENSMORE
CLARENCE RAYMOND CORSEY
GRACE GOLDENA DENNY
FRED WASHINGTON KENNEDY
ERNEST OTTO ECKELMAN
CHARLES LOUIS HELMLINGE
JOHN WILLIAM HOTSON

THERESA SCHMID McMAHON
LOUIS IRVING NEHRKE
FRANCIS DICKBY
SAMUEL HERBERT ANDERSON
SHERNO BURTON CLARK
*MACY MILLMORE SKINNER
CURT JOHN DUCASSE
BRIOR LEONARD GRONDAL
FRED HARVEY HEATH
EDWIN RAY GUTHRIE

*Absent on leave, 1922-23.

**Absent, Winter and Spring Quarters, 1922-23.

ASSISTANT PROFESSORS (continued)

18
 THOMAS GORDON THOMPSON
 VIRGINIA CUNNINGHAM PATTY
 HEWITT WILSON
 MARY EMMA GROSS
 WILLIAM FRAZER
 IRA LEONARD COLLIER
 GEORGE EDWARD GOODSPEED
 CHARLES CULBERTSON MAY
 JOHN CHARLES RATHBUN
 CURTIS TALMADGE WILLIAMS
 JOSEPH BARLOW HARRISON
 RUDOLPH HERBERT ERNST
 ROBERT WILLIAM JONES
 *MARTHA KOEHNE
 JAMES GEORGE ARBUTHNOT
 HORACE GUNTHERP
 PAUL WASHINGTON TERREY
 KEITH SUMNER GREGORY

18
 LOUIS PETER DE VRIES
 HENRY CLINTON MUEHLBERG
 SIDNEY DERRY MAIZE
 LESLIE SPIER
 HARLAN CAMERON HINES
 JAKOB AAIL OTTESSEN LARSEN
 HENRY STEPHEN LUCAS
 HAROLD PRIEST
 SAMUEL WHEELAN NOTES
 WILLIAM ALLEN HALE
 LLOYD LEROY SMAIL
 LOUISE VAN OGLE
 GORDON RUSSELL SHUCK
 HOMER EWART GREGORY
 ALEXANDER PRINGLE JAMESON
 ADDIE JEANETTE BLISS
 EDGAR HARRISON UNDERWOOD
 ARTHUR EUGENE ROWLAND

LECTURERS AND ASSOCIATES

30
 HARVEY GLENN
 JOSEPH GRATTAN O'BRYAN
 FREDERICK POWELL
 CONRAD ZIMMERMAN
 LILIAN COLLISON IRWIN
 LILIAN BLOOM
 WINNIFRED SUNDERLIN HAGGETT
 MILDEED STEUBLE
 JAMES WEHN
 EUGENIA WORMAN
 †HERMAN MUELLEMEISTER
 FRED FALCONER WELD
 AMBROSE PATTERSON
 ETHEL SANDERSON RADFORD
 MARJORIE WHIPPLE PETERSON
 JAMES MCCONAHEY
 WILLIAM BENNETT HENDERSON
 EMUEL JACOB FORMAN
 CHAUNCEY WERNECKE
 EDWIN LEONARD STRANDBERG
 PAMELIA JONES
 SYLVIA KERRIGAN
 †GERTRUDE BROWNING
 ALICE HENSON ERNST
 BERTHA ALDEN VICKNER
 *EBBA DAHLIN
 EARL WEST
 ELIZABETH SOULE
 CLARENCE EDMUNDSON
 JEANNE MERCIER

30
 CARL ZENO DRAVES
 WALDO SEMON
 CLYDE MYRON CRAMLET
 RACHEL ELIZABETH HAMILTON
 ELLA MARIE SICKELS
 ENOCH BAGSHAW
 FRANK CHESTER VAN DE WALKER
 ALEXANDER CRIPPEN ROBERTS
 RAYMOND FORRESTER FARWELL
 JAMES POSTLEWAIT ROBERTSON
 PEARCE CRANE DAVIS
 ARTHUR RUDOLPH JERBERT
 CORNELIUS OSSEWARD
 DELBERT NICKSON
 GERTRUDE KRAFT
 GUSTAF ALFRED MAGNUSSON
 NORMAN LES BURTON
 IVY BUCHANAN
 RUSSELL STANLEY CALLOW
 GEORGE SMITH
 DORSETT GRAVES
 PAUL GUSTIN
 ADAH HOPKINS AIMEE
 JANE SORRIS LAWSON
 WALTER EDWARD ROLOFF
 JOSEF WASHINGTON HALL
 JAMES MATTHEW O'CONNOR, JR.
 MAYBELLE ABBOTT PRASS
 ALICE COLEMAN BOGARDUS
 ALFRED JOHN SCHWEPPE

INSTRUCTORS

16
 WALTER BELL WHITTLESLEY
 †FRANK JOSEPH LAUBE
 *HAROLD OGDEN SEXSMITH
 ALLETTA GILLETTE
 ALBERT PORTER ADAMS
 *ANNETTE EDENS
 ROBERT FULTON MCCELLAND
 JAMES BAKER HAMILTON
 MARTHA DRESSLAR
 FOREST JACKSON GOODRICH
 CLINTON LOUIS UTTERBACH
 ROBINSON SPENCER
 †ELLEN HOWE
 CLARENCE LOUIS ANDERSON
 RALPH MASON BLAKE
 GEORGE KROENER

16
 WILLIAM RONALD WILSON
 HARRY JOHN MCINTYRE
 JOSEPH TAYLOR
 ROBERT QUIKOTE BROWN
 FOREST CHARLES DANA
 LOU EASTWOOD ANDERSON
 *ELEANOR CAMPBELL
 EILENE FRENCH
 *GLENN ARTHUR HUGHES
 KARL ELIAS LEIB
 RUTH MARGARET LUSBY
 FREDERICK ANSTEN McMILLIN
 WILLARD HENRY ELLER
 *GEORGE WHITWELL
 SARGENT POWELL
 HENRY STAGER

*Absent on leave, 1922-23.
 †Absent Fall Quarter, 1922-23.
 †Absent Fall and Winter Quarters, 1922-23.
 †Resigned December 30, 1922.
 †Absent Winter Quarter, 1922-23.
 *Resigned February 28, 1923.
 †Resigned March 31, 1923.

INSTRUCTORS (continued)

OSCAR ELDRIDGE DRAPER
JOHN GERALD DRISCOLL, JR.
ELLA JANE TRULLINGER
WILLIAM WOODBRIDGE EDDY
BYRON TOWNSEND MCMINN
ROBERT HAROLD EDMONDS
GINO VINCENT MEDICI DE SOLENNI
ALBERT KALIN
GEORGE Lisle HOARD
CLARENCE LESTER WHITE
ELGIN ROSCOE WILCOX
JACK RODERICK TOLMIE
MARY LAURA AID
FRANK HARTMOND HAMACK
MILLETT HENSHAW
OMEGA HILTON
GEORGE SHERMAN SMITH
ADA TILLEY

BRYAN SEWALL HALTER
JOHN EDWARD NOLAN
WILLIAM RUSSELL
KENNETH PEARCE
ZALIA JENCKS GAILLY
HELEN FERRYMAN
JOHN VICTOR FARRAR
HELEN RHODES
MARCUS ALBERT HANNA
DONALD RUSSELL CRAWFORD
MARY ELIZA LACY
LEO ARTHUR BORAH
HERBERT AMIL WALDKOENIG
WARREN LORD BEUSCHLEIN
GILBERT SIMON SCHALLER
ALBERT LOVEJOY
ALBAN AURELIUS SHAY

ASSISTANTS

LOUISE DOW BENTON, B.Mus. Music
RUFUS BRELAND A.B. Debating Coach
CLARA BURCH, B.Mus. Music
RHODECA COOPER, A.B. Philosophy
ELMA DICK. Accompanist in Music
MARJORIE FORCHEMER A.B. Physical Education
PAUL HIGGS, B.S. Physics
WILLIAM JEFFERSON. Golf Teacher
EDITH MORRISON JOHNSON, M.S. Bacteriology
FRANK LEE. Assistant State Chemist
BETH MCCAUSLAND, A.B. English
LESLIE MARCHAND, A.B. English
ESTHER MOHR, A.M. English
LEE NEWMAN. Business Administration
ORRE NELSON NOBLES. Fine Arts
MAUDE PARSON, R.N. Nursing
ECHO PEPPER, M.S. Mathematics
ANNA ALFRED STORM. Design
CLAYTON SULLIVAN. Engineering Shops
HAZEL WAGHTER. Accompanist in Music
ROBIN JEAN WILKES, B.S. Assistant State Chemist
MADGE WILKINSON, M.S. Gatzert Foundation
FLORENCE BERG WILSON, B.Mus. Music
FREDERICK WOODBRIDGE, B.B.A. Business Administration

TEACHING FELLOWS

WILLIAM WILSON, B.S. Physics
KIRSTEN NEWBERRY, B.S. Physics
FRANK JOHN STUDER, A.B. Physics
LOIS GRIFFITHS, B.S. Mathematics
JESSE HUGO FELDMAN, A.B. English
WILFORD GUNDLACH, A.B. English
EDWART DEWART LEWIS, A.B. English
AMY VIOLET HALL, B.Ed. English
LOIS BROWN, A.B. English
ADELAIDE FAIRBANKS, A.B. English
LURLINE SIMPSON, A.B. Romanic Languages
GERMAINE MERCIER, B.S. Romanic Languages
ALMIRA BONHAM, B.L. Romanic Languages
HILDA ROSEN, B.S. Zoology
FRANK FOSTER, B.S. Zoology
CONSTANCE WEST, B.S. Chemistry
FERNLEY TATUM, A.B. Chemistry
PHILIP WHITE, A.M. Botany
ALEXIA REUTER, B.S. Botany
LENA HARTGE, B.S. Botany
GRANT BUTTERBAUGH, A.B. Business Administration
WILLIAM DICKERSON, B.B.A. Business Administration
CECIL LEONARD HUGHES, B.Ed. Education
HARRY KENIN, A.B. Political Science
WILLIAM GRIFFITHS, LL.B. Psychology
NANCY BAILEY, B.S. Psychology
M. WESLEY ROPER, B.Ed. Sociology
CARL NEWBURY, B.B.A. Business Administration
RUTH HOFFMAN, B.B.A. Business Administration

UNIVERSITY OF WASHINGTON

GRADUATE SCHOLARS

2 NELLIE TEGLUND, B.A. in Ed.....Business Administration
 EARL K. SWEET, B.B.A.....Business Administration

RESEARCH FELLOWS

5 HAROLD E. MESSMORE, B.S.....Mining (Coal Washing)
 JOHN CURZON, B.S.....Mining (Coal Washing)
 LELAND K. COWIE, B.S.....Mining (Electrometallurgy)
 HENRY C. FISHER, B.S.....Mining (Electrometallurgy)
 FREDERIC W. SCHROEDER, A.B.....Mining (Ceramics)

LORETTA DENNY FELLOWS

3 CYRIL DEAN HILL, A.B.....Economics
 PETER H. ODEGARD, A.B.....Political Science
 HOWARD PERCY ROBERTSON, A.B.....Mathematics

ARTHUR A. DENNY FELLOWS

1/ DUDLEY WILSON WILLARD, B.Ed.....Education
 SUSANNAH JANE MCMURPHY, A.B.....English
 ALICE WINIFRED SPIESBEKE, B.Ed.....History
 RUTH MAGDALENE DAVIS, B.S.....Pharmacy

DUPONT FELLOWSHIP

1 MELVILLE F. PERKINS, B.S. (Chem. Eng.).....Chemistry

BON MARCHE INDUSTRIAL FELLOWSHIP

MARY ALBEN DAVIS

COLUMBIA UNIVERSITY FELLOWSHIP IN MINING ENGINEERING AND CHEMISTRY

(Not yet awarded)

15

ALPHABETICAL LIST OF THE UNIVERSITY FACULTY

HENRY SUZZALLO.....	President of the University A.B., Stanford, 1899; A.M., Columbia, 1902; Ph.D., 1905; LL.D., California, 1918.
ALBERT PORTER ADAMS.....	Instructor in Music
MARY LAURA AID.....	Instructor in Physical Education A.B., Wisconsin, 1920.
ADAM HOPKINS AIME.....	Associate in Sociology A.B., Grinnell, 1905.
WILLIAM FRANKLIN ALLISON.....	Professor of Municipal and Highway Engineering B.S., South Dakota State College, 1895; B.S. (C.E.), Purdue, 1897; C.E., Cornell, 1904.
CLARENCE LOUIS ANDERSON.....	Instructor in Fisheries B.S., Washington, 1917.
LOU EASTWOOD ANDERSON.....	Acting Instructor in Physical Education Valparaiso; Washington.
SAMUEL HERBERT ANDERSON.....	Assistant Professor of Physics A.B., Park College, 1902; A.M., 1903; Ph.D., Illinois, 1912.
JAMES ARBUTHNOT.....	Assistant Professor and Director of Physical Education for Men B.S., Kansas State College, 1904.
FRED CARLETON AYER.....	Professor of Education B.S., Upper Iowa, 1902; M.S., Georgetown, 1905; Ph.D., Chicago, 1915.
LESLIE JAMES AYER.....	Professor of Law B.S., Upper Iowa, 1899; J.D., Chicago, 1908.
ENOCH BAGSHAW.....	Associate in Physical Education B.S. (Met. E.), Washington, 1908.
ERIC TEMPLE BELL.....	Professor of Mathematics A.B., Stanford, 1904; A.M., Washington, 1908; Ph.D., Columbia, 1912.
ALLEN ROGERS BENHAM.....	Professor of English A.B., Minnesota, 1900; A.M., 1901; Ph.D., Yale, 1905.
HENRY KERITZER BENSON.....	Professor of Chemical Engineering A.B., Franklin and Marshall, 1889; A.M., 1902; Ph.D., Columbia, 1907.
WARREN LORD BEUSCHLEIN.....	Acting Instructor in Chemistry B.S. in Ch.E., California Institute of Technology, 1920.
CLARK PRESSCOTT BISSETT.....	Professor of Law A.B., Hobart College, 1896.
RALPH MASON BLAKE.....	Instructor in Philosophy A.B., Williams College, 1911; A.M., Harvard, 1912; Ph.D., 1915.
ADDIE JEANETTE BLISS.....	Assistant Professor of Home Economics A.B., Washington, 1906; A.M., Columbia, 1917.
LILIAN BLOOM.....	Associate in Physical Education Graduate, Medical Gymnastic Institute, Stockholm.
ALICE COLEMAN BOGARDUS.....	Associate in Music B.L., Mills, 1913.
FREDERICK ELMER BOLTON.....	Professor of Education and Dean of the School of Education B.S., Wisconsin, 1893; M.S., 1896; Ph.D., Clark, 1898.
LEO ARTHUR BORAH.....	Instructor in Journalism A.B., Huron College, 1913.
HENRY LOUIS BRAEHL.....	Associate Professor in Engineering Physics A.B., Olivet, 1902; A.M., Washington, 1905; Ph.D., Cornell, 1912.
ROBERT QUIKOTE BROWN.....	Instructor in Civil Engineering B.S. (E.E.), Washington, 1916.
GERTRUDE BROWNING.....	Associate in English A. B., Cornell, 1910; A.M., Columbia, 1914.
IVY BUCHANAN.....	Associate in History A.B., Washington, 1907; A.M., 1920.
NORMAN LEE BURTON.....	Lecturer on Business Administration A.B., Williams, 1911; M.B.A., Harvard, 1917; C.P.A., 1920.

- RUSSELL STANLEY CALLOW.....Associate in Physical Education
A.B., Washington, 1916.
- ELKANOR CAMPBELL.....Instructor in Design
School of Industrial Arts, Pennsylvania Museum, Philadelphia.
- ALLEN FULLER CARPENTER.....Associate Professor of Mathematics
A.B., Hastings, 1901; A.M. Nebraska, 1909; Ph.D., Chicago, 1915.
- ELIAS TRBAT CLARK.....Associate Professor of Forestry
Ph.B., Yale, 1907; M.F., 1908.
- SERENO BURTON CLARK.....Assistant Professor of Latin and Greek
A.B., Michigan, 1901; Ph.D., Harvard, 1907.
- JOHN NATHAN COBB.....Professor of Fisheries and Director of the College of Fisheries
- ETHEL HUNLEY COLDWELL.....Dean of Women
B.L., Mills College, 1894; A.M., Stanford, 1899.
- IRA LEONARD COLLIER.....Assistant Professor of Civil Engineering
B.S., (C.E.), Washington, 1913; C.E., 1917.
- JOHN THOMAS CONDON..Professor of Law, Dean of the School of Law, and Dean of
Faculties.
LL.B., Michigan, 1891; LL.M., Northwestern, 1892.
- CLARENCE RAYMOND CORBY.....Assistant Professor of Mining and Metallurgy
E.M., Montana State School of Mines, 1905; A.M., Columbia, 1915.
- EDWARD GODFREY COX.....Associate Professor of English
A.B., Wabash, 1899; A.M., Cornell, 1901; Ph.D., 1906.
- WILLIAM EDWARD COX.....Associate Professor of Business Administration
A.B., Texas, 1909; A.M., 1910.
- CLYDE MYRON CRAWLEY.....Associate in Mathematics
A.B., Walla Walla College, 1915; M.S., Washington, 1920.
- DONALD RUSSELL CRAWFORD.....Instructor in Fisheries
B.S., Washington, 1923.
- VANDEVERE CUSTIS.....Associate Professor of Economics
A.B., Harvard, 1901; A.M., 1902; Ph.D., 1905.
- EBBA DAHLIN.....Associate in History
A.B., Washington, 1919; A.M., 1922.
- FOREST CHARLES DANA.....Instructor in Civil Engineering
B.S., (C.E.), Washington, 1914.
- JOSEPH DANIELS.....Associate Professor of Mining Engineering and Metallurgy
S.B., Massachusetts Institute of Technology, 1905; M.S., Lehigh, 1908.
- PEARCE CRANE DAVIS.....Lecturer on Accounting
C.P.A., 1914.
- WILLIAM MAURICE DEHN.....Professor of Organic Chemistry
A.B., Hope, 1893; A.M., 1896; Ph.D., Illinois, 1903.
- GRACE GOLDENA DENNY.....Assistant Professor of Home Economics
A.B., Nebraska, 1907; A.M., Columbia, 1919.
- HARVEY BRUCE DENSMORE.....Assistant Professor of Greek
A.B., Oxford, 1907.
- LOUIS PETER DE VRIES.....Assistant Professor of Romanic Languages
A.M., Wisconsin, 1911; Ph.D., 1913.
- FRANCES DIOKEY.....Assistant Professor of Music
Graduate, Iowa State Teachers College, 1901; B.S., Columbia, 1912; A.M., 1913.
- OSCAR ELDREDGE DRAPER.....Instructor in Business Administration
M.Acct., Vories Business College.
- CARL ZENO DRAVES.....Associate in Chemistry
B.S., (C.E.), Washington, 1917; M.S., 1922.
- MARTHA ESTELLA DRESSLAR.....Instructor in Home Economics
B.A., Southern California, 1913; B.S., Washington, 1917; M.S., Columbia, 1918.
- JOHN GERALD DRISCOLL, JR.....Instructor in Accounting
A.B., Stanford, 1918; LL.B., 1920.
- CURT JOHN DUCASSE.....Assistant Professor of Philosophy
A.B., Washington, 1908; A.M., 1909; Ph.D., Harvard, 1912.

- EVERETT OWEN EASTWOOD.....Professor of Mechanical Engineering
C.E., Virginia, 1896; A.B., 1897; A.M., 1899; S.B., Massachusetts Institute of
Technology, 1902.
- ERNEST OTTO ECKELMAN.....Assistant Professor of German
A.B., Northwestern (Watertown, Wis.), 1897; B.L., Wisconsin, 1898; Ph.D.,
Heidelberg, (Germany), 1906.
- WILLIAM WOODBRIDGE EDDY.....Instructor in History
A.B., Princeton, 1911; A.M., Harvard, 1914.
- ANNETTE EDENS.....Instructor in Drawing
New York School of Fine and Applied Arts, Columbia.
- ROBERT HAROLD GRAY EDMONDS.....Instructor in Mechanical Engineering
B.S., Whitman, 1915; B.S. (M.E.), Washington, 1922.
- CLARENCE EDMUNDSON.....Associate in Physical Education
B.S., Idaho, 1910.
- WILLARD HENRY ELLER.....Instructor in Physics
B.S. (E.E.), California, 1914.
- ALICE HENSON ERNST.....Associate in English
A.B., Washington, 1912; A.M., 1913.
- RUDOLF HERBERT ERNST.....Assistant Professor of English
A.B., Northwestern, (Watertown, Wis.), 1904; A.M., Harvard, 1911; Ph.D., 1920.
- VICTOR JOHN FARRAR.....Instructor in History
A.B., Wisconsin, 1911; A. M., 1912.
- RAYMOND FORREST FARWELL.....Associate in Maritime Commerce
A.B., California, 1920.
- EILEEN FERRYMAN.....Instructor in Music
B.Mus., Washington, 1918.
- EMUEL JACOB FORMAN.....Extension Lecturer on Water Transportation
- WILLIAM DAVID FRAZER, Major, C.A.C., U.S.A., Assistant Professor of Military Science and
Tactics
B.S., (C.E.), Michigan Agricultural College, 1909.
- PIERRE JOSEPH FREIN.....Professor of Romanic Languages
A.B., Williams, 1892; Ph.D., Johns Hopkins, 1899.
- EILENE FRENCH.....Instructor in Music
B.Mus., Washington, 1916; A.M., Columbia, 1920.
- THEODORE CHRISTIAN FRYE.....Professor of Botany
B.S., Illinois, 1894; Ph.D., Chicago, 1902.
- ZALIA JENCKS GALEY.....Acting Instructor in Chemistry
B.S., Chicago, 1913; M.S., Washington, 1916; Ph.D., Yale, 1921.
- ROBERT MAX GARRETT.....Associate Professor of English
A.B., Idaho, 1902; A.M., Washington, 1903; Ph.D., Munich, 1909.
- GEORGE IRVING GAVETT.....Assistant Professor of Mathematics
B.S., (C.E.), Michigan, 1898.
- ALLETTA GILLETTE.....Extension Instructor in English
A.B., Smith, 1907; A.M., Washington, 1911.
- IRVING MACKAY GLEN.....Professor of Music; Dean of the College of Fine Arts
A.B., Oregon, 1894; A.M., 1897.
- HARVEY GLENN.....Lecturer in Assaying of Bullion
B.S., Iowa State College.
- CHARLES GOGGIO.....Associate Professor of Romanic Languages
A.B., Harvard, 1910; A.M., Wisconsin, 1914; Ph.D., 1919.
- IVAN WILBUR GOODNER.....Professor of Law
LL.B., Nebraska, 1897.
- FOREST JACKSON GOODRICH.....Instructor in Pharmacy and Materia Medica
Ph.C., Washington, 1913; B.S., 1914; M.S., 1917.
- GEORGE HOWARD GOODSPEED, JR.....Assistant Professor of Geology
B.S., (Min.E.), Massachusetts Institute of Technology, 1910.
- WILLIAM PIERCE GORSUCH.....Professor of Dramatic Art
A.B., Knox, 1898.
- CARL FRELINGHUYSEN GOULD.....Professor of Architecture
A.B., Harvard, 1898.

- JAMES EDWARD GOULD**.....Professor of Maritime Commerce and Dean of Men
B.Ph., Washington, 1896; B.Pd., 1898; M.A., Harvard, 1907.
- HERBERT EDWIN GOWEN**.....Professor of Oriental History, Literature and Institutions
St. Augustine's College (Canterbury); D.D., Whitman College, 1912.
- DORSETT GRAVES**.....Associate in Physical Education
Missouri.
- HOMER EWART GREGORY**.....Assistant Professor of Business Administration
A.B., Washington State College, 1914; A.M., Chicago, 1917.
- KEITH SUMNER GREGORY**, Captain, Infantry, U.S.A., Assistant Professor of Military
Science and Tactics.
Graduate, U.S. Military Academy, 1903.
- BROD LEONARD GRONDAL**.....Assistant Professor of Forestry
A.B., Bethany (Kansas), 1910; M.S.F., Washington, 1913.
- MARY EMMA GROSS**.....Assistant Professor and Director of Physical Education for Women
A.B., Goucher College, 1912; A.M., Columbia, 1915.
- HORACE GUNTHERP**.....Assistant Professor of Zoology
Ph.B., Hamline, 1905; A.B., Stanford, 1909; A.M., Kansas, 1912.
- PAUL GUSTIN**.....Associate in Fine Arts
- EDWIN RAY GUTHRIE**.....Assistant Professor of Psychology
A.B., Nebraska, 1907; A.M., 1910; Ph.D., Pennsylvania, 1912.
- WINNIFRED SUNDERLIN HAGGETT**.....Associate in English
A.B., Olivet, 1897; A.M., Michigan, 1898.
- WILLIAM ALLEN HALE**, Captain, Inf., D.O.L., Assistant Professor of Military Science and
Tactics.
Graduate, American College of Physical Education.
- DAVID CONNOLLY HALL**.....University Health Officer and Professor of Hygiene
Ph.B., Brown, 1901; Sc.M., Chicago, 1903; M.D., Rush Medical College, 1907.
- JOSEF WASHINGTON HALL**.....Lecturer on Oriental Institutions
A.B., Washington College (D.C.), 1915.
- BRYAN SEWALL HALTER**, First Lieutenant, Infantry, D.O.L., Instructor in Military Science
and Tactics.
Graduate, U.S. Military Academy, 1918.
- FRANK HARTMOND HAMAOK**.....Instructor in Business Administration
LL.B., Georgetown, 1916.
- JAMES BAKER HAMILTON**.....Instructor in Civil Engineering
Washington.
- RACHEL ELIZABETH HAMILTON**.....Associate in French
B.L., Whitman, 1910.
- MARCUS ALBERT HANNA**.....Instructor in Geology
A.B., Kansas, 1920; Ph.D., California, 1922.
- CHARLES WILLIAM HARRIS**.....Associate Professor of Civil Engineering
B.S., (C.E.), Washington, 1903; C.E., Cornell, 1905.
- JOSEPH BARLOW HARRISON**.....Assistant Professor of English
A.B., Washington, 1910; A.B., Oxford, 1913.
- FRED HARVEY HEATH**.....Assistant Professor of Chemistry
B.S., New Hampshire, 1905; Ph.D., Yale, 1909.
- CHARLES LOUIS HELMLINGE**.....Assistant Professor of Romance Languages
B.Ph., Wallace College (Ohio), 1911; A.M., Washington, 1915.
- WILLIAM BENNETT HENDERSON**.....Lecturer on Business Administration
A.B., Princeton Collegiate Institute, 1891; LL.B., Cumberland, 1892; LL.M., George
Washington University, 1906.
- WILLIAM ELMER HENRY**.....Librarian and Director of the Library School
A.B., Indiana, 1891; A.M., 1892.
- MILLET HENSHAW**.....Instructor in English
A.B., Colorado, 1915; A.B., Stanford, 1916.
- OMEGA HILTON**.....Instructor in Pharmacy
Ph.C., Washington, 1915; B.S., 1917; M.S., 1921.
- HARLAN CAMERON HINES**.....Assistant Professor of Education
A.B., Wabash, 1913; A.M., Iowa, 1917; Ph.D., 1920.
- GEORGE LISLE HOARD**.....Instructor in Electrical Engineering
B.S., (E.E.), Washington, 1917.

- JOHN WILLIAM HOTSON.....Assistant Professor of Botany
A.B., McMaster, 1901; A.M., 1902; Ph.D., Harvard, 1913.
- ELLEN FORD HOWE.....Assistant Reference Librarian and Instructor in Library Economy
A.B., Washington, 1911; Carnegie Library School.
- GLENN ARTHUR HUGHES.....Instructor in Dramatic Art
A.B., Stanford, 1916; A.M., Washington, 1920.
- LILIAN COLLISON IRWIN.....Lecturer on Physical Education for Women
M.D., Cooper Medical College, 1898.
- WALTER ISAACS.....Associate Professor of Fine Arts
and Head of the Department of Painting, Sculpture and Design.
B.S., James Milliken, 1909.
- ALEXANDER PRINGLE JAMESON.....Associate Professor of Zoology
B.S., Aberdeen, (Scotland) 1911; D.Sc., 1920.
- ARTHUR RUDOLPH JERBERT.....Associate in Mathematics
B.S., Washington, 1916.
- CHARLES WILLIS JOHNSON.....Professor of Pharmaceutical Chemistry
and Dean of the College of Pharmacy.
Ph.C., Michigan, 1896; B.S., 1900; Ph.D., 1903.
- PAMELIA PEARL JONES.....Associate in English
A.B., Iowa, 1906; A.M., 1908.
- ROBERT WILLIAM JONES.....Assistant Professor of Journalism
A.B., Missouri, 1906; LL.B., 1913; A.M., South Dakota, 1918.
- ALBERT KALIN.....Instructor in Electrical Engineering
B.S., Washington, 1919.
- FRED WASHINGTON KENNEDY.....Assistant Professor
and Director of the Journalism Laboratories.
- SYLVIA FINLAY KERRIGAN.....Associate in English
A.B., Washington, 1919.
- THOMAS LATIMER KIBLER.....Professor of Transportation
A.B., Randolph Macon, 1904; A.M., George Washington, 1909; Ph.D., 1913.
- TREVOR KINCAID.....Professor of Zoology
B.S., Washington, 1899; A.M., 1901.
- GEORGE KIRCHNER.....Instructor in Music
Leipzig.
- BURT PERSONS KIRKLAND.....Professor of Forestry
A.B., Cornell, 1905.
- FRIEDRICH KURT KIRSTEN.....Associate Professor of Electrical Engineering
B.S., Washington, 1909; E.E., 1914.
- MARTHA KOEHN.....Assistant Professor of Home Economics
A.B., Ohio State, 1908; A.M., 1910.
- GERTRUDE KRAFFT.....Associate in German
A.B., Washington State College, 1918.
- MARY ELIZA LACY.....Instructor in Interior Decoration
B.S., Columbia, 1922.
- HENRY LANDES.....Professor of Geology and Mineralogy and Dean of the College of Science
A.B., Indiana, 1892; A.B., Harvard, 1892; A.M., 1893.
- HENRY AUGUST LANGENHAN.....Associate Professor of Pharmacy
Ph.G., Illinois, 1908; Ph.C., 1909; B.S., Wisconsin, 1913; M.S., 1915; Ph.D., 1918.
- HARVEY LANTZ.....Professor of Law
Ph.B., De Pauw, 1888; A.M., 1891; LL.B., Kent Law School, 1893.
- JAKOB AALL OTTESSEN LARSEN.....Assistant Professor of History
A.B., Luther College, 1908; A.M., Iowa, 1910; A.B., Oxford, 1914; A.M., 1920.
- FRANK JOSEPH LAUBE.....Instructor in Political Science
A.B., Wisconsin, 1899; A.M., Washington, 1913.
- JANE SORRIS LAWSON.....Associate in English
A.M., St. Andrews (Scotland)
- KARL ELIAS LIEB.....Instructor in Business Administration
A.B., Stanford, 1916.
- HOWARD THOMPSON LEWIS.....Professor of Business Administration
A.B., Lawrence College, 1910; A.M., Wisconsin, 1911.
- EDGAR ALLEN LOEW.....Associate Professor of Electrical Engineering
B.S., (E.E.), Wisconsin, 1906; E.E., 1922.

- ALBERT LOVEJOY.....Acting Instructor in Dramatic Art Graduate, Emerson College of Oratory.
- HENRY STEPHEN LUOAS.....Assistant Professor of History A.B., Olivet, 1918; A.M., Indiana, 1915; Ph.D., Michigan, 1921.
- RUTH MARGARET LUSBY.....Instructor in Institutional Management B.S., Washington, 1918; A.M., Columbia, 1920.
- ELDIN VERNB LYNN.....Associate Professor of Pharmacology and Chemistry A.B., Washington, 1909; A.M., Wisconsin, 1910; Ph.D., 1918.
- ROBERT FULTON MCCLELLAND.....Instructor in Architecture Massachusetts Institute of Technology.
- JAMES MCCONAHEY.....Lecturer on Business Administration B.S., Washington and Jefferson, 1896; M.S., 1899; LL.B., Northwestern, 1899.
- HARRY JOHN MCINTYRE.....Instructor in Mechanical Engineering B.S., (M.E.), Washington, 1915.
- RODERICK DUNCAN MCKENZIE.....Associate Professor of Sociology A.B., Manitoba, 1912; Ph.D., Chicago, 1920.
- EDWARD McMAHON.....Associate Professor of American History Ph.B., Washington, 1898; A.M., Wisconsin, 1907.
- THERESA SCHMID McMAHON.....Assistant Professor of Economics A.B., Washington, 1899; A.M., 1901; Ph.D., Wisconsin, 1909.
- FREDERICK ANSTEN McMILLIN.....Acting Instructor in Chemistry A.B., Williamette, 1916; M.S., 1917.
- BRYAN TOWNE McMINN.....Instructor in Mechanical Engineering B.S., Oregon Agricultural College, 1918.
- CARL EDWARD MAGNUSSON.....Professor of Electrical Engineering and Dean of the College of Engineering B.B.E., Minnesota, 1896; M.S., 1897; E.E., 1905; Ph.D., Wisconsin, 1900.
- GUSTAF ALFRED MAGNUSSON.....Lecturer on Bacteriology A.B., New Mexico, 1903; M.D., Minnesota, 1908.
- SIDNEY DERRY MAIZE....Major, U.S.A., Assistant Professor of Military Science and Tactics
- CHARLES CULBERTSON MAY.....Assistant Professor of Civil Engineering B.S., (C.E.), Washington, 1910.
- EDMOND STEPHEN MEANY.....Professor of History B.S., Washington, 1885; M.S., 1899; M.L., Wisconsin, 1901.
- GINO VINCENT MEDICI DE SOLENNI.....Instructor in Romanic Languages A.B., Ohio State, 1914; A.M., 1915.
- JEANNE AIMED MERCIER.....Associate in French B.S., Whitman, 1920.
- STEPHEN IVAN MILLER.....Professor of Economics and Dean of the College of Business Administration LL.B., Michigan, 1896; A.B., Stanford, 1898.
- LOREN DOUGLAS MILLMAN.....Associate Professor of English A.B., Michigan, 1890.
- CHARLES CHURCH MORE.....Professor of Civil Engineering C.E., Lafayette, 1898; M.C.E., Cornell, 1899; M.S., Lafayette, 1901.
- WILLIAM DANIEL MORIARTY.....Associate Professor of Business Administration A.B., Michigan, 1904; A.M., 1905; Ph.D., 1909.
- ROBERT EDOUARD MORITZ.....Professor of Mathematics B.S., Hastings, 1892; Ph.M., Chicago, 1896; Ph.D., Nebraska, 1901; Ph.N.D., Strassburg, 1902.
- HENRY CLINTON KRESS MUHLENBERG.....Major A.S. U.S.A., Assistant Professor of Military Science and Tactics. Graduate, U.S. Military Academy, 1908.
- HERMANCE MULLENBISTER.....Associate in Mathematics Phil.Cand., Royal University of Utrecht, Holland, 1910; Ph.D., 1913.
- LEWIS IRVING NEIKERK.....Assistant Professor of Mathematics B.S., Colorado, 1898; M.S., 1901; Ph.D., Pennsylvania, 1903.
- DELBERT NICKSON.....Lecturer on Pathology B.S., Wisconsin, 1913; M.D., Oregon, 1917.
- JOHN EDWARD NOLAN.....First Lieutenant, Inf., D.O.L., Instructor in Military Science and Tactics A.B., St. Joseph's College, 1909.

UNIVERSITY FACULTY

21

SAMUEL WHEELAN NOYES.....	Lieutenant Colonel, Inf., D.O.L., Assistant Professor of Military Science and Tactics.
JAMES MATTHEW O'CONNOR, JR.....	Editorial Secretary and Associate in Journalism A.B., Washington, 1921.
CAROLINE HAVEN OBER.....	Professor of Spanish
JOSEPH GRATTAN O'BRYAN.....	Lecturer on Law A.B., Jesuit College (Denver), 1893.
FREDERICK ARTHUR OSBORN.....	Professor of Physics and Director of Physics Laboratories Ph.B., Michigan, 1896; Ph.D., 1907.
CORNELIUS OSSEWARD.....	Lecturer on Pharmacy Ph.G., Columbia, 1892; Ph.C., Northwestern, 1896.
FREDERICK MORGAN PADELFORD.....	Professor of English and Dean of the Graduate School A.B., Colby, 1896; A.M., 1899; Ph.D., Yale, 1899.
VERNON LOUIS PARRINGTON.....	Professor of English A.B., Harvard, 1893; A.M., Emporia, 1895.
AMBROSE PATTERSON.....	Associate in Fine Arts Melbourne National Gallery, Victoria, Australia; Julien, Colorossi and Delocluse Academies, Europe.
VIRGINIA CUNNINGHAM PATTY.....	Assistant Professor of Home Economics Industrial Institute and College, Columbus, Mo., Shugualak College, Miss.; Teachers College, Columbia.
OTTO PATZER.....	Associate Professor of French B.L., Wisconsin, 1898; M.L., 1899; Ph.D., 1907.
JOHN KENNETH PEARCE.....	Acting Instructor in Forestry B.S.F., Washington, 1921.
EARL D'ARCY PEARCE.....	Col., U.S.A., Professor of Military Science and Tactics Graduate, U.S. Military Academy, West Point, 1897.
MARJORIE WHIFFLE PETERSON.....	Associate in Chemistry A.B., Colorado, 1917.
FREDERICK POWELL.....	Lecturer on Gold Dredging E.M., Columbia.
SARGENT POWELL.....	Instructor in Chemistry B.S., M.S., Washington, 1916; Ph.D., Illinois, 1919.
HAROLD PRIEST.....	Captain, U.S.A., Assistant Professor of Military Science and Tactics Washington.
HOWARD HALL PRESTON.....	Professor of Business Administration B.S., Coe, 1911; A.M., Iowa, 1914; Ph.D., 1920.
ETHEL SANDBERSON RADFORD.....	Associate in Chemistry A.B., McGill, 1895.
EFFIE ISABEL RAITT.....	Professor of Home Economics B.S., Columbia, 1912; A.M., 1919.
EDGAR DUNNINGTON RANDOLPH.....	Professor of Education Graduate, Eastern Illinois State Normal School, 1905; A.B., Denver, 1911; A.M., Columbia, 1915; Ph.D., 1922
JOHN CHARLES RATHBUN.....	Assistant Professor of Civil Engineering A.B., Washington, 1903; A.M., 1904; B.S., 1908; C.E., 1909.
HELEN NEILSON RHODES.....	Acting Instructor in Drawing Student, National Academy of Design; Columbia.
OLIVER HUNTINGTON RICHARDSON.....	Professor of European History A.B., Yale, 1889; A.M., Ph.D., Heidelberg (Germany), 1897.
GEORGE BURTON RIGG.....	Associate Professor of Botany B.S., Iowa, 1896; B.Dl., 1899; A.M., Washington, 1909; Ph.D., Chicago, 1914.
ALEXANDER CRIPPEN ROBERTS.....	Lecturer on Education A.B., Wisconsin, 1906; A.M., Washington, 1917; Ph.D., 1922.
MILNOR ROBERTS.....	Professor of Mining Engineering and Metallurgy and Dean of the College of Mines A.B., Stanford, 1899.
JAMES POSTLEWAIT ROBERTSON.....	Lecturer in Accounting C.F.A.
WALTER EDWARD ROLOFF.....	Associate in Business Administration A.B., Northwestern, 1904; A.M., 1905; Ph.D., Wisconsin, 1912.
MORITZ ROSEN.....	Associate Professor of Music Graduate, Warsaw Conservatory, Russia.

- ARTHUR EUGENE ROWLAND.....Assistant Professor of Military Science and Tactics
A.B., Western Maryland, 1909; Student, Cornell, 1909-12.
- HARRY RUBEY.....Associate Professor of Civil Engineering
B.S., (C.E.), Illinois, 1905.
- WILLIAM RUSSELL.....Instructor in Business Administration
Certificate of Civil Engineering, Petrograd Institute of Roads of Communication;
Certificate, Polytechnicum of Munich, 1901.
- EDWIN JAMES SAUNDERS.....Assistant Professor of Geology
B.A., Toronto, 1896; A.M., Harvard, 1907.
- WILLIAM SAVERY.....Professor of Philosophy
A.B., Brown, 1896; A.M., Harvard, 1897; Ph.D., 1899.
- GILBERT SIMON SCHALLER.....Instructor in Shop Metal Work
B.S., Illinois, 1916.
- ALFRED JOHN SCHWEPPE.....Associate in Law
A.B., Wisconsin, 1916; A.M., 1917; LL.B., Minnesota, 1922.
- WALDO SEMON.....Associate in Chemistry
B.S., Washington, 1920.
- HAROLD OGDEN SEXSMITH.....Instructor in Architecture
Armour Institute of Technology; Chicago Art Institute.
- ALBAN AURELIUS SHAY.....Acting Instructor in Architecture
A.B., Pennsylvania, 1922.
- GORDON RUSSELL SHUCK.....Assistant Professor of Electrical Engineering
E.E., Minnesota, 1906.
- ELLA MARIE SICKLES.....Associate in English
A.B., Whitman, 1917; A.M., Washington, 1921.
- THOMAS KAY SIDBY.....Associate Professor of Latin and Greek
B.A., Toronto, 1891; Ph.D., Chicago, 1900.
- MACY MILMORE SKINNER.....Assistant Professor of Business Administration
A.B., Harvard, 1894; A.M., 1895; Ph.D., 1897.
- LLOYD LEROY SMAIL.....Assistant Professor of Mathematics
A.B., Washington, 1911; A.M., 1912; Ph.D., Columbia, 1913.
- CHARLES WESLEY SMITH...Reference Librarian and Associate Professor of Library Economy
A.B., Illinois, 1903; B.L.S., 1905.
- ELI VICTOR SMITH.....Assistant Professor of Zoology
Ph.B., Illinois Wesleyan, 1907; A.M., Washington, 1909; Ph.D., Northwestern, 1911.
- J. ALLEN SMITH.....Professor of Political Science
A.B., Missouri, 1886; LL.B., 1887; Ph.D., Michigan, 1894.
- GEORGE SMITH.....Associate in Physical Education
- GEORGE MCPHAIL SMITH.....Professor of Inorganic Chemistry
B.S., Vanderbilt, 1900; Ph.D., Freiburg, 1903.
- GEORGE SHEERMAN SMITH.....Instructor in Electrical Engineering
B.S., (E.E.), Washington, 1916.
- HARRY EDWIN SMITH.....Associate Professor of Business Administration
A.B., De Pauw, 1906; Ph.D., Cornell, 1912.
- STEVENSON SMITH.....Professor of Psychology
A.B., Pennsylvania, 1904; Ph.D., 1909.
- ELIZABETH SOULE.....Associate in Nursing and Public Health
Graduate, Malden, Massachusetts, Hospital School of Nursing, 1907.
- MATTHEW LYLD SPENCER..Professor of Journalism and Director of the School of Journalism
A.B., Kentucky Wesleyan, 1903; A.M., 1904; A.M., Northwestern, 1905; Ph.D.,
Chicago, 1910.
- ROBINSON SPENCER.....Catalogue Librarian and Instructor in Library Economy
A.B., Wesleyan, University, 1903; B.L.S., Illinois, 1918.
- LESLIE SPIER.....Assistant Professor of Anthropology
B.S., College of City of New York, 1915; Ph.D., Columbia, 1920.
- HENRY WALTER STAGER.....Instructor in Mathematics
A.B., Stanord, 1902; A.M., 1906; Ph.D., California, 1909.
- EDWIN AUGUSTUS START.....Director of the Extension Service
A.B., Tufts, 1884; A.M., Harvard, 1893.
- EDWIN LEONARD STRANDBERG.....Associate in Civil Engineering
B.S., (C.E.), Washington, 1912.

MILDRED STRUBLE.....	Associate in English A.B., Washington, 1916; A.M., 1920.
HERMAN VANCE TARTAR.....	Associate Professor of Chemistry B.S., Oregon Agricultural College, 1902; Ph.D., Chicago, 1920.
JOSEPH MARION TAYLOR.....	Acting Instructor in Mathematics M.S., Adrian, 1886.
PAUL WASHINGTON TERRY.....	Assistant Professor of Education B.S., Vanderbilt, 1909; M.A., Columbia, 1915; Ph.D., Chicago, 1920.
THOMAS GORDON THOMPSON.....	Assistant Professor of Chemistry A.B., Clark, 1914; M.S., Washington, 1915; Ph.D., 1918.
DAVID THOMSON.....	Professor of Latin and Dean of the College of Liberal Arts B.A., Toronto, 1892.
ADA TILLEY.....	Instructor in Singing B.Mus., Simpson, 1917.
JACK RODERICK TOLMIE.....	Instructor in Electrical Engineering B.S., (E.E.), Washington.
ELLA JANE TRULLINGER.....	Instructor in Fine Arts B.S., Columbia, 1919; A.M., 1920.
GEORGE WALLACE UMPHREY.....	Professor of Romanic Languages B.A., Toronto, 1899; A.M., Harvard, 1901; Ph.D., 1905.
EDGAR HARRISON UNDERWOOD.....	Assistant Professor of Military Science and Tactics B.S., (C.E.), Tennessee, 1916; Grad., Coast Artillery School, 1922.
CLINTON LOUIS UTTERBACK.....	Instructor in Physics B.S., Purdue, 1908; M.S., Washington, 1918.
FRANK CHESTER VAN DE WALKER.....	Associate in Business Administration A.B., Whitworth, 1917.
LOUISE VAN OBLE.....	Assistant Professor of Music Theoretical Work, Dr. Bridge, Chester, England; Richter, Leipzig; Piano, Godowsky, Berlin; Lhevinne, Berlin; Harold Bauer, Paris.
ALBERT FRANZ VENINO.....	Associate Professor of Music New York Conservatory of Music; Pupil of Leschetitzky.
EDWIN JOHN VICKNER.....	Professor of Scandinavian Languages A.B., Minnesota, 1901; A.M., 1902; Ph.D., 1905.
BERTHA ALLEN VICKNER.....	Associate in English A.B., Gustavus Adolphus, 1910; A.M., Washington, 1917.
HILBERT AMIL WALDKOENIG.....	Instructor in Sociology LL.B., Maryland, 1916; Ph.B., Chicago, 1920.
CHARLES EDWIN WEAVER.....	Professor of Paleontology B.S., California, 1904; Ph.D., 1907.
JAMES WEHN.....	Associate in Modeling and Sculpture
JOHN WEINZEL.....	Professor of Bacteriology B.S., Wisconsin, 1896; M.S., 1899; Ph.D., 1906; Dr.P.H., Harvard, 1918.
FRED FALCONER WELD.....	Associate in Civil Engineering B.S., Pennsylvania State College, 1893; C.E., 1902.
CHAUNCEY WERNECKE.....	Associate in Civil Engineering B.S., (C.E.), Washington, 1910.
EARL DOWNS WEST.....	Associate in Mathematics A.B., Ohio State College, 1900; A.M., Adrian College, 1908.
CLARENCE LESTER WHITE.....	Instructor in Civil Engineering B.S., (C.E.), Iowa, 1909; C.E., 1914.
WALTER BELL WHITTLESBY.....	Instructor in French A.B., Washington, 1907; A.M., 1909.
GEORGE WHITWELL.....	Associate in Chemical Engineering B.S., Massachusetts Institute of Technology, 1915.
ELGIN ROSCOE WILCOX.....	Instructor in Civil Engineering B.S., Washington, 1915; Met.E., 1919.
CURTIS TALMADGE WILLIAMS.....	Assistant Professor of Education A.B., Kansas State Normal, 1913; A.M., Clark, 1914; Ph.D., 1917.
GEORGE SAMUEL WILSON.....	Associate Professor of Mechanical Engineering B.S., Nebraska, 1906.
HEWITT WILSON.....	Assistant Professor of Ceramics Cer. Engr., Ohio State University, 1913.

- WILLIAM RONALDSON WILSON.....Instructor in Psychology
A.B., Washington, 1917; M.S., 1921.
- ROY MARTIN WINGER.....Associate Professor of Mathematics
A.B., Baker, 1906; Ph.D., Johns Hopkins, 1912.
- HUGO WINKENWERDER.....Professor of Forestry and Dean of the College of Forestry
B.S., Wisconsin, 1902; M.F., Yale, 1907.
- ARTHUR MELVIN WINSLOW.....Associate Professor of Mechanical Engineering
Ph.B., Brown, 1903; B.S., Massachusetts Institute of Technology, 1906.
- CARL PAIGE WOOD.....Associate Professor of Music
A.B., Harvard, 1906; A.M., 1907.
- HOWARD WOOLSTON.....Professor of Sociology
A.B., Yale, 1898; S.T.B., Chicago, 1901; M.A., Harvard, 1902; Ph.D., Columbia,
1909.
- JOHN LOCKE WORCESTER.....Professor of Anatomy
M.D., Birmingham School of Medicine, Alabama, 1900.
- EUGENE HUTCHINSON WORMAN.....Associate in Fine Arts
Pratt Institute.
- CONRAD ZIMMERMAN.....Lecturer on Timber Physics
A.B., Washington, 1908.

BOARDS AND COMMITTEES

1923-1924

ADMINISTRATIVE BOARDS

BOARD OF DEANS—J. T. Condon, Thomson, Magnusson, Roberts, Johnson, Winkenwerder, Padelford, Landes, Bolton, Glen, Lewis, Haggett, Start, Spencer, Cobb, Henry, Gould, Stone.

SUMMER QUARTER.....Board of Deans and the Comptroller

EXTENSION.....Start, Thomson, Landes, Bolton, Lewis, Raitt, H. T. Condon

STUDENT DISCIPLINE.....Deans Condon, Magnusson, Landes, W. E. Cox, Thomson

SCHEDULE AND REGISTRATION—Stevens, Stone, Wilson, Daniels, Rigg, Tartar, Terry, Sidey, Leib, Dresslar, Saunders, Wood, Carpenter, Garrett, W. B. Jones.

COMMITTEES OF THE FACULTY

The President is *ex-officio* a member of each standing committee.

ADMISSIONS.....The Board of Deans

ART.....Isaacs, Carl Gould, James Gould, Hughes, Patterson

ASSEMBLY.....Spencer, Daniels, Glen, Hughes

ATHLETICS.....J. T. Condon, L. J. Ayer, Hall, Moritz, Dehn, May

CURRICULUM—Cobb, Johnson, Bolton, Loew, Winkenwerder, Spencer, Henry, Benson, L. J. Ayer, Daniels, Patzer, Stone.

ENTRANCE EXAMINATIONS.....Garrett, Terry, Winger, Stone

GRADUATION—Thomson, Landes, Magnusson, Glen, Lantz, Preston, Kirkland, Williams, Stone

HONORS.....Padelford, Goodner, Carpenter, Loew, T. S. McMahon, Rathbun, Wood, Terry

JUNIOR COLLEGES.....Padelford, Thomson, Frye, Bolton, E. McMahon, Stone

LIBRARY—Henry, Thomson, Padelford, Frye, Richardson, Patzer, Loew, Preston, C. W. Smith

MILITARY AND NAVAL AFFAIRS.....Osborn, Eastwood, More, S. H. Anderson, Harrison

PRE-MEDICAL COURSE.....Worcester, Johnson, Weinzirl, Kincaid, Hall

PRE-NURSING COURSE.....Soule, Worcester, Raitt, E. Victor Smith, Landes

PUBLICATIONS—Henry, Landes, Padelford, Spencer, Start, Umphrey, Densmore, Bell, Kennedy, O'Connor.

RELATIONS WITH SECONDARY SCHOOLS.....Bolton, Thomson, Padelford, Frye, Frein, Stone

RULES.....Benham, Goodner, Bell, More, Haggett, Gould, Stone

SPECIAL STUDENTS.....The Registrar, the Dean of Men and the Dean of Women

STUDENT AFFAIRS—Thomson, Winkenwerder, Padelford, Gould, Ward, Daniels, McMahon, Loew, Haggett and eight representatives of student organizations.

STUDENT HEALTH.....Hall, James Gould, Haggett, Weinzirl, Worcester

STUDENT WELFARE.....Gould, Haggett, More, Carpenter, W. E. Cox

RHODES SCHOLARSHIPS.....Densmore, L. J. Ayer, Harrison, Larsen

WASHINGTON UNION.....Meany, J. T. Condon, Landes, Thomson, H. T. Condon

THE UNIVERSITY

HISTORY

The foundation for establishment of the University of Washington was laid in 1854, when Governor Isaac Ingalls Stevens, in his message to the first legislature, recommended that Congress be memorialized to appropriate land for a university. Two townships subsequently were granted and in January, 1861, the legislature finally located the Territorial University at Seattle.

On February 22 (Washington's Birthday), the Reverend Daniel Bagley, John Webster and Edmund Carr, composing the Board of University Commissioners, met and organized for work. Ten acres of land were donated by Hon. Arthur A. Denny, Charles C. Terry and Edward Lander from their adjoining farms, and on May 21, 1861, the cornerstone of the main building was laid. The building was completed in specified time and on November 4, 1861, classes were opened for students.

For thirty-four years the University occupied the original tract, but in the later eighties it became apparent that the campus eventually would be outgrown. By 1890 the growth both of the University and of Seattle's business district evinced the necessity of more ample grounds.

To meet this need, the legislature passed a bill on March 17, 1893, providing for the relocation, construction and maintenance of the University of Washington. A fractional section of land consisting of 355 acres between Lakes Washington and Union, the present site of the University, was purchased, and on the completion of Denny Hall and some minor buildings the University moved to its present location in September, 1895.

GOVERNMENT

Under the constitution and laws of the State of Washington, the government of the University is vested in a Board of Regents, consisting of seven members appointed by the Governor by and with the advice and consent of the Senate. Each regent is appointed for a term of six years.

ENDOWMENT AND SUPPORT

The University derives its support entirely from the state. As yet the property belonging to the institution as an endowment yields comparatively little revenue. The income from this property in years to come will greatly help to support the institution.

The legislature of 1923 appropriated \$2,631,983 for maintenance, operation and equipment, other than buildings. This was based on a rate of 1.10 of a mill a year, plus sundry receipts from property income and tuition.

The legislature also formally appropriated \$439,700, the tuition and endowment receipts for the biennium for the permanent building fund.

The property of the University includes:

The two townships of land granted by Congress in 1854. There remains of this old grant some 3,000 acres.

The old University site, consisting of the tract of 8.32 acres, donated in 1861 by Arthur Denny and his wife; and 1.67 acres donated by Charles C. Terry and wife and Edward Lander. This "ten-acre tract" lies in the business center of Seattle, and is rapidly enhancing in value.

One hundred thousand acres of land segregated by the state March 14, 1893.

The University campus consisting of 582 acres of land and waterways.

BEQUESTS

The Board of Regents of the University of Washington is authorized by law to receive such bequests or gratuities as may be given or granted to the University, and to invest or expend the same according to the terms of such bequests or gratuities. The Board of Regents has adopted rules to govern and protect the principal of such gifts and the income therefrom so that the same will be forever applied to the purposes designated by the donors of the gifts.

Those who desire to aid the work of the University of Washington by means of gifts *inter vivos* or by wills may do so, feeling assured that their wishes as outlined in the deed of gift or will are to be carried into effect as provided by law.

A simple statement in a will, such as the following, will be sufficient:

"I give, devise and bequeath to the Board of Regents of the University of Washington the sum of _____dollars *In Trust, However,* for the following uses and purposes to be invested in securities to be approved by said Board and the interest therefrom to be expended in the maintenance of" (scholarship or fellowship subject named).

These bequests may be applied to the maintenance of scholarships and fellowships in any subject desired by the donor which meets the approval of the Board of Regents.

EQUIPMENT

GROUNDS

The Campus contains 582 acres, 109 of which are open water. The land is all within the city limits of Seattle, lying between Lakes Union and Washington, with a shore line of more than one mile on Lake Washington and about a quarter of a mile on Lake Union.

BUILDINGS

The buildings now in use on the University campus include the Aerodynamical Laboratory, Anatomical Laboratory, Bagley Hall and Annex, Commerce Hall, Denny Hall, Dormitories, (Lewis, Clark, Lander and Terry), Education Hall, Engineering Hall and Annex, Extension Building, Fisheries Buildings, Forest Products Laboratory (Dry Kiln, Wood Preserving Plant, Dry Shed), Foundry and Shop Building, Gatzert Building, Good Roads Building, Gymnasium, Health Service Building, Home Economics Hall, Hydraulics Laboratory, Library, Meany Hall, Mines Hall, Mines Laboratory, Museum, Observatory, Philosophy Hall, Power House, Practice Cottage, R.O.T.C. Armory and Headquarters Buildings, Science Hall, United States Bureau of Mines, United States Mine Safety Station.

PLAN OF THE CAMPUS

The plan for grouping the buildings of the University of Washington was prepared by direction of the Board of Regents, and with the supervision of the Faculty Committee. It was officially adopted May, 1915. The scheme is developed upon three major quadrangles, the Science Group about the axis of Rainier Vista, the Administration or Library Group with Meany Hall enclosing the west side, and the Liberal Arts Group about an axis at right angles with the walk in front of Denny Hall.

Since the adoption of the group plan seven buildings have been erected. Home Economics, Philosophy, Commerce and Education Halls on the Liberal Arts Quadrangle. Locations for two additional buildings are provided to complete this quadrangle. The other three new buildings are adjacent to the Science Group. They are Hydraulics, Forest Products and Mines Laboratories.

A portion of the Library will be under construction during the present biennium, and a Women's Building is contemplated as funds become available.

The plan provides for foot traffic only within the quadrangles. Automobile and service roads are provided to give access to the various groups, and scenic driveways encircle the campus. The ground to the west of Montlake Boulevard is reserved for athletics and the Stadium seating 30,000 persons has been built in this section of the campus by the Associated Students of the University of Washington. The Gymnasium is to be placed halfway between the Academic Group and the athletic fields, with a connection by bridge over Montlake Boulevard.

Denny Field already has been moved to conform to the group plan which provides for a Women's Group in the northeast section of the campus, including a women's dormitory and women's gymnasium.

The northwest section of the campus is reserved for men's dormitories.

Between these two proposed groups Memorial Way enters from the north as the continuation of University Boulevard.

LIBRARY FACILITIES

The general library contains 121,957 volumes, and receives 900 current magazines. About 6,000 volumes are being added each year.

The library of the Law School contains more than 25,000 volumes. All books of both libraries are on open shelves and are accessible to all who care to use them.

In addition to the library facilities on the campus, the Seattle Public Library, containing approximately 350,000 volumes, is open to the University.

THE MUSEUM

The museum of the University of Washington is a museum of the arts and natural sciences. It was created the State Museum of the State of Washington by act of the legislature in 1899. In its functions as a state, a university and a public museum, it aims to make its collections representative of the natural history, mineral resources, ethnology, history, and chief industrial activities of this region and of those countries with which this state has a commercial relationship; to furnish materials for research and study, and to interest and educate the public by its exhibitions. Its collections, illustrative of the northwest coast, are among the most complete and valuable in the United States. The museum is housed at present in the Forestry building, which was erected in 1909 for the Alaska-Yukon-Pacific Exposition. It is archaic Greek in style, its frame consisting of large columns of native fir trees, varying from five to six feet in diameter and from forty-two to fifty-four feet in height.

The museum collections number over 100,000 specimens with an approximate value of \$200,000. Extensive exhibits are arranged showing the mineral, lumbering, and horticultural resources of the state and Alaska. An exhibit of local birds is arranged in systematic order and in groups showing their natural habitats. Elaborate habitat groups of large animals, including elk, bear, deer, mountain goats and cougar, mounted according to the latest methods of scientific taxidermy, have been installed or are in process of installation. The marine fauna are represented by a series of mounted fishes of the northwest coast, corals, sponges, crustaceans, and mounted shells. Rare specimens illustrative of the extinct mammoth and mastodon from Alaska and the state of Washington also are on exhibition.

Ethnology.—Collections illustrative of the life, arts and industries of the Indian tribes of the northwest coast from the Columbia river northward through Arctic Alaska are arranged in tribal sequence. The Emmons Tlingit collection from Southeastern Alaska is one of the most complete from that section to be found in any museum, and the Eskimo collection from Arctic Alaska is equally rare and valuable. In addition there is a small and interesting series from the so-called Blonde Eskimos on Coronation Gulf. A collection of pottery and basketry illustrates the art of the Indian tribes of Southwestern United States.

An unusual and rare collection illustrative of the archeology of the Columbia river region of eastern Washington was recently added, through the work of a museum expedition under supervision of Director F. S. Hall. This material together with the Stewart collection in the museum, forms a most interesting series on the archeology of the Columbia river down to the Dalles.

The Philippine collections contain interesting specimens of Moro handicraft such as brasses, hats, textiles, and implements of warfare; examples of the characteristic beadwork of the Bogobos of the island of Mindanao; and articles of dress and implements of warfare of the Igorrots and other primitive tribes of the island of Luzon.

Other collections of interest include porcelains, embroideries, carvings, scrolls, clothing, and Buddhas, from northern China; specimens from var-

ious islands of Oceanica and Australia; Norwegian spinning wheels, chests, household articles, and other materials of the early eighteenth century; a collection of guns, pistols, and other firearms given by the Butterworth estate; relics of the World War given or loaned by persons who collected them while in the service; a colonial collection of early furniture, pewter, glassware, potteries, documents and photographs, and historical materials representative of pioneer days in the Pacific Northwest and elsewhere.

Fine Arts.—The fine arts section contains the interesting collection of paintings, tapestries, and carvings, loaned by Kennedy C. Friend, and a collection of rare antique laces, Paisley and India shawls, porcelains, engravings, textiles and sculpture which have either been given or are loaned indefinitely to the museum. Special exhibits are arranged in the exhibition rooms on the first floor from time to time, notices of which are published.

Reserve or Study Series.—The museum has its laboratories for purposes of study and research, collections of botanical, conchological, ornithological, and ethnological specimens which are available to students or specialists competent to use them, and a museum library, consisting of several hundred books and pamphlets on scientific subjects.

The herbarium of over 15,000 specimens contains a characteristic series of northwest flora virtually all of which are card indexed. There is also the Frye collection of mosses of this region and Alaska which is one of the most complete in the United States.

The collection of bird skins, eggs, and nests consists of more than 4,500 specimens particularly representative of western Washington.

The conchological collection of over 18,000 specimens contains a complete series of west coast forms and a larger series from all parts of the world.

LABORATORIES

The University of Washington has the following laboratories equipped for work in science.

ANATOMY LABORATORIES

The laboratory for human anatomy is in its own building east of Bagley Hall. It is constructed to secure a maximum of light and cleanliness. Skeletal charts and model materials are conveniently arranged. A study room and departmental library form an integral part of the laboratory.

ASTRONOMY LABORATORIES

The observatory occupies a substantial sandstone structure containing dome for equatorial and rooms for transit and clocks, lectures and laboratory work, and dark room. Part of the roof is flat, convenient for evening study of the heavens. Instruments include a six-inch refracting telescope and accessories, a Bamberg transit, Riefler clock, Bond chronometer, Gaertner chronograph, Astro-Petzal objective with accessories, a barometer and sextant. The clock is enclosed in a constant temperature chamber. Minor equipment consists of a good assortment of transparencies and lantern slides, globes, planetarium, and other apparatus for laboratory and lecture work in astronomy.

BOTANY LABORATORIES

The botanical laboratories, in Science Hall, occupy about 5,000 feet of space divided as follows: Two large laboratories of about 1,500 square feet each; three small laboratories, for physiology, mycology and research respectively. The laboratories are fitted with the usual apparatus and conveniences.

CERAMIC LABORATORIES

(See Mining and Metallurgical Laboratories, page 35.)

CHEMICAL LABORATORIES

The chemical laboratories occupy a thoroughly modern fireproof building known as Bagley Hall. Fully equipped separate laboratories are devoted to general chemistry, analytical chemistry, food inspection and analysis, organic, physiological, industrial, and pharmaceutical chemistry. All laboratories are equipped with hoods with forced drafts, water, gas, distilled water and air pressure. The chemical engineering laboratories are equipped with fundamental types of apparatus used in manufacturing processes, such as filter press, hydraulic press, stills, grinding apparatus, heating furnaces and vacuo drying oven.

CIVIL ENGINEERING LABORATORIES

The Hydraulic Laboratory is on the shore of Lake Union, where facilities are available for both medium and high head experiments. For medium head, a free water surface, one acre in extent, is provided at an elevation of 100 feet above the laboratory floor. For high heads, connection is made with an 8" pipe leading from an elevated tank 300 feet above the floor.

The Materials Testing Laboratory contains five universal testing machines with capacities from 30,000 to 300,000 pounds, two impact machines with various hammers ranging in weight from 550 to 1500 pounds, with the necessary auxiliary apparatus for general work.

The equipment for testing hydraulic cement is complete for all the ordinary tests as specified by the American Society of Civil Engineers.

The Road Laboratory is equipped for testing materials used in the construction of roads. The machines for the abrasion and toughness test are of the standard designs adopted by the American Society of Testing Materials; other machines are similar to those used by the United States Office of Public Roads.

The surveying equipment consists of all the necessary instruments for plane and topographic surveying.

ELECTRICAL ENGINEERING LABORATORIES

The dynamo laboratory contains nineteen alternating and thirty-six direct current generators and motors. The machines are of modern design and have a combined capacity of 300 kilowatts in direct current machines and 225 kilowatts in alternating current machines. Most of the machines are of five- or ten-kilowatt capacity. Power from a storage battery of 130 cells is available at a separate switchboard in the dynamo laboratory. The university power house, containing three steam-driven units of 400, 200 and 100 kilowatts, serves as a commercial laboratory for operating and testing purposes.

Nine smaller rooms are devoted to the following: (a) Instrument making and repairing, (b) grinding room and shop, (c) instrument and stock room, (d) telephone laboratory, (e) electrolysis and special thesis problems, (f) storage battery rooms, (g) three dark rooms for photometry work, (h) radio laboratory, (i) transmission line laboratory. The instrument room contains a large collection of standard indicating and recording ammeters, voltmeters and wattmeters, two three-element G.E. oscillographs, and a Tinsley A.C. potentiometer.

ENGINEERING SHOPS

The shops are organized as a modern production unit with each of the five shop departments a contributing factor. The work is routed successively through a pattern shop, foundry, forge shop, machine shop and assembly departments where it is completed and finally inspected.

FISHERIES LABORATORIES

Ichthyology Laboratory.—The ichthyology laboratory contains an extensive collection of named fishes, particularly rich in species from Puget Sound and Alaska. By exchange and other means a representative series of the fishes found in American waters, with particular reference to forms of economic importance, is being built up. There is a collection to illustrate the species of shellfish, crustaceans, and other invertebrate animals constituting the bases for the corresponding industries.

Fish Diseases Laboratory.—The laboratory for fish diseases is equipped for study of life histories of various parasites of aquatic animals, including aquaria for live subjects, and dark room for studying effects of various colored lights on the animals.

Fisheries Laboratory.—The apparatus laboratory is equipped with working models of the larger forms, fully rigged types of the smaller forms, of fishery apparatus and detailed plans for their construction; equipment for manufacture, repair, care and preservation of nets; models of fishing vessels and boats, and samples of various fishery products prepared for market.

Canning Laboratory.—The canning laboratory is equipped with all machinery and appliances necessary for preparation and canning of all varieties of food products, in either glass or tin containers, including paring and slicing machinery, preparation table, exhaust box, closing machines and retorts. Here instruction is given in the usual commercial methods, while research is carried on in the development of new methods or the modification of the old to meet new conditions.

Curing and Drying Laboratory.—The curing laboratory contains the necessary equipment for making pickling solutions and brines, and for the drying, pickling, mild-curing and smoking of the various food products.

Fish Preservation Laboratories.—Ultimately a small refrigeration and cold storage plant will be installed for economic study of various methods of freezing and preserving food products in cold storage.

A smokehouse will be built for the purpose of carrying on experiments in smoking of various species and their utilization as food either in this condition or canned.

Testing Laboratory.—The testing room will have a constant temperature of approximately 98° Fahrenheit, and in it samples of canned fishery products may be incubated, by means of which swells may be separated from the other cans and the sufficiency of the process used in the cannery determined. Various vacuum gauges and can testers will also be available.

Jam and Jelly Laboratory.—This laboratory is equipped with a pulper and finisher, steam-jacketed kettles, and other machinery used in the preparation of jellies, jams, maraschinos, glace fruits, etc. There are also vats, a press, and a filler and bottling machine for use in the manufacture of juices.

Research Laboratory.—The research laboratory contains the necessary chemical and bacteriological apparatus for investigation of problems of the food preserving industry. Laboratory desks are equipped with water, gas, and

electricity, and with balances, microscopes, apparatus for microphotography, pressure cookers and hand closing machines. The equipment includes sterilizers, incubator, vacuum drying ovens, hot-plates, and the necessary glassware. It is expected that the student specializing in food preservation will spend a considerable part of his time in this laboratory.

FOREST AND LUMBERING LABORATORIES

Dendrology.—Individual lockers. Extensive collections of tree seeds, cones, bark specimens. An arboretum is under way.

Logging and Lumbering.—Field work at logging camps and sawmills about Seattle. Complete equipment of instruments and tools is available for work in logging engineering. Collections of lumber, showing grades and patterns, charts of lumber grades, exhibits of sawmill and wood saws, logging equipment, such as wire ropes, axes, hooks, blocks, special appliances for donkey engines, saw-mill belts and models of high lead logging.

Mensuration.—Equipment selected to show principal types of instruments in use. Those adapted for use in the Northwest are provided in quantities sufficient for all practice work in cruising, surveying, volume, growth and yield studies.

Silviculture.—Forests around Seattle offer wide opportunities for practical studies and demonstrations. The extensive forest tree nursery of the College of Forestry affords excellent opportunity for practice in modern nursery methods.

Timber Physics.—Laboratory work is conducted in the U.S. Forest Service Timber Testing Laboratory, operated in cooperation with the University. The laboratory is magnificently equipped with seven large testing machines for static and impact loading, circular and band saws, planer and other shop equipment for wood-working.

Wood Technology.—Individual lockers, gas, water, compound microscopes and all apparatus for preparing and sectioning wood for microscopic study are provided. Hand specimens and planks of domestic and foreign commercial timbers are provided in large quantities. These include extensive collections of South American, Australian, Philippine, Japanese and other foreign hardwoods. Microscopic slides of nearly all American woods are kept on hand for check specimens.

Forest Products Laboratories.—The Forest Products Laboratory was erected at a cost of \$85,000. Owing to the shortage of class room accommodations on the campus, the products laboratory is used to house all the activities of the College of Forestry until the second unit of the Forestry Group is erected. The laboratories for work in forest products now ready on the campus consist of five distinct units, as follows:

1. General Laboratory.—Equipped with special wood sectioning and plain sliding microtomes, binocular research microscope with mechanical stage and microscopes of usual pattern, special illuminating devices for microscopic studies, micro-projection apparatus, water-baths, large and small gas and electric drying ovens, platform scales, analytical and pulp balances, all apparatus necessary for the technical examination of wood preservatives, standardized thermometers, enlarging and reducing camera, standard horizontal photo-micrographic apparatus, dark room, and all incidental apparatus required in the detailed study of woody tissues.

2. Wood Preservation Laboratory.—A 14-inch by 12 foot retort, equipped with vapor drum and condenser, air compressor, vacuum pump and duplex pressure pump, is arranged for experimental work with any pressure process of treating wood. An open-tank plant of semi-commercial size is available for treatment of 9-foot material. It consists of one treating tank, two steel storage tanks for creosote and a wooden tank for the storage of metallic-salt solutions.

3. Wood Distillation Laboratory.—A retort of about one-half cord capacity is equipped with copper condensers, gas pump, gas tank and redistilling apparatus. This plant has been installed by the U.S. Forest Service for cooperative work with the University.

4. Dry Kiln Laboratory.—A dry kiln with a capacity of 10,000 feet B.M., equipped with a temperature controller, air compressor, hygromet, recording hygrometer and a recording thermometer is conveniently located on the University spur of the Northern Pacific Railway.

5. Pulp and Paper Laboratory.—A 100-pound capacity digester and a beating engine of equivalent capacity are provided for research in the pulping of wood.

Commercial Plants.—Plants for manufacture of paper, wood pipe, cooperage, excelsior, wood conduit, veneers, furniture, boxes, and numerous other secondary wood products are available for study. Four large creosoting plants and several smaller preservative plants are also available.

Demonstration Forest and Experiment Station.—This consists of a 60,000-acre tract comprising the Pilchuck-Sultan watersheds, formerly a part of Snoqualmie Forest. It is very conveniently reached from Seattle, and offers almost ideal conditions for a school forest. It has a stand of timber of over a billion and a half feet. Nearly all species of the Pacific Northwest are represented, but more than three-fourths is composed of Douglas fir, cedar and hemlock. As there is an excellent representation of age classes, the tract lends itself readily to scientific forest management. It is estimated that the tract will yield from \$20,000 to \$25,000 annually on a sustained yield basis. It is expected that title to the tract will be completed in the near future.

GEOLOGY LABORATORIES

The geology laboratories, in Science Hall, consist of six large rooms arranged for general geology, physiography, meteorology, mineralogy, petrography and paleontology.

Extensive collections of minerals and rocks are supplied for work in mineralogy and petrography. For paleontological study there are collections of fossils and casts representing the principal geological formations. In meteorology practical work is done with a complete set of weather bureau instruments. For study of earthquake phenomena there is a Bosch-Omori seismograph. The latest model Bosch & Lomb Balopticon with reflectroscope and polariscope attachments is provided for laboratory and lecture work.

JOURNALISM LABORATORIES

The journalism laboratory is equipped with chases, imposing stones, type materials, borders and everything necessary to teach students how to dress a newspaper. For students interested in advertising and commercial printing, other special equipment is provided. A laboratory library of publications from supply houses, is always available, containing the latest information on type, paper, furniture, engravings and all equipment of the publishing and allied trades.

MECHANICAL ENGINEERING LABORATORIES

The steam and experimental laboratory is fully equipped with steam apparatus, including engines aggregating 900 H.P., simple and compound, high speed and Corliss types; steam turbine; jet and surface condensers; injector; centrifugal pump; steam calorimeters; indicators; calibrating appliances; oil testing machine; gas engine of stationary and automobile types; gas producer plant; refrigerating apparatus; compressed air machinery for two stage compression and Westinghouse full train equipment; fuel testing facilities, including Mahler Bomb, Junkers and other calorimeters, with accessories for determining heating value and analysis of solid, liquid and gaseous fuels.

MINING, METALLURGICAL AND CERAMIC LABORATORIES

The laboratories used by students of the College of Mines for courses in chemistry, physics, geology, civil, electrical and mechanical engineering, are described in other bulletins of the University. The laboratories for mining, metallurgy, and ceramics proper are housed in two buildings: Mines Hall, containing equipment for mining, ore dressing, and all branches of metallurgy; and the new Mines Laboratory, containing the ceramics, fuels and coal washing laboratories.

Mining, Ore Dressing, Metallurgy.—Mines Hall contains the offices, library, classrooms, drafting rooms and museum, as well as laboratories, desks, stockroom and balance room for assaying and general metallurgy, mining and milling machinery, electric furnaces, supplies, and stocks of ore, steel locker room, shower-baths, and a metallographic laboratory.

The metallurgical equipment includes standard size furnaces fired by six methods—coal, coke, gasoline, gas, fuel-oil and electricity; a reverberatory furnace, pyrometers of several types, cyanide equipment, amalgamating devices, blowers, calorimeters, balances, sampling machines, and exhibits of metallurgical processes and products.

The electrometallurgy laboratory is equipped with transformers, voltage regulators and switchboard through which power can be used at rates ranging up to 3600 amperes and at voltages varying from 1 to 484. A quarter-ton steel melting furnace and six other furnaces of various types are in use. The electrolytic laboratory contains a 3-horsepower motor-generator set, switchboard, meters, vats and accessory apparatus. A good supply of electrodes and refractory materials is kept in stock.

The mining equipment consists of air compressors, receivers, three rock drills, aerial tram, hand tools, full equipment for practice in blasting, loading and tamping models, exhibits of mining and timbering methods, drawings, blue prints, photographs, lantern with 1,600 slides, and collections of ores and minerals. The College of Mines mill contains breakers, rolls, 3-stamp battery, feeders, screens, classifiers, jigs, six concentrating tables, flotation cells of six types, Dings magnetic separator, and accessory apparatus.

Ceramics and Coal Washing.—The new Mines Laboratory is representative of the University collegiate gothic architecture. A special feature of the building is the unusually large window area. An electric elevator serves all floors; hot and cold water, steam, compressed air, gas, and electricity for lighting, power and electrolytic purposes, reach all the laboratories.

The building contains ceramics equipment, offices and class rooms. The apparatus may be used for both manufacturing and testing ceramic products. The heavy brick machinery consists of a 4-foot Crossley dry and wet pan, a Mueller universal auger machine with cutting table, and a large American dry brick press. The pottery machinery includes a Patterson clay washing outfit with a double blunger, power screens, agitator,

pump and filter press, a potter's pug mill, jolly wheel and plaster molds for both jollying and casting ware. The terra cotta equipment consists of pressing molds, a De Vilbiss spraying apparatus, engobe and glaze materials, and glaze-grinding ball mills. Firing apparatus installed on the basement floor includes an oxygen acetylene cone-fusion furnace; a 3-foot, high-temperature, load-test kiln for two bricks; two portable muffle pottery kilns; a 10 by 7-foot muffle down-draft terra cotta kiln; and a two pot, 4 by 10-foot glass furnace. The kilns are equipped with thermocouple, radiation, and optical pyrometers and fired with both gas and oil. General testing apparatus consists of sample molds, a small Mueller auger machine, a sample dry-press, ageing cellar, volumeters, steam dryer, constant temperature electric dryer and transverse and tensile strength machines. The ceramic museum, library and office, physical-chemical laboratory, lecture, storage and pottery class rooms also are in this building.

The coal section of the Mines Laboratory consists of three floors surrounding an open well or hatch, a lower main floor, and a sub-basement. Coal for testing is received on the ground floor, in lots up to thirty tons, and is screened to remove large sizes; smaller sizes pass into a concrete bin from which they are drawn to elevators from transportation to screens on the fourth floor, the screened products falling into bins on the third floor. From the bins, gravity flow delivers the screened sizes to the second floor, where classifiers, jigs, tables, and other washing equipment are located. Products from these machines may flow to the lower floor for settling and dewatering. Large sizes of coal will be crushed in the sub-basement and wheeled to the elevator for delivery to the upper floor. Sampling devices will be installed at suitable points.

The building also contains fuel and analytical laboratories for the College of Mines and the U.S. Bureau of Mines, a room for conducting sink-and-float tests, a sampling room, a coal crushing and grinding room for the preparation of samples, a sludge tank, and a two-stage compressor for supplying air for the entire building.

PHARMACY AND MATERIA MEDICA LABORATORIES

Rooms devoted to pharmacy, materia medica and chemistry are located in Bagley Hall, a three-story fireproof building. Special sections are provided for pharmacy students in general, organic and qualitative chemistry. Work in prescription practice receives special attention in a room constructed and arranged as a model prescription pharmacy. The materia medica room contains a museum of several hundred samples of official and unofficial crude drugs. It also contains an extensive collection of commercial and biological products manufactured and donated by the H. K. Mulford Company of Philadelphia, Pennsylvania, Parke, Davis & Co., of Detroit, Michigan, and Eli Lilly and Company, of Indianapolis, Indiana. One room is given to drug assaying and food analysis. The examination of official food and drug samples for the state is under direction of the dean of the College of Pharmacy in a well equipped laboratory devoted to this purpose. Pharmacy students taking botany, physiology and bacteriology have well equipped laboratories in Science Hall.

PHYSICS LABORATORIES

Laboratories of the department of physics consist of: (1) general laboratory for students in arts and sciences, (2) general laboratory for students in applied science, (3) electrical laboratory, (4) heat laboratory, (5) a sound and light laboratory, (6) photometry room, and (7) battery room.

The laboratories are supplied with apparatus from the best American and European makers.

The Bureau of Testing is being rapidly equipped to meet the demand for

accurate calibration and testing and of scientific instruments. Standards of the bureau will be calibrated by the National Bureau of Standards at Washington, D.C. The bureau is prepared to calibrate direct and alternating current instruments, determine candle power of lamps, measure temperature, both high and low, and, to a limited extent, to standardize weights. Persons desiring to have work done should address the director, Frederick A. Osborn.

PSYCHOLOGY

The psychology laboratory occupies the third floor of Philosophy Hall. The fourth floor of this building ultimately will be a part of the laboratory.

ZOOLOGY

The laboratory of the department of zoology consists of six rooms located on the second floor of Science Hall. Here are adequate facilities for pursuing the following lines of investigation: General zoology, physiology, cytology, parasitology, plankton, entomology and research.

UNITED STATES BUREAU OF MINES NORTHWEST EXPERIMENT STATION

The United States Bureau of Mines maintains at the College of Mines, a mining and metallurgical experiment station for the Pacific Northwest and the coast regions of Alaska. The headquarters of the station, from which all operations in this territory are directed, are in the Bureau of Mines building, between Mines and Bagley Halls. At present the principal investigations being conducted by the station are in electro-metallurgy, in the treatment and uses of coal, and in ceramics. Members of the experiment station staff give occasional lectures to the students of the University on subjects dealing with their special lines of work.

Mine Safety Station.—The Mine Safety Station occupies a separate building. Various types of oxygen rescue and resuscitation apparatus are kept on hand for practice and use in mine rescue work. The purpose of the station is to train miners in the use of oxygen helmets, which are used in cases of mine fires and explosions in both coal and metal mines. From ten days to two weeks' time is required for the course of training. The applicant is taught the construction of the apparatus and is required to wear it for four hours each day, in two periods of two hours each. The practice is carried on in a room filled with gas which cannot be breathed without immediate danger, and the work performed is the same as that which would be required in actual mining operations or rescue work. The smokers room represents a portion of a mine, and is equipped with mine car, track, overcast, timbers and brick. First-aid instruction is also given. Applicants who have completed the course of training receive a certificate from the United States Bureau of Mines.

A one-ton, 45-horsepower automobile truck, equipped with rescue apparatus ready for emergency calls, forms part of the equipment of the rescue station.

ENGINEERING EXPERIMENT STATION

The Engineering Experiment Station was formally organized in December, 1917, to coordinate the engineering investigations in progress and to facilitate development of industrial research in the University.

The scope of the work is two-fold:

(a) To investigate and to publish information concerning engineering, problems of a more or less general nature that would be helpful in municipal, rural and industrial affairs;

(b) To undertake extended research and to publish reports on engineering and scientific problems.

The purpose of the station is to aid in the industrial development of the state and nation by scientific research and by furnishing information for solution of engineering problems. Every effort will be made to cooperate effectively with professional engineers and the industrial organizations in the state. Investigations of primary interest to the individual or corporation proposing them, as well as those of general interest, will be undertaken through the establishment of fellowships.

The control of the Engineering Experiment Station is vested in an administrative staff consisting of the president of the University, the dean of the College of Engineering, ex-officio director, and seven members of the faculty.

For administrative purposes, the work of the station is organized into seven divisions: (1) forest products, (2) mining and metallurgy, (3) chemical engineering and industrial chemistry, (4) civil engineering, (5) electrical engineering, (6) mechanical engineering, (7) physics standards and tests.

Inquiries in regard to the work of the Engineering Experiment Station should be addressed to the director.

BAILEY AND BABETTE GATZERT FOUNDATION FOR CHILD WELFARE

On December 21, 1910, this foundation was established by a gift to the University of \$30,000 made by Sigmund Schwabacher and by the executor of the will of the late Abraham Schwabacher. The purpose of the foundation is (1) to conduct a laboratory for the mental and physical examination of children in order to determine their individual defects and aptitudes and, in accordance with the results of the examination, to suggest the best means of education and treatment; (2) to assist in establishing child welfare agencies and child study laboratories throughout the state, and (3) to carry on research in child psychology.

In December, 1915, the Bailey and Babette Gatzert Foundation for Child Welfare was created a separate department of the University.

GENERAL INFORMATION

THE UNIVERSITY ORGANIZATION

The University of Washington is one of five institutions of higher education which complete the state's system of public education, the others being the state college and the three normal schools. To the University is given exclusive authority to instruct in the following major lines: Aeronautical engineering, architecture, commerce, fisheries, forestry, journalism, law, library science, marine engineering and medicine.

The University has concurrent authority with the state college to instruct in the following major lines: Chemical engineering, civil engineering, electrical engineering, home economics, liberal arts, mechanical engineering, mining, pharmacy, professional training of high school teachers, school supervisors and school superintendents, and pure science.

Schools and Colleges and Their Fields—The University is organized in the following schools and colleges:

- (A) *The Colleges of Liberal Arts and Science*, which provide a liberal education in arts and pure science, in a course normally requiring twelve quarters of residence, leading to the degrees of bachelor of arts and bachelor of science.
- (B) The professional and technical schools and colleges including:
 - (1) *The School of Business Administration*, covering the fundamental scientific training in industry and commerce in a course of twelve quarters leading to the degree of bachelor of business administration.
 - (2) *The School of Education* requires for admission six quarters' of approved work in any college of the University, and offers an advanced course of six quarters preparing students for careers as high school teachers and school administrators. The degrees are bachelor of arts or bachelor of science, in education. Students in the College of Liberal Arts may major in the department of education and receive the degree of bachelor of arts.
 - (3) *The College of Engineering* has four departments: chemical, civil, electrical and mechanical engineering (including aeronautical and marine), with curricula of twelve quarters leading to the degree of bachelor of science in the special field chosen by the student. The degree of master of science in each field is open to graduate students.
 - (4) *The College of Fine Arts* offers curricula of twelve quarters in architecture, vocal, instrumental, or public school music, or musical theory, painting and design, public school drawing, music and drawing, and dramatic art, leading to the degrees of bachelor of architecture, bachelor of music and bachelor of fine arts, or bachelor of arts with a major in one of the subjects named.
 - (5) *The College of Fisheries* lays a scientific foundation for work connected with the fisheries industry, one of the chief resources of the Pacific Coast. Bachelor of science in fisheries is the degree offered.
 - (6) *The College of Forestry* offers a curriculum of twelve quarters preparing for work in scientific forestry or in the lumber industry, leading to the degree of bachelor

of science. The full professional course is fifteen quarters, with a liberal allowance of electives, giving opportunity for specialization in forest service and state work, logging engineering, forest products, or the lumber business. For this course the degree of master of science is given in the Graduate School.

- (7) *The School of Journalism*, requires for entrance the junior certificate, that is, completion of two years of college work in liberal arts or science. The curriculum leads to the degree of bachelor of arts in journalism and prepares its students for practical newspaper work.
- (8) *The School of Law* is the standard of approved law schools for admission to the bar of this state. For admission the student must present a junior certificate from the College of Liberal Arts or the College of Science, or its equivalent. The curriculum of the school covers nine quarters, leading to the degree of bachelor of laws. The degree of master of laws also is given. Students may carry on work in liberal arts or science and law concurrently, taking both bachelors' degrees in six years, or eighteen quarters.
- (9) *The Library School* prepares students for librarianship in a technical curriculum extending through three quarters following either three or four years of academic study. On completion of the library school curriculum (46 credits), the degree of bachelor of science in library science is granted.
- (10) *The College of Mines* offers a curricula of twelve quarters leading to the degree of bachelor of science in mining engineering, geology and mining, metallurgical engineering, or coal mining engineering. The fields open to graduates of this college are indicated by these divisions. The college also offers a curriculum in ceramics (clay, glass and cement products.) The degree of master of science, with a major in one of these lines, may be obtained in the Graduate School.
- (11) *The College of Pharmacy* offers three-year and four-year courses, the first giving preparation in technical and commercial pharmacy, and the second providing a well-rounded scientific training in this field. The three-year course leads to the degree of pharmaceutical chemist, and the four-year course to the degree of bachelor of science in pharmacy. A fifth year in the Graduate School offers an opportunity for graduate research work leading to the degree of master of science in pharmacy.
- (C) *The Graduate School* offers work leading to the degrees of master of arts, master of science, master of arts or master of science in technical subjects, certain technical or professional master's degrees (as, for example, master of business administration), and doctor of philosophy. A master's degree presupposes at least one year of resident work of high grade and special character, and a doctor's degree at least three years of such work. The University is placing increased emphasis upon its graduate work.

Definitions and Explanations.—In all statements relating to the University the word *course* refers to a single study pursued for a definite period, for which credit may be given toward University requirements for graduation in accordance with the number of hours taken. A *curriculum* is a group of courses arranged to be followed consecutively or concurrently.

A *department* is the unit of instructional organization in a particular science or art, as the department of geology. A *college* gives full curricula, beginning with the work of the freshman year and covering twelve quarters. The work of a *school* is preceded by two or more years of college work.

The four-year programs of the Colleges of Liberal Arts and Science are divided into the *lower division* (freshman and sophomore) and *upper division* (junior and senior). The *junior certificate* is given for completion of the requirements of the lower division in the College of Liberal Arts. The more advanced work of the upper division leads to graduation with the bachelor's degree. The junior certificate is required for admission to the specialized upper division or graduate work of the schools.

The term *unit* is applied to work taken in high school; a *credit* to work taken in college. To count as a unit, a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of thirty-six weeks. A University credit is given for one hour of recitation a week throughout one quarter. Thus a quarter course in which there are five recitations a week is a five-credit course.

The term *major* is applied to the department or subject in which a student elects to specialize.

Special Curricula Within the Schools.—Certain semi-professional curricula are given for which no special school or college is provided. Such is the curriculum in nursing and public health in the College of Science.

The University does not give a medical course, but offers a pre-medical curriculum especially planned as a foundation for study in a medical school. This may be two years in length for schools not requiring college graduation, or four years for schools requiring that amount of preparation.

Under provisions of the National Defense Act, students in the University may attain commissions as reserve officers in the United States Army by meeting the requirements for advanced work in military science. This can be done without interference with the student's regular academic work.

The Four-Quarter System.—The University is operated on the four-quarter system, each quarter having approximately twelve working weeks. The Autumn Quarter begins in October, the Winter Quarter in January, the Spring Quarter in April, and the Summer Quarter in June. The University is closed only through September. Careful reading of the calendar will show the working of this plan in detail. Students may enter at the beginning of any quarter. The quarter system permits them to do a full quarter of university work in the summer in most curricula; to complete a university course in three years, if health and resources permit; or otherwise to adjust their university residence to meet personal conditions. This flexible plan is of especial advantage in the University of Washington because the absence of extremes in climatic conditions is favorable to mental work at all times of the year.

ADMISSION TO THE UNIVERSITY

GENERAL STATEMENT

☛ All correspondence regarding admission of students to the resident course of the University and requirements for graduation, should be addressed to the registrar.

Students are admitted to the resident work of the University by certificate or by examination. Only recommended graduates of fully accredited

four-year secondary schools are admitted on certificate. Students are classified as graduates and undergraduates. Undergraduates are classified as regular students (freshmen, sophomores, juniors and seniors), unclassified students, and special students.

ADMISSION BY CERTIFICATE

ADMISSION TO FRESHMAN STANDING

A graduate of a four-year accredited secondary school, whose course has covered the requirements for entrance as outlined on pages 12-14 and who meets the scholarship requirement outlined below, will be admitted upon recommendation of his principal and the presentation of a satisfactory certificate. Since school diplomas do not give the necessary information, they cannot be accepted for this purpose. Principals of all accredited high schools in the state are furnished with official blanks, which also may be obtained from the registrar's office. Credentials accepted toward admission to the University are kept on permanent file.

Credentials for students expecting to enter the University in the autumn quarter, 1923 should be filed in the registrar's office not later than August 15. It is obligatory to submit at entrance records from all schools previously attended.

Scholarship Requirement.—The University has adopted a scholarship requirement of grade of 80 or better in at least two-thirds of the subjects accepted for graduation from high school and for entrance to the University. This requirement will not be imposed on students who have graduated from high school before September, 1921. It will have to be satisfied, however, in respect to all subjects taken in high school after September, 1921.

If a graduate of an accredited secondary school fails to meet this scholarship requirement, he has the privilege of qualifying for admission by passing the regular University entrance examinations in a sufficient number of subjects in which he has fallen below the grade of 80, to bring his average grade up to the required two-thirds above 80. Successful passing of these examinations will require a very thorough review of the subjects concerned after the work has been completed in high school.

Any student who wishes to be examined to bring his average grade up to the required two-thirds above 80 should send to the registrar, with his application for examination, a detailed statement of courses in which he desires to be examined. This is essential, so that the examination may be a fair test of the student's ability. Such descriptions may best be obtained through the high school principal. (For dates see page 47).

REQUIREMENTS FOR ADMISSION

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the above scholarship requirement and presents fifteen units* of credit, distributed as follows:

*A "unit" is applied to work taken in high school; a "credit" to work taken in college. To count as a unit, a subject must be taught five times a week, in periods of not less than forty-five minutes, for a school year of thirty-six weeks.

changed Oct 23-23 separately minutes

- (a) 3 units of English.
- (b) 1 unit of algebra.
- (c) 1 unit of plane geometry.
- (d) 3 units selected from one of the following groups (or 2 units if 3 units of mathematics are presented).

** (1) Foreign language, either ancient or modern, (at least 2 units in one language; less than one unit will not be counted in any language).

(2) History, civics, economics (at least one unit to form a year of consecutive work in history).

(3) Physics, chemistry, botany, zoology, general biology, physical geography, geology, physiology. (Less than one unit will not be counted in physics, chemistry, or general biology. No science will be counted as applying on this requirement unless it includes a satisfactory amount of laboratory work).

(e) 2 units in subjects presented in the above groups (1) - (3).

(f) 5 units selected from subjects accepted by an approved high school for its diploma. Less than one unit will not be counted in physics, chemistry, general biology, or a foreign language. A maximum of 4 units will be counted in vocational subjects, except for admission to the Colleges of Business Administration and Fine Arts. For admission to the College of Business Administration, the University will accept a maximum of 8 units in vocational subjects, of which 4 units must be in commercial branches. If a student presents 8 such vocational units and 2 units in history, and fulfills requirements (a), (b), and (c), he will be given freshman standing in that college without being held for requirements (d) and (e). If the student is transferred later to another college, only 4 vocational units will be counted, and the students will be required to meet the requirements (d) and (e). For admission to the College of Fine Arts, the University will accept a maximum of 5 units in vocational subjects, provided not less than 2 units of the five are in fine arts subjects. If the student is transferred later to another college only 4 vocational units will be counted.

A candidate who fulfills these requirements will be admitted to freshman standing in any college of the University. †However, if he has not taken in high school certain subjects prescribed for admission to the college he may decide to enter, he must take them in the University, or if they are not offered in the University, he must take them in some accredited secondary school or with a tutor, as part of his authorized schedule of work. Such subjects, if taken in the University, may apply toward a degree, as far as elective courses make this practicable. In certain curricula, however, these subjects must be taken in addition to the prescribed subjects. A student entering without having satisfied such a requirement is required to register so that the requirement will be satisfied not later than the end of his fourth quarter of residence. A student failing to do this is ineligible for readmission until the requirement has been satisfied.

Entrance to freshman standing with condition is not permitted. Excess admission credit does not establish presumptive claim for advanced standing, unless the student has taken a graduate course in the high school of at least one semester.

SPECIFIC SUBJECTS RECOMMENDED FOR ADMISSION TO THE SEVERAL COLLEGES

Colleges of Liberal Arts and Science (General Courses)

3 units of English.
1 unit of algebra.

1 unit of plane geometry.
**2 units in one foreign language.

**If a student has not taken in high school the amount of foreign language required for admission to the college he plans to enter, he must make up the deficiency in the University as part of his regular schedule of work, but without receiving college credit for it. For the Colleges of Science and Fine Arts, the foreign language requirement may be satisfied by two units or 20 credits in any one foreign language. For the College of Liberal Arts, by two units or 20 credits in one of the following: Latin, Greek, French, German, Spanish, Scandinavian, or Italian. If a student fails to present two units in one of these languages, but presents two units in another foreign language, he will receive college credit for required foreign language taken in the University.

†In satisfying entrance requirements with college courses, a minimum of ten credits is counted as the equivalent of the entrance unit.

College of Fine Arts

- | | |
|---|--|
| 3 units of English. | 1 unit in <i>one</i> of the following: physics, |
| 1 unit of algebra. | chemistry, botany, zoology. |
| 1 unit of plane geometry. | 1 unit in a history or $\frac{1}{2}$ unit in U. S. |
| ††2 units in <i>one</i> foreign language. | history, and $\frac{1}{2}$ unit civics. |

College of Business Administration

- | | |
|---------------------|---|
| 3 units of English. | 1 unit of plane geometry. |
| 1 unit of algebra. | 2 units of history. (May include civics and economics.) |
- (One unit of typewriting will be required of students entering in the autumn quarter of 1924, and thereafter.)

Colleges of Engineering and Mines

- | | |
|--|---------------------------------------|
| 3 units of English. | 1½ units of plane and solid geometry. |
| 1½ units of elementary and advanced algebra. | 1 unit of physics. |
| | ½ unit of shopwork. |

College of Forestry

- | | |
|--|---------------------------------------|
| 3 units of English. | 1½ units of plane and solid geometry. |
| 1½ units of elementary and advanced algebra. | 1 unit of physics. |
| | 1 or ½ unit of botany. |

College of Pharmacy

Three-year Course

- | | |
|---------------------|---------------------------|
| 3 units of English. | 1 unit of plane geometry. |
| 1 unit of algebra. | |

Four-year Course

- | | |
|---|---|
| 3 units of English. | 1 unit in <i>one</i> of the following: physics, |
| 1 unit of algebra. | chemistry, botany, zoology, physiology, |
| 1 unit of plane geometry. | general biology. (Must include satis- |
| ††2 units in <i>one</i> foreign language. | factory amount of laboratory work.) |

College of Fisheries

- | | |
|---------------------|---------------------------|
| 3 units of English. | 1 unit of plane geometry. |
| 1 unit of algebra. | |

School of Law, Library School and School of Journalism

(See page 46)

ACCREDITED SCHOOLS

The list of accredited secondary schools in the State of Washington is as follows for the year 1923-1924:

I. Public High Schools

Aberdeen	Asotin	Bickleton	Buckley
Adna	Auburn	Black Diamond	Burlington (U. H.)
Albion (U. H.)	Battle Ground	Blaine	Burton (U. H.)
Almira	Bellingham	Bothell	Camas
Anacortes	Whatcom	Bremerton (U. H.)	Cashmere
Arlington	Fairhaven	Brewster	Castle Rock

††If a student has not taken in high school the amount of foreign language required for admission to the college he plans to enter, he must make up the deficiency in the University as part of his regular schedule of work, but without receiving college credit for it. For the Colleges of Science and Fine Arts, the foreign language requirement may be satisfied by two units or 20 credits in any one foreign language. For the College of Liberal Arts, by two units or 20 credits in one of the following: Latin, Greek, French, German, Spanish, Scandinavian, or Italian. If a student fails to present two units in one of these languages, but presents two units in another foreign language, he will receive college credit for required foreign language taken in the University.

Centerville	Hillyard	Oak Harbor	Snoqualmie
Centralia	Houliam	Oakville	South Bend
Chehalis	Ilwaco	Odessa	Spangle
Chelan	Ione	Okanogan	Spokane
Cheney	Issaquah	Olympia	Lewis and Clark
Chewelah	Kalama	Omak	North Central
Chimacum	Kapowsin	Oroville	Orchard Avenue
Clarkston	Kelso	Orting	Sprague
Cle Elum	Kennewick	Outlook	Stanwood
Colfax	Kent	Pateros	Stevenson
Colville (U. H.)	Kirkland (U. H.)	Palouse	St. John
Coulee City	Kittitas (U. H.)	Pasco	Sultan (U. H.)
Coupeville	Klamber	Pe Ell	Sumas
Cowiche	La Conner	Pomeroy	Sumner
Creston	La Crosse	Port Angeles	Sunnyside
Davenport	Lake Stevens	Poulsbo	Tacoma
Dayton	Langley	Port Townsend	Lincoln
Deer Park	Latah	Prescott	Stadium
Deming	Leavenworth	Prosser	Tekoa
Doty	Lebam	Pullman	Tenino
Dryad	Lind	Puyallup	Thorpe
Duvall	Lower Naches	Raymond	Tieton
East Mill Plain	Lynden	Reardan	Toledo
(U. H.)	Mabton	Redmond	Tolt (U. H.)
Eatonville	Malden	Renton	Toppenish
Edison	Mansfield	Republic	Touchet
Edmonds	Maple Valley	Richland	Twisp
Edwall	Marcus	Richmond Beach	Vader
Ellensburg	Marysville	Ridgefield	Valleyford
Elma	Mead	Ritzville	Vancouver
Endicott	Medical Lake	Riverside	Vashon
Entiat	Menlo	Rochester	Vera, Greenacres
Enumclaw	Meridan (U. H.)	Rockford	Whitburg
Ephrata	Kent, R. 1.	Rosalia	Walla Walla
Everett	Meridian, Ferndale,	Roslyn	Wapato
Fairfield	R. 1.	Roy	Washougal
Fall City	Millwood	Seattle	Washuena
Farmington	Monroe	Ballard	Waterville
Ferndale	Montesano	Broadway	Waverly
Fife	Morton	Franklin	Wenatchee
Foster	Mossy Rock	Garfield	White Salmon
Friday Harbor	Mount Vernon (U. H.)	Lincoln	Wilbur
Garfield	Moxee	Queen Anne	Wilson Creek
Goldendale	Naches	West Seattle	Winlock
Grandview	Napavine	Sedro Woolley	Winslow
Granger	Naselle	Selah	Woodland
Granite Falls	Newport	Sequim	Yacolt
Harmony	Nooksack	Shelton	Yakima
Harrington	North Bend	Skykomish	Yelm
Hartline	Oakesdale	Snohomish	Zillah

II. Other Secondary Schools in Washington

Annie Wright Seminary, Tacoma.
 Aquinas Academy, Tacoma.
 Forest Ridge Convent, Seattle, (provisional).
 Gonzaga High School, Spokane.
 Holy Names Academy, Seattle.
 Holy Names Academy, Spokane.
 Moran School, Rolling Bay.
 Pacific Lutheran Academy, Parkland.
 Seattle Pacific College, Seattle (academy)
 Spokane College, Spokane (preparatory department) (provisional).

St. Dominic's Academy, Everett.
 St. James Cathedral High School, Seattle (provisional).
 St. Martin's College, Lacey (high school department).
 St. Nicholas School, Seattle.
 St. Paul's Academy, Walla Walla (provisional).
 Walla Walla College Academy, Walla Walla (provisional).
 Y. M. C. A., Seattle (high school department) (provisional).

III. Schools Outside of Washington

Graduates of secondary schools outside of Washington will be admitted on the same terms as graduates of accredited schools of Washington, provided the school in question is fully accredited, (1) by the North Central Association of Schools and Colleges, (2) by the New England College Entrance Certificate Board, or (3) by a leading university whose standards of admission are practically the same as those of the University of Washington. The University of Washington reserves the right to require examinations of graduates of such schools in all cases where it seems advisable to do so.

Graduates of four-year high schools in Alaska recommended by the Commissioner of Education for Alaska will be accepted on the same basis as graduates of accredited schools in Washington, until further notice.

ADMISSION TO ADVANCED STANDING

Applicants for advanced standing are required to furnish a complete certified statement of both preparatory and college credits, together with a letter of honorable dismissal from the institution last attended.

School of Law and the School of Journalism.—Requirements for admission to the School of Law and the School of Journalism are: Clear entrance to the College of Liberal Arts or the College of Science; 90 hours (two years) of advanced credit in freshman and sophomore courses: covering all prescriptions for upper division standing in the college of Liberal Arts, and 10 hours of military science or physical education.

School of Education.—Requirements for admission to the School of Education are: Clear entrance to any college of the University; 90 hours of college credits in courses approved by the faculty of the School of Education and the faculty of the college concerned, and 10 hours of military science or physical education.

Library School.—Students who have qualified for senior standing in the College of Liberal Arts or the elective curricula of the College of Science, having earned 145 credits including ten credits in military science or physical education and all required work except the completion of a major, may be admitted to senior standing in the Library School as candidates for the degree of bachelor of science in library science, the requirements for which can ordinarily be fulfilled in one academic year.

Graduate students who hold baccalaureate degrees from any college or university in good standing and whose undergraduate work has included the equivalent of at least 20 college credits in each of two modern foreign languages, German and French preferred, may be admitted to the Library School as candidates for the degree of bachelor of science in library science, the requirements for which can ordinarily be fulfilled in one academic year.

Advanced Undergraduate Standing.—Students from classes above the first year, who present letters of honorable dismissal from other colleges of recognized rank, may be admitted to the advanced standing for which their training seems to fit them. No advanced credit will be given for work done in institutions whose standing is unknown, except upon examination. Definite advanced standing will not be given until the student has been in residence at least one quarter.

Admission of Normal School Graduates to Advanced Standing.—Advanced credit for work taken in approved normal schools by students previously graduated from an accredited four-year secondary school will be allowed at the ratio of 45 quarter hours of lump credit for each full year of normal work.

In fulfilling the requirements of university curricula that allow a large number of elective hours, such as that of the School of Education, normal school credits can usually be fairly well applied. As a rule, a student cannot count much more than two years of normal school work toward completion of curricula that require a major of thirty-five or more hours consecutive and coordinated work in one department. In many set technical or professional courses only a very limited amount of normal school credit can be used.

For graduation with a bachelor's degree a student admitted with advanced credit from a normal school must earn in the University a sufficient number of credits to bring the total up to a minimum of 180 quar-

ter hours (exclusive of required physical education or military science). He must satisfy such specific requirements of the degree as have not been fairly satisfied by previous work.

Claims for exemption from specific requirements, based on work taken in the normal school, shall be passed on by the registrar and the dean of the college.

A minimum of 36 quarter hours and three full quarters in residence is required for any degree offered by the University.

ADMISSION TO GRADUATE STANDING

A bachelor's degree from a college or university of good standing is required for admission to the Graduate School.

ADMISSION BY EXAMINATION

Applicants for admission by examination are required to pass, with grades above 80 per cent in at least two-thirds of the required work an examination based on a four-year course totaling fifteen units and covering the requirements of the college the student wishes to enter.

ENTRANCE EXAMINATIONS

Entrance examinations are held at the registrar's office on the following dates:—July 25, 26, 27; September 26, 27, 28; and December 19, 20, 21, 1923; March 24, 25, 26; June 11, 12, 13; and July 23, 24, 25, 1924. On these days the following schedule will be adhered to:

	First Day	Second Day	Third Day
9-11	English	U. S. History	Physics
11-1	Algebra	Civics	German
2-4	Greek and Latin	Economics	Solid Geometry
	Sciences except Physics	Plane Geometry	French
		Spanish	Commercial
		History other than	Vocational
		U. S.	

Entrance examinations will also be held on request at the following points in the state, on July 24, 25, and on September 4, 5, 1923.

Bellingham	Ephrata	Vancouver
Centralia	Montesano	Walla Walla
Clarkston	Olympia	Waterville
Colfax	Pasco	Wenatchee
Dayton	South Bend	Yakima
Ellensburg	Spokane	

Applications for examinations must be filed with the registrar of the University at least two weeks before the dates on which the examinations are held. Proper blanks are obtainable from the registrar on request. (See page 42).

Certificates of successful examinations before the College Entrance Examination Board will be accepted in lieu of matriculation examinations conducted by the University of Washington. With this exception the only examinations recognized for giving entrance credit are the regular scheduled examinations held at the registrar's office, or such other examinations as are authorized by the registrar.

EXAMINATIONS FOR EXEMPTION IN ENGLISH

The department of English gives an examination in English composition for students who wish to attempt it, with the view of being excused

from all or a part of the required course in college composition. It is desired that a large number of entering students will present themselves for this examination, which will be held on the same dates as the regular entrance examinations for the autumn quarter.

ADVANCED CREDIT BY EXAMINATION

A student may be examined for advanced credit in work that he has not followed in a college class at the University with the approval of the head of the department concerned. Credits and grades so obtained, must be certified by the examiner and the dean concerned, and shall not be given for work done while the student is in residence.

A student desiring to take an examination for advanced credit must first file an application and obtain a permit at the registrar's office.

Special claims for advanced credit based on credentials are passed on by a committee consisting of the registrar, the dean of the college and the heads of the departments concerned.

UNCLASSIFIED STANDING

If a graduate of a four-year accredited secondary school meets the scholarship requirements outlined on page 42 but lacks the specific subject requirements for admission to freshman standing he may be admitted as an unclassified student on recommendation of his principal. Such a student will be allowed to enroll only in courses for which he has had adequate preparation. By virtue of his classification he is not a candidate for a degree, but he may ultimately become a candidate for a degree by fulfilling as part of his college prescriptions all the requirements for entrance to and graduation from the college in which he is registered. An unclassified student is required to register, so that all prerequisites will be satisfied by the end of his fourth quarter of residence. Failure to comply with this requirement will make him ineligible for readmission until regular standing has been acquired.

SPECIAL STUDENTS

All courses offered by the University are organized for regular students who have had the equivalent of a good high school education fully covering college entrance requirements. Under certain regulations, however, a mature person who cannot be admitted to freshman standing or as an unclassified student may be admitted as a special student. He will be allowed to register only for courses for which he shows special preparation, and to subjects prescribed by the Committee on Special Students.

The number of such students admitted is necessarily limited by the facilities of the University. The regulations governing the admission of special students are as follows:

1. An applicant for admission as a special student to any college or school of the University must be at least twenty-one years of age.
2. In general, a student from an accredited high school will not be admitted to this classification if he has been in attendance in the high school the previous year.
3. All available certified credits for previous school work must be submitted to the registrar at least a month before the beginning of the quarter which the student desires to attend. Such a student must file an application for admission showing the kind of work he desires, the reasons for desiring such work, and if no credits can be presented, a detailed statement of any previous educational work and practical experience with a list of subjects in which the candidate is prepared to take entrance examinations. Special blanks for this information are provided.

4. Registration as a special student is for one quarter only. Re-registration will be refused if the student has not shown satisfactory earnestness and definiteness of purpose, if his work has not been good or if he has not complied with conditions prescribed by the committee on special students.

5. By virtue of his classification, a special student is not eligible for any degree. He may ultimately become a candidate for a degree, however, by completing the admission requirements of the college in which he is enrolled.

6. Special students are not eligible to take part in student activities.

7. Persons desiring to be admitted as special students will apply to the registrar for the necessary application and credential blanks.

That applicants for admission as special students may receive full consideration, their applications should be filed with the registrar four weeks before the beginning of the quarter in which the applicant wishes to attend the University. Applications for the autumn quarter should be filed not later than August 15.

AUDITORS

With consent of instructors concerned any mature person, not registered as a student in the University, may be enrolled at the registrar's office as an auditor in not more than two courses on payment of a fee of \$10 a quarter. This provision does not apply to laboratory courses, or to courses offered in the summer quarter.

Rule 1. (a) In the summer quarter, any mature person, with the consent of the dean and the instructor concerned and upon payment of the regular tuition fee, may enroll at the registrar's office as auditor in any number of non-laboratory courses or the lecture parts of any number of laboratory courses.

(b) Persons who, while registered in the University, have attended courses as auditors, shall, in no case, be permitted to take the examinations in such courses or obtain credit therefor.

No person may regularly attend any course in which he has not been registered or enrolled as an auditor.

REGISTRATION

Registration for all students for the autumn quarter will take place on Monday and Tuesday, October 1 and 2, 1923; for the winter quarter on Thursday, January 3, 1924, for the spring quarter, Wednesday, March 26, 1924; and for the summer quarter, Tuesday, June 17, 1924.

Registration is complete when the election blank has been signed by all required registering officers and the student, when all required fees have been paid, and when all blanks have been left in the registrar's office or other place designated by the registrar. Registration by proxy is not permitted.

Late Registration.—The dates noted above are officially set apart for registration and enrollment. All students are expected to complete their registration (including payment of all required fees) in those days. Students failing to do this will be charged an additional fee of \$2 for the first day's delay, and a further cumulative fee of \$1 for each day thereafter during the first week following the final official registration date. After the first week following the final official registration date, no student will be permitted to register except by special action of the Board of Deans. (If a student who has been granted a leave of absence or has withdrawn in good standing during a preceding quarter he may be given the privilege of late enrollment to complete unfinished courses, with the consent of the instructors concerned.)

Changes in Registration.—A fee of \$1 is charged for each change made by a student in his election of studies after registration is completed, unless such change is made on the initiative of University authorities.

Rule 2. Unsatisfied prerequisites take precedence over other subjects. Any student having any unsatisfied entrance prerequisite must so register for work that the deficiency will be removed by the end of his fourth quarter of residence. In special cases, permission to postpone the removal may be granted by the dean of the proper college; provided such permission be filed and entered on the student's record card before the grades for the student's third quarter are in. The registrar is authorized to refuse registration to any student not complying with this rule. Appeal from the registrar's decision may be taken to the Board of Deans.

Rule 3. Except with the consent of his dean:

- (a) No student shall be registered for less than 12 hours of work;
- (b) No student shall be registered for more than 16 hours of work (exclusive of drill or physical training), or the number for the respective quarters in the prescribed curricula.

Rule 4. With the consent of his dean, a junior or senior whose previous scholastic record has been exceptionally good, may be registered for a maximum of 19 hours (exclusive of drill or physical training).

Rule 5. No student may be registered for more than 19 hours (exclusive of drill or physical training).

Rule 6. Work taken to remove entrance deficiencies shall count as a part of the schedule allowed.

Rule 7. A student who is obliged to do outside work must enter on his registration blank a statement of the nature of the work and the number of hours per week so used. In considering petitions for reinstatement the Board of Deans shall take no cognizance of outside work if it has not been noted on the student's registration blank.

Rule 8. A student who registers for an elective course must ultimately complete the course, unless relieved of the necessity by his dean. A student properly withdrawn and given a "W" shall not be affected by this rule.

PHYSICAL EXAMINATIONS

All students entering the University for the first time are required to present themselves for physical examination at the call of the department of physical education. Failure to be examined constitutes a delinquency on the records.

EXPENSES

Tuition and Fees.—By authority of the special legislative act of the session of 1921, the following tuitions and fees will be collected:

GENERAL TUITION FEES

Resident Tuition.—Fifteen dollars (\$15) general tuition per regular academic quarter from each student who has been domiciled within the state of Washington or the territory of Alaska for a period of one year just prior to the date of registration.

Non-resident Tuition.—Fifty dollars (\$50) tuition per regular academic quarter from each student who has not been domiciled in the state of Washington or the territory of Alaska for the period of one year just prior to registration.

Associated Students Fee.—An associated student membership fee of ten dollars (\$10) for the year (exclusive of summer quarter) is collected of all regularly enrolled undergraduate students upon registration. This fee is optional with graduate students, but they must pay one dollar at registration for the infirmary fund for the year.

Exemptions.—All honorably discharged service men or women who served in the military or naval service of the United States during the late world war; and all honorably discharged service men who served in the

military or naval services of any of the governments associated with the United States during the said war, provided they were citizens of the United States at the time of their enlistment and who are again citizens at the time of their registration in the University may on application and showing that such fee will be an individual expense be exempted from the payment of general tuition fee provided they have been domiciled in the state of Washington or territory of Alaska for the period of one year prior to the date of registration. If any such service men have not been domiciled in the state of Washington or territory of Alaska for one year prior to registration they are exempt up to twenty-five dollars (\$25) per quarter.

Deserving students (domiciled in the state of Washington or the territory of Alaska) who, after a quarter in residence have shown a marked capacity for the work done by them in school, in lieu of paying the general tuition fee, above provided for, may give their promissory notes with interest at the rate of four per cent per annum. All applications for this concession must be presented at the comptroller's office.

Refunding Fees.—Tuition and other general fees are not returnable except in case of sickness or causes entirely beyond the control of the student. No portion of the returnable fees shall be returned for voluntary or enforced withdrawal after thirty (30) days from the date of registration of the student. In no case shall more than one-half of the fees be refunded. Students withdrawing under discipline forfeit all rights to the return of any portion of the fee.

OTHER CHARGES

Auditor's Tuition Fee.—A fee of \$10 a quarter will be charged all persons enrolling as auditors.

Part Time Tuition Fee.—A fee of \$10 a quarter will be charged persons registering for partial courses not exceeding six (6) credits.

Excess Hour Fee.—A fee of \$1 per credit per quarter will be charged each student registering for excess hours.

Library Fee.—All students, other than law majors, are required to pay a quarterly fee of one dollar (\$1) for general library book repairs and replacements. This fee is in lieu of the former library fee of five dollars which has been abolished. Law majors pay ten dollars (\$10) a quarter as a special law library fee.

Law Library Fee.—Ten dollars (\$10) per quarter special law library fee from each student registering in law will be charged in addition to the general tuition fee. Students other than majors in law taking work in the School of Law will pay at the rate of one dollar (\$1) for each credit hour of law work elected up to a maximum of \$10 per quarter.

Short Course Tuition.—Twenty dollars (\$20) from each student registering in any short course—mining, forestry, fisheries, etc.

Summer Quarter Tuition.—Twenty dollars (\$20) from each student registering in the summer, for the quarter or any part thereof.

Marine Biological Station Tuition.—Fifteen dollars (\$15), of which twelve dollars (\$12) is for tuition and three dollars (\$3) for laboratory fee.

Military Uniform Deposits.—Each student who is held for military drill is required to deposit \$12 before he draws his uniform. Ten dollars (\$10) of this amount is returnable upon the presenting of proper clearance papers from the military headquarters; the two dollars (\$2) is retained as a breakage fee. This deposit in no way entitles the student to ownership in any part of the military equipment or clothing issued.

Special Examinations.—A fee of \$1 will be charged for all examinations outside the regular schedule.

Late Registration.—A penalty of \$2 is imposed for the first day's delay in registering and \$1 per day additional thereafter up to the close of the week during which registration is permitted.

Changes of Registration.—A fee of \$1 will be charged for changes in election, including additions or withdrawals of individual courses after completion of registration.

Diploma Fee.—Each graduate receiving a baccalaureate or higher degree, diploma in pharmacy, or a teacher's diploma is required to pay a diploma fee of five dollars (\$5). *The teacher's diploma fee does not include the legal registration fee of \$1 paid to the county school superintendent who first registers a teacher's diploma.*

LABORATORY FEES AND DEPOSITS

The following laboratory fees and deposits will be collected quarterly during the ensuing year, 1923-24. With few exceptions, these fees are not returnable in whole or in part, and in no case can any rebate be allowed after 35 days from date of registration: (Fees and deposits listed below apply individually to each numbered course as segregated under the various subjects.)

Anatomy—105, 106, 107	\$ 3.00
104, 108	5.00
101, 102, 103	7.50
Architecture—54, 55, 56, 104, 105, 106, 154, 155, 156	3.00
Astronomy—1	1.00
Bacteriology and Pathology—4, 101, 102.....	3.00
104, 105, 106, 110, 111, 112, 204, 205, 206.....	4.00
Botany—271, 272, 273	1.00
1, 2, 3, 11, 12, 13, 14, 53, 70, 105, 106, 107, 111, 130, 140,	
141, 142, 190, 191, 192, 200, 233, 240, 241, 242, 250, 251,	
252, 253, 254, 261, 262, 263	2.00
119, 143, 144, 145, 279, 280	3.00
Ceramics—131, 132, 133, 180	5.00
110, 191, 192, 193	10.00
121, 122, 123	12.00
Chemistry—All courses except 52, 116, 117, 118, 150, 200, 215	
216, 217, 221, 223, 224, 225, 232, 233, 250.....	6.50
150, 215, 217, 250 to be arranged.	
Breakage Ticket	\$5.00 Desk Key
	.50
Civil Engineering—1, 4, 21, 22, 23, 24, 27, 30, 38, 55, 56, 126,	
142, 167	2.00
Economics and Business Administration—All courses \$1.00	
except those listed below:	
15, 16—Typewriting and 18, 19—Shorthand	10.00
81, 82, 83—Secretarial and Office Training	5.00

Education—All courses except those listed below .....	.50
196, 197, 198	2.50
150, 285, 286, 287	4.50
Electrical Engineering—132, 141, 181, 182, 196, 198	2.00
102, 110, 112, 122, 162, 164	4.00
Engineering Shops—50, 51, 52, 53, 54, 105, 106, 107, 108	2.00
Fisheries—3, 4, 5, 101, 102, 103, 104, 105, 112, 140, S.C. 8	
S.C. 9, S.C. 12, S.C. 13.....	3.00
106, 107, 108, 117, S.C. 7.....	4.00
Food Preservation—154, 155	3.00
120, 150, 151, 152, 153	4.00
Forestry and Lumbering—1, 5, 51, 52, 53, 57b, 58, 101, 102,	
104, 105	2.00
186S, 187, 188, 189, 213, 214, 215.....	3.00
Geology—11, 12, 112, 113, S. C. 1	1.00
1, 2, 21, 31, 120, 123, 124, 131, 133, S. C. 2	2.00
Home Economics—8, 43, 101, 102, 189, 190, 191, 207	2.00
25, 27, 32, 112, 113, 121, 133, 135, 143, 183, 188	3.00
1, 4, 5, 105, 106, 107, 108, 110, 116, 121, 204, 205, 206	6.00
Journalism—61, 90, 91, 92, 160	1.00
51, 75, 101, 120, 130, 131, 133, 136, 140, 170, 173, 174, 175	
(Maximum fees for any one student \$2.50 a quarter.)	2.00
Library Science—Text Book Fee—One or more courses ex-	
cept course 1, a quarter	1.50
Lockers—Anatomy, Chemistry, Education, Engineering, Home	
Economics and Mines buildings, a year .....	.50
Mathematics (Statistics 13)	1.00
Mechanical Engineering—83, 151, 152, 153, 167	2.00
Metallurgy—103, 163	5.00
102	10.00
153, 160	12.00
101, S. C. 1	20.00
Mining—S. C. 2, S. C. 3	3.00
101, 151, 153, 154, 155	5.00
152, 176	10.00
Music—18, 19, 20, 69, 70, 71, 118, 119, 120, 169, 170, 171 as	
listed below:	
Adams, Benton, Burch, Ferryman, 1 lesson a week	15.00
2 lessons a week	30.00
Venino, Van Ogle, Rosen, Tilly, 1 lesson a week	22.00
2 lessons a week	44.00
Glen, 1 lesson a week, \$27.00 2 lessons a week.....	54.00
Piano practice room, an hour a day for the quarter	
(key deposit \$1.00)	3.00
Pipe organ, an hour a day for the quarter (key de-	
posit \$1.00)	12.50
Painting, Sculpture and Design—5, 6, 7, 9, 10, 11, 53, 54, 55	
103, 104, 157, 158.....	2.00
56, 57, 58, 72, 73, 74, 107, 108, 109, 116, 117, 118, 122, 123	
124, 160, 161, 162, 163, 164, 165	3.00
Pharmacy—15	1.00
9, 10, 11	3.00
7	4.50
1, 2, 3, 5, 6, 113, 114, 115,	6.50
121, 122, 123, 129, 130, 131, 201, 202, 203, to be arranged	

Physical Education—174 (swimming)	2.50
87, 88 (golf)	3.00
All other P. E. courses, or combinations of P. E. courses other than those listed above .....	.50
Combinations of P. E. 87, 88, or 174 and any other P. E. course—special fee plus regular \$.50 fee.	
Physics—1, 2, 3, 50, 51, 89, 90, 97, 98, 99, 105, 160, 170, 205	2.00
54, 114	5.00
Psychology—1	1.00
Zoology and Physiology—E160Z	1.00
1, 2, 3, 4, 5, 6, 7, 101, 103, 106, 107, 108, 121, 155, 156, 157	2.00
54, 55, 60, 61, 115	2.50
151, 152, 153	3.00
201, 202, 203, 204, 205, 206 to be arranged.	

Board and Room.—The University dormitories consist of Lewis Hall and Clark Hall for women and Lander Hall and Terry hall for men. During the ensuing year \$32 a month will be charged for room and board at these residence halls. The rooms are furnished with necessary articles of plain furniture, but the student is expected to supply his own bed linen, bedding, towels, and rugs.

An amount equal to the first month's account is paid in advance and left on deposit to be applied on the board and room account for the last month of the school year.

All remittances should be made in favor of the University of Washington and be addressed to the Comptroller of the University of Washington, Seattle.

The University also operates The Commons on the campus where students so desiring may secure the best of food at reasonable rates, cafeteria style.

Outside the campus, board and room may be secured at rates ranging from \$35 to \$40 a month.

University Health Service.—A health service is maintained by the University in conjunction with the Associated Students. Ten per cent of the fees collected by the Associated Students is assigned to the health fund, for the maintenance of an infirmary containing medical offices for both men and women, nurses' offices and quarters, and 40 beds. The University provides the building and equipment, a corps of two physicians and two nurses. Medical advice and office treatment are available at all times.

If a student is taken ill and is unable to call at the medical office, he should notify the infirmary clerk and the public health nurse will call upon the patient. Disposition of the case is determined on report of this visit. If the patient is a contagious suspect or in unsatisfactory quarters, he is taken to the infirmary and cared for free of cost, except for board. If serious illness develops he is transferred to the Seattle hospital of his choice, and further responsibility of the University health service ceases. Scarlet fever and smallpox patients are sent to Firlands Sanitarium and cared for by the city. A local physician may be called in at any time at the patient's expense.

Students absent from classes on account of sickness are not readmitted until they secure cards from the health service office. Record is thus kept of all illness and used as a guide for health supervision. (See Rule 22, page 63).

Student Help.—Many students who find it necessary to support themselves in part or wholly at the University have been enabled to do so through an employment bureau for men conducted by the Y. M. C. A. and by aid of the dean of men. The dean of women renders a similar service for women.

It is necessary to advise caution in entering the University without funds. The University cannot be responsible for finding work for students. During periods of business depression it is especially difficult to obtain part time work. It is not advisable for anyone to enroll unless he has sufficient funds to maintain him for a quarter, minimum of \$200. Students expecting to earn a portion of their support should not register for a full schedule of studies.

ACADEMIC AND VOCATIONAL GUIDANCE

Dean of Men.—The dean of men is concerned with the welfare of the men students of the University. He confers with them on all questions affecting their personal or group interests. Among other duties he prepares reports on students failing in scholastic work, arranges schedules, helps to obtain students part-time employment and examines housing conditions. A list of approved boarding places is kept in his office.

Dean of Women.—The dean of women is always ready to help or advise any woman student who may need assistance. She supplies lists of approved boarding and lodging places, corresponds with parents or guardians who desire to make inquiry concerning their daughters or wards, gives advice regarding course of study, and offers vocational information of a general nature. She acts as counselor to the officers of organizations for women and supervises all student houses of residence.

Vocational Secretary.—The office of vocational secretary assumes the responsibility of all placement work. It is desirable that every student have a conference with the vocational secretary sometime before graduation. The office is available to undergraduates for the purpose of advisement. The vocational secretary is also the executive secretary of the alumni association of the University. A great mutual service may be rendered by reporting to this office any positions open that would be of interest to University graduates.

DEGREES

It is not the policy of the University to grant honorary degrees.

Rule 9. The work of the senior year (a minimum of 36 credits earned in three quarters) must be done in residence.

Rule 10. Each senior, shall, upon registration, file with the registrar a written application for his degree. Each application shall be checked by the Committee on Graduation at least six months before the date at which the student expects to be graduated and notice shall be sent to the student by the registrar of the acceptance or rejection of his application. The accepted list shall be submitted at the last regular meeting of the faculty for the quarter in which the checking is done and, if approved by the faculty, with or without modification, shall constitute the list of candidates to be recommended for graduation upon the completion of the work requisite for their respective degrees. No change shall be made in this list unless ordered by a two-thirds vote of the members of the faculty present.

Note.—Applicants who are late in filing their applications cannot be assured of recommendation to the faculty, or of consideration of petitions for modification of requirements.

Rule 11. All students shall have the option of being held to the entrance and graduation requirements of the catalogue under which they enter, or those of the catalogue under which they expect to graduate. All responsibility for fulfilling the requirements for graduation from the various schools and colleges of the University shall be thrown upon the student concerned.

Rule 12. The degrees of A.B. and A.M., B.S. and M.S., or two different bachelor's degrees, may be granted at the same time in all cases in which a minimum of fifteen quarters shall have been occupied in the work for two degrees.

Rule 13. In determining the fitness of a candidate for a degree, his attitude towards his financial obligations shall be taken into consideration.

Rule 14. Theses shall be typewritten on sheets of ledgerweight paper eight and one half by eleven inches in size, and shall be bound in cloth, with the subject, the name of the author and the date of the presentation on the front cover, and the name and date on the back in gilt letters. A uniform and suitable margin shall be left on the typewritten pages.

Degrees with Honors.—A degree with honors may be conferred on a student who is declared worthy of unusual distinction on recommendation of the honors committee and on vote of the faculty. Early in May each head of a department brings to the attention of the committee on honors such seniors majoring in his department as he thinks eligible for honors. Honors are not awarded to any student in more than one subject.

NORMAL DIPLOMAS

The University Normal Diplomas.—The University is authorized by law to issue teachers' diplomas, valid in all public high schools of the state. Candidates for these diplomas should register in the department of education as early as possible after the beginning of the sophomore year, and should consult with the department from time to time as to his work for the diploma and his preparation for teaching. Fuller information may be found in the department of education.

SENIOR SCHOLARS

Rule 15. (a) Students of the Colleges of Liberal Arts, Science, Fine Arts, Business Administration, and of the School of Education and Library School who are intellectually mature, who have 132 or more credits, and who have shown exceptional ability and capacity for independent work in some group of studies, shall be eligible for senior scholarships. Senior scholars shall be elected by the faculty, upon recommendation of the Committee on Honors, in the June preceding their senior year and their election shall be announced at Commencement and published in the catalogue. Ordinarily the number of scholars shall not exceed ten per cent of the class. Students of the above mentioned colleges, who, in the course of their senior year, show fitness therefor may be recommended and elected to senior scholarships.

(b) The work of the senior scholars shall be in not less than two nor more than four, allied subjects, which shall be so correlated as to bear upon some common field, the aim of the scholarships being breadth of knowledge and culture, rather than minute research. Except in the case of unfinished prescribed work or of courses in which the major professor deems attendance essential. Scholars are to be relieved from attendance at regular lectures and recitations and their work shall be done under the personal direction of the instructors with whom they are registered. The instructors in charge shall submit senior scholars at the end of the year to searching final examinations by which the grade of honor, if any, to be recommended to the Committee on Honors, shall be determined.

(c) Senior scholars shall be granted the library privileges accorded to members of the faculty and such monetary awards, if any, as may be available.

FELLOWSHIPS, SCHOLARSHIPS, AND AID

Loretta Denny Fellowships.—Three fellowships, of \$500 each, open to graduate students in any department of the University. Awarded by the faculty on the basis of scholastic excellence and general merit, but only to those who need financial assistance. Applications for these fellowships should be made on blanks supplied by the dean of the Graduate School, and must be in his hands on or before March 15 preceding the academic year for which the fellowships are to be granted.

Arthur A. Denny Fellowships.—Six fellowships of \$500 each, open to graduate students in the departments of civil engineering, education, English, history, mining engineering, and pharmacy respectively. Awarded by the departments concerned on the basis of scholastic excellence and general merit, but only to those who need financial assistance. Applicants must be residents of the state of Washington. Applications for these fellowships should be made to the heads of the departments concerned on blanks supplied by the dean of the Graduate School, and must be in their hands on or before March 15 preceding the academic year for which the fellowships are to be granted.

National Research Fellowships.—Fellowships in physics and chemistry, offered by the National Research Council, are open to promising research students, who have already taken the doctor's degree or have equivalent qualifications. A successful candidate can pursue his research at any university or research institute chosen by him and which is acceptable to the appointing board. The salary will ordinarily be \$1800 for the first year. Fellows are eligible for successive reappointments ordinarily with increase in salary. For details address the dean of the Graduate School or the heads of the departments.

University Honorary Fellowships.—Three honorary fellowships have been established by the University. These, like the Loretta Denny fellowships, are open to students in any department of the University. They carry no stipend, and are designed to furnish recognition of exceptional scholastic excellence in the case of graduate students who are not eligible for the Loretta Denny or the Arthur A. Denny fellowships, either because they do not need financial assistance or because they are not giving their entire time to their work in the University.

Research Fellowships in Mining and Metallurgy.—The College of Mines of the University in cooperation with the United States Bureau of Mines offers five fellowships in mining and metallurgical research. The fellowships are open to graduates of universities and technical schools who are properly qualified to undertake research work. The value of each fellow is \$900 per year of twelve months. Fellowship holders are required to register as graduate students and to become candidates for the degree of master of science in mining engineering or metallurgy, unless an equivalent degree has previously been earned. Applications are due not later than May 15, and should be addressed to the Dean, College of Mines, University of Washington, Seattle, Washington.

Du Pont Fellowship.—Through its chemical department, Du Pont de Nemours & Co. offer an annual fellowship of \$500 in chemistry, known as the "Du Pont Fellowship," open to a senior student or graduate student in chemistry or chemical engineering.

The Bon Marche Industrial Fellowship.—The Bon Marche of Seattle offers an annual fellowship of \$600 to a graduate student in home economics for research work in textiles. The recipient of this fellowship is required to give one fourth of her time for eleven months to the testing of textiles for the Bon Marche.

The Mars Fellowship.—A research fellowship in astronomy, given by the late Dr. Percival Lowell, of the Lowell Observatory, Flagstaff, Arizona, carrying a stipend of \$600, may be awarded annually.

Columbia University Fellowship.—Columbia University offers each year a fellowship of \$250, open to students in mining, engineering and chemistry.

University Teaching Fellowships.—The University each year provides a number of teaching fellowships in various departments. The graduate student receiving such a fellowship divides his time equally between his studies and assistance in the teaching work of the departments in which he is enrolled. These fellowships range from \$540 to \$720.

Graduate Scholarships.—A number of graduate scholarships are open to students who perform service as laboratory assistants, assistants in charge of quiz sections, or readers. The remuneration is proportioned to the service, and ranges from \$180 to \$360.

Rosenberg Scholarship.—A scholarship of \$200, known as the "Samuel Rosenberg Scholarship, endowed in loving memory by Ella S. Rosenberg, his wife," is open to graduate students in French. In making this award, account will be taken of the scholarship, personality and needs of the candidates.

Isabella Austin Scholarship.—The Isabella Austin scholarship of \$100 for freshmen women is awarded annually at the end of the fall quarter to a young woman of promise on the basis of scholarship and financial need.

Washington Alumnae Scholarship.—The Washington Alumnae offer an annual scholarship of \$100 to be awarded to a woman member of the Junior Class on the basis of scholarship, activity in student affairs, personal character and wholesome influence in university life.

The Gamma Phi Beta Scholarship.—The Seattle Alumnae of Gamma Phi Beta offer an annual scholarship of \$100 to that woman among the English major students who most nearly fulfills the following conditions: partial or complete financial self-dependence, high scholarship, strength of personality, wholesomeness of influence and promise.

The Frederick and Nelson Scholarships.—Frederick and Nelson of Seattle offers two scholarships, one to a boy and one to a girl, each of which carries \$250 a year for the freshman and sophomore years. These scholarships are awarded on the basis of scholarship, personality, and business acumen.

The Beta Gamma Sigma Scholarship.—Beta Gamma Sigma offers a scholarship of \$75 in the College of Business Administration, to be awarded to the self-supporting student with the highest grades at the end of the fifth quarter.

The A. F. Venino Scholarship.—Professor A. F. Venino offers an annual scholarship to the candidate showing the greatest proficiency and promise in piano playing. This scholarship carries free tuition for one weekly lesson throughout the autumn, winter and spring quarters. All candidates must submit their application in writing to Dean Glen before September 1. The competitive examination preliminary to the award is held in room 110, Meany hall, at 2 p. m. of the Saturday before registration day.

PRIZES

The Judge Alfred Battle Prize in Public Speaking and Debate.—Judge Alfred Battle offers an annual cash prize of \$50 to the Washington debating team chosen to meet representative debaters from the University of Oregon.

The Judge Kenneth Mackintosh Prize in Debate.—Judge Kenneth Mackintosh offers an annual prize of \$75 to the University of Washington debating team, consisting of two men, who compete with Leland Stanford Junior University in debate.

The E. F. Blaine Prize in Oratory.—Mr. E. F. Blaine offers an annual cash prize of \$100 to the winner in an intercollegiate oratorical contest of the universities of the northwest.

Fraternal Order of Eagles Prize.—Seattle Aerie No. 1 of the Fraternal Order of Eagles offers an annual prize of \$100 for the best essay or oration by a student of the University of Washington. The subject for this year is "Truth."

Philo Sherman Bennett Prize.—The Philo Sherman Bennett prize of \$24 annually is "for the best essay discussing the principles of free government."

The Jaggard Prize.—In memory of the Hon. Edwin A. Jaggard, late justice of the supreme court of Minnesota, Miss Anna Wright Jaggard offers an annual cash prize of \$50 for the best essay on a topic connected with courses in history of law or jurisprudence.

The Burke China Club Prize.—The Burke China Club Prize of \$25 is awarded annually for the best essay on some subject related to the Chinese Literature, History or Language. Competitors are restricted to those who have had at least one term's work in Chinese Literature, History or Language.

The Dan Cloud Memorial Prize.—The Sigma Delta Chi fraternity offers a prize of \$100 to be awarded to the student who writes the ten best editorials published in *The University of Washington Daily* during the current year.

The Charles H. Bebb Prize in Architecture.—Mr. Charles H. Bebb offers an annual cash prize of \$100 for the best design in some problem of architecture.

The Kellogg Prize in Architecture.—The William W. Kellogg Prize of \$50 is awarded annually for competitive work in architecture and design and is open to juniors and seniors.

The Washington Brick and Lime Company Prize.—The Washington Brick and Lime Company of Spokane offers a prize of \$50 in the department of architecture to the sophomore, junior or senior student who submits the best design in terra cotta treatment.

The Judge Thomas Burke Prizes in French.—Judge Thomas Burke offers two cash prizes, one of \$15 and one of \$25, for general excellence in French.

The Frank Butty Prize.—The Frank Butty Prize of \$20 is offered annually for the best essay on some subject related to the Italian Language and Literature.

The Italian Commercial Club Prize.—The Italian Commercial Club of Seattle offers a first prize of \$75 and a second prize of \$50 to the two students in the University who attain distinction in second-year Italian.

The A. Merlino Prize.—The A. Merlino Prize of \$25 is offered annually to the student in the College of Science who writes the best essay on "An Italian Scientific Advancement During the Year."

The N. Paoella Medal.—Mr. N. Paoella, of Seattle, offers a gold medal each year, beginning with 1913, for a period of ten years, to the student doing the best work in Italian.

Military Science Prize.—The members of the Non-commissioned Officers Training School have established a fund of \$400, the income of which shall be utilized as a prize to be awarded to the student completing his junior year with the highest honors in military science.

STUDENT LOAN FUNDS

Several loan funds are available to assist students, both men and women through financial emergencies. See the comptroller or the dean of women as the case may be for full information.

ASSOCIATIONS AND CLUBS

Alumni Association.—Every graduate of the University of Washington is a member of the Alumni Association. The records are kept by the permanent executive secretary, J. G. Fletcher, who is also the vocational secretary of the University. The Alumni Association is governed by the alumni council which meets annually and consists of a representative from each local organization. It lays down policies which are carried out by the executive committee. The executive committee consists of five members elected by the council, one representative respectively of the Board of Regents, the faculty, the associated students, and the officers of the association, who are elected annually. The annual dues are \$3. All alumni who pay dues receive *The Washington Alumnus*, the official publication.

Associated Students.—The Associated Students of the University of Washington (A.S.U.W.) is the central organization which conducts the activities of the student body. Membership is required of all regularly enrolled undergraduate students. The annual fee is \$10. (\$1 for summer terms.)

This fee gives each student a membership in the corporation, including a free subscription to the *University of Washington Daily* and free or reduced admission to such football, basketball, baseball games, tennis, track and wrestling meets, crew regattas, debates, oratorical contests, musical concerts as may be designated by the Board of Control.

The management of the Associated Students is vested in an annually elected Board of Control, composed of nine students, three faculty and three alumni. The Board meets bi-weekly and has all the usual powers vested in the directorate of any corporation. The Board employs a graduate manager as its executive agent. He is assisted by student managers and in 1921-1922 the business transacted amounted to \$165,000, besides the stadium. The office of the graduate manager is in room 109 Commerce hall.

The Board employs a manager of the A.S.U.W. bookstore. In 1921 the sales amounted to \$160,000.

Christian Associations.—The Young Men's Christian Association is open to membership for all men students and members of the faculty. The Association publishes the "W" book or student hand-book for men students. It is a Christian service organization and will assist University men in finding homes, part-time employment, and church affiliation.

The new building at the entrance to the campus on east forty-second street is designed for the use of all men of the University whether they are members of the organization or not.

The Young Women's Christian Association on the campus has a membership of 900 women and maintains an active organization with headquarters at 210 Denny hall.

The purpose of the organization is to create and promote a spirit of Christian friendliness among women students; to afford opportunities for development of Christian leadership through cabinet and committee work; and to offer channels for self-expression through various forms of service work, both on and off the campus.

A full-time general secretary is employed whose services are at the disposal of every University woman.

Department Clubs.—The following clubs are connected with the work of different University departments: American Chemical Society, American Institute of Electrical Engineers, American Society of Mechanical Engineers, Business Administration Council, Chemical Club, Classical Club, Deutscher Verein, Education Club, English Club, Engineers Council, Fisheries Club, French Club, Forestry Club, Graduate Club, Home Economics

Club, Law Association, Maritime Commerce Club, Mathematical Journal and Research, Mines Society, Officers Club, Pharmacy Club, Philological Club, Political Science Club, Physical Education Club, Pre-Medic Club, Scandinavian Club, Spanish Club, Women's Athletic Association, Zoology Club.

Religious and Social.—Canadian Co-ed Club, Chinese Club, Christian Science Society, Cosmopolitan Club, Daughters of the American Revolution, Filipino Club, Girls Rifle Club, Japanese Club, Kla-How-Yah, Marilla Hutchins Club, Mountaineers' Club, Newman Club, Menorah Society, Patrons' Association, Service Club of Washington, Thalian Dramatic Association, Tillicums, Young Men's Christian Association, Varsity Boat Club, Women's Ex-Service Club, Women's Federation of the University of Washington, Young Women's Christian Association.

Debating Societies.—There are four debating and literary societies in the University: Stevens, Badger, Athena and Sacajawea. The first two are for men, the last two for women. Membership in the clubs is limited so that frequent practice may be afforded.

The Pacific Coast Triangular Debating League, consisting of the Universities of Washington, Oregon, and Stanford, holds an annual triangular debate. Each institution has two teams, representing the affirmative and negative of the question under discussion.

The men of the University also have a triangular debate league with Whitman College and the University of Idaho.

The women of the University have a dual league with the University of Oregon and a triangular league with Whitman College and the University of Idaho.

Musical Organizations.—The musical organizations consist of the University Choral Society, Men's Glee Club, Women's Ensemble, Orchestra and Band.

Philological Association.—The Philological Association was organized to encourage scientific investigation in languages and literature. Membership is open to all members of the University who are interested in philology.

Honor Societies.—The following honor and professional societies have been established at the University: Alpha Kappa Psi (Commerce); Association University Players (Dramatics); Beta Gamma Sigma (Business Administration); Big "W" Club; Calva et Ossa (Pharmacy); Delta Phi (Women's Debate); Eta Sigma Phi (Home Economics); Fir Tree (Senior Men); Hammer and Coffin (Comic Publication); Iota Sigma Pi (Chemistry, Women); Iota Tau Alpha (Dramatics, Men); Kappa Psi (Pharmacy, Men); Knights of the Hook; Lambda Rho (Art, Women); Mu Phi Epsilon (Music, Women); Oval Club (Junior and Senior Men); Pan Xenia (Foreign Trade); Phi Alpha Delta (Law); Phi Beta Kappa (Scholarship in the Arts); Phi Delta Delta (Law, Women); Phi Delta Kappa (Education, Men); Phi Delta Phi (Law, Men); Phi Lambda Upsilon (Chemistry, Men); Phi Mu Alpha (Music, Men); Phi Sigma Chi (Commerce, Women); Pi Lambda Theta (Education, Women); Pi Mu Chi (Pre-Medic); Red Domino (Dramatics, Women); Scabbard and Blade (Military); Sigma Delta Chi (Journalism, Men); Sigma Epsilon (Pre-Medic, Women); Sigma Upsilon (Literary Fraternity, Men); Sigma Xi (Scientific); Tau Beta Pi (Engineering); Tau Kappa Alpha (Debate, Men); Theta Sigma Phi (Journalism, Women); Tolo Club (Junior and Senior Women); Atellier (Architecture); Xi Sigma Pi (Forestry, Men).

Washington University State Historical Society.—The Washington University State Historical Society has for its purpose the preservation of his-

torical documents and records of the Northwest and the state of Washington, and to preserve or publish the results of all investigations.

GENERAL SCHOLASTIC REGULATIONS

STUDIES

At the beginning of each quarter, the student arranges his schedule of studies with the advice and assistance of his class officer. A regular course consists of fifteen or sixteen hours of recitation per week.

Rule 16. No person may regularly attend any course in which he has not been registered as a student or enrolled as an auditor.

All women students are required to take three hours of gymnasium work a week throughout the first and second years, ten credits in physical training being required of women for a degree.

Two years of military training is required of all able-bodied male students, except those from foreign countries not intending to become naturalized. By regulation of the University the course is required during the first and second years.

Neither the requirement of physical education for women, nor that of military science for men applies to any student entering as a junior or senior if the student has fulfilled the requirements in these subjects laid down by the institution from which he comes. The deans, together with the physical director, or commandant, as the case may be, have authority to allow a student to substitute the proper corresponding amount of scholastic work for gymnasium or military science when it seems advisable. To be valid, substitutions must be signed by the dean concerned and the physical director or commandant, and must be filed in the registrar's office.

Rule 17. It shall be the duty of every student of whom military science or physical training is required to see that he is properly registered for the course, and to report for instruction. The fact that a student was not formally registered does not exonerate him from attending. Students who are required to take military science or physical training, but fail to report for work, will, with the approval of the president, be excluded from all classes. The responsibility of complying with the regulations regarding military science and physical training rests entirely with the student.

Rule 18. (a) Men who are to be at the University for only one year, preparing for entrance into some other institution, e. g., a medical school, may be permitted to postpone the course, with the understanding that if they register in the University in succeeding years, they shall be required to take the full course.

(b) Men who, because of physical condition, age, civil status, or pecuniary circumstances necessitating outside work, should not, in the judgment of their dean, be required to take the work in military science, may be permitted by the commandant of cadets to substitute physical training or scholastic work therefor.

Rule 19. Each request for permission to postpone, or substitute for the regular course in the department of military science and tactics, shall be acted upon by the commandant of cadets, on the recommendation of the dean concerned. Each grant of permission must be filed in the registrar's office.

Rule 20. Only short course students in mining and forestry shall be exempt from the requirements in military science and physical training.

Rule 21. The dean concerned and the physical director together may grant permission to a student to postpone, or substitute scholastic work for the required work in physical training. The grant of permission must be filed in the registrar's office.

REGULATIONS FOR WITHDRAWAL

Withdrawal is the voluntary severance by a student of his connection with a course or with the University and is indicated on the registrar's books by a "W". During the first four weeks of a quarter a student may withdraw from a course and be given a "W" with the written consent of his dean and his instructor. If he desires to withdraw at a later period, he may do so, but if his work has not been satisfactory he shall be given an "E" instead of a "W." If a withdrawal in either case will reduce the

student's hours below 12, it must be approved by his dean. A student who drops a course without withdrawing shall be given an "E" in the course.

LEAVE OF ABSENCE

A leave of absence from the University, involving excuses from classes, may be granted by the dean concerned except as hereinafter provided.

Rule 22. (a) Leaves of absence on account of sickness shall be granted by the University health service, and shall be taken personally to the instructors concerned. Students absent on account of sickness shall not be re-admitted to classes without this written excuse. The University health service shall file a copy of these leaves of absence with the registrar.

(b) Leaves of absence from one class period with the exception of cases included in rule 22 (a) may be granted by instructors.

(c) Leave of absence from the University for recognized student activities (athletics, music, debate, etc.) shall be passed on by the dean of men and the dean of women respectively.

SCHOLARSHIP STANDING

Rule 23. (a) Any student who, any time in a quarter, is reported to the registrar as doing work below passing grade in any subject, shall be warned.

(b) Any student who, at the end of any quarter, fails in two or more subjects, aggregating more than one-third of his registered hours, shall be dropped. Reinstatement in the following quarter shall be allowed *only on permission* of the board of deans. If such student is reinstated he shall be on probation and shall register under conditions prescribed by his dean, who shall be his registering officer.

Note.—Probation is the status of a student who, having been dropped for scholastic failures but reinstated by the board of deans, is compelled to pass in all his registered hours. (See also Rule 32.)

(c) The cases of all students registered for less than a normal schedule who are failing in more than one-third of their work, shall be reported to the board of deans for final action.

(d) To be eligible for re-registration during the academic year 1923-1924, or any succeeding academic year, a student must have made grades of A, B, or C, in two-thirds of his hours for the last academic year; provided, that a student eliminated by this rule shall be eligible for re-registration after the interval of one succeeding autumn, winter, or spring quarter.

Note.—In the administration of these rules military science and physical education shall be on the same basis as so-called "academic subjects."

EXAMINATIONS

Rule 24. Examinations shall be held at the close of each quarter in all courses. Instructors desiring to excuse any or all students from examinations in any course shall obtain the approval of the head of the department and the dean of the college concerned.

Rule 25. Examinations shall be held in each course at the last scheduled class-hour of the quarter, and also at the next preceding class-hour, if desired; except in laboratory courses, when the last laboratory period may be used as a substitute or in addition. In case an instructor wishes to give an examination at other than the scheduled time, he must get the permission of the board of deans.

In certain courses running through two or more quarters the examination on the work of the first quarter is provisional, final credit not being given until the examination for the entire course has been passed.

Under "Departments of Instruction" such courses are indicated by course-numbers connected by hyphens.

Rule 26. A student desiring to be absent from his scheduled examinations must before leaving college, present to the instructors concerned permission from his dean to be absent.

Rule 27. A student, absent from a scheduled examination either by permission of his dean, or through sickness, or other unavoidable cause, may take another examination under the following conditions:

(a) He shall satisfy his dean as to his reasons for absence;

(b) He shall pay a fee of \$1 at the comptroller's office and get a receipt for same;

(c) He shall present this receipt to the registrar, who shall issue a card entitling student to examinations;

(d) He shall present this card to the instructors concerned and take the delayed examination at a time approved by his dean and instructor. No instructor need give more than one special examination in any one subject in any quarter.

Rule 28. Reports of all examinations of seniors must be in the registrar's office by 6 p.m. of the Monday preceding commencement day. Examination for all candidates for graduation at the end of the autumn, winter, and summer quarters shall conform to the regular examination schedule.

SYSTEM OF GRADES

1. The following is the system of grades:*

A	.....Honor
B	.....
C	.....Intermediate
D	.....
E	.....Failed
I	.....Incomplete
W	.....Withdrawn

The grade "E" is final and a student receiving a grade of "E" in a course can obtain credit for that course only by re-registering for it and repeating it.

A grade of "W" can be given only in case of regular withdrawal in good standing.

An Incomplete is given only in case the student has been in attendance and done satisfactory work to a time within two weeks of the close of the quarter. An Incomplete in a course may be changed to a passing grade during the next quarter in which the student is in residence, provided the work of the course shall have been finished in a satisfactory manner; otherwise it becomes an "E". In special cases removal of an Incomplete may be deferred by the dean of the proper college. Notice of such deferment must be filed with the registrar before the Incomplete has been changed to an "E."

2. Candidates for the bachelor's degrees in the colleges of Liberal Arts, Science, Business Administration, Fine Arts and Forestry, the Library School, the School of Education, and the School of Journalism, must receive grades of A, B, or C in three-fourths of the credits required to be earned in this University for their respective degree.

3. The grades "passed" or "failed" are used in reporting the work of graduate students.

Rule 29. Except in cases of clerical error, no instructor shall be allowed to change a grade which has once been turned in to the registrar.

TUTORING RATES

Rule 30. The maximum rates to be charged by official tutors shall be as follows:

No. in Class	Fee per hour
1	\$2.00 per student
2	1.20 " "
3	1.00 " "
4	.80 " "
5	.80 " "
6	.70 " "
7-15	5.00 " Class

No class to be larger than 15.

No reduction to be made for absences.

Fees to be payable by the month, in advance.

LIBRARY RULES

Rule 31. Following shall be regulations governing the use of the library.

(a) Any student may borrow books from the library for a period of two weeks; provided, however, that any book may be called in at any time.

(b) A loan may be renewed on or before the day the loan expires if there is no other demand for the book.

(c) A fine of 3 cents per day is imposed for each day a book is retained after it is due; provided, however, that if a book is retained five days or more

*These grades correspond approximately to the old marking scheme as follows: A, 100-96; B, 95-86; C, 85-76; D, 75-70; E, 70-0.

after it is due the borrower may be assessed double the accumulated fine. The date a book is due is stamped inside the back cover.

(d) Any reserved book may be borrowed for any period when the library is to be closed, but failure to return the same within ten minutes after the library next opens will subject the borrower to a fine of ten cents for the first hour or any part of that hour and five cents for each additional hour or fraction thereof that the book is retained. All fines are due when the book is returned.

(e) Books must not be taken from the library without being charged at the loan desk.

(f) Failure to comply with (c), (d) or (e) shall be considered "a delinquency in a financial obligation."

DISCIPLINE

Rule 32. (a) All charges of infraction of the honor code as promulgated by the A. S. U. W. shall be referred to the senior council established by said A. S. U. W..

(b) The decisions of the senior council in said cases shall be referred to the President of the University before taking effect.

(c) All charges of infraction of the rules and regulations of the University shall be referred to the faculty committee on discipline for investigation and final decision.

STUDENT PUBLICATIONS

Rule 34. Only those publications may make use of the good will of the University in soliciting advertising who shall be so designated by the committee on publications.

Rule 35. All requests for permission to issue student publications shall be referred to the committee on publications with power to act.

Rule 36. The editor of the *University of Washington Daily* and the editors of all other student publications shall be held responsible for all matter that appears in their respective publications. Correspondents of all other publications shall be held similarly responsible for all items contributed by them to their respective publications.

Rule 37. No special editions of *The Daily*, by special sets of editors, shall be allowed, except by special permission of the publications committee of the board of control.

STUDENT ACTIVITIES

Rule 38. Student activities shall include:

- (a) Any sport or pursuit for which an A.S.U.W. emblem is granted.
- (b) Any sport or pursuit organized under an A.S.U.W. coach or a member of the faculty in preparation for (a).
- (c) Any semi-scholastic pursuit for which credit is given.
- (d) Any all-university public performance managed by students.

ELIGIBILITY RULES

GENERAL

Rule 39. (a) In order to be eligible to represent the University in any student activity, a student must:

1. Be registered in the university.
2. Not have a total of failures on his previous record, in this or any other institution, exceeding one-fifth of his total hours earned.
3. Keep off probation.
4. Secure a written leave of absence, if his absence from classes is required by participation.

(b) An incomplete, until removed, shall have the same value as an "E" in determining eligibility.

(c) Credits or provisional credits for work taken to remove entrance conditions may not be counted.

(d) The foregoing general rules shall apply to the editors-in-chief and business managers of all authorized student publications. Eligibility in these cases shall be determined by the Director of the School of Journalism.

(e) Student members of the Board of Control of the A.S.U.W., head student managers, members of the executive committee and council of the Women's Federation, and class officers, must comply with these general eligibility rules. Eligibility in these cases shall be determined by the committee on student welfare.

(f) A student, after having been declared eligible for any student activity, shall remain eligible, scholastically, for the remainder of the season of participation, or the term of office; provided, that in cases of moral delinquency no previous notice shall be required to disqualify.

(g) A student, to be eligible to take part in any intramural meet or game under the control of the department of physical education, must pass any physical tests set by the department of physical education, and practice at least one month before any intramural meet or game. Eligibility in these cases shall be determined by the heads of the departments of physical education for men and women respectively.

SPECIAL

*Group I**Athletics.*

(a) In order to be eligible to represent the university in any intercollegiate athletic activity, a student must:

1. Comply with the foregoing general rules of eligibility.
2. Have presented fifteen (15) Carnegie units for entrance requirements.
3. Have been in residence for one calendar year after his matriculation, provided that until one calendar year after his matriculation any student (of less than junior scholastic standing and otherwise eligible as a freshman) not a transfer, shall be eligible to compete in freshman contests; and provided, that a student transferring to this University, with at least full sophomore standing, from an institution not granting a standard bachelor's degree, shall be eligible to play on varsity teams during his first year of residence, but not eligible to compete on the freshman teams.
4. Have completed thirty-six (36) quarter hours of scholastic work, and earned passing credits therefor.
5. Be registered for at least twelve hours' work in a regular or special course as defined in the curriculum of his school or college.
6. Have passed two-thirds of the normal work of the curriculum in which he is enrolled for the quarter of residence previous to participation. Fractional hours are to be disregarded in favor of the participant. Previous quarter shall be considered as the last quarter preceding such participation in which the student was carrying at least two-thirds normal work of the curriculum in which enrolled.
7. Be, one week before the first conference game, carrying satisfactorily two-thirds of the normal hours of the curriculum in which he is enrolled for the quarter of participation. All members of the squad found eligible one week before the first conference game shall be declared scholastically eligible for the season in question; provided, that in cases of moral delinquency no previous notice shall be required to disqualify.
8. Pass any physical tests set by the department of physical education.
9. Have registered not later than three weeks after the first day of registration in the quarter in which he desires to compete.

(b) No student shall participate in any one intercollegiate sport for more than three college seasons in the aggregate, and shall not compete in varsity competitions in more than four separate academic years. In the interpretation of this rule it is understood that any man who participated in any intercollegiate competition previous to December 1, 1915, shall be eligible to compete in any sport for four seasons in the aggregate.

(c) So far as applicable these regulations shall apply to freshmen. Freshmen shall not be allowed to play with varsity men on a team representing the institution in any outside competition. For the purposes of this rule a person, to be a freshman, must have completed less than thirty-six quarter hours of scholastic work.

(d) Eligibility in athletic cases shall be determined by the chairman of the faculty athletic committee.

(e) Athletics for women shall be limited to games and contests within the University. Such games and contests shall not be open to the public. Eligibility in these cases shall be determined by the head of the department of physical education and hygiene for women.

Group II

Dramatics, music, debate, oratory, for which credit is given.

(a) In these activities a student must comply with the foregoing general rules of eligibility and must satisfy the department responsible for the work, before he is allowed to represent the University; provided, that if a student engages in any of these activities without registering for the course of which it forms a part, his eligibility shall be determined by the committee on student welfare.

(b) No student shall take part in more than one dramatic performance during a quarter unless such performance is part of a regular course for credit.

Group III

All-University public performances managed by students and not included in Groups I and II.

(a) In these activities, a student must comply with the foregoing general rules of eligibility and satisfy the committee on student welfare before he is allowed to represent the University.

MISCELLANEOUS

Rule 49. Smoking shall not be allowed in the University recitation or laboratory buildings or on the steps thereof.

Rule 50. Push-ball contests, tie-ups, and all other forms of class conflicts are prohibited. Any forms of hazing, or of interference by any class or any members

of any class with the personal dignity and liberty of any member of any class, are a breach of discipline and are prohibited.

Rule 51. (a) Student clubs or organizations connected with the work of a department or departments may have speakers to address them at the University; provided the speakers are vouched for by the head of the department concerned. They must also secure the permission of the superintendent of buildings to use the University grounds or buildings.

(b) All extra-departmental groups, wishing to have speakers address them must have the speakers approved by the assembly committee and must secure the permission of the superintendent of buildings for the use of any of the University buildings or any part of the grounds of the University.

Rule 52. There may be three University formal social functions in any academic year, viz., the junior prom and the varsity ball, not open to freshmen, and the cadet ball, open to freshmen.

Rule 53. (a) During the first four weeks of the first quarter, no fraternity or sorority nor any organization or club whose membership is made up wholly of men or women shall give any social function at which members of the opposite sex are entertained.

(b) During the college year, social functions may be held on Fridays and Saturdays only. The night before a single University holiday shall be free for social affairs, except in the case of the night before Campus Day.

(c) No social functions involving both sexes may be held within the two weeks preceding the quarter or year examinations.

(d) During the college year, picnics may be held only Saturdays.

FRATERNITIES AND SORORITIES

Rule 54. (a) No fraternity or sorority shall pledge any person for membership whose registration in the University is not complete. SEE REGISTRATION.

(b) No student having less than junior standing shall be initiated into a fraternity or sorority until he or she has earned 18 credits or provisional credits in two quarters, or 15 in one quarter, at this University. (Beginning with the year 1923-1924, 18 or 15 hours, respectively, of scholastic work exclusive of prescribed military science or physical education will be required.) Credits or provisional credits for work taken to remove entrance conditions may not be counted.

(c) Any ex-service man entering the University with fifteen entrance units, at least ten academic credits, and a minimum of ten military credits, shall be regarded as eligible for initiation into a fraternity.

(d) Any ex-service man who, in addition to having fifteen entrance units and a minimum of ten military credits, shall have earned in the University a minimum of ten credits in one quarter, shall be eligible for initiation into a fraternity; provided always that if he is registered for less than fifteen hours, he must have passed in all his hours.

(e) Candidates for initiation into either fraternities or sororities shall secure from the registrar's office a certificate of eligibility.

(f) Special students desiring to be initiated into fraternities or sororities must also be approved by the student affairs committee. Unclassified students and others having unremoved entrance conditions may also be referred by the registrar to the student affairs committee for approval.

Rule 55. The location of all fraternity and sorority houses must be approved by the president of the University.

COLLEGE OF LIBERAL ARTS

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California),	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern),	DEAN OF FACULTIES
DAVID THOMSON, B.A. (Toronto),	Professor of Latin; DEAN
FRED CARLTON AYER, Ph.D. (Chicago),	Professor of Education
ERIC TEMPLE BELL, Ph.D. (Columbia),	Professor of Mathematics
ALLEN ROGERS BENHAM, Ph.D. (Yale),	Professor of English
FREDERICK ELMER BOLTON, Ph.D. (Clark),	Professor of Education; Dean of School of Education.
HERBERT E. CORY, Ph.D. (Harvard),	Professor in Liberal Arts
PIERRE JOSEPH FREIN, Ph.D. (Johns Hopkins),	Professor of Romanic Languages
HERBERT HENRY GOWEN, F.R.G.S., M.R.S.A., D.D. (Whitman),	Professor of Oriental Languages and Literature.
EDMOND STEPHEN MEANY, M.L. (Wisconsin),	Professor of History
HOWARD THOMPSON LEWIS, A.M. (Wisconsin)	Professor of Business Administration and Dean of the College of Business Administration.
ROBERT EDWARD MORITZ, Ph.D. (Nebraska, Ph.N.D. (Strassburg),	Professor of Mathematics
CAROLINE HAVEN OBER	Professor of Spanish
FREDERICK MORGAN PADFORD, Ph.D. (Yale),	Professor of English and Dean of Graduate School.
VERNON LOUIS PARRINGTON, A.B. (Harvard, A.M. (Emporia),	Professor of English
EDGAR DUNNING RANDOLPH, Ph.D. (Columbia),	Professor of Education
OLIVER HUNTINGTON RICHARDSON, Ph.D. (Heidelberg),	Professor of European History
EFFIE ISABEL RAITT, M.A. (Columbia),	Professor of Home Economics
ALEXANDER C. ROBERTS, Ph.D. (Washington),	Lecturer on Education
WILLIAM SAVERY, Ph.D. (Harvard),	Professor of Philosophy
J. ALLEN SMITH, Ph.D. (Michigan),	Professor of Political Science
STEVENSON SMITH, Ph.D. (Pennsylvania),	Professor of Psychology
GEORGE WALLACE UMPHERY, Ph.D. (Harvard),	Professor of Romanic Languages
EDWIN JOHN VICKNER, Ph.D. (Minnesota),	Professor of Scandinavian Languages
HOWARD B. WOOLSTON, Ph.D. (Columbia),	Professor of Sociology
ALLEN FULLER CARPENTER, Ph.D. (Chicago),	Associate Professor of Mathematics
EDWARD GODFREY COX, Ph.D. (Cornell),	Associate Professor of English
VANDEVYVER CUSTIS, Ph.D. (Harvard),	Associate Professor of Economics
ROBERT MAX GARRETT, Ph.D. (Munich),	Associate Professor of English
CHARLES GOGGIO, Ph.D. (Wisconsin),	Associate Professor of Romanic Languages
RODERICK DUNCAN MCKENZIE, Ph.D. (Chicago),	Associate Professor of Sociology
EDWARD McMAHON, A.M. (Wisconsin),	Associate Professor of American History
LOREN DOUGLAS MILLMAN, A.B. (Michigan),	Associate Professor of English
*OTTO PATZER, Ph.D. (Wisconsin),	Associate Professor of French
THOMAS KAT SIDET, Ph.D. (Chicago),	Associate Professor of Latin and Greek
ROY M. WINGER, Ph.D. (Johns Hopkins),	Associate Professor of Mathematics
ADDIE JEANETTE BLISS, A.M. (Columbia),	Assistant Professor of Home Economics
SERGEO BURTON CLARK, Ph.D. (Harvard),	Assistant Professor of Latin and Greek
GRACE GOLDENA DENNY, A.M. (Columbia),	Assistant Professor of Home Economics
HARVEY BRUCE DENSMORE, A.B. (Oxford),	Assistant Professor of Greek
LOUIS PETER DEVRIES, Ph.D. (Wisconsin),	Assistant Professor of Romanic Languages
CURT JOHN DUCASSE, Ph.D. (Harvard),	Assistant Professor of Philosophy
ERNEST OTTO ECKELMAN, Ph.D., (Heidelberg),	Assistant Professor of German
RUDOLF HERBERT ERNST, Ph.D. (Harvard),	Assistant Professor of English

*Absent on leave 1923-24.

GEORGE IRVING GAVETT, B.S. (Michigan),	Assistant Professor of Mathematics
EDWIN RAY GUTHRIE, Ph.D. (Pennsylvania),	Assistant Professor of Psychology
JOSEPH BARLOW HARRISON, A.B. (Oxford),	Assistant Professor of English
CHARLES LOUIS HELMINGE, A.M. (Washington),	Assistant Professor of Romanic Languages
HARLAN CAMERON HINES, Ph.D. (Iowa),	Assistant Professor of Education
MARTHA KOEHNE, A.M. (Ohio State),	Assistant Professor of Home Economics
JAKOB A. O. LARSEN, A.M. (Oxford),	Assistant Professor of History
HENRY L. LUCAS, Ph.D. (Michigan),	Assistant Professor of History
TERRESA SCHMID McMAHON, Ph.D. (Wisconsin),	Assistant Professor of Economics
LEWIS I. NEHEK, Ph.D. (Pennsylvania),	Assistant Professor of Mathematics
VIRGINIA C. PATTY,	Assistant Professor of Home Economics
LLOYD LEROY SMALL, Ph.D. (Columbia),	Assistant Professor of Mathematics
LESLIE SPIER, Ph.D. (Columbia),	Assistant Professor of Anthropology
PAUL WASHINGTON TERRY, Ph.D. (Chicago),	Assistant Professor of Education
CURTIS TALMADGE WILLIAMS, Ph.D. (Clark),	Assistant Professor of Education
ADAM HOPKINS AIME, A.B. (Grinnell),	Associate in Sociology
IVY BUCHANAN, A.M. (Washington),	Associate in History
CLYDE MYRON CRAMLET, M.S. (Washington),	Associate in Mathematics
ALICE HENSON ERNST, A.M. (Washington),	Associate in English
WINNIFRED S. HAGGETT, A.M. (Michigan),	Associate in English
RACHEL HAMILTON, B.Lit. (Whitman),	Associate in French
ARTHUR R. JERBERT, B.S. (Washington),	Associate in Mathematics
PAAMELIA PEARL JONES, M.A. (Iowa State Univ.)	Associate in English
SYLVIA FINLAY KERRIGAN, A.B. (Washington),	Associate in English
JANE S. LAWSON, A.M. (St. Andrews),	Associate in English
GERTRUDE KRAFFT, A.B. (Washington State College),	Associate in Germanic Languages
HERMAN MULLERMEISTER, Ph.D. (Utrecht),	Associate in Mathematics
ELEANOR M. SICKELS, A.M. (Washington),	Associate in English
MILDRED STRUBLE, A.M. (Washington),	Associate in English
BERTHA ALMER VICKNER, A.M. (Washington),	Associate in English
EARL D. WEST, A.M. (Adrian),	Associate in Mathematics
RALPH MASON BLAKE, Ph.D. (Harvard),	Instructor in Philosophy
GINO VINCENT MEDICI DE SOLENNI, A.M. (Ohio State University),	Instructor in Romanic Languages
MARTHA ESTELLA DRESSLER, M.S. (Columbia),	Instructor in Home Economics
*WILLIAM W. EDDY, A.M. (Harvard),	Instructor in History
VICTOR JOHN FARRAR, A.M. (Wisconsin),	Instructor in Historical Research
FRANK LAUBE, A.M. (Washington),	Instructor in Political Science
RUTH M. LUSBY, A.M. (Columbia),	Instructor in Home Economics
HILBERT A. WALDKOENIG, Ph.B. (Chicago); LL.B. (Maryland),	Instructor in Sociology
WALTER BELL WHITTLESSEY, A.M. (Washington),	Instructor in French
WILLIAM R. WILSON, M.S. (Washington),	Instructor in Psychology

IRVING MACKAY GLEN, A.M. (Oregon),Professor of Music and Dean of the College of Fine Arts.

WILLIAM PIERCE GORSUCH, A.B. (Knox),Professor of Dramatic Art

DAVID CONNOLLY HALL, M.D. (Chicago),University Health Officer and Professor of Hygiene.

TREVOR KINCAID, A.M. (Washington),Professor of Zoology

FREDERICK ARTHUR OSBORN, Ph.D. (Michigan), ...Professor of Physics and Director of the Physics Laboratories.

GEORGE BURTON RIGG, Ph.D. (Chicago),Associate Professor of Botany

JAMES GEORGE ARBUTHNOT, B.S. (Kansas State College), ..Director of Physical Education for Men.

MARY EMMA GROSS, A.M. (Columbia),Director of Physical Education for Women

EDWIN JAMES SAUNDERS, A.M. (Harvard),Assistant Professor of Geology

*Absent on Leave 1923-24.

GENERAL STATEMENT

The College of Liberal Arts provides instruction in languages, education, economics and business administration, history, mathematics, philosophy, political science, psychology, and sociology. With the College of Science, it affords the student an opportunity to acquire a general education which shall serve as a sure foundation for real success in whatever profession he may choose. In the College of Liberal Arts the work of the high school is closely articulated with that of the college. To obtain the degree of bachelor of arts the student must first fulfill the requirements of the lower division and then complete two years of work in the upper division. The detailed requirements are set forth below.

It is highly desirable that students entering the College of Liberal Arts from another institution should obtain from the registrar, as soon as possible, a statement of what they must do to be granted lower division standing and later their bachelor's degree. Otherwise, by failing to fulfill the requirements, they will find their graduation postponed for a quarter or more, despite the fact that they may have earned credits sufficient in number to entitle them to the degree.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

Special Requirements for College of Liberal Arts.—Three units of English and two units of mathematics are required of all students for admission to the University. In addition two units in a foreign language are required for Liberal Arts. The student expecting to enter this college is advised to take as many as possible of the subjects specified on a succeeding page among "Requirements of the Lower Division", under group 2, "Subjects Required Either in High School or the First Two Years of College". He should note paragraph 4 on the same page entitled, "Subjects Conditionally Required in the First Two Years of College". Careful observance of these paragraphs will furnish a more complete preparation for college work, and will give the student correspondingly greater freedom of election in college.

Admission of Normal School Graduates to Advanced Standing.—Advanced credit for work taken in approved normal schools, by students previously graduated from an accredited four-year secondary school, will be allowed at the rate of 45 hours of lump credit for each full year's work completed in the normal school.

For graduation with the degree of bachelor of arts a normal school graduate with such advanced credit must earn in the University a sufficient number of credits to bring the total up to 180 credits plus ten credits of required courses in physical education and military science, and including all specific requirements for the degree not fairly covered by previous work. Claims for exemption from specific requirements, based on work in normal school, are passed on by the registrar and the dean of the college concerned.

A minimum of three full quarters in residence, with completion of 36 hours of work, is required for any degree granted by the University.

It should be noted that a student, whose work in high school and normal school has not included a sufficient number of special requirements of the College of Liberal Arts, may find it necessary to offer more than the usual 180 scholastic credits for the degree of bachelor of arts.

REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

To secure the degree of bachelor of arts (A.B.) the student must complete not less than 190 credits and must observe the restrictions in regard to major and group requirements, scholarship requirements, and the requirements of the lower and upper divisions.

I. MAJOR AND GROUP REQUIREMENTS

(a) From 36 to 60 credits must be earned in a single department, known as the major department, but for a major in English, 10 credits in English 1-2 may be counted in addition to 60 credits in other English courses.

(b) The number of credits in the major and any other single department combined must not exceed 96 (except that when English is combined with the major department for the purpose of this total, credits in English 1-2 may be disregarded).

(c) At least 72 credits must be earned in the group in which the major department falls. For this purpose the departments are grouped as follows:

Group 1. Language and Literature.—Classical languages and literature, English, German, Oriental literature, Romanic languages and literature, Russian, Scandinavian.

Group 2. Philosophical.—Economics and business administration, education, history, mathematics, philosophy, political science, psychology, sociology. The group requirement of 72 credits does not apply to majors in home economics.

II. SCHOLARSHIP REQUIREMENTS

Not less than three-fourths of the credits required for graduation must be earned with grades of A, B, or C.

III. REQUIREMENTS OF THE LOWER DIVISION

The work of the lower division comprises studies of the freshman and sophomore years of the undergraduate curriculum. A student is said to be enrolled in the lower division until he has completed all such courses as are required during the first two college years, and until he has attained a minimum of 90 scholastic credits. This work consists primarily of the elementary or introductory courses of the various departments.* Its aim is to supplement the work of the high school, to contribute to a broad general training in preparation for the advanced work of the upper division.

The subjects required for a degree in the College of Liberal Arts are grouped as follows, the high school and the college being viewed as essentially a unit:

1. *Subjects Required in High School.*

(a) English, 3 years (3 units)

In addition to the completion of this amount of work in English, the student must show by a test examination *proficiency in English composition*, or he must take English composition in the University, as provided in note 5, page 72.

*The following (or their equivalents) constitute the courses of the lower division:

1. Modern Foreign Languages: The first two years.
2. Ancient Language: Latin 1, 2, 3; 4, 5, 6; the first two years of college work; courses in civilization and literature.
3. English: Composition; freshman and sophomore literature.
4. Mathematics and the Natural Sciences: The elementary courses (1 and 2) or equivalents.
5. History: The introductory courses in each line, e. g., medieval and modern (1-2), American (57-58-59), English (5-6), ancient (71-72-73).
6. Philosophy and Psychology: Elementary or Introductory course in each line, e.g., general psychology, introduction to philosophy, ethics, logic.
7. Political and Social Science: Introductory courses in economics, government, sociology.

- (b) Elementary algebra, 1 year (1 unit).
 - (c) Plane geometry, 1 year (1 unit).
- Subjects (a), (b), and (c) are those required of all students for admission to the University.
- (d) A foreign language, 2 years (2 units or 20 credits). See note 4 below and paragraph on Reading Knowledge of a Foreign Language, page 73.
2. *Subjects Required Either in High School or in the First Two Years of College.*
- (e) U. S. history and civics, 1 year (1 unit) or 2 quarters (10 credits). See note 1. below.
 - (f) History, 1 year (1 unit) or 2 quarters (10 credits). See note 2 below.
 - (g) Physics or chemistry, 1 year (1 unit) or 2 quarters (10 credits).
 - (h) Botany, or geology, or zoology, 1 year (1 unit) or 2 quarters (10 credits). In cases where a student is required to take both groups of science in college, he may, at his option, postpone one until he is enrolled in the upper division. In this case it will be counted among the 60 hours of upper division courses which he must take while enrolled in the upper division. In cases where only one science is required it should normally be taken in the freshman year.
3. *Subjects Required in the First Two Years of College.*
- (i) Philosophy 1 or 2 or 3 or 5, 1 quarter (5 credits). This requirement may be postponed until the junior year, but must be fulfilled by the end of that year. For students who take it in the junior year it shall count among the 60 upper division credits to be earned while one is enrolled in the upper division.
 - (j) Psychology, 1 quarter (5 credits).
 - (k) Economics, political science, sociology, 2 quarters (10 credits).
 - (l) Physical education or military science, regular freshman and sophomore requirements.
4. *Subjects Conditionally Required in the First Two Years of College.*
- (m) Ancient life and literature, 2 quarters (10 credits). See note 3 below.
 - (n) English composition, 2 quarters (10 credits). See note 5 below.

NOTES

1. Students who do not take U.S. history and civics in the high school must take History 57-58-59 in the college. Those who take U.S. history but not civics in high school must take Political Science 1 in college.

2. One year of history is required in addition to requirement (e). It may be satisfied by any year (1 unit or 9 or 10 credits) of history. The college courses which satisfy this requirement are (a) 1-2; (b) 5-6; (c) 71-72-73.

3. Two quarters' work in Ancient Life and Literature is required of all students who have not taken, or do not plan to take, three or more years of ancient language. This requirement may be satisfied by any one of the following: (a) Greek 1 and 2; (b) Latin 4 and 5; (c) Greek 11 and Latin 11; (d) Greek 13 and 14; (e) Greek 11 and 13; (f) Greek 15 and 16; (g) Latin 11 and Greek 14; (h) Oriental History, Life and Literature 50, 51, 52 (any two).

4. Two years of one of the following foreign languages are required for admission to the college of Liberal Arts: Latin, Greek, French, German, Spanish, Italian, Scandinavian. (In special cases other languages may be accepted). If the requirement has not been met in high school, it must be made up in college. This work shall be taken without credit unless the student presents two units in another foreign language.

5. English composition is required in the first two years of college except in the case of persons who show by examination proficiency in that subject (see University calendar for dates of examination).

As a rule students in the lower division must confine their elections to courses numbered 1 to 99 in the catalogue. If a student has had the proper prerequisite or is deemed qualified in intellectual maturity he may register for an upper division course with the consent of the dean and instructor concerned. (In a foreign language a student who has had the proper prerequisite may be enrolled in an upper division course merely with consent of his registering officer.) If a student avails himself of this privilege he should be careful not to allow it to interfere with the completion of all the requirements of the first two years.

Schedule of Limitations of the Lower Division.—No student in the lower division shall be registered for more than 16 credit hours a quarter (exclusive of required military science and physical education) or for less than 12 credit hours a quarter except with consent of the dean.

IV. REQUIREMENTS OF THE UPPER DIVISION

The upper division comprises the studies of the junior and senior years. It consists principally of the advanced work of the undergraduate curriculum, and is therefore differentiated, both in content and method, from that of the lower division. A student is said to be enrolled in the upper division when he has completed all such studies as are required during the first two college years and has attained a minimum of 90 scholastic credits. At least 60 hours of the credit hours taken in the upper division must be in the upper division courses (Courses 100 to 199.) Of the 190 credits required for graduation, eighteen, not counting teachers' courses, must be in the upper division courses in the major department. These eighteen will, in most cases be included, in whole or in part, in the 60 hours of upper division courses to be taken while the student is enrolled in the upper division.

Schedule Limitations of the Upper Division.—No student in the upper division shall be registered for more than 16 nor less than 12 credit hours per quarter, except with the consent of the dean. A maximum of 19 hours per quarter may be granted to students who have made an exceptional record in scholarship in the lower division and who maintain that record in the upper division.

V. READING KNOWLEDGE OF A FOREIGN LANGUAGE

Beginning with the academic year 1924 a reading knowledge of any one of the foreign languages taught in the University will be required for graduation from Liberal Arts. (This requirement will not apply to graduates from the Six-Year Arts and Law Curriculum).

SCHEME OF ELECTIVES

For the purpose of election, outside the major department, the College of Liberal Arts, the College of Science, the School of Education, the College of Business Administration and the School of Journalism are treated as one.

The following courses given outside the College of Liberal Arts may be counted toward a bachelor of arts degree. Not more than 24 such credits altogether shall be counted toward this degree except that from the College of Fine Arts 36 credits may be counted.

College of Pharmacy.—Materia medica, therapeutics, toxicology. Total amount allowed, 12 credits.

College of Engineering.—Mechanical drawing, descriptive geometry, surveying, direct currents, alternating currents, engineering problems. Total amount allowed, 18 credits.

College of Mines.—General Metallurgy.

College of Fine Arts.—A total number of 36 credits in the College of Fine Arts may be counted toward the bachelor of arts degree.

College of Forestry.—General forestry, characteristics of trees, forest economics, silviculture. The maximum number of hours elective from these subjects is 18.

School of Law.—Agency, constitutional law, contracts, general business law, equity, persons, property. From these subjects a total of 18 credits may be counted toward the bachelor of arts degree by a student majoring in the philosophical group; a total of nine credits may be so counted by a student majoring in the other group.

SIX-YEAR ARTS AND LAW CURRICULUM

This combined course allows a student with a good record to obtain an A.B. and an LL.B. in six years. It is open only to students who have maintained a uniformly good record for scholarship during the first three years of collegiate work. At the end of three years, after the student has earned 135 credits, plus the ten required credits in military science or physical education and including all of the required work, together with a major, he may for the fourth year register in the School of Law for the first year's work in law. He must, however, earn in the College of Liberal Arts additional credits sufficient to make the total credits amount to 154. Thirty-six credits in the first year law work may apply toward the A. B. degree, thus making 190 credits required for this degree.

The last two years of this combined course are devoted to completing the rest of the required work in the School of Law.

Students are strongly advised to complete their full 144 (plus 10) credits in the College of Liberal Arts by the end of the third year so that they can enter the School of Law in the fourth year.

Students from other institutions entering this University with advanced standing may take advantage of this combined course, provided they are registered in the College of Liberal Arts for at least one full year of work, and earn at least 45 credits in the University before entering the School of Law.

This privilege will not be extended to normal school graduates attempting to graduate in two years, nor to undergraduates of other colleges who enter this University with the rank of senior.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

COLLEGE OF SCIENCE

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....PRESIDENT
 JOHN THOMAS CONDON, LL.M. (Northwestern).....DEAN OF FACULTIES
 HENRY LANDES, A.M. (Harvard).....Professor of Geology; DEAN
 THEODORE CHRISTIAN FRYE, Ph.D. (Chicago).....Professor of Botany
 TREVOR KINCAID, A.M. (Washington).....Professor of Zoology
 FREDERICK ARTHUR OSBORN, Ph.D. (Michigan).....Professor of Physics and Director of
 the Physics Laboratories.
 ROBERT EDOUARD MORITZ, Ph.D. (Nebraska), Ph.N.D. (Strassburg).....Professor of
 Mathematics.
 DAVID CONNOLLY HALL, ScM, M.D. (Chicago).....Professor of Hygiene and University
 Health Officer.
 HENRY KREITZER BENSON, Ph.D. (Columbia).....Professor of Industrial Chemistry
 JOHN WEINZIRL, Dr.P.H. (Harvard).....Professor of Bacteriology
 EFFIE ISABEL RAITT, A.M. (Columbia).....Professor of Home Economics
 STEVENSON SMITH, Ph.D. (Pennsylvania).....Professor of Psychology
 WILLIAM MAURICE DEHN, Ph.D. (Illinois).....Professor of Organic Chemistry
 GEORGE MCPHAIL SMITH, Ph.D. (Freiburg).....Professor of Inorganic Chemistry
 *CHARLES EDWIN WEAVER, Ph.D. (California).....Professor of Geology
 JOHN L. WORCESTER, M.D. (Med. School University of Alabama)....Professor of Anatomy
 ERIC TEMPLE BELL, Ph.D. (Columbia).....Professor of Mathematics
 ALLEN FULLER CARPENTER, Ph.D. (Chicago).....Associate Professor of Mathematics
 HENRY LOUIS BRAKEL, Ph.D. (Cornell).....Associate Professor of Engineering Physics
 GEORGE BURTON RIGG, Ph.D. (Chicago).....Associate Professor of Botany
 ROY MARTIN WINGEN, Ph.D. (Johns Hopkins).....Associate Professor of Mathematics
 HERMAN VANCE TARTAR, Ph.D. (Chicago).....Associate Professor of Chemistry
 EDWIN JAMES SAUNDERS, A.M. (Harvard).....Assistant Professor of Geology
 GEORGE IRVING GAVETT, B.S. (C.E.) (Michigan).....Assistant Professor of Mathematics
 ELI VICTOR SMITH, Ph.D. (Northwestern).....Assistant Professor of Zoology
 GRACE GOLDENA DENNY, M.A. (Columbia).....Assistant Professor of Home Economics
 JOHN WILLIAM HOTSON, Ph.D. (Harvard).....Assistant Professor of Botany
 LEWIS IRVING NEKIRK, Ph.D. (Pennsylvania).....Assistant Professor of Mathematics
 SAMUEL HERBERT ANDERSON, Ph.D. (Illinois).....Assistant Professor of Physics
 EDWIN R. GUTHRIE, Ph.D. (Pennsylvania).....Assistant Professor of Psychology
 THOMAS GORDON THOMPSON, Ph.D. (Washington).....Assistant Professor of Chemistry
 GEORGE EDWARD GOODSPEED, JR., B.S.M.E. (Massachusetts Institute of Technology).....
 Assistant Professor of Geology.
 VIRGINIA CUNNINGHAM PATTY, (Diploma, Ecole Guerre, Paris).....Assistant Professor of
 Home Economics.
 MARY EMMA GROSS, A.M. (Columbia).....Assistant Professor and Director of Physical
 Education for Women.
 JAMES GEORGE ARBUTHNOT, B.S. (Kansas).....Assistant Professor and Director of
 Physical Education for Men.
 HORACE GUNTHER, A.M. (Kansas).....Assistant Professor of Zoology
 MARTHA KOEHNE, A.M. (Ohio).....Assistant Professor of Home Economics
 LLOYD LEROY SMALL, Ph.D. (Columbia).....Assistant Professor of Mathematics
 JOHN E. GUBERLET, M.S. (Illinois).....Associate Professor of Zoology
 WILLARD HENRY ELLER, B.S. (E.E.) California).....Instructor in Physics

*Absent on leave

MARTHA DRESSLAR, M.S. (Columbia)	Instructor in Home Economics
WILLIAM RONALD WILSON, A.B. (Washington)	Instructor in Psychology
JOSEPH M. TAYLOR, M.S. (Adrian College)	Acting Instructor in Mathematics
SARGENT G. POWELL, Ph.D. (Illinois)	Instructor in Chemistry
LOU EASTWOOD ANDERSON	Acting Instructor in Physical Education
FREDERICK ANSTEN McMILLIN, M.S. (Willamette)	Acting Instructor in Chemistry
HENRY WALTER STAGER, Ph.D. California)	Instructor in Mathematics
CLINTON LOUIS UTTERBACH, M.S. (Washington)	Instructor in Physics
GEORGE E. WHITWELL, B.S. (Massachusetts Institute of Technology)	Instructor in Chemistry.
MARY AID, A.B. (Wisconsin)	Instructor in Physical Education
MARCUS A. HANNA, A.B. (Kansas)	Instructor in Geology
ZALIA JENCKS GALEY, Ph.D. (Yale)	Acting Instructor in Chemistry
EARL D. WEST, A.M. (Adrian College)	Associate in Mathematics
ETHEL SANDERSON RADFORD, A.B. (McGill)	Associate in Chemistry
*HERMANOS MULLEMEISTER, Ph.D. (Royal University of Utrecht, Holland)	Associate in Mathematics.
LILLIAN BLOOM, (Graduate, Medical Gymnastic Institute, Stockholm, Sweden)	Associate in Physical Education.
MARJORIE WHIPPLE PETERSON, A.B. (Colorado College)	Associate in Chemistry
CARL ZENO DRAVES, M.S. (Ch.E.) (Washington)	Associate in Chemistry
CLARENCE EDMUNDSON, B.S. (Idaho)	Associate in Physical Education
WALDO SEMON, B.S. (Washington)	Associate in Chemistry
ELIZABETH S. SOULE, R.N. (Malden, Massachusetts, Hospital School of Nursing and Public Health)	Associate in Nursing
CLYDE MYRON CRAMLET, M.S. (Washington)	Associate in Mathematics
ARTHUR RUDOLPH JERBERT, B.S. (Washington)	Associate in Mathematics
ENOCH BAGSHAW, M.E. (Washington)	Associate in Physical Education
RUSSELL STANLEY CALLOW, A.B. (Washington)	Associate in Physical Education
GEORGE SMITH, A.B. (Washington)	Associate in Physical Education
LILLIAN C. IRWIN, M.D. (Cooper Medical College)	Lecturer on Physical Education for Women.
GUSTAF A. MAGNUSSON, M.D. (Minnesota)	Lecturer on Bacteriology

*Absent on leave, 1922-23.

GENERAL INFORMATION

The student entering the College of Science may take up one of several curricula, general or specialized, with emphasis on pure or applied sciences. These curricula, as set forth in detail in succeeding pages, are:

- I. Elective curricula, for students desiring general training in science, leading to the degree of bachelor of science.
- II. Required curricula for students desiring to specialize in one department, or to obtain professional training, leading to the degree of bachelor of science, in one of the following subjects:

A. Bacteriology	F. Military Science
B. Biology	G. Physics
C. Chemistry	H. For prospective teachers
D. Geology	I. Combined Science and Law
E. Mathematics	J. Library Science
- III. Prescribed curricula in vocational subjects:

A. Pre-medical	C. Home Economics
B. Nursing	D. Physical Education for women.

LABORATORIES

For description of science laboratories see pages 30-37.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

Special Requirements of the College of Science.—In addition to three units of English and two units of mathematics required of all students for admission to the University, two units of a foreign language are required for admission to the College of Science. The student expecting to enter this college is advised to take as many as possible of the subjects specified on a succeeding page among "Subjects required either in a secondary school or in the University." Careful observance which will furnish a more complete preparation for college work, and give correspondingly greater freedom of election in college.

CURRICULA

I. ELECTIVE CURRICULA

The student selecting these curricula must select one department of the College of Science, in which he proposes to do the preponderance of his work. This department will be known as his major department and the subject as his major subject. If possible, the student should choose his major subject at the time of entrance.

To secure the degree of bachelor of science in this division of the college, a student must earn 190 credits, observing the restrictions in regard to a major subject, scholarship requirements, and electives in other colleges.

A. REQUIREMENTS IN A MAJOR SUBJECT

A student must earn not less than 36 nor more than 60 credits in his major department. Not more than 96 credits will be accepted in the major and any other one department.

B. DISTRIBUTION OF REQUIRED WORK

At least 60 of the scholastic credits presented for the degree of bachelor of science must be in courses numbered above 100, and 18 such credits must be in the major subject. Requirements for graduation are as follows:

1. *Subjects Required in Secondary School:*

- (a) English, three years.
- (b) Elementary algebra, one year.
- (c) Plane geometry, one year.
- †(d) One foreign language, two years.

2. *Subjects Required Either in Secondary School or in the University.*

- (e) United States history and civics, one year in high school or ten credits in the University.
- (f) History in addition to (e) one year or ten credits.
- (g) Mathematics, geology,* or astronomy, one year or ten credits.
- (h) Chemistry, one year or ten credits.
- (i) Physics, one year or ten credits.
- (j) Botany or zoology, one year or ten credits.
- (k) The student must obtain a certificate of proficiency in English from the department of English, after examination, or must earn 10 credits in English composition in the University.

3. *Subjects Required in the University.*

- (l) Physical education or military science, two years.
- (m) Economics, history, language, and literature, philosophy, political science, psychology, sociology, 20 credits, but only ten credits will be counted in any one of these subjects.

C. ELECTIVES

Students selecting these curricula may complete their courses with electives from any school or college of the University. Electives in engineering, fine arts, fisheries, forestry, law, mines, and pharmacy, must not exceed 36 credits in all, and must not exceed 25 credits from any one of these colleges.

II. CURRICULA IN THE VARIOUS DEPARTMENTS

A. BACTERIOLOGY

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
English 1	5	English 2 or Electives ..	5	Electives	5
Chemistry 1	5	Chemistry 2	5	Chemistry 3	5
Zoology 1 or 3	5	Zoology 2 or 4	5	Sociology 1	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

SECOND YEAR

Bacteriology 101	5	Bacteriology 102	5	Bacteriology 103	5
Chemistry 131	5	Chemistry 132	5	Chemistry 111	5
Anatomy 105	5	Anatomy 106	5	Anatomy 107	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

THIRD YEAR

Bacteriology 104	4	Bacteriology 105	4	Bacteriology 106	4
Physics 1	5	Physics 2	5	Physics 3	5
Electives	6	Electives	6	Electives	6

FOURTH YEAR

Bacteriology 110	4	Bacteriology 111	4	Bacteriology 112	4
Bacteriology 210	2	Bacteriology 211	2	Bacteriology 212	2
Bacteriology 213	3	Bacteriology 214	3	Bacteriology 215	3
Electives	6	Electives	6	Electives	6

*Physiography (with laboratory work) taken in a high school will be accepted instead of geology.

†If a student has not taken in high school the amount of foreign language required for admission to the college that he plans to enter, he must make up the deficiency in the University as part of his regular schedule of work, but without receiving college credit for it. For the College of Science, the foreign language requirement may be satisfied by two units, or 20 credits, in any one foreign language.

B. BIOLOGICAL SCIENCES

In this curriculum the student must select a major in anatomy, botany, or zoology. On selecting his major subject, the student should at once consult his major department, a member of which will act as his advisor. The advisor will plan a special curriculum for the student, fitting him for his chosen work. This curriculum must be submitted to the dean of the College of Science for approval. Thereafter the individual curriculum can be changed only with consent of the advisor and the dean.

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
English 1	5	English 2 or Elective ..	5	Mathematics or Elective. 5	
Botany or Zoology	5	Botany or Zoology	5	Electives	10
Electives	5	**Mathematics or Elect. 5			
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½	

SECOND YEAR

Chemistry or Physics ..	5	Chemistry or Physics ..	5	Major	5
Major	5	Major	5	Electives	10
Electives	5	Electives	5		
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½	

THIRD YEAR

Major	5	Major	5	Major	5
Soc., Pol. Sci. or Econ.. 5		Soc., Pol. Sci. or Econ.. 5		Electives	10
Electives	5	Electives	5		

FOURTH YEAR

Major	5	Major	5	Electives	15
Electives	10	Electives	10		

C. CHEMISTRY

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Chemistry 1 or 21	5	Chemistry 2 or 22	5	Chemistry 3 or 23	5
Mathematics 4	5	Mathematics 5	5	Mathematics 6	5
English 1	5	English 2 or Electives 5		*Electives	5
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½	

SECOND YEAR

Physics 1 or 97	5	Physics 2 or 98	5	Physics 3 or 99	5
Chemistry 101	5	Chemistry 112	5	Chemistry 113	5
Mathematics 61	3	Mathematics 62	3	*Electives	5
*Electives	2	Electives	2	Mil. Sci. or Phys. Ed... 1½	
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½			

THIRD YEAR

Chemistry 131	5	Chemistry 132	5	Chemistry 133	5
*Electives	5	*Electives	5	*Electives	5
GROUP OPTIONS		GROUP OPTIONS		GROUP OPTIONS	
(a) General		(a) General		(a) General	
Chemistry 221	3	Chemistry 222	3	Chemistry 144	5
Electives	2	Electives	2		
(b) Industrial ¹		(b) Industrial		(b) Industrial	
*Chemistry 121	5	Chemistry 122	5	Chemistry 123	5
(c) Physiological Chemistry		(c) Physiological Chemistry		(c) Physiological Chemistry	
Botany 143	5	Botany 144	5	Botany 145	5
(d) Sanitary and Food		(d) Sanitary and Food		(d) Sanitary and Food	
Chemistry		Chemistry		Chemistry	
Chemistry 105	5	Chemistry 106	5	Chemistry 107	5

**Two and one-half years of mathematics required, which may be taken in high school or University.

¹Options: A—Mechanical Drawing, B—Geology or Mineralogy, C—Biological Science.

²Students expecting to elect the industrial group in junior year will take Chemical Technology (Chem. 52) lectures only, 3 credits, during the sophomore year.

³In addition to the subjects specifically listed above, 10 credits in either French or German are required, to be completed before the end of the third year.

All electives must be approved by the head of the department of chemistry or other registration officer appointed by the department of chemistry.

UNIVERSITY OF WASHINGTON

FOURTH YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Chemistry 181	5	Chemistry 182	5	Chemistry 183	5
Chemistry 224	2	Chemistry 225	2		
GROUP OPTIONS		GROUP OPTIONS		GROUP OPTIONS	
(a) General		(a) General		(a) General	
Chemistry 221 or)		Chemistry 250	5	Chemistry 250	5
Chemistry 212 or)	5	Electives	3	Electives	5
Chemistry 250)..	3				
(b) Industrial		(b) Industrial		(b) Industrial	
Chemical Engineer-		Chemistry 211	2	Chemistry 250	5
ing 215	5	Chemistry 250	3	Electives	5
Electives	3	Electives	3		
(c) Physiological Chem-		(c) Physiological Chem-		(c) Physiological Chem-	
istry		istry		istry	
Chemistry 141	5	Chemistry 142	5	Chemistry 146	3
Chemistry 102	3	Chemistry 103	3	Electives	7
(d) Sanitary and Food		(d) Sanitary and Food		(d) Sanitary and Food	
Chemistry		Chemistry		Chemistry	
Chemistry 141	5	Chemistry 142	5	Chemistry 146	3
Chemistry 102)	3	Chemistry 103	3	Electives	7
Electives)	3				

D. GEOLOGY

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Geology 1	5	Mathematics 4	5	Mathematics 6	5
English 1	5	English 2 or Elective ..	5	Geology 2	5
Chemistry 1 or 21	5	Chemistry 2 or 22	5	Chemistry 3 or 23	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

SECOND YEAR

Physics 1	5	Geology 21	5	Geology 117	3
Chemistry 111	4	Physics 2	5	Geology 120	3
Civil Engineering 1	3	Civil Engineering 21 ...	3	Geology 122	2
Astronomy 11	5	Electives	3-2	Civil Engineering 4	3
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

THIRD YEAR

Botany or Zoology	5	Botany or Zoology	5	Geology 125	4
Geology 123	3	Geology 124	4	Geology 121	3
Geology 181	5	Geology 118	3	Geology 124	5
Electives	5	Electives	3	Electives	3

FOURTH YEAR

Geology 126	3	Geology 127	5	Geology 128	2
Mining 51	3	Law 158	2	Metallurgy 103	5
Thesis	2	Thesis	2	Thesis	2
Electives	3	Electives	3	Electives	3

E. MATHEMATICS

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
English 1	5	English 2 or Elective ..	5	History	5
Mathematics 4	5	Mathematics 5	5	Mathematics 6	5
*Physics 1	5	*Physics 2	5	Modern Foreign Lang... 5	
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

SECOND YEAR

History	5	Economics 1	5	Political Science 1	5
Mathematics 107	5	Mathematics 108	5	Mathematics 109	5
Modern Foreign Lang... 5		Chemistry 1	5	Chemistry 2	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

THIRD YEAR

GROUP I—SECONDARY SCHOOL TEACHERS

Psychology 1	5	Philosophy or Logic	5	Astronomy 1	5
Biological Science.	5	Biological Science	5	Mathematics	2 or 3
Mathematics	2 or 3	Mathematics	2 or 3	Education 101	5
Electives	3 or 2	Electives	3 or 2	Electives	3 or 2

*Students in Group III take Bus. Ad. 11-12 in place of Physics.

GROUP II—COLLEGE AND UNIVERSITY TEACHERS

Psychology 1	5	Philosophy or Logic	5	Astronomy	5
Biological Science	5	Biological Science	5	Mathematics	2
Mathematics	2	Mathematics	2	Mathematics	2
Mathematics	3	Mathematics	3	Electives	5

GROUP III—STATISTICIANS AND ACTUARIES

Psychology 1	5	Philosophy or Logic	5	Astronomy 1	5
Biological Science	5	Biological Science	5	Mathematics 13	5
Business Ad. 64	5	Business Ad. 65	5	Electives	5

FOURTH YEAR

GROUP I—SECONDARY SCHOOL TEACHERS

Education 110	3	Education 119	3	Education	34
Education 145	5	Electives	12	Mathematics 127	5
Electives	7			Electives	16

GROUP II—COLLEGE AND UNIVERSITY TEACHERS

Mathematics	5	Mathematics	5	Mathematics	5
Electives	10	Electives	10	Electives	10

GROUP III—STATISTICIANS AND ACTUARIES

Mathematics 151	3	Mathematics 152	3	Mathematics 153	3
Political Science 60	5	Business Ad. 147	5	Business Ad. 118	5
Electives	7	Electives	7	Electives	7

F. FOUR-YEAR CURRICULUM IN MILITARY SCIENCE

For students who desire to major in military science the following four-year curriculum has been provided. This will give a good general college education upon which any line of professional or technical study may be based and will give to the graduate the degree of B.S. in Military Science, and at the same time enable him to obtain a commission as second lieutenant in the Officers' Reserve Corps of the United States Army in accordance with the provisions of the National Defense Act.

MILITARY SCIENCE

First Year	Credits	Second Year	Credits
Mil. Sci. 1-2-3 all units.....	5	Mil. Sci. 51-52-53 Inf.)	
Math. 1 (Algebra)	5	Mil. Sci. 61-62-63 Arty.).....	5
Math. 2 (Solid Geometry).....	5	Physics 1-2 or 97, 98.....	10
Math. 4 (Plane Trigonometry).....	5	Chemistry 1-2, or 21-22.....	10
Civil Eng. 1 (Eng. Draw.).....	3	French or Spanish 4-5-6.....	9
Civil Eng. 21 (Plane Surv.).....	10	Dramatic Art 31-32.....	6
English 1-2	10	History 57-58-59	19
French or Spanish 1-2-3.....	15		
	51		49

Summer Quarter—Basic R.O.T.C. Camp

Third Year	Credits	Fourth Year	Credits
Mil. Sci. 101-102-103 Inf.)		Mil. Sci. 151-152-153 Inf.)	
Mil. Sci. 111-112-113 Arty.).....	9	Mil. Sci. 161-162-163 Arty.).....	9
Philosophy 2	5	Military Science Thesis	5
Soc. Pol. Sci. or Econ.....	10	Approved Electives*	32
Approved Electives*	21		46
	45		

Summer Quarter (After third year)—Advanced R. O. T. C. Camp.

Students taking this course will specialize in the military work of one of the two units established here, Infantry or Coast Artillery, and receive their Reserve commissions in that branch of the service.

The military department, during the latter part of the second year and prior to the beginning of the third year, will advise the student as to his electives, all of which will be outside the military department. Each case will be handled separately depending on the student's future life. After approval by the professor of military science and tactics, and the dean of the College of Science, the curriculum for the individual student must be followed until graduation.

*All electives will be outside the military department.

G. PHYSICS

<i>First Year</i>	<i>Credits</i>	<i>Second Year†</i>	<i>Credits</i>
Mathematics	15	Physics	15
**Chemistry or Physics	15	Mathematics	15
English 5 or Adv. Electives	10	Chemistry	10
Bot., Zool., Geol., or Astron.	10	Psychology	5

GROUP I—SECONDARY SCHOOL TEACHERS

<i>Third Year</i>	<i>Credits</i>	<i>Fourth Year</i>	<i>Credits</i>
Physics	15	Physics	6
Education	5	Education	13
Philosophy Group	15	Adv. Electives	13
Free Electives	10	Free Electives	13

GROUP II—COLLEGE AND UNIVERSITY TEACHERS

<i>Third Year</i>	<i>Credits</i>	<i>Fourth Year</i>	<i>Credits</i>
Physics	15	Physics	9
Mathematics	10	Mathematics	9
Philosophy Group	15	Adv. Electives	12
Free Electives	9	Free Electives	15

GROUP III—INDUSTRIAL PHYSICISTS

<i>Third Year</i>	<i>Credits</i>	<i>Fourth Year</i>	<i>Credits</i>
Physics	15	Physics	9
Philosophy Group	15	Chemistry	15
Chemistry	5	Adv. Electives	15
Adv. Electives	5	Free Electives	6
Free Electives	5		

Advanced electives must be approved by the department.

H. CURRICULUM FOR PROSPECTIVE SCIENCE TEACHERS

Most of those science students who expect to teach must begin in a small high school. In such schools one teacher usually teaches several or all the sciences. It is therefore desirable that such students get a wide range of scientific knowledge, rather than the intensive training secured by three years' work for a major in some one department. The following course permits the students to prepare in more sciences by not requiring three years of any one science.

<i>First Year</i>	<i>Credits</i>	<i>Second Year</i>	<i>Credits</i>
Science (botany, geology, or zoology) ..	10	History	10
Science (physics or chemistry)	10	Economics, Pol. Sci. or Sociology	10
Mathematics	5	Science	20
English	0 to 10	Electives	5
Electives	10	Mil. Sci. or Phys. Ed.	6
Mil. Sci. or Phys. Ed.	6		
<i>Third Year</i>	<i>Credits</i>	<i>Fourth Year</i>	<i>Credits</i>
Philosophy and Psychology	10	Education	18
Science	20	Science	10
Electives	15	Electives	17

REGULATIONS GOVERNING THIS CURRICULUM

- A student may select any three of the following sciences and must do the amount of work in any particular science, as indicated.
Botany (exclusive of bacteriology), 20 credits.
Chemistry, 20 credits.
Geology, 20 credits.
Mathematics (exclusive of astronomy), 20 credits.
Physics, 20 credits.
Zoology, 20 credits.
- Included in or in addition to the work in (a) every student must take 5 credits in mathematics, 10 credits in physics, 10 credits in chemistry, 10 credits in botany or zoology.
- If 20 credits of chemistry are taken, only 15 of geology are required.
- When mathematics is selected as one of the three sciences, physics must be selected also.
- ~~The modern foreign language required shall be either French or German and a continuation of the language taken in high school.~~
- The work in freshman composition shall be 0 to 10 credits.

**Physics will be taken only when no high school physics is offered.

†Students of Group III may select 5 hours of advanced electives in the second year.

I. SIX-YEAR COURSE IN SCIENCE AND LAW

This is a combination course whereby a student may obtain the degrees of bachelor of science and bachelor of laws in six years. At the end of his third year, after he has earned 135 credits and the required credits in military science or physical education, and completed all required work with a major in some department, he may register in the School of Law for the first year's work in law. He will be granted the bachelor of science degree at the end of the fourth year, or as soon as he completes the required work above specified with 9 additional credits in the College of Science and 36 credits in the School of Law; making a total of 190 credits for graduation. The fifth and sixth years of the combined course are devoted to completing the remainder of the required work for graduation from the School of Law.

J. FIVE-YEAR COURSE IN SCIENCE AND LIBRARY SCIENCE

This course is for students who are preparing to become professional librarians and who desire to receive degrees of bachelor of science and bachelor of library science. Under this arrangement a student should first complete all the required work of the course for science teachers (outlined under Section H.), substituting courses in library science for the 12 credits in education stipulated for the senior year. A portion of the fourth year and all the fifth year are devoted to required subjects in library science. If this plan is carefully followed, a student should earn the degree of bachelor of science at the end of the fourth year, and the degree of bachelor of library science at the end of the fifth year. (See department of library science.)

III. PRESCRIBED CURRICULA IN VOCATIONAL SUBJECTS

A. PRE-MEDICAL CURRICULA

TWO AND FOUR-YEAR CURRICULA PREPARATORY TO MEDICINE

The University offers two curricula preparatory to the study of medicine. One of these is for two years, and will meet the requirements of medical schools which require only two years of college work for admission to their professional study. The second is for four years, and prepares students for those medical schools that require for admission the completion of a full four-year college course. The curricula will not reduce the amount of work to be done by the student in the medical school but they are designed to increase its efficiency.

These courses are also well adapted for pre-dental students, as the best dental schools require the same foundation work as the medical schools.

Below is the outline of the four-year curriculum. The first and second years constitute the two-year curriculum:

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Chemistry 1 or 21	5	Chemistry 2 or 22	5	Chemistry 3 or 23	5
Zool. 3 (Pre-medical)	5	Zool. 4 (Pre-medical)	5	Zool. 5 (Pre-medical)	5
English 1	5	English 2	5	Psychology 1	5
Mil. Sci. or Phys. Ed.	1½	Mil. Sci. or Phys. Ed.	1½	Mil. Sci. or Phys. Ed.	1½

SECOND YEAR

Physics 1	5	Physics 2	5	Physics 3	5
Chem. 131 (Organic)	5	Chem. 132 (Organic)	5	Sci. French or German	5
English 73	5	Psych. 126 (Abnormal)	5	Ec. 1 or Pol. Sci. 1	5
Mil. Sci. or Phys. Ed.	1½	Mil. Sci. or Phys. Ed.	1½	Mil. Sci. or Phys. Ed.	1½

THIRD YEAR

Anatomy 101	6	Anatomy 102	6	Anatomy 103	6
Anatomy 105	6	Anatomy 106	6	Anatomy 107	6
Bacteriology 104	4	Bacteriology 105	4	Bacteriology 106	4

FOURTH YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Zoology 151	5	Zoology 152	5	Zoology 153	5
Chemistry 141	5	Chemistry 142	5	Bacteriology 112	4
Bacteriology 110	4	Bacteriology 111	4	Elective	9
Anatomy 104	4	Elective	4		

B. THREE-YEAR CURRICULUM FOR NURSES

Believing that a broader scientific education is desired by young women entering the nursing profession, the University offers a five-year course in nursing, including three years at the University and two years at a hospital selected by the University. This course leads to a degree of bachelor of science in nursing and a certificate of nursing.

The curriculum:

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Home Economics 4	3	English 1	5	Chemistry 6	5
Nursing 1	5	Chemistry 5	5	Physiology 7	5
Physics 89	5	Physics 90	5	English 2	5
Phys. Ed.	1½	Phys. Ed.	1½	Phys. Ed.	1½

SECOND YEAR

Psychology 1	5	Home Economics 108 ..	4	Anatomy 101	5
Home Economics 105 ..	4	Physiology 55	5	Nursing 3	3
Physiology 54	5	Sociology 1	5	Pharmacy 18	3
Phys. Ed.	1½	Pharmacy 12	3	Dramatic Art	3
		Phys. Ed.	1½	Phys. Ed.	1½

THIRD YEAR

Anatomy 102	3	Bacteriology 102	5	Education 110	5
Elective	2-5	Psychology 126	3	Bacteriology 103	5
Bacteriology 101	5	Economics 1	5	Electives	5
Education 101	5	Elective	3-5		

NOTE—It is advised that the two years in the hospital follow the first quarter of the third year. This enables the student to return to the University to specialize in public health nursing.

CURRICULUM TO BE FOLLOWED IN A SELECTED HOSPITAL

<i>Credits</i>		<i>Credits</i>	
Demonstration of Nursing.....	5	Eye, Ear, Nose and Throat Nursing ..	5
Anesthesia	5	Neurological Nursing	5
Clinical Analysis	10	Children's Nursing	5
Medical Nursing	20	Infectious and Contagious Disease Nursing	5
Surgical Nursing	20	Administration	5
Obstetrical and Gynecological Nursing ..	20		

C. PRESCRIBED CURRICULA IN HOME ECONOMICS

Many fields of activity other than teaching are open to women trained in home economics. In each line of vocational work offered, there is opportunity to supplement the technical work of the laboratory with practical experience. In food preparation, the students do practice work in the University Commons, commercial establishments, hospitals and clubs. In the clothing courses, students learn first to sew for themselves and then for customers.

Seniors are required to live in the practice cottage on the campus, where they take full responsibility for the management and care of the house for a family of four during a period of three weeks.

The following grouping is arranged as a guide in selecting work that will best satisfy the requirements of each individual:

Group I, General, for students who desire a liberal college training with emphasis on subjects that pertain to the home and home life. Persons interested in social betterment who wish to enter definite welfare work may combine home economics and sociology in this curriculum.

Group II, Food and Nutrition, for students who wish to specialize in teaching this phase of the work in institutions of higher education, for laboratory or research workers, and students who wish to become dietitians in hospitals, sanatoria or private work. Those who intend to become sanitary and food inspectors are also advised to take the course.

Group III, Teachers' Curriculum, combines home economics and liberal arts subjects, chemistry, physics, bacteriology, fine arts, physiology and economics. Courses are arranged to meet the particular needs of home economics students. Practice teaching extending through one quarter in the Seattle schools is required. On application to the State Board of Vocational Education, graduates of this course will receive a Smith-Hughes certificate. A teaching major in home economics consists of : H.E. 4, 5, 6, 8, 25, 107, 108, 112, 113, 143, 144, 145, 146, 147—with their prerequisites.

Group IV, Institutional Management, combines the fundamental sciences, technical and business courses, with practice work. Young women with initiative and ability find positions that offer increasingly attractive returns when trained along this line.

Group V, Textiles, Clothing and Fine Arts, requires a minimum of science but gives ample opportunity for combining work in design with clothing and textiles for the purpose of general culture or for use in a commercial field.

Any of these five lines may lead to the degree of bachelor of science in home economics. Students who fulfill all entrance requirements of the College of Liberal Arts may use home economics as a major for the degree of bachelor of arts.

"Preferred elective" refers to required courses from which the student may be exempted in certain cases with the approval of the head of the department.

GROUP I—GENERAL CURRICULUM

To provide a liberal college training, also for those students who wish to fit themselves for the following vocations:

1. Homemaking.
2. Social Service. (Elect economics and sociology.)

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
English 1	5	English 2	5	Physiology 4 7	8
Zool. 1 or Bot. 1	5	Chemistry 5	5	Chemistry 6	5
Home Economics 7	2	Zool. 2 or Bot. 2	5	Lang. (Anc. or Mod.) ..	5
Elective	8	Phys. Ed.	1½	Phys. Ed.	1½
Phys. Ed.	1½	Preferred electives—H.E. 4, 8, 25, 43; Nursing 5.			

SECOND YEAR

Language (Anc. or Mod.) 5	Language (Anc. or Mod.) 5	Language (Anc. or Mod.) 5
History	History	Psychology
Phys. Ed.	Phys. Ed.	Economics
		Phys. Ed.
Preferred electives—H.E. 5; P.S.D. 8; Bact. 101.		

THIRD YEAR

Philosophy 2	5	Sociology 1	5
Preferred electives—H.E. 105-106, 112, 113, 116; Physics 80-90.			

FOURTH YEAR

Preferred electives—H.E. 144-145, 146, 148, 149; Arch. 1-2.

UNIVERSITY OF WASHINGTON

GROUP II—FOOD AND NUTRITION

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
English 1	5	English 2	5	Chemistry 8	5
Home Economics 7	2	Chemistry 5	5	Physiology 8	5
Phys. Ed.	1½	Phys. Ed.	1½	Lang., Lit., or Hist.	5
				Phys. Ed.	1½

Preferred electives—H.E. 4, 8, 25; P.S.D. 3.

SECOND YEAR

Lang., Lit., or Hist.	5	Lang., Lit., or Hist.	5	Lang., Lit., or Hist.	5
Bacteriology 101	5	Bacteriology 102	5	Psychology 1	5
Chemistry 135	5	Chemistry 136	5	Chemistry 104	5
Phys. Ed.	1	Phys. Ed.	1	Phys. Ed.	1

Preferred electives—H.E. 5.

THIRD YEAR

Economics	5	Chemistry 104	4
		Sociology	5

Preferred electives—H.E. 107-108, 116; Nursing 5; Physics 89-90.

FOURTH YEAR

Preferred electives—H.E. 103, 148, 189, 190, 191 and related sciences.

GROUP III—SMITH-HUGHES TEACHER TRAINING

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
English 1	5	English 2	5	Lang., Lit. or Hist.	5
Physiology 8	5	Chemistry 5	5	Chemistry 6	5
Home Economics 7	2	Phys. Ed.	1½	Phys. Ed.	1½
Phys. Ed.	1½				

Preferred electives—H.E. 4, 8, 25; P.S.D. 3.

If H.E. 4 and 8 are taken in high school, substitute H.E. 43 and Nursing 5.

SECOND YEAR

Lang., Lit. or Hist.	5	Lang., Lit. or Hist.	5	Lang., Lit. or Hist.	5
Chemistry 135	5	Chemistry 136	5	Psychology 1	5
Phys. Ed.	1	Phys. Ed.	1	Phys. Ed.	1

Preferred electives—

Home Economics 5	5	Bacteriology 101	5
------------------	---	------------------	---

THIRD YEAR

Education 101	5	Education 110	5	Economics 1	5
				Education 119	3
				Sociology 1	5

Preferred electives—

Physics 89	5	Physics 90	5	Home Economics 107-108	5
Home Economics 112	5	Home Economics 113	5	Home Economics 143	5
Home Economics 116	5				

FOURTH YEAR

Education 160.J.	3	Education 161.J.	3	Education 145	5
Preferred electives—				Home Economics 145	3
Home Economics 148	2	Home Economics 144	3		
Architecture 1, 2.					

GROUP IV—INSTITUTIONAL MANAGEMENT

To be taken by those who wish to fit themselves for the following vocations:

1. Dietitians.
2. House directors.
3. Managers of tearooms, lunchrooms, cafeterias.
4. Food service in state, municipal, or charitable institutions.

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
English 1	5	English 2	5	Chemistry 6	5
Physiology 8	5	Chemistry 5	5	Lang., Lit. or Hist.	5
Home Economics 7	2	Phys. Ed.	1½	Phys. Ed.	1½
Phys. Ed.	1½				

Preferred electives—H.E. 4, 25; P.S.D. 3; Law 54.

COLLEGE OF SCIENCE

87

SECOND YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Lang., Lit. or Hist.....	5	Lang., Lit. or Hist.....	5	Lang., Lit. or Hist.....	5
Phys. Ed.	1	Chemistry 185	5	Chemistry 186	5
		Phys. Ed.	1	Psychology 1	5
				Phys. Ed.	1

Preferred electives—H.E. 5; Bact. 101.

THIRD YEAR

Economics 1	5	Sociology 1	5
Preferred electives—H.E. 107-108, 116, 124, 143; Chem. 104, 144; Physics 89-90.			

FOURTH YEAR

Preferred electives—H.E. 121, 122, 123, 125, 144, 145, 183, 189, 190; B.A. 11; Arch. 1-2.

GROUP V—TEXTILES, CLOTHING AND FINE ARTS

SUMMARY

	Credits		Credits
College requirements	64	Free electives	29
Fine Arts	31	Physical Education	10
Home Economics	56		
			190

SUGGESTED SCHEDULE

College Requirements	Credits	Fine Arts	Credits	Home Economics	Credits
English	16-17	P. S. & D. 3-10-11.....	13-12	H.E. 8, Ele. Clothing...	3
Lang., Lit. or Hist.....	20	P. S. & D. 169-170....	4	H.E. 25, Textiles.....	6
Laboratory Science	10	Arch. 1-2	5-4	H.E. 127, Non-textiles...	3
Physiology 8	5	P. S. & D. Electives.....	16	H.E. 101-102	4
Economics 1	5		11	H.E. 112-113 (Clothing). 10	
Sociology 1	5			H.E. 130-131 Trade	
Psychology 1	5			dressmaking	12
Philosophy 1 or 2.....	5			H.E. 133-134 Costume ;	
				design	10
				H.E. 135 Millinery.....	3
				H.E. 143 Home Furnish.	3
				H.E. 145 House Manag't..	2
				H.E. 188	3
				" " " " " "	2
Total	64	Total	31	Total	57
Free Electives	29	Physical Education	10		

D. PHYSICAL EDUCATION FOR WOMEN

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
English 1	5	Lang., Lit., History or		English	5
Lang., Lit., Hist., or		Electives	5	Lang., Lit., History or	
Elective	5	Chemistry 5	5	Electives	5
Zoology 1	5	Zoology 7	5	Chemistry 6	5
Phys. Ed.	1½	Phys. Ed.	1½	Phys. Ed.	1½

SECOND YEAR

Physiology 54	5	Physiology 55	5	Sociology 1	5
Lang., Lit., Hist. or		Psychology 1	5	Education 101	5
Elective	5	Anatomy 102	3	Anatomy 103	3
Anatomy 101	3	Phys. Ed.	1½	Phys. Ed.	1½
Phys. Ed.	1½				
Preferred Electives					
Physical Ed. 111.....	3	Physical Ed. 112.....	3	Physical Ed. 113.....	3

THIRD YEAR

Physics 89	5	Physics 90	5	Education 110	5
Preferred Electives					
Phys. Ed. 104 (Dancing)	2	Phys. Ed. 105 (Dancing)	2	Phys. Ed. 106 (Dancing)	2
Phys. Ed. 101 (Gymna.)	3	Phys. Ed. 102 (Gymnas.)	3	Phys. Ed. 103 (Gymna.)	3
Phys. Ed. 131 (Correc.)	4	Phys. Ed. 132 (Correc.)	4	Phys. Ed. 133 (Correc.)	4
Phys. Ed. 167 (Athlec.)	2			Phys. Ed. 122 (Kin'g'y)	3
				Phys. Ed. 160 (Athlet.)	2

UNIVERSITY OF WASHINGTON

FOURTH YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Education 145	3	Education 145	2	Electives	7
Education 119	3	Electives	7	Phys. Ed. 163 (Anthro.)	2
Education 160.E.	2	Phys. Ed. 155 (Dancing)	2	Phys. Ed. 156 (Dancing)	2
Preferred Electives—		Phys. Ed. 162 (Ad. in		Phys. Ed. 168 (Meth.)	
Phys. Ed. 154 (Dancing)	2	Phys. Ed.)	2	Hyg. Inst.)	2
Phys. Ed. 170 (Athlet.)	2	Phys. Ed. 171 (Athlet.)	2	Phys. Ed. 172 (Athlet.)	2
Physical Education, 69 credits			Electives, 32 credits.		

If chemistry and physics have been taken in high school, Chemistry 5 and 6 and Physics 89 and 90 may be eliminated.

Of the preferred electives in physical education, the minimum is 58 and the maximum 64 credits.

A student may also use physical education as a major, following the prescriptions outlined under group I (curricula with major in one department).

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

GENERAL NOTE.—Each student is to be held either for the admission and graduation requirements of the catalogue under which he enters, or for those of the catalogue under which he graduates.

SCHOOL OF EDUCATION

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California)	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern)	DEAN OF FACULTIES
FREDERICK ELMER BOLTON, Ph.D. (Clark)	Professor of Education; DEAN
FRED CARLETON AYER, Ph.D. (Chicago)	Professor of Education
EDWARD DUNNINGTON RANDOLPH, Ph.D. (Columbia)	Professor of Education
CURTIS TALMADGE WILLIAMS, Ph.D. (Clark)	Assistant Professor of Education
PAUL WASHINGTON TERRY, Ph.D. (Chicago)	Assistant Professor of Education
*HARLAN CAMERON HINES, Ph.D. (Iowa)	Assistant Professor of Education
ALEXANDER CRIPPEN ROBERTS, Ph.D. (Washington)	Lecturer in Education
CECIL LEONARD HUGHES, B.Ed. (Washington)	Teaching Fellow in Education
<hr/>	
HENRY LANDES, A.M. (Harvard)	Professor of Geology; Dean of the College of Science
EDMOND STEPHEN MBANY, M.L. (Wisconsin)	Professor of History
CAROLINE HAVEN OBER	Professor of Spanish
TREVOR KINCAID, A.M. (Washington)	Professor of Zoology
FREDERICK MORGAN PADELFORD, Ph.D. (Yale)	Professor of English; Dean of the Graduate School.
FREDERICK ARTHUR OSBORN, Ph.D. (Michigan)	Professor of Physics; Director of the Physics Laboratories.
DAVID THOMSON, B.A. (Toronto)	Professor of Latin; Dean of the College of Liberal Arts
PIERRE JOSEPH FREIN, Ph.D. (Johns Hopkins)	Professor of Romanic Languages
THEODORE CHRISTIAN FRYE, Ph.D. (Chicago)	Professor of Botany
ROBERT EDOUARD MORITZ, Ph.D. (Strassburg)	Professor of Mathematics
IRVING MACKEY GLEN, A.M. (Oregon)	Professor of Music; Dean of the College of Fine Arts.
EDWIN JOHN VICKNER, Ph.D. (Minnesota)	Professor of Scandinavian Languages
EFFIE ISABEL RAITT, A.M. (Columbia)	Professor of Home Economics
WILLIAM PIERCE GORSUOE, A.B. (Knox)	Professor of Public Speaking and Debate
STEVENSON SMITH, Ph.D. (Pennsylvania)	Professor of Psychology
HOWARD THOMPSON LEWIS, A.M. (Wisconsin)	Professor of Business Administration; Dean of the College of Business Administration.
HOWARD WOOLSTON, Ph.D. (Columbia)	Professor of Sociology
EDWARD MCMAHON, A.M. (Wisconsin)	Associate Professor of American History
ROBERT MAX GARRETT, Ph.D. (Munich)	Associate Professor of English
EDWIN JAMES SAUNDERS, A.M. (Harvard)	Assistant Professor of Geology
ERNEST OTTO ECKELMAN, Ph.D. (Heidelberg)	Assistant Professor of German
FRANCES DICKET, A.M. (Columbia)	Assistant Professor of Music
MARY EMMA GROSS, A.M. (Columbia)	Director of Physical Education for Women

*Resigned, May, 1923.

GENERAL STATEMENT

The School of Education, formerly the College of Education, bases its work on two years of college or normal school. Only one course in education, Introduction to Education, is allowed in the sophomore year. The degrees awarded are bachelor of arts in education or bachelor of science in education according to the character of the academic work chosen.

The work in the school is strictly professional and seeks to afford special training and technique for the various types of teachers and educational specialists. Emphasis is placed on graduate work. A probationary teaching certificate, the five year normal diploma, is granted for a minimum amount of professional study, but all wishing to secure the life diploma are required to spend at least one quarter in residence after graduation and complete a total of 35 credits (including the undergraduate work) in education.

Scope and Aims.—The curriculum of the School of Education assumes that teachers should have a broad and liberal education, supplemented by professional training, giving knowledge of the pupils to be taught and the problems to be met, and new meaning to the subjects of instruction, as well as fundamental principles of teaching; and that they should be masters of some special subject which they expect to teach.

The school is especially fitted to provide teachers of the following types: (1) high school teachers, (2) high school principals, (3) superintendents of public schools, (4) grammar school principals, (5) supervisors of primary schools, (6) supervisors and teachers of music, drawing, manual and industrial arts, home economics, physical training and other special subjects, (7) normal school and college instructors in education, (8) experts in educational research, (9) specialists in the education of defectives, (10) playground directors, (11) Y. M. C. A. and Y. W. C. A. workers, (12) juvenile court workers.

General Academic Work.—Because of the variety of work which every teacher is likely to be required to do on beginning to teach, and because of the requirements for state certificates, elementary college courses should be taken in not less than four subjects taught in the high schools.

Specialized Academic Work.—Each teacher should have thoroughly extended preparation in one subject and reasonable preparation in at least two additional subjects. Experience has shown that the following combinations are most frequently demanded: Latin, French; Latin, Greek; English, French; English, history, civics; English, Latin, history; Spanish, French; mathematics, physics, chemistry; botany, zoology, physiology, physiography; home economics alone or in connection with one or two other subjects; manual and industrial arts alone or in connection with one or two other subjects; commercial subjects alone or with other subjects; athletics, music or drawing in combination with other work. One teacher is frequently required to teach all the sciences. Public speaking is desirable as part of the preparation for teaching English.

Professional Work.—The requirements for the academic major and minors assure a proper distribution of the academic subjects. The professional work consists (a) of the courses in the department of education, (b) the teachers' courses in the various academic departments.

Special Teachers' Courses.—Many academic departments have teachers' courses covering the problems of teaching their subjects in high schools. Work in special methods relating to particular subjects is given by instructors dealing most directly with the subject matter. Foundation principles of general methods based on the laws of learning and teaching are developed in the department of education.

Observation and Supervised Teaching.—By an arrangement between the University and the schools of Seattle students in the department of education may observe the regular work in certain schools (at present twelve are used) and do supervised teaching under direction of the regular teachers of the school and the university professor in charge of that work. Thus students have an opportunity to gain valuable experience under exceptionally favorable conditions.

Industrial Arts.—While no separate department of industrial arts is maintained during the regular year, special attention is devoted to this work during the summer quarter. A good curriculum may be obtained during the regular academic year by selecting courses in engineering, fine arts, and education. Because of the excellent industrial arts work in the Seattle public schools, students have unusual facilities for observing the best organization and equipment. A large number of industrial centers and pre-vocational classes are maintained in various parts of the city.

Athletics and Playground Activities.—At the present time there is a strong demand for teachers, both men and women, who can direct various forms of athletics and playground activities in high school and the grammar grades.

Public School Music.—Not only is there a demand for specially trained supervisors of music in the schools, but every school needs teachers who can assist in the general musical activities of the school and community. Every teacher who has any musical ability should take some training in music and participate in some of the University musical organizations.

Debating, Dramatics, Public Speaking.—Every teacher will be called on to assist in the incidental work of the school. The small towns cannot afford special teachers of public speaking and debate and consequently the teacher who prepares to assist in these lines increases his usefulness. Every student should participate in some of these lines throughout his college course and should take definite courses in these subjects.

Journalism in High Schools.—Newspaper writing is being introduced in some of the best high schools as part of the English course. It seems to afford a valuable incentive to many pupils in their English work. The teacher who undertakes this work needs to be especially well trained professionally as well as in English and journalism. For a proper combination of courses the student should consult the departments of education, English, and journalism.

Commercial Subjects.—At present the demand on the University for teachers of commercial subjects far exceeds the supply. To prepare for this line of work the student should include courses in bookkeeping, stenography, commercial law, commercial policies, commercial geography, economics, besides the professional training in education.

Teaching of Technical Subjects in College.—Many students of engineering, forestry, law and other technical subjects ultimately plan to teach those subjects in colleges or technical schools. An increasing number of such students desire professional training in educational theory and methods as part of their preparation.

The Study of Education and Citizenship.—Courses in education are valuable both for those who expect to teach and for those who expect to become useful citizens of any community. Many courses in education, therefore, are rightly coming to be pursued by students not expecting to become teachers.

Extension Service.—The department of education is pleased to render service to the cause of education in many ways besides through regular

courses of instruction. Members frequently give addresses at teachers' institutes, parent-teacher associations, educational associations, community centers, school dedications, and school commencements. They also are pleased to conduct educational surveys as far as time will permit.

Saturday and Evening Classes.—To accommodate teachers of Seattle and vicinity several classes in education are scheduled on Saturday and during the late afternoon and evening.

Vocational Secretary.—The University maintains a vocational secretary to assist students in obtaining desirable positions. The services of this officer are entirely free to students and graduates of the University and to employers.

Honorary Educational Societies.—Chapters of Phi Delta Kappa, men's national honorary educational fraternity, and Pi Lambda Theta, women's national honorary educational sorority have been established for several years. Each has a large and vigorous membership. A men's education club has recently been organized.

ADMISSION

The admission requirements are completion of 90 hours of college credit earned in the University of Washington or in an accredited institution of equal rank. Disposition of these 90 hours shall be determined by mutual agreement of the faculty of the School of Education and the faculty of the particular college concerned, and shall be administered by the dean of the college in accordance therewith. In addition the usual undergraduate requirements in physical training or military drill must be completed.

Sophomores who have earned 65 hours of credit may enroll in course 101, Introduction to Education.

Admission of Normal School Graduates to Advanced Standing.—Advanced credit for work taken in approved normal schools, by students previously graduated from an accredited four-year secondary school, will be allowed at the rate of 45 hours of lump credit for each full year's work completed in the normal school.

For graduation with the degree of bachelor of arts in education or bachelor of science in education a normal school graduate with such advanced credit must earn in the University a sufficient number of credits to bring the total up to 180 credits plus ten credits of required courses in physical education or military science, and including all specific requirements for the degree not fairly covered by previous work. Claims for exemption from specific requirements, based on work in normal school, are passed on by the registrar and the dean of the college concerned.

A minimum of three full quarters in residence, with completion of 36 hours of work, is required for any degree granted by the University.

It should be noted that a student whose work in high school and normal school has not included a sufficient number of special requirements of the School of Education, may find it necessary to offer more than the usual 190 credits for the degree of bachelor of arts in education or the degree of bachelor of science in education.

GRADUATION

For graduation from the School of Education with the degree of bachelor of arts in education or bachelor of science in education there shall be completed 90 hours of credit beyond requirements for entrance to the school, at least 48 of which shall be in upper division subjects. In the total of 180 hours of academic credit required for graduation from the School of Education the following must be included:

	<i>Credits</i>
Academic major	35
Academic minor	20
Education, including 2 hours special teachers' course.....	25

The education courses required for the degree of bachelor of arts in education, or bachelor of science in education shall include the following:

	<i>Credits</i>
101. Introduction to Study of Education.....	5
110. Psychology of Teaching Methods.....	5
119. Secondary Education	8
145. Practice Teaching	5
150. Educational Measurements	8
160. Teachers' Course in Special Subject.....	2
Educational Electives	2
	<hr/> 25

An academic major consists of 35 credits in some subject other than education.

An academic minor consists of 20 credits in some subject other than education.

The academic major and minor may be selected from any subjects now recognized in the Colleges of Liberal Arts, Science, Fine Arts, or Business Administration, or such others as may be approved by the faculty of the School of Education. Students may minor (but not major) in journalism. Students may major but not minor in physical education for women.

Part of the preparation in the academic major and minor should be completed before entrance to the School of Education.

No courses in education may be taken before the junior year, except that sophomores who have earned 65 quarter hours of credit may enroll in course 101, Introduction to Education.

Normal school graduates who are candidates for the bachelor's degree from the School of Education are required to take the following courses in education:

	<i>Credits</i>
119. Secondary Education	8
150. Educational Measurements	8
152. Social Surveys of Education.....	2
160. Teachers' Course in Special Subject.....	2
Electives in Education.....	5
	<hr/> 15

Experienced teachers who are candidates for the bachelor's degree from the School of Education are required to take the following courses:

	<i>Credits</i>
101. Introduction to Study of Education.....	5
110. Psychology of Teaching Methods.....	5
119. Secondary Education	8
150. Educational Measurements	8
152. Social Surveys of Education.....	2
160. Teachers' Course in Special Subject.....	2
Electives in Education.....	5
	<hr/> 25

Students in other colleges or schools of the University may elect courses in education according to conditions fixed by those colleges and not inconsistent with the regulations of the School of Education.

Students are allowed to combine, in preparation for teaching, courses in the departments of political science, sociology and economics, for the academic major or the academic minor. Such combinations must be approved by the dean of the School of Education and the head of the department in which the academic major or minor is selected.

Courses in manual and industrial arts, or in those combined with drawing, will be accepted as an academic minor toward graduation from the School of Education.

REQUIREMENTS FOR NORMAL AND LIFE DIPLOMAS

The University is authorized by law to issue diplomas valid in the State of Washington as teachers' certificates to teach in any high school or to superintend or supervise in any public school of the state, as described below:

The University Five-Year Normal Diploma, valid for a period of five calendar years from date of issue, is granted on the following conditions:

(a) Graduation from the University, (b) evidence of good health, such general scholarship and personal and moral qualities as give promise of success and credit in the teaching profession. Active professional interest in teaching is an important factor. The faculty of the School of Education may refuse to recommend candidates for the normal diplomas who fail to measure up to the foregoing standards. (c) Completion of the following courses in education:

	<i>Credits</i>
101. Introduction to Study of Education.....	5
110. Psychology of Teaching Methods.....	5
119. Secondary Education	3
145. Practice Teaching	5
160. Teachers' Course in Special Subject.....	2
	<hr/> 20

Graduates from the University of Washington with no credits in education who desire the five-year normal diploma must complete the following courses in education:

	<i>Credits</i>
110. Psychology of Teaching Methods.....	5
119. Secondary Education	3
160. Educational Measurements	3
162. Social Surveys of Education.....	2
145. Practice Teaching	5
160. Teachers' Course in Special Subject.....	2
	<hr/> 20

Graduates from other colleges who desire the five-year normal diploma are required to be in residence one academic year and to complete the following courses in education:

	<i>Credits</i>
110. Psychology of Teaching Methods.....	5
119. Secondary Education	3
145. Practice Teaching	5
160. Educational Measurements	3
162. Social Surveys	2
160. Special Teachers' Course.....	2
	<hr/> 20

They also must complete 10 credits in some teaching subject approved by the head of the department in which the academic major work is chosen.

The teachers' course in the academic major is required, if offered.

Graduates of the two-year course of state normal schools who subsequently graduate from this University and who become candidates for the University five-year-normal diplomas must earn in this University at least 15 credits in education as follows:

	<i>Credits</i>
119. Secondary Education	3
160. Educational Measurements	3
162. Social Surveys of Education.....	2
160. Teachers' Course in Special Subject.....	2
Electives in Education.....	5
	<hr/> 15

Normal school graduates must qualify for the University normal diploma or life diploma to be eligible to teach in high schools. The diplomas from the normal schools qualify the holders for elementary schools only.

Persons who have received the master's or doctor's degrees from this University are eligible to the University five-year normal diploma provided they have fulfilled the specific normal diploma requirements.

The University life diploma is granted to candidates who fulfill the requirements for the University five-year normal diploma and who have completed:

(a) At least one quarter of residence study subsequent to receiving the five-year diploma.

(b) A minimum of 35 quarter hours in education, which may include a maximum of 5 hours in teachers' courses in special subjects.

(c) A minimum of 5 additional quarter hours in an academic subject which will normally be the academic major or minor.

(d) Who also furnish satisfactory evidence of having taught successfully for at least twenty-four months.

The life diploma is not granted until candidates have taught at least one school year subsequent to receiving the normal diploma even though they have had twenty-four months of teaching experience.

No person is eligible to receive the degree, the normal diploma or the life diploma who has not been in residence at this University at least three quarters.

Use of education as the only recommended teaching subject (or major subject) is (for normal diploma) limited to cases of men and women in administrative positions whose undergraduate work shows a fair degree of preparation in two or more high school subjects. In all other cases, each candidate for the five-year normal diploma or life diploma must be recommended by at least one department besides education.

MINIMUM FOR DEGREE OF BACHELOR OF ARTS IN EDUCATION, OR BACHELOR OF SCIENCE IN EDUCATION, AND FIVE-YEAR NORMAL DIPLOMA

For High School Teachers

Regular Students University of Washington	Normal School Graduates
*Credits	*Credits
101. Introduction to Study of Education... 5	119. Secondary Education..... 3
110. Psychology of Teaching Method... 5	150. Educational Measurements..... 3
119. Secondary Education..... 3	152. Social Surveys in Education..... 2
145. Practice Teaching..... 5	160. Teachers' Course in Special Subject 2
150. Educational Measurements..... 3	Elective in Education..... 5
160. Teachers' Course in Special Subject 2	
Electives in Education..... 2	15
25	

MINIMUM REQUIREMENTS IN EDUCATION FOR STUDENTS FROM OTHER COLLEGES OF THE UNIVERSITY

For Five-Year Normal Diploma

Regular Students from Other Colleges of the University	Graduates from University of Washington with no Under- Graduate Credits in Education	Graduates from Other Accred- ited Colleges with no Under- Graduate Credits in Education
*Credits	*Credits	*Credits
101. Introduction to the Study of Education.... 5	110. Psychology of Teach- ing Method..... 5	110. Psychology of Teach- ing Method..... 5
110. Psychology of Teach- ing Method..... 5	119. Secondary Education... 3	119. Secondary Education... 3
119. Secondary Education... 3	145. Practice Teaching... 5	145. Practice Teaching... 5
145. Practice Teaching... 5	150. Educ. Measurements... 3	150. Educ. Measurements... 3
160. Teachers' Course in Special Subject..... 2	152. Social Surveys..... 2	152. Social Surveys..... 2
	160. Teachers' Course in Special Subject..... 2	160. Teachers' Course in Special Subject..... 2
20	20	45
		Academic Subjects... 10
		Free Electives..... 15

*Quarter Hours

One year of residence in this University. These will presumably select work to apply on a master's degree.

**DISTRIBUTION OF COURSES IN EDUCATION IN PREPARATION FOR SPECIAL
TYPES OF POSITIONS. LEADS TO MASTER'S DEGREE**

Requirements in Education for Bachelor of Arts in Education, or Bachelor of Science
in Education.

High School Principal	Grade School Principal	Village Superintendent	City Superintendent
<i>*Credits</i>	<i>*Credits</i>	<i>*Credits</i>	<i>*Credits</i>
Introduction to the Study of Educ. 5	Introduction to the Study of Educ. 5	Introduction to the Study of Educ. 5	Introduction to the Study of Educ. 5
Psych. of Teach- ing Method.... 5	Psych. of Teach- ing Method.... 5	Psych. of Teach- ing Method.... 5	Psych. of Teach- ing Method.... 5
Secondary Educa- tion 3	Secondary Educa- tion 3	Secondary Educa- tion 3	Secondary Educa- tion 3
Teachers' Course in Special Sub- ject 2	Teachers' Course in Special Sub- ject 2	Teachers' Course in Special Sub- ject 2	Teachers' Course in Special Sub- ject 2
Practice Teaching 5	Practice Teaching 5	Practice Teaching 5	Practice Teaching 5
Educ. Measure- ments 3	Educ. Measure- ments 3	Educ. Measure- ments 3	Educ. Measure- ments 3
Electives in Edu- cation 2	Electives in Edu- cation 2	Electives in Edu- cation 2	Electives in Edu- cation 2
<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>

ADDITIONAL REQUIREMENTS IN EDUCATION FOR MASTER'S DEGREE

Junior High School 2	Junior High School 2	Educational Soci- ology 5	Junior High School 2
High School Or- ganization 2	Individual Mental Testing 6	Psych. of Elemen- tary School Sub- jects 3	Group Intelligence Tests 5
Psych. of High School Subjects 3	Psych. of Elemen- tary School Sub- jects 3	Educational Ad- ministration .. 6	Psych. of Elemen- tary School Sub- jects 3
Educational Ad- ministration .. 6	Educational Ad- ministration .. 6	Electives 8	Educational Ad- ministration .. 6
Electives 9	Electives 5	Thesis 6	Electives 6
Thesis 6	Thesis 6		Thesis 6
<u>28</u>	<u>28</u>	<u>28</u>	<u>28</u>

**REQUIREMENTS IN EDUCATION FOR CANDIDATES FOR SPECIAL POSITIONS
AND FOR DEGREE OF DOCTOR OF PHILOSOPHY**

The requirements in Education for Bachelor of Arts in Education, or Bachelor of Science in Education for College Instructors in Education, Normal School Instructors in Education, and Directors of Educational Research, are:

<i>*Credits</i>	<i>*Credits</i>
Introduction to the Study of Education.. 5	Practice Teaching 5
Psych. of Teaching Method..... 5	Educ. Measurements 3
Secondary Education 3	Electives in Education..... 2
Teachers' Course in Special Subject..... 2	
	<u>25</u>

Elect, 60 hours from the following (thesis required):

<i>*Credits</i>	<i>*Credits</i>
Educational Sociology 3	Seminar, Vocational Guidance..... 6
Educational Administration 6	Seminar, School Survey..... 6
Individual Mental Testing..... 6	Seminar, Educational Measurements..... 6
Psychology of Elementary School Subjects. 3	Philosophy of Education..... 6
Psychology of High School Subject..... 3	Seminar, Educational Sociology..... 6
Junior High School..... 2	Seminar, Comparative Education..... 6
Child Study or Adolescence..... 5	Electives 8
Group Intelligence 5	Thesis 30
Experimental Education 3	
History of Education..... 5	<u>120</u>

**REQUIREMENTS FOR ACADEMIC MAJORS AND MINORS AND DEPARTMENTAL
RECOMMENDATIONS FOR THE NORMAL AND LIFE DIPLOMAS**

An academic major consists of 35 credits in some subjects other than education.

An academic minor consists of 20 credits in some subject other than education.

*Quarter Hours.

In a few cases more than the minimum number of credits are required by a department because the first courses listed are in reality high school courses. If students have high school credits in these subjects the minimum of 35 college credits will suffice for the major and 20 for the minor.

Below are listed the courses specified by the various departments for the academic majors and minors in the School of Education. Those who expect major or minor recommendations by the academic departments for teaching or on the normal or life diplomas, as required by the State Board of Education, should comply with the requirements made by the various departments. However, the academic major or minor graduation requirements will be fulfilled with the minimum of 35 or 20 credits respectively. For descriptions of the courses see the respective department statements.

ASTRONOMY

Academic Minor (major not offered): Courses 1, 2, 112, 123, 131. It is recommended that students who wish to combine astronomy with mathematics or physics add course 172.

BACTERIOLOGY

Academic Major: Courses 101, 102, 103, 104, 106, and 9 hours selected from 210-211-212, 213-214-215; total 36 credits.

Academic Minor: Course 101, 102, 103, and from numbers above 200 enough to total 20 credits.

BOTANY

Academic Major: Minimum 35 credits, including courses 105, 106, 107, and 140, 141, 142, or 143, 144, 145.

Academic Minor: Minimum 20 credits of which at least 15 credits should be in courses above 100. For a minor recommendation to teach botany at least 25 credits.

Major students in botany should take at least a year of chemistry.

CHEMISTRY

Academic Major: Courses 21-22-23, 101, 111, 131-132; minimum 35 credits.

Academic Minor: Courses 21-22-23, 101, 111, or (131-132); or course 5-6, 135-136; minimum 20 credits. To be recommended to teach the subject the student must add 23 or 101; total 25 credits.

For the minor, students should have had at least high school physics; for the major they should have a year of college physics. Grades must average at least C to secure a recommendation for teaching chemistry.

CIVICS

Academic Major, combining political science, sociology and economics: Political Science 1, Sociology 1, Economics 1, and one of the following groups: Political Science, 10, 60, 100, Political Science, electives; Sociology 29, 51, 55, 56, 60; Economics 57, 61, 105, 160; minimum 35 credits.

Academic Minor: Political Science 1, Economics 1, Sociology 1, and 5 (for teaching recommendation 10) additional from one of the three subjects; minimum 20 credits.

CLASSICAL LANGUAGES AND LITERATURE

Academic Minor in Latin: Latin 21, 22, 23, two of 50, 60, 70; 107. Total 108 or 109. Greek 1 and 2. Total 32-36 credits.

Academic Minor in Latin: Latin 21, 22, 23, two of 50, 60, 70; 107. Total 24-28 credits.

Academic Major in Greek: Greek 1, 2, 3, 4, 5, 101-102-103; Latin 10 credits. Total 37 credits.

Academic Minor in Greek: Greek 1, 2, 3, 4, 5. Total 21 credits.

COMMERCIAL TEACHING

(See Economics and Business Administration.)

DRAMATIC ART

Academic Major: Courses 1-2-3, 21-22-23, 101-102-103, 111-112-113; total 45 credits.

Academic Minor: Courses 1-2-3, 21-22-23, 101-102-103; total 30 credits.

DRAWING

Academic Major: Courses 5-6-7, 9-10-11, 16-17-18, 101, ~~111~~, and either 53-54-55, or 103-104 or 105-106; total 36 to 42 credits.

Academic Minor: Courses 5-6-7, 9-10-11, 16-17-18, 101, ~~111~~, total 30 credits.

ECONOMICS AND BUSINESS ADMINISTRATION

Academic Major: Courses 1, 57, 61, 105, 160; electives to total minimum of 35 credits.

Academic Minor: Courses 1, 57, 61; electives to total minimum of 20 credits.

See also civics for combinations with political science and sociology.

COMMERCIAL TEACHING

Academic Major: Courses 11, 12, 54, 55, 66, 182; minimum 35 credits. If more are elected 101-102 is recommended.

Academic Minor: Courses 11, 12, 64, 65; minimum 20 credits.

Shorthand and typewriting are almost absolutely necessary for commercial teaching in high school and should be taken although no college credit is given.

ENGLISH

Academic Major: Freshman composition, teachers' course 188-189, senior conference 191-192-193, electives to total 35 credits, exclusive of freshman composition.

Academic Minor: 20 credits exclusive of freshman composition.

For either a major or a minor it is desirable to divide the time between the extensive courses which give broad surveys and the intensive courses which deal critically with limited periods or movements.

FINE ARTS

(See Drawing and Music.)

GEOLOGY

Academic Major: Courses under either a or b, as follows:

a. Courses 1, 2, 21, 31, 107, 120, 123, 124, 126; minimum, 35 credits.

b. Courses 1 or 12, 2, 10, 11, 111, 112, 113, 116, 117, or 118; minimum, 35 credits.

Academic Minor: Courses under either a or b, as follows:

a. Courses 1, 2, 10, 107, 112; minimum, 20 credits.

b. Courses 1 or 12, 10, 11, 111, 116; minimum, 20 credits.

GERMANIC LANGUAGES AND LITERATURE

Academic Major: Minimum 35 credits, including Education 160 G. course 160-161-162.

Academic Minor: Minimum 20 credits.

Major recommendation for teaching, at least 27 credits in courses above 100, including Education 160.G.

HISTORY

Academic Major: Minimum 35 credits, including course 1-2. Electives on advice of the head of the department.

Academic Minor: Minimum 20 credits, including 1-2, or 5-6, or 57-58. Electives on advice of the head of the department.

HOME ECONOMICS

Academic Major: Courses 4, 5, 7, 8, 25, 107-108, 112-113, 116, 143, 144-145, 148; total 56 credits.

Academic Major in Principles of Nutrition: Courses 4, 5, 7, 43, 116 or 144, 107-108, 145, 148; total 39 credits.

Academic Minor in Principles of Nutrition: Courses 5, 7, 107-108, 116, 145; total 28 credits.

Academic Minor in Textiles and Clothing: Courses 7, 8, 25, 112-113, 143, total 26 credits.

Academic Major in Textiles and Clothing: In addition to the minor 148, and at least 8 credits from 130, 133, 135; total 36 credits.

JOURNALISM

Academic Minor: Courses 51, 75, 101, 120, 150; total 25 credits.

Academic Major in Journalism not offered in the School of Education.

MATHEMATICS

Academic Major: Minimum 35 credits, including courses 5, 109.

Academic Minor: Minimum 20 credits, including courses 4, 5.

MUSIC: (PUBLIC SCHOOL)

Academic Major: Courses 1-2-3, 4-5-6, 7-8-9, 14-15-16, 51-52-53, 54-55-56, 113-114-115; total 45 credits.

Academic Minor: Courses 1-2-3, 7-8-9, 14-15-16, 54-55-56; total 24 credits.

PHILOSOPHY

Academic Major: Minimum 35 credits, including course 101-102-103.

Academic Minor: Minimum 20 credits, including course 101-102-103.

PHYSICAL EDUCATION FOR MEN

Major in Athletic Coaching: The following curriculum is especially arranged for men who plan to prepare for coaching athletics and directing physical education in the public schools. Their first few years of service will be in the smaller high schools where athletic coaching must be combined with teaching academic subjects.

1. Students are advised to complete, in addition to the physical education major, (a) a second teaching major or (b) two teaching minors.

2. With the consent of the director of the department of physical education, courses in anatomy, physiology, and anthropometry may be counted in a physical education major.

3. Students intending to major in physical education in the School of Education should complete in the freshman year 10 hours in English 1-2, 10 hours in Zoology 1-2, (or 3-4) and 5 hours in Physical Education 1-2-3 which may be counted as scholastic credit for men who complete 10 hours in military science (or approved substitute); and in the sophomore year, 10 hours in Zoology 10-11.

4. The academic teaching major or minors should be begun in the freshman and sophomore years.

5. Education 101 should be taken in the last quarter of the sophomore year or the first quarter of the junior year.

Required Courses in Athletic Coaching: 1-2-3, Calisthenics and Gymnastics, 5 credits; 101-102-103, Gymnastic Terminology, Principles and Technique of Teaching, 6 credits; 110, First Aid, 2 credits; 112, Physical Diagnosis, 3 credits; 113, Playground Supervision, 2 credits; 115, Organization and Administration, 2 credits; 131-132-133, Theory and Practice of Corrective Gymnastics, 9 credits; specific courses required. 29 credits.

Suggested Electives: 120, Theoretical Football, 2 credits; 121, Theoretical Basketball, 2 credits; 122, Theoretical Track Athletics, 2 credits; 123, Theoretical Baseball, 2 credits; 124, Theoretical Boxing and Wrestling; 2 credits; total electives, 6 credits; total 35 credits.

PHYSICAL EDUCATION FOR WOMEN

Academic Major: Total of 45 credits including physical education 101-102-103, 104-105-106, 111-112-113, 131-132-133, 154-155-156, 170-171. Education 160.R. Practice Teaching, Education 145 is additional in all cases except by exemption by head of department of physical education. Electives chosen to suit the different needs under the advice of the head of the department of physical education, and the dean of the School of Education Anat. 101-102-103, Physiology 54-55 are prerequisites for certain foregoing courses. Anatomy or physiology may be used as a minor.

Students desiring to prepare for *Community Recreation and Leadership* may select the following combination for an academic major in the department of physical education:

Academic Major: Dramatic Art 31; Sociology 1, 55, 57, 62; Drawing 169, 170, 171; Physical Education 104-105-106, 111-112-113, 154-155-156, 167, 169, 170-171-172, 173; minimum 34 credits. Substitutions in sociology and fine arts may be made with the approval of the head of the department of physical education.

(Anatomy or physiology are not required for the courses in physical education mentioned in the foregoing paragraph.)

PHYSICS

Academic Major: Courses 1, 2, 3, and not less than 20 credits from other courses under 200; minimum 35 credits.

Academic Minor: Courses 1, 2, 3, and not less than 5 credits from other courses under 200; minimum 20 credits.

Recommendation as a major or minor for the normal diploma same as the foregoing with all grades above C.

POLITICAL SCIENCE

Academic Major: Courses 1, 10, 60, 100, and electives to make minimum of 35 credits.

Academic Minor: Courses 1, 10, 60, 100, minimum ²⁰48 credits.

For teaching civics, courses in history, economics and sociology are desirable as supporting subjects. See also civics for combinations with economics and sociology.

PSYCHOLOGY

Academic Major: Courses 1, 101, 106, 109, 111, 112, 114, 124 and electives to make a minimum of 35 credits.

Academic Minor: Courses 1, 106, 112, 114, and electives to make a minimum of 20 credits.

Recommendations for the normal diploma are made on the bases of quality rather than merely the required number of credits. Only high grade students can be recommended because of the specialized character of psychology work as a teaching subject.

ROMANIC LANGUAGES AND LITERATURE

Academic Major: Minimum of 35 college credits in one language.

Academic Minor: Minimum of 20 college credits in one language.

Recommendation for Teaching French: Courses 1-2-3, 4-5-6, 7-8-9, 41, 101-102-103, 158, 159, Educ. 160T., electives from literary courses 10 credits; total 59 credits.

Recommendation for Teaching Spanish: Courses 1-2-3, 4-5-6, 7-8-9, 101-102-103, 159, electives from literary courses 10 credits; total 55 credits.

In many cases a part of the French or Spanish courses may have been taken in high school.

The distinction between major and minor recommendations for teaching French or Spanish are determined upon the basis of quality rather than quantity.

SCANDINAVIAN LANGUAGES AND LITERATURE

Academic Major: Minimum 35 credits.

Academic Minor: Minimum 20 credits.

Suggested minors in Swedish: Courses 1-2-3, 4-5-6, 23-24-25; minimum 21 credits.

Suggested minor in Norwegian courses 10-11-12; 13-14-15; 20-21-22.

Because of the diversity of previous preparation it will be necessary to consult the head of the department in each case.

SOCIOLOGY

Academic Major: Courses 1, 52, 55, 56, 60, and electives to make a minimum of 35 credits.

Academic Minor: Courses 1, one from above, and electives to make a minimum of 20 credits.

Electives may be along one of three lines, viz: anthropology, social theory or social problems. Important basic and supplementary subjects, zoology, psychology, statistics, political science.

See civics for combination with economics and political science.

ZOOLOGY

Academic Major: Courses 1-2 or 54-55 and electives to make a minimum of 35 credits.

Academic Minor: Courses 1-2 or 45-55 and electives to make a minimum of 20 credits.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

LIBRARY SCHOOL

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern).....	DEAN OF FACULTIES
WILLIAM ELMER HENRY, A.M. (Indiana).....	Professor of Library Science; DIRECTOR
CHARLES WESLEY SMITH, A.B., B.L.S. (Illinois)....	Associate Professor of Library Science
ELLEN F. HOWE, A.B. (Washington), Graduate in Library Science (Washington), Certificate (Carnegie Library School).....	Instructor in Library Science
ROBINSON SPENCER, A.B. (Wesleyan University), B.L.S. (Illinois).....	Instructor in Library Science.
MARIE SMART ALPONSO, A.B. (Nebraska), B.S. in L.S. (Washington).....	Instructor in Library Science.

GENERAL STATEMENT

The Library School offers professional education in librarianship.

Being an educational institution, a library should not be entrusted to persons of merely elementary acquirements. Its conduct requires a larger and more comprehensive educational equipment and outlook than can be had with less than that signified by the bachelor's degree.

The technical curriculum extends through three quarters—short in comparison with the academic curriculum, because the general educational equipment of the librarian is of larger significance than the technical education, but neither is sufficient without the other.

Graduates of the School are competent to take charge of a small public library or to take an assistant's place in any department of the larger libraries. After a reasonable experience in either of these positions, they have shown themselves competent to conduct libraries of medium size with excellent success.

ADMISSION

Admission is granted as follows:

1. To graduate students who hold the baccalaureate degree from any college or university of good standing, whose undergraduate work in either or both high school and college has included the equivalent of at least twenty college credits each in two modern foreign languages, German and French preferred. Slight deficiencies in the languages, however, may be accepted as conditions, but must be removed within the period of study in the Library School.

2. To students who have qualified for senior standing in the College of Liberal Arts or, in the elective curricula in the College of Science—having earned ~~147~~ credits, including 10 credits in military science or physical education and including all required work. Such students may finish the curriculum in three quarters, provided they meet the language requirements prescribed in Paragraph 1 above.

Initial admission to classes in the Library School is permitted only at the beginning of the college year in October except by special permission of the director of the Library School. No one may be admitted to any course in the Library School curriculum except as an auditor, unless he is expecting to complete the entire curriculum.

DEGREES

On completion of the curriculum in library science, either as a fourth year (or major) following three years in the College of Liberal Arts or the College of Science, or as a fifth (or graduate) year, the degree of Bachelor of Science in Library Science is granted.

ADVISORY SUGGESTIONS

The student entering the school should be a typist of accuracy and fair speed.

Students doing an inferior grade of work will be advised to discontinue work in the Library School. Grades below an average of B minus or C plus are too low. A poor scholastic record is not an adequate basis for a strong recommendation for library service.

As no one with serious physical defects or ill health can readily secure a position in library service, such persons should not ask admission to the school.

Persons beyond thirty years of age are advised not to enter the school unless they have already had experience in library service.

CURRICULUM IN LIBRARY SCIENCE

	<i>Credits</i>
Order routine, trade bibliography, and circulation.....	2
Classification and subject headings.....	3
Cataloging	6
Reference	6
History of books and libraries.....	2
Organization and extension.....	2
Administration	3
Subject bibliography	2
Book selection	7
Work with children and schools.....	3
Special lectures	1
Practice (300 clock hours).....	10 <i>46</i>

Each recitation or lecture period presupposes two hours preparation and twelve such periods are counted as one credit. Thirty clock hours of practice are counted as one credit.

Practice.—Practice under careful supervision covers 300 clock hours, fifteen hours per week through ten weeks each during the winter and spring quarters.

The practice time is divided about equally between the University Library and the Seattle Public Library.

The Seattle Public Library offers rather unusual opportunities for practice in varied phases of work under careful supervision of trained librarians of large experience.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

COLLEGE OF BUSINESS ADMINISTRATION

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern).....	DEAN OF FACULTIES
HOWARD THOMPSON LEWIS, A.M. (Wisconsin).....	Professor of Business Administration; DEAN
LESLIE JAMES AYER, B.A., J.D. (Chicago).....	Professor of Law
JAMES E. GOULD, A.M. (Harvard).....	Professor of Maritime Commerce
HOWARD H. PRESTON, Ph.D. (Iowa).....	Professor of Business Administration
WILLIAM D. MORIARTY, Ph.D. (Michigan).....	Professor of Business Administration
CARL S. DAKAN, B.S. (Missouri).....	Professor of Business Administration
WILLIAM E. COX, A.M. (Texas).....	Associate Professor of Business Administration
HARRY E. SMITH, Ph.D. (Cornell).....	Associate Professor of Business Administration
MAOT M. SKINNER, Ph.D. (Harvard).....	Associate Professor of Business Administration
CHARLES R. ATKINSON, A.M. (Columbia)....	Associate Professor of Business Administration
THERESA S. McMAHON, Ph.D. (Wisconsin).....	Assistant Professor of Business Administration
HOMER E. GREGORY, A.M. (Chicago).....	Assistant Professor of Business Administration
JAMES M. McCONAHAY, M.A. (Washington and Jefferson), LL.B. (Northwestern), C.P.A., Lecturer in Accounting.	
J. P. ROBERTSON, C.P.A.	Lecturer in Accounting
PIERCE C. DAVIS, C.P.A.	Lecturer in Accounting
NORMAN L. BURTON, A.B. (Williams), M.B.A. (Harvard), C.P.A.	Lecturer in Accounting
OSCAR E. DRAPER.....	Lecturer in Business Administration
FRANK C. VAN DE WALKER, A.B. (Whitworth), M.B.A. (Washington).....	Associate in Business Administration.
FREDERICK W. WOODBRIDGE, M.B.A. (Washington)....	Associate in Business Administration
KARL E. LEIB, A.B. (Stanford).....	Instructor in Business Administration
J. G. DRISCOLL, JR., LL.B. (Stanford).....	Instructor in Business Administration
F. H. HAMACK.....	Instructor in Business Administration
RAYMOND F. FARWELL, A.B. (California).....	Instructor in Maritime Commerce
WILLIAM A. RUSSELL.....	Instructor in Business Administration
FLORENCE M. MORSE, M.A. (Colorado).....	Instructor in Business Administration
GRANT I. BUTTERBAUGH, M.B.A. (Washington).....	Assistant in Business Administration
<hr/>	
FREDERICK M. PADEL FORD, Ph.D. (Yale).....	Professor of English; Dean of the Graduate School.
WILLIAM SAYERT, Ph.D. (Harvard).....	Professor of Philosophy
ROBERT EDOUARD MORITZ, Ph.D. (Nebraska), Ph.D. (Strassburg),	Professor of Mathematics
HENRY KREITZER BENSON, Ph.D. (Columbia).....	Professor of Chemical Engineering
CARL EDWARD MAGNUSSON, Ph.D. (Wisconsin), B.E. (Minnesota).....	Professor of Electrical Engineering; Dean of the College of Engineering.
FREDERICK ELMER BOLTON, Ph.D. (Clark).....	Professor of Education; Dean of the School of Education.
EFFIE ISABEL RAITT, A.M. (Columbia).....	Professor of Home Economics
STEVENSON SMITH, Ph.D. (Pennsylvania).....	Professor of Psychology
EDWARD McMAHON, A.M. (Wisconsin).....	Associate Professor of American History

GENERAL STATEMENT

Modern business has reached the stage where internal and external economies must be realized. The industrial management of today seeks to reduce waste in materials and labor, and to promote the most effective organization of the factors of production. Such a task requires not only special knowledge, but also vision of the highest order.

A knowledge of accounting, statistics, labor efficiency, resources, credit, insurance, business law and organization, is fundamental for a proper understanding and an intelligent direction of our modern industrial system. Such studies as psychology, sociology, government, ethics, and his-

tory provide the larger equipment necessary for dealing with this industrial system in its proper perspective and its social relationships.

The establishment of a well-ordered plant is the basis of a strong position in production. Just as important is the problem of successfully moving the product to the consumer. Markets are no longer local, but national and even international. Every business man has occasion to study salesmanship, advertising, transportation routes and rates, banking, exchange, tariffs and government regulation. The more extended state control of industry especially is calling for unusual ability to cooperate.

The College of Business Administration aims to train students to meet the general as well as the specific problems of modern industry.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University, students expecting to enter the College of Business Administration should elect their work so as to offer two units of history. Civics and economics may count toward the history requirement.

If these subjects have not been included in high school elections, they must be elected in the University.

Beginning in the autumn of 1924, one high school unit (or two college quarters) of typewriting will be required of all graduates of the College of Business Administration. This requirement should be fulfilled in the high school, whenever possible.

GRADUATION

The College of Business Administration is a professional college. Its graduates receive the degree of bachelor of business administration (B.B.A.). The degree of bachelor of business administration is conferred on any student who has fulfilled the entrance requirements and who presents 190 credits in subjects required or approved by the faculty of the College of Business Administration.

The degree of master of arts (M.A.), or of master of business administration (M.B.A.) are conferred on students who complete in a satisfactory manner an approved course ordinarily requiring three quarters of advanced work beyond that required for the bachelor's degree. The degree of master of arts implies a major in business administration or economics and a minor in some related subject. The degree of master of business administration is a more technical degree, and implies that a candidate's work has been confined to business administration or economics. Before being recognized as a candidate for an advanced degree, a student must appear before a committee appointed by the Dean of the Graduate School, which determines the student's fitness for such work and confers with him upon his proposed course of study.

Students entering from other colleges must satisfy not only the general requirements of the University, but also the requirements of the College of Business Administration.

Not less than three-fourths of the credits required for graduation must be earned with grades of A, B. or C.

CURRICULA

All students in the College of Business Administration must have their selection of courses approved each quarter by a member of the college faculty. The college requires the following courses:

PRE-BUSINESS CURRICULUM

		<i>Credits</i>
B.A. 1 and 2	General Economics. Autumn, winter, spring, summer. Lecture and discussion groups. Five hours a quarter.....	10
B.A. 7	Economic Resources of the World. Autumn, winter, spring, summer. Five hours	5
Math. 11-12-13	Mathematical Theory of Investments and Statistics. Autumn, winter, spring, summer. Five hours a quarter.....	15
*English 1	Written and Oral English. Autumn, winter, spring, summer. Five hours	5
Psych. 1	Elements of Psychology. Autumn, winter, spring, summer. Five hours	5
	Approved Electives	5
	Military Science or Physical Education.....	5
		<hr/> 50

SECOND YEAR

		<i>Credits</i>
B.A. 54-55-56	Business Law. Autumn, winter, spring, summer. Three quarters required. Three hours a quarter.....	9
Hist. 50-57-58 59	History of the United States. Autumn, winter, spring. Three hours a quarter.....	9
B.A. 11-12-64	Accounting. Autumn, winter, spring, summer. Five hours a quarter	15
B.A. 57	Money and Banking. Autumn, winter, spring summer. Five hours..	5
B.A. 61	Social and Economic Standards of Living. Autumn, winter, spring. Five hours	5
Soc. 1	Introductory Sociology. Autumn, winter, spring summer.....	5
	Approved Electives	5
	Military Science or Physical Education.....	5
		<hr/> 58

BUSINESS CURRICULUM

THIRD YEAR

		<i>Credits</i>
Phil. 1, 2, 3, or 5	One of these courses required. Five hours.....	5
Pol. Sci. 1	Elements of Government. Autumn, winter, spring, summer.....	5
English 37	Argumentation. Autumn, winter, spring. Five hours.....	5
	**Approved electives	30
		<hr/> 45

FOURTH YEAR

		<i>Credits</i>
B.A. 160	Advanced Economics. Autumn, winter, spring, summer.....	5
B.A. 120	Business Report Writing. Autumn, winter, spring, summer.....	5
Research	Five hours in selected major department.....	5
	**Approved electives	27
		<hr/> 42

The requirements of the first two years are sufficiently broad to establish a foundation for the profession of business, regardless of the particular field in which the student may later be interested.

No student is allowed to enter the junior-senior courses of the College of Business Administration unless he has reached junior standing and satisfied the prerequisites to these courses. The prerequisites have been established after the most careful consideration of the standard of efficiency and performance aimed at in the course, and the education value of the course for the student. To admit students who have not completed the carefully arranged prerequisites would imperil not only the quality of the work of the instructor, but also make it impossible for the students to get the full benefit of the course. The College real-

*Students exempted from English 1 may substitute approved electives in colleges other than the College of Business Administration.

**Of the approved electives in the junior and senior years at least 25 must be in upper division courses in economics and business administration.

izes that certain just claims to exceptions from the above rules could be presented, and such exceptions can be granted to students whose maturity and extended experience in economic affairs of a suitable nature make it just and reasonable. Proof of these experiences and qualifications will be passed on by the dean of the College of Business Administration, and the committee on graduation.

The junior and senior years are largely reserved for the student's selected field of business interest. Each student or group of students is guided and assisted by the instructor designated for that department of work, under the general direction of the dean of the College of Business Administration.

ECONOMICS

Students in the College of Liberal Arts or the School of Education choosing economics as their major, should consult with the head of the department or the professor in charge of Advanced Economics with regard to a proper selection of courses. A major in economics must include B.A. 160 and B.A. 168, and a minor must include one of these two courses. The other courses to complete the requirements should be chosen from the following:

1. General Economics	161. American Labor Problems
2. Applied Economics	162. European Labor Problems
57. Money and Banking	164. Labor Legislation (2 hrs.)
61. Social and Economic Standards of Living	*165. Economics of Consumption (8 hrs.)
70. Economics of Marketing and Advertising	166. Women in Industry
121. Corporation Finance	168. History of Economic Thought
160. Advanced Economics	201. Graduate Seminar
	205. Seminar in Value and Distribution
	207. Seminar in Labor

SUGGESTED COURSES FOR THE PROFESSIONAL FIELDS

Besides general training in economics the following fields of business training are suggested:

1. Accounting	7. Insurance
2. Advertising	8. Maritime Commerce
3. Business Finance	9. Marketing
4. Commercial Teaching	10. Merchandising
5. Foreign Trade	11. Secretarial Work
6. Industrial and Employment Management	12. Transportation

In the first year the student fulfills the standardized requirements.

For the second, third, and fourth years, the following courses are suggested.†

ACCOUNTING

THIRD YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Second Year Accounting..	5	Advanced Accounting.....	5	Advanced Accounting	5
Business Organization.....	5	Corporation Finance	5	Investments and	
Philosophy	5	Political Science	5	Speculations.....	5
	15		15	Argumentation	5
					15

FOURTH YEAR

Advanced Economics	5	Business Report Writing..	5	Research	5
Accounting	10	Accounting	10	Accounting	10
	15		15		15

*Not given in 1923-1924.

†No student will be permitted to specialize in a field of work without having had his schedule approved by the major professor in charge of that field.

UNIVERSITY OF WASHINGTON

ADVERTISING

SECOND YEAR

B.A. 61, Social and Economic Standards of Living, and
B.A. 70, Economics of Marketing and Advertising.

THIRD YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Market Analysis	5	Advertising Campaigns.....	5	Sales Management	5
Fundamentals of Adv.....	5	Display Advertising.....	5	Typography	5
Philosophy	5	Political Science	5	Argumentation	5
	15		15		15

FOURTH YEAR

Retail Selling	5	Retail Buying	5	Retail Org. Problems.....	5
History of Econ. Thought..	5	Advanced Economics	5	Business Report Writing..	5
Approved Electives	5	Research	5	Approved Electives.....	5
	15		15		15

BUSINESS FINANCE

THIRD YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Business Organization.....	5	Corporation Finance	5	Investments and Spec.....	5
Foreign Exchange	5	Banking Practice	5	Business Statistics	5
Political Science	5	Philosophy	5	Argumentation	5
	15		15		15

FOURTH YEAR

Transportation	5	Research	5	Adv. Money & Banking...	5
Risk and Insurance.....	5	Commercial Credits	5	Advanced Economics	5
Business Report Writing..	5	Electives	3 or 5	Electives	3 or 5
	15		13 or 15		13 or 15

COMMERCIAL TEACHING

THIRD YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
81 Secretarial Correspondence	5	Office Training & Practice.	3	Business Report Writing..	5
82 Sec'l Bus. Forms & Papers	5	Philosophy	5	Teachers' Course in Short-	5
Political Science	5	Argumentation	5	hand and Typewriting..	5
	15	Electives	2	Electives	5
			15		15

FOURTH YEAR

101 Introduction to Education.	5	Office Management	10	Practice Teaching	5
Advanced Economics	5	Psychol. & Teaching Meth.	5	Com. Teachers' Course...	5
Research	5	Secondary Education	11	Electives	5
	15		15		15

*FOREIGN TRADE

THIRD YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Importing and Exporting..	5	Trade of Europe.....	5	Water Transportation	5
Econ. of Transportation...	5	Philosophy	5	Econ. of Mktg. & Adv....	5
Political Science	5	Argumentation	5	Electives	5
	15		15		15

FOURTH YEAR

Commercial Policies	5	Advanced Economics	5	Business Statistics	5
Foreign Exchange	5	Trade of Far & Near East	5	Trade of Americas.....	5
Business Report Writing..	5	Electives	5	Research	5
	15		15		15

*At least two years of modern foreign language will be required of all majors in foreign trade unless they are specifically exempted from the requirement.

INDUSTRIAL AND EMPLOYMENT MANAGEMENT

THIRD YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Second Year Accounting... 5		Third Year Accounting... 5		Third Year Accounting... 5	
Business Organization ... 5		Corporation Finance ... 5		Sales Management ... 5	
Political Science 5		Argumentation 5		Labor Legislation 2	
				Women in Industry..... 3	
	15		15		15

FOURTH YEAR

Philosophy 5		Advanced Economics 5		Business Statistics 5	
Business Report Writing.. 5		Econ. of Mktg. and Adv.. 5		Research in Management.. 5	
Industrial Management ... 5		Employment Management.. 5		Executive Technique 5	
	15		15		15

It is important that students interested in this field should secure the advice of the department early in the first year. This curriculum is suggestive only and is subject to a great number of changes in particular instances. It is desirable that training in the management courses should include as much elementary training in chemistry and engineering as may be possible.

INSURANCE

THIRD YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Risk and Insurance..... 5		Political Science 5		Life Insurance 5	
Argumentation 5		Office Management 5		Business Statistics 5	
Contracts or Math. 161... 5		Contracts or Math. 162... 5		Agency or Math. 163..... 5	
	15		15		15

FOURTH YEAR

Fire Insurance 5		Marine Insurance 5		Real Estate & Cas. Ins... 5	
Advanced Economics 5		Corporation Finance 5		Research in Insurance... 5	
Philosophy 5		Business Report Writing.. 5		Insurance Law 5	
	15		15		15

MARITIME COMMERCE

The suggested curriculum in maritime commerce is intended to give preliminary training for the steamship business. After the first year of residence students will be assigned to apprenticeships so that they can alternate quarters of attendance with quarters of office practice and sea service. For details of the apprenticeship plan students should consult with the maritime commerce department.

In addition to the regular requirements of the College of Business Administration the following courses are prescribed for a major in maritime commerce: ship operation, paper work in shipping, navigation, risk and insurance, marine insurance, water transportation, ports and terminals, shipping and consular regulations, admiralty law.

Except for the requirements of the College of Business Administration and of the major, the following outline is merely suggestive. Numbers refer to quarters of residence; e. g., fifth quarter means fifth quarter at the University, exclusive of time spent as apprentices.

<i>First Quarter</i>	<i>Credits</i>	<i>Second Quarter</i>	<i>Credits</i>	<i>Third Quarter</i>	<i>Credits</i>
General Economics 5		Applied Economics 5		Econ. Res. of the World.. 5	
English 5		Psychology 5		Sociology 5	
Math. 13 5		Ship Operation 5		Money and Banking..... 5	
	15		15		15

UNIVERSITY OF WASHINGTON

<i>Fourth Quarter</i>		<i>Fifth Quarter</i>		<i>Sixth Quarter</i>	
<i>Credits</i>		<i>Credits</i>		<i>Credits</i>	
Business Law	3	Business Law	3	Business Law	3
History 57	3	History 58	3	History 59	3
Risk and Insurance.....	5	Paper Work in Shipping..	5	Navigation	5
Accounting	5	Accounting	5	Accounting	5
	16		16		16
<i>Seventh Quarter</i>		<i>Eighth Quarter</i>		<i>Ninth Quarter</i>	
<i>Credits</i>		<i>Credits</i>		<i>Credits</i>	
Bus. Report Writing.....	5	Political Science	5	Econ. of Mktg. & Adv... 5	
Philosophy	5	Corporation Finance	5	Argumentation	5
Econ. of Transportation...	5	Marine Insurance	5	Water Transportation ...	5
	15		15		15
<i>Tenth Quarter</i>		<i>Eleventh Quarter</i>		<i>Twelfth Quarter</i>	
<i>Credits</i>		<i>Credits</i>		<i>Credits</i>	
Adv. Economics	5	Foreign Trade	5	Shipping and Consular	
Exporting and Importing..	5	Research	5	Regulations	5
Ports and Terminals.....	3	Electives	3 or 5	Foreign Trade	5
Admiralty Law	3		13 or 15	Business Statistics	5
	10				15

MARKETING

SECOND YEAR

B.A. 61, Social and Economic Standards of Living, and
B.A. 70, Economics of Marketing and Advertising

THIRD YEAR

<i>Autumn Quarter</i>		<i>Winter Quarter</i>		<i>Spring Quarter</i>	
<i>Credits</i>		<i>Credits</i>		<i>Credits</i>	
Market Analysis	5	Advertising Campaigns ...	5	Sales Management	5
Philosophy	5	Political Science	5	Argumentation	5
Approved Electives	5	Approved Electives	5	Approved Electives	5
	15		15		15

FOURTH YEAR

Retail Sales Problems....	5	Retail Buying Problems..	5	Retail Organization Prob..	5
History of Econ. Thought.	5	Business Report Writing..	5	Advanced Economics	5
Research	5	Approved Electives	5	Approved Electives	5
	15		15		15

In view of the various fields which students in marketing and advertising may enter, approved electives may be chosen from the following, or from other courses upon consultation with the head of the department: Textiles, non-textiles, principles of design, economics of transportation, business organization, corporation finance, American labor problems, European labor problems, economics of consumption, women in industry, executive management, employment management, business statistics, or courses in foreign trade. For students who desire to specialize in the marketing of lumber, not only B.A. 109, but Forestry 6, 126, 153, and 157 are highly desirable. Students should consult the head of the department about electives as early as possible to arrange their courses with a view to the field they have in mind.

MERCHANDISING

SECOND YEAR

B.A. 61, Social and Economic Standards of Living, and
B.A. 70, Economics of Marketing and Advertising

THIRD YEAR

<i>Autumn Quarter</i>		<i>Winter Quarter</i>		<i>Spring Quarter</i>	
<i>Credits</i>		<i>Credits</i>		<i>Credits</i>	
Market Analysis	5	Advertising Campaigns ...	5	Sales Management	5
Retail Sales Problems....	5	Retail Buying Problems..	5	Retail Organiza. Problems..	5
Philosophy	5	Political Science	5	Argumentation	5
	15		15		15

FOURTH YEAR

In the senior year, students majoring in merchandising are placed in alternate quarters in full time practical work under direction of a co-ordinator, with evening seminar and readings in their particular field. As a rule these placements are for the autumn and spring quarters. In the summer and winter quarters of their senior year they complete the regular senior requirements (advanced economics and business report writing) and such electives as the coordinator or head of the department may approve as best fitted to their needs. If textiles and principles of design have not been taken before the third year, they should be taken then, rather than deferring them to the fourth year, deferring to the senior year part of the Liberal Arts work.

SECRETARIAL TRAINING

THIRD YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Secretarial Correspondence	5	Office Training & Practice	3	Argumentation	5
Sec'l. Bus. Forms & Papers	5	Philosophy	5	Electives	10
Political Science	5	Electives	7		15
	15		15		

FOURTH YEAR

Advanced Economics	5	Office Management	5	Research in Sec'l Training	5
Business Organization	5	Business Report Writing	5	Business Statistics	5
Electives	5	Electives	5	Electives	5
	15		15		15

TRANSPORTATION

Students desiring to major in transportation should consult with the professor of transportation as soon as possible. The subjects listed below are simply suggestive. No effort has been made to fit a complete course for transportation majors upon the minimum requirements as set forth on pages 106 and 107. Students are encouraged to liberalize their program by the incorporation of courses in the laboratory sciences or modern language. Such options as might be permissible can not be stated here owing to their dependence upon the student's interests and background.

THIRD YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Business Organization	5	Marine Insurance	5	Water Transportation	5
Econ. of Transportation	5	Commercial Credits	5	Business Statistics	5
Risk and Insurance	5	Corporation Finance	5	Econ. of Mark. and Adv.	5
	15		15		15

FOURTH YEAR

Exporting and Importing	5	R. R. Finance & Adm.	5	Investments & Speculation	5
American Labor Problems	5	Employment Management	5	Rail and Marine Rates	5
Economic Problems	5	Trade of Far & Near East	5	Research	5
	15		15		15

GENERAL INFORMATION

Textbooks—Syllabus Fees.—Many courses in the College of Business Administration require textbooks. The faculty aims to keep the textbook expense as low as is consistent with a high standard of class work.

Syllabus or consultation fees are asked in all except research courses. The service rendered in either case is necessary and valuable. With the exception of three secretarial training courses at \$5 this fee has been

fixed at \$1 a course. A fee of \$10 will be asked for any one quarter of instruction in shorthand or typewriting, as these are not a part of the regular curriculum and must finance themselves.

Library Facilities.—The college is placing in the library a large number of supplementary books. For many years government reports, containing a vast amount of material for the student of business, have been filed in the library. Most of the domestic journals on economics and commerce, as well as many foreign ones are received by the college. Each student is expected to make use of the material and report from time to time on current topics of interest.

Student Organizations.—Three professional societies with national affiliations have been established at the College of Business Administration. Beta Gamma Sigma and Alpha Kappa Psi are professional fraternities for men which at present count chapters in many eastern institutions. Membership is based on high scholarship. Their aim is to promote serious study of business problems. Gamma Epsilon Pi is a similar organization among the women specializing in business administration. Its purpose is not social, but professional, and membership is restricted to candidates for the B.B.A. degree. A number of prominent business women in Seattle and eastern cities are honorary members. The parent chapter of Pan Xenia, an honor society for major students in foreign trade, was founded three years ago at the University of Washington and bids fair to play an important part in the future of our foreign trade department.

Required Military Science and Physical Education.—The University requirements in military science, physical education and hygiene are satisfied as follows:

Men students.—Freshmen and sophomores, five hours of military science per week.

Women students.—Physical education, five times per week for two years.

Correspondence.—Inquiries in regard to the College of Business Administration may be addressed to the dean of the college. All correspondence regarding admission should be sent to the registrar of the University.

Contact with Actual Business.—The business men of the state and especially of the city of Seattle, are cooperating in a most genuine way with the College of Business Administration. Students are encouraged to avail themselves of the many opportunities to do part-time work in local concerns along their chosen lines.

In addition to part-time employment an alternating quarter system of office practice and academic work has been established in the division of maritime commerce. The office practice work is made a definite part of the training.

During the senior year, or during a year of graduate work, students specializing in marketing, merchandising, or advertising are given opportunity to spend alternate quarters in actual business under the immediate supervision of a field director. This plan involves either attendance at summer school or working under supervision during the summer between the junior and senior year. These apprenticeships are made possible by the active cooperation of Seattle and Tacoma business houses. They give the student the benefit of a favorable introduction to the best business practice, and also give him this introduction while he is still in college. His theories may be vitalized by supervision of department heads in the business and the teacher of theory in college discussing with him the application of theory to actual business as the student finds it.

This apprenticeship system is to be extended until it includes students in all of the departments of the College. Chinese students of the College of Business Administration are placed in Seattle business houses, either already engaged in trade with the Orient or contemplating entering that field. The China Club of Seattle has shown a fine desire to cooperate with the University, in securing twenty or more such apprenticeships. Much benefit is expected to accrue both to the Chinese students who are initiated into actual American business methods as well as to the firms which will now receive advice as to the needs of the market in China and will later have native representatives in China familiar with their goods, methods, and business standing.

Advisory Boards.—The College of Business Administration has formed advisory boards of business men throughout the state for foreign trade, money and banking, merchant marine management, and insurance. Other boards for transportation, employment management and executive management, sales management, accounting, commercial teaching, secretarial training and merchandising are being formed. The purpose is to create a direct cooperation between education and industry, principle and practice.

The Students' Advisory Council.—The B.A. Council, organized in the autumn quarter of 1919 by the students of the college, is a representative body having as its members three officers, two representatives from each of the three upper undergraduate classes, one representative from the freshman class, and one from the graduate school. It functions in an advisory capacity on matters relating to standard of scholarship, student esprit-de-corps, cooperation between the faculty and the student body on other matters which are brought to its attention by the faculty or the student body. The regular business administration assemblies are organized and conducted under the direction of the council.

Cases of student discipline are investigated and reviewed, and the council renders service as a court of appeals.

The mentor system is the conception of this council. The plan provides for the appointment of a group of senior and graduate students to meet the freshmen of the college at a certain appointed time in three conferences during the quarter. The mentors take the responsibility of seeing that every freshman student in his or her group gets the largest possible benefit out of his college life.

International Relations.—Plans are now being completed to establish exchange scholarships with China and with some of the South American republics. The opportunities which are thus afforded for American students to study abroad and for foreign students to gain a better understanding of American life and thought will be of a great educational value.

Fellowships.—The college is now in a position to grant several fellowships with opportunity for assisting in the instruction. Address Dean of the College of Business Administration.

Outside Lectures.—The College of Business Administration supplements as far as possible the work given with practical lectures and discussions by business men. Many of the leading business men of Seattle and the state have delivered lectures in their special fields to classes.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

SCHOOL OF JOURNALISM

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern).....	DEAN OF FACULTIES
MATTHEW LYLE SPENCER, Ph.D. (Chicago).....	Professor of Journalism; DIRECTOR
ROBERT WILLIAM JONES, A.B., LL.B. (Missouri), A.M. (South Dakota).....	Associate Professor of Journalism.
FRED WASHINGTON KENNEDY.....	Assistant Professor of Journalism; Director of the Journalism Laboratories.
JAMES MATTHEW O'CONNOR, JR., A.B. (Washington).....	Associate in Journalism
LEO A. BORAH, A.B. (Huron).....	Instructor in Journalism
*JOSEF W. HALL.....	Instructor in Journalism
NAIDA LOUISE CURTIS, B.S. (Columbia).....	Secretary to the Director
<hr/>	
EDMOND STEPHEN MEANY, M.L. (Wisconsin).....	Professor of History
WILLIAM SAVERY, Ph.D. (Harvard).....	Professor of Philosophy
PIERRE JOSEPH FREIN, Ph.D. (Johns Hopkins).....	Professor of Romance Languages
STEVENSON SMITH, Ph.D. (Pennsylvania).....	Professor of Psychology
LESLIE JAMES AYER, J.D. (Chicago).....	Professor of Law
FRED CARLETON AYER, Ph.D. (Chicago).....	Professor of Education
WILLIAM DANIEL MORIARTY, Ph.D. (Michigan).....	Professor of Business Administration
ROBERT MAX GARRETT, Ph.D. (Munich).....	Associate Professor of English
AMBROSE PATTERSON.....	Associate in Fine Arts
FRANK H. HAMACK.....	Assistant in Business Administration

THE SCHOOL AND ITS EQUIPMENT

The first courses in journalism in the University of Washington were given in 1907. A department of journalism was established in 1909. In March, 1918, the department was formally made a school.

The professional courses in the School of Journalism and those prescribed in the colleges of Liberal Arts and Science are planned with two aims in view—to offer instruction and practice in the fundamentals of newspaper work, and to provide such studies as are best adapted to give the broad training necessary for a successful pursuit of journalism as a profession. In the first the courses include reporting, copy reading, editorial writing, advertising, cartooning, trade journalism, the mechanics of printing and publishing, and the practical work of the business and administrative offices. In the second are history, economics, political science, sociology, philosophy, psychology, language, literature, and similar subjects necessary in developing the broader scholarship indispensable in modern journalism.

This double ideal of the School of Journalism curriculum has justified itself in the increasing demands of Pacific coast editors for University graduates. Requests to date have exceeded the supply to such an extent that the school has been compelled to recommend students who have not completed their training. Ultimately the school hopes to meet the demand with graduates only.

Equipment.—Journalism and printing take up the entire first floor of Commerce Hall, 208 x 70 feet. On this floor are the class rooms, the jour-

*Spring Quarter, 1923.

nalism library and reading room, the faculty offices, the University Press, and all the mechanical equipment for teaching practical journalism. The University Press does virtually all the campus printing and publishing.

Frederick A. Churchill Junior Memorial Library.—In March, 1918, a separate journalism library and reading room was opened, known as the Frederick A. Churchill Junior Memorial Library, in memory of a brilliant student of the school who died in 1916 while engaged in newspaper work in New York. The Memorial Library contains carefully selected books and periodicals relating to printing, advertising, current events, short story, and all phases of the editorial side of the newspaper.

Journalism "Morgue."—In the Memorial Library is a journalism "morgue," for newspaper and periodical clippings on current topics classified for instant reference. This contains biography, book reviews, and dramatic criticism, besides a continuous chronicle of events.

Student Publications.—The editorial and business offices of *The University of Washington Daily*, *Sun Dodger*, *Columns*, and *Tyee* are on the first floor of Commerce Hall. Ownership of these publications is vested in the Associated Students of the University of Washington. All are supervised by the School of Journalism, the staff members of each being recruited mainly from the school. All offer opportunities for practical experience in magazine and newspaper work. Places on the editorial and business staffs of each, awarded for the most part on a basis of literary and executive ability, are open to all students in the School of Journalism. Opportunity for wide experience in reporting, copy reading, editorial writing, and advertising is offered in the various departments of these publications.

Journalistic Clubs.—Four national organizations are maintained by students in the School of Journalism. Junior and senior men have a chapter of Sigma Delta Chi, one of the two national journalistic fraternities. Junior and senior women maintain a chapter of Theta Sigma Phi, the national journalistic sorority founded at the University of Washington in 1910. Members of the *Sun Dodger* staff have a chapter of Hammer and Coffin, the national comic-magazine fraternity. Sigma Upsilon, the national literary fraternity, also has a chapter at Washington.

Opportunity for Self-Help.—The director of the School of Journalism has frequent calls from business managers and publishers for students with some experience to do part time work in advertising, publicity, and reporting. All the local newspapers and many of the more important dailies in neighboring cities maintain special reporters and correspondents at the University. Remuneration for this work ranges up to \$60 a month, according to the service given. Promise of employment, however, cannot be made in advance. Positions usually are given those on the ground who are able to show by actual experience that they can do the work required.

Admission.—On successful completion of 90 plus 10 credits of prescribed and elective work at the University of Washington, or an equivalent amount from another institution of accredited standing, students are granted the junior certificate, which admits to the School of Journalism. (See pages 71, 72.)

Fees.—In certain courses in journalism laboratory fees are charged. These go toward purchase of textbooks, student materials, community typewriters—of which the school has nineteen—and toward subscriptions for newspapers and periodicals, of which the school takes forty or fifty annually, in addition to a large number of weeklies that come to the director's desk on exchange. The number of courses requiring fees varies from year to year. In 1923-1924 the maximum laboratory fees in journalism, in

addition to the regular University fees, will not be more than \$2.50 a quarter for any student, regardless of the number of courses taken.

Pre-Journalism Majors.—The director of the School of Journalism is the advisor for all students in journalism from the beginning of the freshman year. Registration of pre-journalism majors at the beginning of each quarter is held in the director's office. To him should be taken questions about co-ordinating courses in other schools and any matters touching the scholastic work of journalism majors.

Journalism Curriculum.—From the beginning of the freshman year a specific curriculum of studies (see page 117) is required of students expecting to major in journalism. Courses in news writing and the community newspaper are open to students of sophomore rank. Entrance to the School of Journalism is granted on ability shown by the individual in these courses to do newspaper work successfully. A minimum of 90 plus 10 credits must be earned before entrance.

Shorthand and Typewriting.—All written work in the School of Journalism must be done on a typewriter. Both shorthand and typewriting are required for graduation. Prospective students may save themselves much time, however, by learning shorthand and typing before entering the University. Tests in each are given quarterly. Those passing the tests successfully are excused from the University courses.

Graduation.—The curriculum of the School of Journalism leads to the degree of bachelor of arts in journalism, for which 180 credits must be obtained, plus 10 hours in physical training or military science. Fifty of these credits must be in journalism, with an average class grade of 86 or better. At the discretion of the journalism faculty, any student not maintaining this grade may be dropped from the school. An oral examination before the journalism faculty is required of seniors not less than two weeks before the end of the quarter in which they expect to graduate.

Graduate Study.—Advanced courses in journalism, history, economics, political science, sociology, and English are offered students wishing to take graduate study in preparation for newspaper work or teaching journalism. A wide demand exists in high schools, colleges, and universities for instructors adequately trained to teach journalism. The University library contains a large collection of bound newspapers and magazines and furnishes unusual opportunity for a historical study of American journalism. Special provision is made for directing the work of graduate students interested in historical, political, psychological, or language studies in journalism. The courses required are determined by the nature and amount of undergraduate work the candidate has done in journalism and the phase of it in which he wishes to specialize, such as advertising, the business office, trade journalism, or the purely editorial field. A thesis constitutes one of the requirements. On completion of the requisite number of hours, the degree of master of arts in journalism is granted by the University.

Specialization.—Students looking forward to specialized branches of journalistic work, such as trade or class journalism, advertising, or the business office, will find the School of Journalism equipped to aid them. While emphasis is laid on the editorial side of the newspaper field, provision is made in the curriculum for practical training in other departments as well.

CURRICULUM

Requirements for the degree of bachelor of arts in journalism are scheduled below. The courses are arranged in the order in which they

SCHOOL OF JOURNALISM

117

normally follow each other. Those with a double dagger are required. Those marked with a single dagger are regarded as essential. Others are suggested electives.

FIRST YEAR¹

	Credits	History	Credits
<i>Architecture</i>			
10-11-12. Freehand Drawing	3	5-6. English Political and Social History	10
<i>Dramatic Art</i>		<i>Military Science</i>	
81. Practical Public Speaking.....	9	1-2-3. †Practical Military Science....	5
<i>Economics</i>		<i>Painting, Sculpture and Design</i>	
1. †General Economics	5	16-17-18. Art Appreciation	3
†Typewriting		<i>Political Science</i>	
<i>English</i>		1. †Elements of Government.....	5
1. †Composition	5	<i>Science</i>	15
64, 65. †Literary Backgrounds.....	10	<i>Sociology</i>	
		1. †Introductory Sociology	5

SECOND YEAR

	Credits	Painting	Credits
<i>Architecture</i>			
73-74. Freehand Drawing	2	56-57-58. Illustration	9
<i>Economics</i>		<i>Philosophy</i>	
11, 12. Accounting	10	5. †Introduction to Logic.....	5
†Shorthand		<i>Political Science</i>	
<i>English</i>		52. †Political Parties	3
67, 68, 69. †Great American Writers	6	60. Public Finance	5
<i>Foreign Language</i>	10	62. Municipal Finance	3
<i>History</i>		<i>Psychology</i>	
57-58. †History of the United States	5	1. †General Psychology	5
71-72-73. Ancient History	9	<i>Science</i>	15
<i>Journalism</i>		<i>Sociology</i>	
51. †News Writing	5	51. Growth of Culture.....	5
61. †Community Newspaper.....	3	55. Community Organization	5
<i>Military Science</i>		56. The Family	3
51-52-53. †Practical Military Science..	5	60. Group Behavior	3
<i>Music</i>		63. †Municipal Sociology	3
1, 2, 3. Music Appreciation	6		
4, 5, 6. History of Music.....	6		

THIRD YEAR

	Credits	History	Credits
<i>Architecture</i>			
101-102-103. History of Architecture.	6	130. Europe, 1814-1870	5
<i>Astronomy</i>		131. Europe since 1870.....	5
1. Introduction to Astronomy.....	1	147. Civil War Period.....	3
<i>Dramatic Art</i>		148. Reconstruction Period	3
111-112-113. Play Writing.....	15	149. National Development	5
<i>Economics</i>		<i>Journalism</i>	
54, 55, 56. †Business Law.....	9	90, 91, 92. †Current Events.....	1
106. Economics of Markets	5	101. †Reporting	5
138. Sales Management	5	104. †Newspaper Administration	2
<i>English</i>		105. The Sporting Page.....	2
70-71. †Shakespeare	6	109. Literary and Dramatic Reviewing.....	2
98. †The Bible as Literature.....	3	115. †Elements of Publishing.....	3
104-105-106. Contemporary Literature.	9	120. †Copy Reading	5
147, 148, 149. The English Novel.....	6	130. †Fundamentals of Advertising..	5
<i>Foreign Language</i>	10	131. †Display Advertising	3
<i>Greek</i>		133. Advertising Typography	3
11. †Greek Civilization.....	5	136. †Comparative Journalism	3
<i>Latin</i>		138. †History of Journalism.....	5
11. †Roman Civilization.....	5	140. †Business Office	5
<i>Oriental History</i>		<i>Psychology</i>	
114-115-116. History of Religion.....	9	109. Mental Tests	3
<i>Philosophy</i>		111. History of Psychology.....	2
101-102-103. History of Philosophy....	9	126. Abnormal Psychology	5
<i>Political Science</i>		<i>Science</i>	15
100. †Municipal Government	3	<i>Sociology</i>	
102. Municipal Problems	3	114. American Social Conditions....	2
		120. The Social Survey.....	3

¹If a student has not had science in high school, he is required to take ten hours of chemistry or physics and ten of botany or geology or zoology in the University. Students entering without foreign language are required to take twenty hours of a modern foreign language in the University without credit.

²Philosophy 1 or 3 may be substituted for this requirement.

³Students who have taken, or who plan to take, three or more years of ancient language, may omit this requirement.

FOURTH YEAR

<i>Economics</i>	<i>Credits</i>	<i>History</i>	<i>Credits</i>
121. Corporation Finance	5	163-164-165. †Northwestern History..	6
122. Railroad Administration	5	<i>Journalism</i>	
161. American Labor Problems.....	5	160. †Editorial Writing	5
162. European Labor Problems.....	5	160. Trade Journalism	5
175. Business Statistics	5	170, 171, 172. Magazine and Feature Writing.....	6
188. Research in Marketing and Advertising	5	173. The Short Story	3
<i>English</i>		174-175. Short Story Writing.....	6
161-162-163. American Literature to 1870	9	188. News Writing for Teachers....	2
164, 165, 166. American Literature since 1870	9	250. Research in Journalism.....	5
174-175-176. †Nineteenth Century English Poetry	9	<i>Political Science</i>	
183-184-185. General Literature.....	9	111. International Politics	3
<i>Foreign Language</i>	10	130. American Government	3
<i>History</i>		131. State Government	3
153. †The Pacific Rim.....	3	<i>Science</i>	15
		<i>Sociology</i>	
		155. Poverty and Philanthropy.....	5
		156. Criminology	5

Advertising.—Students expecting to make advertising a profession should elect the following courses from those scheduled above: Architecture 10-11-12 (Freehand Drawing); Economics 106 (Economics of Markets); Economics 138 (Sales Management); Economics 175 (Business Statistics); Economics 180 (Trade of the Americas); Journalism 130 (Fundamentals of Advertising); Journalism 131 (Display Advertising); Journalism 133 (Advertising Typography); Journalism 160 (Trade Journalism); Painting and Design 56-57-58 (Illustration). All these will be found of particular value in advertising work.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

COLLEGE OF ENGINEERING

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....PRESIDENT
 JOHN THOMAS CONDON, LL.M. (Northwestern).....DEAN OF FACULTIES
 CARL EDWARD MAGNUSSEN, Ph.D. (Wisconsin), M.S., E.E. (Minnesota).....Professor of
 Electrical Engineering; Director of Engineering Experiment Station; DEAN.
 EVERETT OWEN EASTWOOD, C.E., M.A. (Virginia), S.B. (Massachusetts Institute of
 Technology).....Professor of Mechanical Engineering
 CHARLES CHURCH MORE, M.S., C.E. (Lafayette), M.C.E. (Cornell).....Professor of
 Civil Engineering.
 WILLIAM FRANKLIN ALLISON, B.S., C.E. (Purdue), C.E. (Cornell).....Professor of
 Municipal and Highway Engineering.
 HENRY KREITZER BENSON, Ph.D. (Columbia).....Professor of Chemical Engineering
 GEORGE SAMUEL WILSON, B.S. (Nebraska).....Associate Professor of Mechanical Engineering
 CHARLES WILLIAM HARRIS, C.E. (Cornell).....Associate Professor of Civil Engineering
 EDGAR ALLEN LOEW, B.S., E.E. (Wisconsin).....Associate Professor of Electrical Engineering
 ARTHUR MELVIN WINSLOW, Ph.B. (Brown), B.S. (Massachusetts Institute of
 Technology).....Associate Professor of Mechanical Engineering
 HARRY RUBET, B.S. (C.E.), (Illinois).....Associate Professor of Civil Engineering
 FREDERICK KURT KIRSTEN, B.S., E.E. (Washington).....Associate Professor of Electrical
 Engineering.
 IRA LEONARD COLLIER, B.S., C.E. (Washington).....Assistant Professor of Civil Engineering
 CHARLES CULBERTSON MAY, B.S., C.E. (Washington).....Assistant Professor of Civil
 Engineering.
 JOHN CHARLES RATHBUN, A.M., B.S., C.E. (Washington).....Assistant Professor of
 Civil Engineering.
 GORDON RUSSELL SHUCK, E.E. (Minnesota).....Assistant Professor of Electrical Engineering
 FRED FALCONER WELD, C.E. (Pennsylvania State College).....Associate in Civil Engineering
 EDWARD LEONARD STRANBERG, B.S. (C.E.) (Washington).....Associate in Civil Engineering
 CHAUNY WERNECKE, B.S. (C.E.) (Washington).....Associate in Civil Engineering
 CLARENCE LESTER WHITE, C.E. (Iowa).....Instructor in Civil Engineering
 JAMES BAKER HAMILTON.....Instructor in Civil Engineering
 HARRY J. MCINTYRE, B.S. (M.E.) (Washington).....Instructor in Mechanical Engineering
 ROBERT QUIKOTE BROWN, B.S. (E.E.) (Washington).....Instructor in Civil Engineering
 FOREST CHARLES DANA, B.S. (C.E.) (Washington).....Instructor in Civil Engineering
 ALBERT KALIN, B.S. (E.E.) (Washington).....Instructor in Electrical Engineering
 BYRON TOWNE McMINN, B.S. (Oregon Agricultural College).....Instructor in Mechanical
 Engineering.
 ROBERT H. G. EDMONDS, B.S. (Whitman).....Instructor in Mechanical Engineering
 GEORGE LISLE HOARD, B.S. (E.E.) (Washington).....Instructor in Electrical Engineering
 JACK RODERICK TOLME, B.S. (E.E.) (Washington).....Instructor in Electrical Engineering
 ELGIN ROSCOE WILCOX, Met.E. (Washington).....Instructor in Civil Engineering
 GEORGE S. SMITH, B.S. (E.E.) (Washington).....Instructor in Electrical Engineering
 W. L. BUESCHLEIN, B.S. in Ch.E. (California Institute of Technology).....Instructor in
 Chemical Engineering.
 GILBERT S. SCHALLER, M.E. (Illinois).....Instructor in Engineering Shops
 C. L. SULLIVAN.....Assistant in Engineering Shops

FREDERICK MORGAN PADELFORD, Ph.D. (Yale).....Professor of English; Dean of the
 Graduate School.
 GEORGE MCPHAIL SMITH, Ph.D. (Freiburg).....Professor of Inorganic Chemistry
 ERIC TEMPLE BELL, Ph.D. (Columbia).....Professor of Mathematics
 JOHN WEINZIRL, Ph.D. (Wisconsin), Dr.P.H. (Harvard).....Professor of Bacteriology
 LESLIE JAMES AYER, B.S. (Upper Iowa), J.D. (Chicago).....Professor of Law
 JOSEPH DANIELS, S.B. (Massachusetts Institute of Technology), M.S.
 (Lehigh).....Professor of Mining Engineering and Metallurgy
 HENRY LOUIS BRAKEL, Ph.D. (Cornell).....Associate Professor of Engineering Physics
 GEORGE IRVING GAVETT, B.S. (C.E.) (Michigan).....Assistant Professor of Mathematics
 LEWIS IRVING NEIKIRK, Ph.D. (Pennsylvania).....Assistant Professor of Mathematics
 SAMUEL HERBERT ANDERSON, Ph.D. (Illinois).....Assistant Professor of Physics

GENERAL INFORMATION

Curricula and Degrees.—The College of Engineering offers two four-year curricula in each of the departments of chemical, civil, electrical and mechanical engineering. One curriculum leads to the degree of bachelor of science in the respective branches of engineering, as B.S. in civil engineering. The other offers a more general training leading to the degree of bachelor of science (B.S.), and should be followed by a year of graduate work which, under the university regulations for advanced degrees, leads to the degree of master of science (M.S.) in the respective lines.

In arranging the curricula the aim has been: To keep the work fundamental in character; to introduce students into an engineering atmosphere as soon as possible; to direct methods of work and study and to provide for a certain amount of flexibility in selection of subjects.

Engineering problems, (C.E.—11-12-13) analyzed from an engineering standpoint, comprise a distinctive feature of the college.

The freshman work in the departments of chemical, civil, electrical and mechanical engineering is identical, making it possible for a student to delay definite choice until the beginning of the sophomore year.

All freshman and sophomore work is offered each quarter. Additional courses will be repeated whenever practicable, provided the demand is sufficient to warrant full sections, but not for less than six students. The plan provides opportunity for taking desirable elective courses, or for engaging in practical work for one or more quarters before completing the curriculum.

Degree with Honors.—A degree with honors in engineering may be conferred upon any student of the College of Engineering who, upon recommendation of the engineering faculty, of the honors committee and by vote of the university faculty, may be declared worthy of unusual distinction.

Advanced Degrees.—The degrees of master of science in civil engineering (M.S. in C.E.), master of science in electrical engineering (M.S. in E.E.), master of science in mechanical engineering (M.S. in M.E.), and master of science in chemical engineering (M.S. in Ch.E.), respectively, will be conferred on graduates of this college, or other engineering colleges of recognized standing, who complete a year (45 credit hours) of graduate work, including a satisfactory thesis, with the grade of A or B. The candidate must comply with regulations of the Graduate School and pass a formal examination open to all members of the faculty. Selection of work for this degree must, in each case, be approved by the head of the department in which the student majors.

The professional degrees, chemical engineer (Ch.E.), civil engineer (C.E.), electrical engineer (E.E.), and mechanical engineer (M.E.), will be conferred in three years on graduates of this college holding the degree (B.S.) in their respective lines, who give evidence of having been engaged continuously in acceptable engineering work and who present satisfactory theses.

Thesis.—The graduating thesis will consist of research or design in some branch of engineering, or review of some existing construction. The subject must be approved by the professor in charge of the department under which it is classified.

Engineering Laboratories.—For description of laboratories see pages 30-37.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to

the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University all students expecting to enter the College of Engineering should elect their work so as to offer the following subjects:

Advanced algebra	$\frac{1}{2}$ unit
Solid geometry	$\frac{1}{2}$ unit
Physics	1 unit
Manual Training (woodwork)	$\frac{1}{2}$ unit

If the student does not include these subjects in his high school elections, it will be necessary for him to take them in the University in addition to the prescribed curriculum.

Students entering the College of Engineering must have a *working knowledge* of the fundamentals of arithmetic, algebra and geometry. It is therefore desirable for the student to review his preparatory mathematics *just before entering college*. By such a step much time will be saved and the work of the college will be rendered more valuable to him.

CURRICULA OF THE COLLEGE OF ENGINEERING FOR THE FRESHMAN YEAR IN ALL DEPARTMENTS

FRESHMAN

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Alg. Math. 51.....	4	Trig. Math. 52.....	4	Anal. Geom. Math. 53..	4
Engr. Prob. C.E. 11....	3	Engr. Prob. C.E. 12... 3		Engr. Prob. C.E. 13... 3	
Gen. Chem. 1 or 21....	5	Gen. Chem. 2 or 22....	5	Gen. Chem. 3 or 23....	5
Drawing, C.E. 1.....	3	Drawing, C.E. 2.....	3	Surveying, C.E. 21....	3
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	
	16%		16%		16%

IN CHEMICAL ENGINEERING

Leading to the degree of Bachelor of Science
in Chemical Engineering

FRESHMAN

The same for all curricula. See above.

SOPHOMORE

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Physics 97	5	Physics 98	5	Physics 99	5
Qual. Chem. 101.....	5	Quant. Chem. 112.....	5	Quant. Chem. 113.....	5
Mechanism—M.E. 81....	3	Steam Eng.—M.E. 82... 3		Steam Lab.—M.E. 83... 3	
Dir. Cal.—Math. 61....	3	Int. Cal.—Math. 62....	3	Chem. Tech. Ch. 100... 3	
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	
	17%		17%		17%

JUNIOR

Ind. Chem. 121.....	5	Ind. Chem. 122.....	5	Ind. Chem. 123.....	5
English 4	3	Org. Chem. 128 or 132..	5	Org. Chem. 129 or 133..	5
Mach. Des.—M.E. 91....	2	Mach. Des.—M.E. 92... 2		Dir. Cur.—E.E. 101....	4
Org. Chem. 181 or Ther- mo. & Refrig.—M. E. 183	5	Mechanics—C.E. 131 ... 3		D.C. Lab.—E.E. 101 .. 2	
Shop 53	1	Shop 54	1		
	16		16		16

UNIVERSITY OF WASHINGTON

SENIOR

Autumn Quarter		Credits	Winter Quarter		Credits	Spring Quarter		Credits
			Op.1	Op.2		Op.1	Op.2	
Phys. Chem. 181.....	5	Phys. Chem. 182.....	5	5	Metallurgy 102	5	5	
Alt. Cur.—E.E. 121....	4	Chem. Eng. 216....	5	5	Thesis	2		
A.C. Lab.—E.E. 122....	2	Ind. Seminar Chem.	5		Chem. 217		5	
Electives	5	296 /J.C.	2		Electives	8	5	
		Thesis	3					
		Electives		5				
	16		15	15		15	15	

Electives must in all cases be approved by the head of the department.

IN CIVIL ENGINEERING

Leading to the degree of Bachelor of Science in
Civil Engineering

FRESHMAN

The same for all curricula. See Page 121.

SOPHOMORE

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Mech.—C.E. 91	3	Mech.—C.E. 92	3	Mech.—C.E. 93	3
St. Eng.—M.E. 82.....	3	St. Eng. Lab.—M.E. 83.	3	Economics	3
Physics 97	5	Physics 98	5	Physics 99	5
R.R. Surv.—C.E. 22....	4	Higher Surv.—C.E. 23..	4	Field Eng.—C.E. 24..	4
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	
	16%		16%		16%

JUNIOR

Hydraulics—C.E. 142 ..	5	Dir. Cur.—E.E. 101....	4	Alt. Cur.—E.E. 121....	4
Struct. Mat.—C.E. 167. 5		D.C. Lab.—E.E. 102... 2		A. C. Lab.—E.E. 122... 2	
Calc.—Math. 61	3	Calc.—Math. 62	3	Highways—C.E. 122... 3	
Mach. Des.—M.E. 91....	2	Mach. Des.—M.E. 92... 2		Mach. Des.—M.E. 93... 2	
		Gas. Eng.—M.E. 198... 3		English 4	3
		Hyd. Eng.—C.E. 143... 3		Electives	3
	15		17		17

SENIOR

Structures—C.E. 134....	3	Thesis or electives.....	5		
Water Sup.—C.E. 153.. 3		Business Law—B.A. 55. 3			
Business Law—B.A. 54. 3		Electives	8		
Geology A 1.....	5			Electives	15
	14		16		15

Electives must in all cases be approved by the head of the department.

IN ELECTRICAL ENGINEERING

Leading to the degree of Bachelor of Science in
Electrical Engineering

FRESHMAN

The same for all curricula. See Page 121.

SOPHOMORE

Physics 97	5	Physics 98	5	Physics 99	5
Dif. Calc.—Math. 61... 3		Int. Calc.—Math. 62... 3		Int. Calc.—Math. 63... 3	
Mechanism—M.E. 81... 3		El. Steam—M.E. 82... 3		Steam Lab.—M.E. 83... 3	
Mach. Des.—M.E. 91... 2		Mach. Des.—M.E. 92... 2		Mach. Des.—M.E. 93... 2	
Shop 53	1	Shop 54	1	Shop 55	1
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	
	15%		15%		15%

JUNIOR

D.C.—E.E. 109	4	D.C.—E.E. 111	4	A.C.—E.E. 161	6
D.C. Lab.—E.E. 110... 2		D.C. Lab.—E.E. 112... 4		A.C. Lab.—E.E. 162... 4	
Mechanics—C.E. 131... 3		Mechanics—C.E. 132... 3		Mechanics—C.E. 133... 3	
English	3	Hydraulics—C.E. 142 .. 5		Materials—M.E. 167... 3	
Electives	4				
	16		16		16

SENIOR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
A.C.—E.E. 103	6	Trans.—E.E. 195, 196		Trans.—E.E. 198 or	
A.C.—E.E. 104	4	or Thesis 186	4	Thesis 188	2
Physics 114	3	Mach. Des.—E.E. 152 ..	5	Electives	14
Electives	3	Electives	6		
	16		15		18

Electives must in all cases be approved by the head of the department.

IN MECHANICAL ENGINEERING

Leading to the degree of Bachelor of Science in Mechanical Engineering

FRESHMAN

The same for all curricula. See Page 121.

SOPHOMORE

Cal.—Math. 61	3	Cal.—Math. 62	3	Cal.—Math. 63	3
Physics 97	5	Physics 98	5	Physics 99	5
Mechanism—M.E. 81 ..	3	El. Steam—M.E. 82 ..	3	Steam Lab.—M.E. 88 ..	3
Mach. Des.—M.E. 91 ..	2	Mach. Des.—M.E. 92 ..	2	Mach. Des.—M.E. 93 ..	2
Shop 53	1	Shop 54	1	Shop 55	1
Mil. Sci. or Phys. Ed. ..	1%	Mil. Sci. or Phys. Ed. ..	1%	Mil. Sci. or Phys. Ed. ..	1%
	15%		15%		15%

JUNIOR

Dir. Cur. E.E. 101	4	Alt. Cur.—E.E. 121	4	Hydraulics—C.E. 142 ..	5
Dir. Cur. Lab.—E.E. 102 ..	2	Alt. Cur. Lab.—E.E. 122 ..	2	English	3
Exp. Eng.—M.E. 151	3	Exp. Engr.—M.E. 152 ..	3	Exp. Engr.—M.E. 153 ..	3
Eng. & Boll.—M.E. 123 ..	3	Eng. & Boll.—M.E. 124 ..	3	Mechanics—C.E. 133 ..	3
Mechanics—C.E. 131	3	Mechanics—C.E. 132 ..	3	Shop 107	1
Ship 105	1	Shop 106	1		
	16		16		15

SENIOR

Business Law—B.A. 54 ..	3	Gas. Eng.—M.E. 198	3	Power Plants—M.E. 184 ..	3
Thermo. & Ref.—M.E. 183 ..	5	Heat & Vent.—M.E. 182 ..	3	Steam Turb.—M.E. 179 ..	3
Mach. Des.—M.E. 101	2	Mach. Des.—M.E. 102	2	Mach. Des.—M.E. 103 ..	3
Electives	6	Eng. Mat.—M.E. 167	3	or 199	3
	16	Electives	5	Thesis 210, or Resear. 211 ..	3
				Electives	2
					16

Electives must in all cases be approved by the head of the department.

IN NAVAL ARCHITECTURE AND MARINE ENGINEERING

FRESHMAN

The same for all curricula. See Page 121.

SOPHOMORE

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Cal.—Math. 61	3	Cal.—Math. 62	3	Cal.—Math. 63	3
Physics 97	5	Physics 98	5	Physics 99	5
Mechanism—M.E. 81 ..	3	El. Steam—M.E. 82 ..	3	Steam Lab.—M.E. 83 ..	3
Mach. Des.—M.E. 91 ..	2	Mach. Des.—M.E. 92 ..	2	Mach. Des.—M.E. 93 ..	2
Shop 53	1	Shop 54	1	Shop 55	1
Mil. Sci. or Phys. Ed. ..	1%	Mil. Sci. or Phys. Ed. ..	1%	Mil. Sci. or Phys. Ed. ..	1%
	15%		15%		15%

JUNIOR

Dir. Cur.—E.E. 101	4	Alt. Cur.—E.E. 121	4	Hydraulics—C.E. 142 ..	5
Dir. Cur. Lab.—E.E. 102 ..	2	Alt. Cur. Lab.—E.E. 122 ..	2	Exp. Eng.—M.E. 153 ..	3
Exp. Eng.—M.E. 151	3	Exp. Engr.—M.E. 152 ..	3	Nav. Arch.—M.E. 187 ..	3
Nav. Arch.—M.E. 185	3	Nav. Arch.—M.E. 186 ..	3	Mechanics—C.E. 133 ..	3
Mechanics—C.E. 131	3	Mechanics—C.E. 132 ..	3	Shop 107	1
Shop 105	1	Shop 106	1		
	16		16		15

SENIOR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Business Law—B.A. 54...	3	Gas. Eng.—M.E. 198...	3	Mar. Eng.—M.E. 190...	3
Thermo. & Ref.—M.E. 188...	2	Heat. & Vent.—M.E. 182...	3	Steam Turb.—M.E. 179...	3
English 183	5	Ship Design—M.E. 189...	2	Mach. Des.—M.E. 103...	3
Ship Design—M.E. 188...	2	Eng. Mat.—M.E. 167...	3	Thesis 210	4
English	3	Electives	5	Electives	3
Electives	8				
	16		16		16

Electives must in all cases be approved by the head of the department.

IN COMMERCIAL ENGINEERING

Leading to the degree of Bachelor of Science

The student must register in the chemical, civil, electrical or mechanical engineering department of the College of Engineering.

Mathematics 51, 52, 53, 61, 62, 63, 13.....	26
Physics 97, 98, 99.....	15
Chemistry 1, 2, 3, or 21, 22, 28.....	15
English (Certificate in English Composition).....	8
Military Science or Physical Education.....	10
Civil Engineering 1, 2, 11, 12, 13, 21, 131, 132.....	24
Electrical Engineering 101, 102, and 121, 122 or 161, 162.....	12
Mechanical Engineering 81, 82, 83, 91, 92, 93.....	15
Business Administration 1 or 3, 11, 12, 54, 55, 167.....	24
Technical Electives (department in which the student is registered)	21
General Electives	27
Total.....	192

Electives must in all cases be approved by the dean of the College of Engineering.

IN AERONAUTICAL ENGINEERING

Students desiring to major in aeronautical engineering should include the following courses in the technical and general electives of the curriculum for the bachelor of science degree in the College of Engineering. These courses may also be taken as electives in the curricula for the bachelor of science degree in chemical, civil, electrical and mechanical engineering.

101. Aerodynamics.
111. Aerial Propellers.
121. Airplane Design.
141. Airships.
161. Aerial Transportation.

Electives must in all cases be approved by the dean of the College of Engineering.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

ENGINEERING EXPERIMENT STATION

THE STAFF

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....	PRESIDENT
JOHN THOMAS CONDON, LL.M., (Northwestern).....	DEAN OF FACULTIES
CARL EDWARD MAGNUSSON, Ph.D. (Wisconsin), M.S., E.E. (Minnesota), Electrical Engineering	DIRECTOR
HUGO WINKENWERDER, M.F. (Yale).....	Forest Products
MILNOR ROBERTS, A.B. (Stanford).....	Mining and Metallurgy
HENRY KREITZER BENSON, Ph.D. (Columbia).....	Chemical Engineering and Industrial Chemistry.
CHARLES WILLIAM HARRIS, B.S., (C.E.) Washington, C.E. (Cornell).....	Civil Engineering
EVERETT OWEN EASTWOOD, C.E., A.M. (Virginia), S.B. (Massachusetts Institute of Technology).....	Mechanical Engineering
FREDERICK ARTHUR OSBORN, Ph.D. (Michigan).....	Physics Standard and Tests

For description of the work of the Experiment Station see page 37.

COLLEGE OF FINE ARTS

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California)	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern)	DEAN OF FACULTIES
IRVING MACKAY GLEN, A.M. (Oregon)	Professor of Music; DEAN
WILLIAM PIERCE GORSUCH, A.B. (Knox)	Professor of Dramatic Art
CARL FRELINGHUYSEN GOULD, A.B. (Harvard)	Associate Professor of Architecture
WALTER ISAAKS, B.S. (James Milliken)	Associate Professor of Fine Arts
MORITZ ROSEN, Graduate (Warsaw Conservatory)	Associate Professor of Music
ALBERT FRANZ VENINO, New York College, Stuttgart Conservatory, Leschetizky,	Associate Professor of Music.
CARL PAIGE WOOD, A.M. (Harvard)	Associate Professor of Music
FRANCES DICKEY, A.M. (Columbia)	Assistant Professor of Music
MRS. LOUISE VAN OGLE	Assistant Professor of Music
AMBROSE PATTERSON	Associate in Fine Arts
MRS. EUGENIA WOMAN	Associate in Fine Arts
JAMES A. WEHN	Associate in Modeling and Sculpture
JOHN BUTLER	Associate in Fine Arts
ROBERT FULTON MCCLELLAND (Massachusetts Institute of Technology)	Instructor in Architecture.
GEORGE C. KIRCHNER, (Leipzig)	Instructor in Music
ALBERT PORTER ADAMS	Instructor in Music
ANNETTE EDENS, (New York School of Fine and Applied Arts, Columbia)	Instructor in Drawing.
EILENE FRENCH, B.Mus. (Washington), M.A. (Columbia)	Instructor in Music
ADA TILLEY, B.Mus. (Simpson)	Instructor in Music
GLENN HUGHES, A.M. (Washington)	Instructor in Dramatic Art
ALBERT LOVEJOY, Graduate (Emerson College of Oratory)	Acting Instructor in Dramatic Art.
	Instructor in Design
MARY ELIZA LACY, B.S. (Columbia)	Instructor in Interior Decorating
HELEN RHODES, (Columbia)	Acting Instructor in Drawing
ELLA JANE TRULLINGER, A.M. (Columbia)	Instructor in Fine Arts
HELEN FERRYMAN, B.Mus. (Washington)	Instructor in Music
ANNA ELFRIDA STORM	Assistant in Design
LOUISE DOW BENTON, B.Mus. (Washington)	Assistant in Music
FLORENCE BERGE WILSON, B.Mus. (Washington)	Assistant in Music
CLARA CATHERINE BURCH, A.M. (Washington)	Assistant in Music
IRIS FERN CANFIELD, B.Mus. (Washington)	Assistant in Music
<hr/>	
EVERETT OWEN EASTWOOD, C.E., A.M. (Virginia), S.B. (Massachusetts Institute of Technology)	Professor of Mechanical Engineering
DAVID CONNOLLY HALL, M.D. (Chicago)	University Health Officer and Professor of Hygiene.
CHARLES CHUBB MORE, C.E., M.S. (Lafayette), M.C.E. (Cornell)	Professor of Civil Engineering.
ERIC TEMPLE BELL, Ph.D. (Columbia)	Professor of Mathematics
THOMAS K. SIDEX, Ph.D. (Chicago)	Associate Professor of Latin and Greek
CHARLES GOGGIO, Ph.D. (Wisconsin)	Associate Professor of Romanic Languages
ROBERT MAX GARRETT, Ph.D. (Munich)	Associate Professor of English
ERNST OTTO ECKELMAN, Ph.D. (Heidelberg)	Assistant Professor of German
HARVEY BRUCE DENSMORE, A.B. (Oxford)	Assistant Professor of Greek
SAMUEL HERBERT ANDERSON, Ph.D. (Illinois)	Assistant Professor of Physics
MARY EMMA GROSS, A.M. (Teachers' College, Columbia)	Director of Physical Education for Women.
CURT JOHN DUCASSE, Ph.D. (Harvard)	Assistant Professor of Philosophy
LESLIE SPIER, Ph.D. (Columbia)	Assistant Professor of Anthropology
ALEXANDER CRIPPEN ROBERTS, A.M. (Washington)	Associate in Education

GENERAL STATEMENT

This college comprises the departments of architecture, music, painting, sculpture, design, and dramatic art. In the department of architecture a curriculum of four years is offered leading to the degree of bachelor of architecture; in music there are curricula of four years leading to the degree of bachelor of music, with major in applied music, composition, or public school music, and to the degree of bachelor of arts in music. Curricula of four years are offered leading to the degree of bachelor of fine arts, with a major in painting and design, interior decoration, public school drawing, or music and drawing. Two-year curricula lead to certificates of proficiency for supervisors of art and music. The department of dramatic art offers major courses in the study of the drama and dramatic interpretation.

Normal Diploma.—In addition to their bachelor of music degree graduates in music may receive a normal diploma, entitling them to teach music in the public schools, by meeting the requirements of the department of education and such departmental requirements as the department of music may institute. This will necessitate a total of at least 192 credits.

Certificates of Proficiency for Music Supervisors.—These may be issued by the head of this college to students who may not have completed the requirements for the degree, but who have satisfactorily completed certain stipulated courses at the discretion of the department. These courses include history of music, elementary harmony, public school music, ear training and melody writing, school music and music education, vocal music, education and drawing or some other approved elective. Only students of advanced standing can complete this course in less than two years.

Architecture.—The plan of study recognizes that architecture is essentially a fine art, the practice of which must be based upon a thorough knowledge of construction and of the practical requirements of buildings. Technical training which has not recognized the importance of the knowledge of the principles of design has failed notably to raise the skilled draftsman to the position of an architect.

The University recognizes that its function in teaching the profession is to equip men to obtain not only a general knowledge of the subject of architecture, but that they may become able to cope with the problems that occur in actual practice.

It must be recognized, however, that knowledge of design is the most essential subject in a course preparing students for the profession of architecture.

Design.—The program of studies is so arranged as to allow students to give the greater part of their afternoons to work in the drafting room. This work consists largely of problems in architectural design presented as far as possible with the object of developing technical skill without hindering expression. The problems after the freshman year will be judged by a visiting committee of architects appointed by the dean and the head of the department. All drawings made by the students are the property of the department until returned by the department to the students.

Construction.—The theory and practice of construction is taught as a necessary basis for and in connection with architectural design and is such as to prepare students in the best way for architectural practice. It is strongly recommended that the student supplement his university training by work in an architect's office and three months of office work at least will be required of a student before a degree may be obtained. This three months of office work may be substituted for a thesis but only upon the approval of the head of the department of architecture.

Engineering.—At the beginning of the fourth year a student with the approval of the head of the department, may elect a fourth year course in structural engineering. This course is distinct from that in fourth year design and meets a practical need for added training in the engineering and administrative problems of the practice of architecture.

Dramatic Art.—The work is planned for three classes of students: (a) those who desire some knowledge of dramatic art as part of a liberal education; (b) those who need some knowledge of dramatic art as part of their technical training; and (c) those who wish to pursue the subject more intensively than either of the former groups.

For a major the department requires 38 to 60 credits, of which 24 must be in the department, including courses 1-2-3 and 21-22-23.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University, it is recommended that a student expecting to enter the College of Fine Arts should elect his work so as to offer the following subjects:

A foreign language.....	at least 2 unit.
A history (American preferred) or U. S. history and civics.....	1 unit
A science (physics, chemistry, botany, or zoology).....	1 unit

If he shall not have included these subjects in his high school elections, it will be necessary for him to include them among his elections in college. If the required foreign language has not been taken in high school, it will have to be made up without college credit, reducing the amount of regular college work that the student may carry during the first four quarters.

It is advisable that students intending to enter the course in architecture present credits for preparatory work in trigonometry and freehand drawing. Beginning in 1921 two years of a foreign language will be included among specific entrance requirements, to be made up in the University without credit, if they have not been taken in high school.

Students intending to enter any of the music courses leading to a degree must satisfy the head of the department that they have completed in addition to the usual high school preparation the equivalent of four years' work in piano, showing that they are familiar with the rudiments and can play well scales and chords in all positions, the smaller sonatas of Haydn, Mozart and Beethoven, and easier compositions representative of the best literature for the piano.

CURRICULA

Forty hours of foreign language pursued either in the high school or in the University are required for a degree in the College of Fine Arts. If a student has finished this work in the high school, he shall substitute approved electives in the University. If he presents no foreign language for admission to the University, he must supply the deficiency in addition to the hours demanded by the respective curricula, without credit.

**FOR THE BACHELOR OF MUSIC DEGREE WITH A MAJOR IN
APPLIED MUSIC**

(Piano, Violin, Voice, Violoncello, Organ)

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Music 1 Appreciation... 2		Music 2 Appreciation... 2		Music 3 Appreciation... 2	
4 History 2		5 History 2		5 History 2	
7 Sight Singing... 2		5 Sight Singing... 2		9 Sight Singing... 2	
14 Ear Training 2		15 Ear Training 2		16 Ear Training... 2	
18 Applied 3		19 Applied 3		20 Applied 3	
10 Chorus, elect. ... 1		11 Chorus or elect... 1		12 Chorus or elect... 1	
Phys. Ed. or Mil. Sci... 1½		English Comp. 3		English Comp. 3	
	<u>3</u>	Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½	
	16%		16%		16%

SECOND YEAR

Music 10 Chorus or elect. 1		Music 11 Cho. or elect.. 1		Music 12 Cho. or elect.. 1	
68 Applied 3		69 Applied 3		70 Applied 3	
51 Harmony 3		52 Harmony 3		53 Harmony 3	
Pol. or Soc. Sci. 5		Physics 50 5		Physics 51 5	
Foreign Language 5		Foreign Language 3		Foreign Language 3	
Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½	
	<u>16%</u>		16%		16%

THIRD YEAR

Music 10 Chorus or elect. 1		Music 11 Cho. or elect.. 1		Music 12 Cho. or elect.. 1	
118 Applied 3		119 Applied 3		120 Applied 3	
101 Adv. Harmony ... 3		102 Adv. Harmony ... 3		103 Adv. Harmony ... 3	
104 Adv. History 2		105 Adv. History 2		106 Adv. History 2	
107 Counterpoint 2		108 Counterpoint 2		109 Counterpoint 2	
110 Instr. Form 2		111 Instr. Form 2		112 Instr. Form 2	
Foreign Language 3		Foreign Language 3		Foreign Language 3	
	<u>16</u>		16		16

FOURTH YEAR

Music 10 or elective... 1		Music 11 or elective... 1		Music 12 or elective... 1	
168 Applied 3		169 Applied 3		170 Applied 3	
157 Composition 2		158 Composition 2		159 Composition 2	
151 Adv. Apprec. 2		152 Adv. Apprec. 2		153 Adv. Apprec. 2	
Philosophy 129 aesth.. 5		Electives 3		Electives 5	
Electives 3				Senior Program* 2	
	<u>16</u>		16		15

**FOR THE BACHELOR OF MUSIC DEGREE WITH A MAJOR
IN COMPOSITION**

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Music 1 Appreciation... 2		Music 2 Appreciation... 2		Music 3 Appreciation... 2	
4 History 2		5 History 2		6 History 2	
14 Ear Training 2		15 Ear Training 2		16 Ear Training 2	
51 Beg. Harmony 3		52 Beg. Harmony 3		53 Beg. Harmony 3	
18 Applied 3		19 Applied 3		20 Applied 3	
English Comp. 3		English Comp. 3		English Comp. 3	
Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½	
	<u>16%</u>		16%		16%

SECOND YEAR

Music 10 Cho. or elect... 1		Music 11 Cho. or elect.. 1		Music 12 Cho. or elect.. 1	
101 Adv. Harmony ... 3		102 Adv. Harmony ... 3		103 Adv. Harmony ... 3	
107 Counterpoint 2		108 Counterpoint 2		109 Counterpoint 2	
Foreign Language 5		Foreign Language 3		Foreign Language 3	
Pol. or Soc. Science... 5		Physics 51 5		Physics 52 5	
Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½	
	<u>17%</u>		15%		15%

*As a substitute for the senior program, the student may have the option of offering an approved original composition or work in an elective course approved by the adviser and the dean.

†Only those who have successfully completed the work in Mus. 11 will be eligible for registration in Mus. 12.

THIRD YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Music 10 Cho. or elect.. 3		*Music 11 Cho. or elect.. 1		*Music 12 Cho. or elect.. 1	
68 Applied 3		69 Applied 3		70 Applied 3	
110 Instr. Form 2		111 Instr. Form 2		112 Instr. Form. 2	
157 Composition 2		158 Composition 2		159 Composition 2	
104 Adv. History 2		105 Adv. History 2		106 Adv. History 2	
Foreign Language 3		Foreign Language 3		Foreign Language 3	
Electives 2		Electives 2		Electives 2	
15		15		15	

FOURTH YEAR

Music 10 Cho. or elect.. 1		*Music 11 Cho. or elect.. 1		*Music 12 Cho. or elect.. 1	
118 Applied 3		119 Applied 3		120 Applied 3	
151 Adv. Apprec. 2		152 Adv. Apprec. 2		153 Adv. Apprec. 2	
161 Polyphonic 2		162 Polyphonic 2		163 Polyphonic 2	
201 Adv. Comp. 2		202 Adv. Comp. 2		203 Adv. Comp. 2	
204 Orchestra 2		205 Orchestra 2		206 Orchestra 2	
Philosophy 129 Aesth.. 5		Electives 5		Electives 5	
17		17		17	

FOR THE BACHELOR OF MUSIC DEGREE WITH A MAJOR
IN PUBLIC SCHOOL MUSIC

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Music 1 Appreciation... 2		Music 2 Appreciation... 2		Music 3 Appreciation... 2	
4 History 2		5 History 2		6 History 2	
7 Sight Singing 2		8 Sight Singing 2		9 Sight Singing 2	
10 Chor. or elect.. 1		11 Chorus or elect.. 1		12 Chorus or elect.. 1	
14 Ear Training 2		15 Ear Training 2		16 Ear Training 2	
18 Applied 3		19 Applied 3		20 Applied 3	
English Composition 3		English Composition 3		English Composition 3	
Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½	
16½		16½		16½	

SECOND YEAR

Music 51 Harmony..... 3		Music 52 Harmony..... 3		Music 53 Harmony..... 3	
54 School Music 2		55 School Music 2		56 School Music 2	
10 Chorus or elect.. 1		11 Chorus or elect.. 1		12 Chorus or elect.. 1	
Electives 5		Physics 51 5		Physics 52 5	
Foreign Language 3		Foreign Language 3		Foreign Language 3	
Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½	
15½		15½		15½	

THIRD YEAR

Music 68 Applied..... 3		Music 69 Applied..... 3		Music 70 Applied 3	
101 Adv. Harmony 3		102 Adv. Harmony 3		103 Adv. Harmony 3	
113 Education 2		114 Education 2		Education 160N 2	
Foreign Language 5		Education 5		Education 5	
Pol. or Soc. Science... 5		Foreign Language 3		Foreign Language 3	
18		16		Electives 2	
				16	

FOURTH YEAR

Music 107 Counterpoint. 2		Music 108 Counterpoint. 2		Music 109 Counterpoint. 2	
110 Instr. Forms 2		111 Instr. Forms 2		112 Instr. Forms 2	
151 Adv. Apprec. 2		152 Adv. Apprec. 2		153 Adv. Apprec. 2	
154 Ed. & Superv. 2		155 Ed. & Superv. 2		156 Ed. & Superv. 2	
Phil. 129 Aesthetics... 5		Education 145 Pract.. 5		Electives 7	
Electives 2		Electives 2			
15		15		15	

FOR THE DEGREE OF BACHELOR OF ARTS IN MUSIC

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
*Music, electives 3		*Music, electives 3		*Music, electives 3	
English Composition 3		English Composition 3		English Composition 3	
Foreign Language 5		Foreign Language 5		Foreign Language 5	
Chem., Bot. or Zool.. 5		Chem., Bot. or Zool.. 5		Elective 3	
Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½	
17½		17½		15½	

*See foot-note on page 130.

SECOND YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
*Music, electives	5	Music, electives	5	Music, electives	5
Pol. or Soc. Science....	5	Physics 50	5	Physics 51	5
For. Lang. or elective..	5	Electives	5	Electives	5
Phys. Ed. or Mil. Sci..	1½	Phys. Ed. or Mil. Sci..	1½	Phys. Ed. or Mil. Sci..	1½
	<u>16½</u>		<u>16½</u>		<u>16½</u>

THIRD YEAR

Music, electives	5	Music, electives	5	Music, electives	5
Phil. 129 Aesthetics....	5	†Liberal Arts, electives.10		Electives	5
†Lib. Arts, electives....	5			†Liberal Arts, electives.	5
	<u>15</u>		<u>15</u>		<u>10</u>

FOURTH YEAR

Music, electives	5	Music, electives	5	Music, electives	5
†Liberal Arts, electives.10		†Liberal Arts, electives.10		†Liberal Arts, electives.10	
	<u>15</u>		<u>15</u>		<u>15</u>

CURRICULA IN ARCHITECTURE LEADING TO THE DEGREE OF
BACHELOR OF ARCHITECTURE

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Arch. 1 Hist. & Elem....	2	Arch. 2 Hist. & Elem....	2	Arch. 3 Hist. & Elem....	2
Arch. 4 Drawing.....	3	Arch. 5 Drawing.....	3	Arch. 6 Drawing.....	3
Arch. 7 Descr. Geom....	2	Arch. 8 Shades & Shad. 2		Arch. 9 Perspective....	2
Arch. 47 Statics.....	5	Arch. 48 Statics.....	5	Foreign Language	5
Arch. 10 Freehand Draw. 1		Arch. 11 Freehand Draw. 1		Arch. 12 Freehand Draw. 1	
English 1	3	English 4	3	English 3	3
Phys. Ed. or Mil. Sci..	1½	Phys. Ed. or Mil. Sci..	1½	Phys. Ed. or Mil. Sci..	1½
	<u>17½</u>		<u>17½</u>		<u>17½</u>

SECOND YEAR

Arch. 51. Hist. & Elem. 2	Arch. 52 Hist. & Elem.. 2	Arch. 53 Hist. & Elem.. 2
Arch. 54 Design..... 3	Arch. 55 Design..... 3	Arch. 56 Design..... 3
Arch. 60 Bldg. Constr.. 2	Arch. 61 Bldg. Constr.. 2	Arch. 62 Bldg. Constr. 2
P.S.D. 72	Arch. 73 Freehand Draw. 1	Arch. 74 Freehand Draw. 1
Mathematics 51	Mathematics 52	Mathematics 53
Foreign Language	Foreign Language 2.....	Foreign Language 3.....
Phys. Ed. or Mil. Sci..	Phys. Ed. or Mil. Sci..	Phys. Ed. or Mil. Sci..
1½	1½	1½
	<u>18½</u>	<u>18½</u>

NOTE.—Students electing structural option will, in spring quarter, junior year, omit Arch. 103, 114, and register for Physics 3-5 hours.

THIRD YEAR

Arch. 101 Hist.....	2	Arch. 102 Hist.....	2	Arch. 103 Hist.....	2
Arch. 104 Design.....	5	Arch. 105 Design.....	5	Arch. 106 Design.....	5
P.S.D. 73	1	Arch. 113 Water Colo..	1	Arch. 114 Water Color..	1
C.E. 181 Mechanics....	3	Arch. 117 Struc. Details	3	Arch. 118 Struc Details.	3
Physics 1 General.....	4	Physics 2 General.....	5	Phys. 119 Acous. & Illum.	4
	<u>15</u>		<u>18</u>		<u>15</u>

FOURTH YEAR
(Design Option)

Arch. 151 Hist.....	2	Arch. 152 Hist.....	2	Arch. 153 Hist.....	2
Arch. 154 Design.....	5	Arch. 155 Design.....	5	Arch. 156 Design.....	5
Arch. 157 Freehand Draw.	3	Arch. 158 Freehand Draw.	3	Arch. 159 Freehand Draw.	3
P.S.D. 16	1	P.S.D. 17	1	P.S.D. 18	1
M.E. 82 Steam Eng....	3	M.E. 182 Heat & Vent.	3	C.E. 21 Pl. Survey....	3
Arch 115 San. & Plbg. 2		Arch. 117 Spec. & Office		For. 103 Wood Anal....	2
	<u>16</u>	Prac. 116.....	2		<u>16</u>

* (1) Among the music courses indicated above the following are required: 1, 2, 3, 4, 5, 6, 7, 8, 9, 14, 15, 16, 51, 52, 53, 101, 102, 103.

† Liberal Arts electives for the junior and senior years must be in upper division courses, except with the consent of the dean.

FOURTH YEAR

(Structural Engineering Option)

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
C.E. 184 Frame Struc... 3		C.E. 161 Bridges..... 5		C.E. 21 Pl. Survey.... 3	
M.E. 82 Steam Eng.... 3		E.E. 121-122 Alt. Cur... 6		For. 103 Wood Anal.... 2	
M.E. 101-102 Dir. Car. 6		M.E. 182 Heat. & Vent... 3		C.E. 187 Struc. Mat.... 3	
Law 54 Bus. Law..... 3		Law 55 Bus. Law..... 3		Law 56 Bus. Law..... 3	
Arch. 115 San. & Plbg.. 2		Arch. 117 Spec. Office		Electives	5
		Prac. 116..... 2			
	17		17		17

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN
PAINTING AND DESIGN

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
P.S.D. 5 Freehand..... 3		P.S.D. 6 Freehand..... 3		P.S.D. 7 Freehand..... 3	
*P.S.D. 9 Art Struc.... 4		*P.S.D. 10 Art Struc... 4		*P.S.D. 11 Art Struc.. 4	
P.S.D. 16 Art. Apprec.. 1		P.S.D. 17 Art. Apprec.. 1		P.S.D. 18 Art. Apprec.. 1	
English Composition ... 3		English Composition ... 3		English Composition ... 3	
Foreign Language 5		Electives	5	Electives	5
Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½	
	17½		17½		17½

SECOND YEAR

P.S.D. 53 Art Struc.... 4		P.S.D. 54 Art Struc... 4		*P.S.D. 55 Art Struc... 4	
P.S.D. 56 Illustration.. 3		P.S.D. 57 Illustration.. 3		P.S.D. 58 Illustration.. 3	
Greek Art N. 3..... 1		Foreign Language 5		Foreign Language 5	
Foreign Language 5		Greek Art N. 3..... 1		Greek Art N. 3..... 1	
Electives	3	Electives	3	Electives	3
Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½	
	17½		17½		17½

THIRD YEAR

Arch. 1 Hist. & Elem... 2		Arch. 2 Hist. & Elem... 2		Arch. 3 Hist. & Elem... 2	
P.S.D. 103 Art Struc... 3		P.S.D. 104 Art Struc... 3		P.S.D. 109 Portrait.... 3	
P.S.D. 107 Portrait.... 3		P.S.D. 108 Portrait.... 3		Lat. 16 Roman Art.... 1	
Lat. 14 Roman Art.... 1		Lat. 15 Roman Art.... 1		Laboratory Science 5	
Political Science 5		Laboratory Science 5		Electives	4
	15	Electives	2		
			16		15

FOURTH YEAR

P.S.D. 157 Art Struc... 3		P.S.D. 158 Art Struc... 3		P.S.D. 159 Art Struc... 3	
P.S.D. 160 Life, or		P.S.D. 161 Life, or		P.S.D. 162 Lift, or	
163 Mural Dec..... 3		165 Mural Dec..... 3		165 Mural Life..... 3	
Electives	9	Electives	9	Electives	9
	15		15		15

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN
PUBLIC SCHOOL DRAWING

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
P.S.D. 5 Freehand..... 3		P.S.D. 6 Freehand..... 3		P.S.D. 7 Freehand..... 3	
P.S.D. 9 Art Struc.... 4		P.S.D. 10 Art Struc... 4		P.S.D. 11 Art Struc... 4	
P.S.D. 16 Art. Apprec.. 1		P.S.D. 57 Illustration.. 3		P.S.D. 18 Art. Apprec.. 1	
English Composition ... 3		English Composition ... 3		English Composition ... 3	
Foreign Language 5		Foreign Language 5		Foreign Language 5	
Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½	
	17½		17½		17½

*The course in art structure comprises the following: Freshman, principles of design; sophomore, advanced design, tie and dye, batik, woodblock printing, design; junior, pottery, interior decorating, posters; seniors, jewelry, landscape composition, design.

SECOND YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
P.S.D. 53 Art Struc...	4	P.S.D. 54 Art Struc...	4	P.S.D. 55 Art Struc...	4
P.S.D. 56 Illustration...	3	P.S.D. 57 Illustration...	3	P.S.D. 58 Illustration...	3
Political Science	5	Electives	3	Electives	5
Foreign Language	3	Phys. Ed. or Mil. Sci..	1%	Foreign Language	3
Phys. Ed. or Mil. Sci..	1%			Phys. Ed. or Mil. Sci..	1%
	16%		14%		16%

THIRD YEAR

P.S.D. 103 Art Struc...	3	P.S.D. 104 Art Struc...	3	P.S.D. 105 Art Struc...	3
P.S.D. 107 Portrait...	3	P.S.D. 108 Portrait...	3	P.S.D. 109 Portrait...	3
Greek Art 8	1	Greek Art 9	1	Greek Art 10	1
Education	5	Education	3	Education	3
Elective	3	Laboratory Science	5	Laboratory Science	5
	15		15		15

FOURTH YEAR

P.S.D. 157 Art Struc...	3	P.S.D. 158 Art Struc...	3	P.S.D. 159 Art Struc...	3
Education 145	5	Education	3	P.S.D. 11 Art Struc...	3
Education 160-P	3	Electives	9	Electives	9
Philosophy 129	5				
	16		15		15

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN
INTERIOR DECORATION

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
P.S.D. 5 Freehand.....	3	P.S.D. 6 Freehand.....	3	P.S.D. 7 Freehand.....	3
P.S.D. 9 Art Struc.....	4	P.S.D. 10 Art Struc.....	4	P.S.D. 11 Art Struc.....	4
P.S.D. 16 Art. Apprec..	1	P.S.D. 17 Art. Apprec..	1	P.S.D. 18 Art. Apprec..	1
English Composition ...	3	English Composition ...	3	English Composition ...	3
Foreign Language	5	Foreign Language	5	Foreign Language	5
Phys. Ed. or Mil. Sci..	1%	Phys. Ed. or Mil. Sci..	1%	Phys. Ed. or Mil. Sci..	1%
	17%		17%		17%

SECOND YEAR

P.S.D. 59 Hshld. Des..	3	P.S.D. 60 Hshld. Des..	3	P.S.D. 61 Hshld. Des..	3
Arch. 1 History.....	2	Arch. 2 History.....	2	Arch. 3 History.....	2
Arch. 13 Dimension Dr.	2	Arch. 14 Dimension Dr.	2	H.E. 25 Textiles.....	5
Foreign Language	5	Electives	7	Electives	5
Electives	2	Phys. Ed. or Mil. Sci..	1%	Phys. Ed. or Mil. Sci..	1%
Phys. Ed. or Mil. Sci..	1%				
	15%		15%		16%

THIRD YEAR

P.S.D. 110 Interior Decoration	3	P.S.D. 111 Interior Decoration	3	P.S.D. 112 Interior Decoration	3
P.S.D. 113 Furn. Design	2	P.S.D. 114 Furn. Design	2	P.S.D. 115 Furn. Design	2
Political Science	5	Laboratory Science	5	Laboratory Science	5
Electives	5	Electives	5	Electives	5
	15		15		15

FOURTH YEAR

P.S.D. 172 Interior Decoration	5	P.S.D. 173 Interior Decoration	5	P.S.D. 174 Interior Decoration	5
Greek Art 14 or Roman Art	1	Greek Art 9 or Roman Art	1	Greek Art 14 or Roman Art	1
Fine or Lib. Arts Elect.	6	Fine or Lib. Arts Elect.	9	Fine or Lib. Arts Elect.	9
H.E. 143 House Furn...	3				
	15		15		15

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN
MUSIC AND DRAWING

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Music 4 Hist. of Music.. 2		Music 5 Hist. of Music.. 2		Music 6 Hist. of Music.. 2	
Music 7 Sight Singing.. 2		Music 8 Sight Singing.. 2		Music 9 Sight Singing.. 2	
P.S.D. 5 Drawing..... 4.3		P.S.D. 6 Drawing..... 4.3		P.S.D. 7 Drawing..... 4.3	
Foreign Language 5		Foreign Language 5		Foreign Language 5	
English Composition ... 3		English Composition ... 3		English Composition ... 3	
Mil. Sci. or Phys. Ed.. 1%		Mil. Sci. or Phys. Ed.. 1%		Mil. Sci. or Phys. Ed.. 1%	
	17%		17%		17%

SECOND YEAR

Music 14 Ear Tr. or elective 2		Music 15 Ear Tr. or elective 2		Music 16 Ear Tr. or elective 2	
Music 54 School Music.. 2		Music 55 School Music.. 2		Music 56 School Music.. 2	
Foreign Language 5		Laboratory Science 5		Electives 5	
Political Science 3		P.S.D. 10 Art Struc... 3		Laboratory Science 5	
P.S.D. 9 Art Struc... 3		Electives 5		P.S.D. 11 Art Struc... 3	
Mil. Sci. or Phys. Ed.. 1%		Mil. Sci. or Phys. Ed.. 1%		Mil. Sci. or Phys. Ed.. 1%	
	18%		18%		18%

THIRD YEAR

Music 18 Ap. Music.... 1		Music 19 Ap. Music.... 1		Music 20 Ap. Music.... 1	
Music 51 Harmony..... 3		Music 52 Harmony..... 3		Music 53 Harmony..... 3	
Music 113 Music Ed... 2		Music 114 Music Ed... 2		Educ. 160N Music Ed.. 2	
P.S.D. 53 Art Struc... 3		P.S.D. 54 Art Struc... 3		P.S.D. 55 Art Struc... 3	
P.S.D. 16 Art Apprec.. 1		P.S.D. 17 Art Apprec.. 1		P.S.D. 18 Art Apprec.. 1	
P.S.D. 103 Pottery..... 3		P.S.D. 104 Pottery..... 3		Education 3	
Education 5		Education 3		Electives 5	
	18		18		18

P.S.D. art majors must take one year of art structure.

CURRICULUM IN ART LEADING TO CERTIFICATES OF PROFICIENCY
FOR SUPERVISORS OF ART

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
P.S.D. 9 Art Struc.... 4		P.S.D. 10 Art Struc... 4		P.S.D. 11 Art Struc.... 4	
P.S.D. 5 Freehand..... 3		P.S.D. 6 Freehand..... 3		P.S.D. 7 Freehand Cast. 3	
English Composition ... 3		English Composition ... 3		English Composition ... 3	
P.S.D. 16 Art Apprec.. 1		P.S.D. 17 Art Apprec.. 1		P.S.D. 18 Art Apprec.. 1	
Electives 5		Electives 5		Electives 5	
	16		16		16

SECOND YEAR

P.S.D. 53 Art Struc... 4		P.S.D. 54 Art Struc... 4		P.S.D. 55 Art Struc.... 4	
P.S.D. 56 Freehand.... 3		P.S.D. 57 Freehand.... 3		P.S.D. 58 Freehand.... 3	
Psychology 5		Education 5		Education 5	
Education 160-P 3		Electives 3		Public School Draw. 101 3	
	15		15	Electives 1	
					16

CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF ARTS IN
DRAMATIC ART

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Dramatic Art, elective.. 3		Dramatic Art, elective.. 3		Dramatic Art, elective.. 3	
English Composition ... 3		English Composition ... 3		English Composition ... 3	
Foreign Language 5		Foreign Language 5		Foreign Language 5	
Chem., Botany or Zool.. 5		Chem., Botany or Zool.. 5		Elective 5	
Phys. Ed. or Mil. Sci.. 1%		Phys. Ed. or Mil. Sci.. 1%		Phys. Ed. or Mil. Sci.. 1%	
	17%		17%		17%

UNIVERSITY OF WASHINGTON

SECOND YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Dramatic Art, elective... 5		Dramatic Art, elective... 5		Dramatic Art, elective... 5	
Arch. 1 History..... 2		P.S.D. 170 Textile..... 2		P.S.D. 171 Textile..... 2	
P.S.D. 169 Textile..... 2		Arch. 2 History..... 2		Arch. 3 History..... 2	
Foreign Language 5		Electives 5		Pol. or Soc. Science... 5	
Electives 2		Phys. Ed. or Mil. Sci.. 1½		Phys. Ed. or Mil. Sci.. 1½	
Phys. Ed. or Mil. Sci.. 1½					
	17½		15½		15½

THIRD YEAR

Dramatic Art, elective... 6		Dramatic Art, elective... 6		Dramatic Art, elective... 6	
Psychology 5		†Liberal Arts, elective..10		†Liberal Arts, elective..10	
†Liberal Arts, electives. 5					
	16		16		16

FOURTH YEAR

Dramatic Art, electives. 5		Dramatic Art, electives. 5		Dramatic Art, electives. 5	
†Liberal Arts, electives.10		†Liberal Arts, electives.10		†Liberal Arts, electives.10	
	15		15		15

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

†Liberal Arts electives for the junior and senior years must be in upper division courses except with the consent of the dean.

COLLEGE OF FISHERIES

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California)	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern)	DEAN OF FACULTIES
JOHN N. COBB	Professor of Fisheries, DIRECTOR
CARL R. FELLERS, Ph.D. (New Jersey State College)	Associate Professor of Food Preservation.
CLARENCE L. ANDERSON, B.S. (Washington)	Instructor in Fisheries
DONALD R. CRAWFORD, B.S. (Washington)	Instructor in Fish Culture
RAY WILLIAM CLOUGH, Ph.D. (Washington)	Lecturer on Food Preservation
<hr/>	
TREVOR KINCAID, A.M. (Washington)	Professor of Zoology
FREDERICK MORGAN PADELFORD, Ph.D. (Yale)	Professor of English and Dean of the Graduate School.
FREDERICK ARTHUR OSBORN, Ph.D. (Michigan)	Professor of Physics and Director of the Physics Laboratories.
CHARLES WILLIS JOHNSON, Ph.C., Ph.D. (Michigan)	Professor of Pharmaceutical Chemistry, and State Chemist.
THEODORE CHRISTIAN FRYE, Ph.D. (Chicago)	Professor of Botany
EVERETT OWEN EASTWOOD, C.E., A.M. (Virginia), S.B. (Massachusetts Institute of Technology)	Professor of Mechanical Engineering
DAVID CONNOLLY HALL, M.D. (Chicago)	University Health Officer; Professor of Hygiene
HENRY KRETZER BENSON, Ph.D. (Columbia)	Professor of Chemical Engineering
JOHN WEINZIERL, Ph.D. (Wisconsin), Dr.P.H. (Harvard)	Professor of Bacteriology
LESLIE JAMES AYER, J.D. (Chicago)	Professor of Law
HOWARD T. LEWIS, M.A. (Wisconsin)	Professor of Economics and Dean of the College of Business Administration.
GEORGE MCPHAIL SMITH, Ph.D. (Freiburg)	Professor of Inorganic Chemistry
WILLIAM MAURICE DEHN, Ph.D. (Illinois)	Professor of Organic Chemistry
GEORGE BURTON RIGG, Ph.D. (Chicago)	Associate Professor of Botany
WILLIAM DANIEL MORIARTY, Ph.D. (Michigan)	Associate Professor of Business Administration.
GEORGE SAMUEL WILSON, B.S. (Nebraska)	Associate Professor of Mechanical Engineering
WILLIAM EDWARD COX, A.M. (Texas)	Associate Professor of Business Administration
HERMAN VANCE TARTAR, B.S. (Oregon Agricultural College)	Associate Professor of Chemistry.
JOHN E. GUBERLET, M.S. (Illinois)	Associate Professor of Zoology
ELI VICTOR SMITH, Ph.D. (Northwestern)	Assistant Professor of Zoology
ERDIN VERNE LYNN, Ph.D. (Wisconsin)	Assistant Professor of Pharmacology and Chemistry
HORACE GUNTHERP, Ph.D. (Kansas)	Assistant Professor of Zoology
THOMAS G. THOMPSON, Ph.D. (Washington)	Assistant Professor of Chemistry
RAYMOND FORREST FARWELL, A.B. (California)	Instructor in Maritime Commerce
CLARENCE LESTER WHITE, C.E. (Iowa)	Instructor in Civil Engineering

GENERAL STATEMENT

The College of Fisheries was established in 1919. It has a two-fold purpose: First, to afford instruction in the principles and practices of fishery; second, to promote the interest of fisheries in the state of Washington and in the United States by encouraging the right use of fishery resources.

The location of the college has exceptional advantages. The University campus is situated on the shores of Lakes Washington and Union, which are connected with each other and with Puget Sound by canals. Extensive commercial fisheries for fishes, oysters, clams and crabs are conducted in Puget Sound, while fleets of vessels with headquarters at Seattle and nearby cities carry on extensive fisheries in the ocean adjacent to the Washington coast, and on the fishing banks of Alaska. Numerous canneries, smokehouses, cold storage plants and fertilizer plants are to be found in Seattle and other places on the Sound. A number of fish hatcheries are owned and operated in the state of Washington by the federal, state and county governments. At Friday Harbor the University owns and operates an excellent marine biological station. These many advantages present unrivaled opportunities for study of fisheries, aquatic life and fish culture.

PRESERVATION OF FRUITS AND VEGETABLES

The College of Fisheries will offer for the first time in the autumn quarter of 1923, a new course in the commercial preservation of fruits and vegetables, similar to that offered hitherto in the preservation of aquatic food products. The course has been placed in the College of Fisheries because that college possesses elaborately equipped laboratories for the practical exposition of the principles underlying food preservation. Due provision has been made for additional equipment for this new work.

The commercial preservation of foods has been developed and improved very rapidly during the past quarter century through scientific study and invention and improvement of machinery. At present enormous quantities of food are preserved by canning, drying and salting, or as jams, jellies and preserves. The soil and climate of Washington are particularly well adapted to the raising of most fruits and vegetables, among the most important of which are apples, plums, pears, peaches, cherries, strawberries, raspberries, loganberries, blackberries, gooseberries, currants, potatoes, tomatoes, asparagus, string beans, cabbage, cucumbers, beets, carrots, cauliflower, corn and peas. Aside from fish and milk, the state of Washington has not kept pace with other sections of the continent in the canning and preserving of its varied products. But much interest now has been aroused and it is probable that the few modern and well equipped canneries and preserving plants now operating on fruits and vegetables will largely increase in numbers in the near future. This course has been established to anticipate the demand for men trained in food preservation certain to be created.

DEGREES

The four-year curricula in the College of Fisheries lead to the degrees of bachelor of science (B.S.) in fisheries and bachelor of science (B.S.) in food preservation.

The degree of master of science (M.S.) in fisheries, or of master of science (M.S.) in food preservation will be conferred on any graduate of the four-year curricula who has completed, at least one year of graduate work and presented a satisfactory thesis with the grade of A. or B. A graduate of any other institution of equal rank will be given full graduate standing, but he must have a satisfactory knowledge of zoology, chemistry, bacteriology and botany. Selection of work for these degrees must, in each case, be approved by the director of the college. Before being recognized as a candidate for an advanced degree, a student must appear before a committee

appointed by the dean of the Graduate School, who shall determine the student's fitness for such work and confer with him upon his proposed course of study.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

Advanced Standing.—Credit will be given for subjects pursued at other colleges of recognized rank upon presentation to the registrar of certificates that such subjects have been satisfactorily completed. Graduates of this institution and others of similar rank are admitted to graduate standing.

Short Courses for Fishermen and Food Preservers.—These courses will be given each winter quarter, provided there are a sufficient number of applicants. Applicants must be at least twenty years old and show ability to carry the work with profit to themselves. Admission to courses is without examination. Examinations will be given in the various subjects at the close of the course and a certificate showing the work satisfactorily covered issued to each student.

LABORATORIES

For description of laboratories see page 32.

AQUARIUM

The aquarium is equipped with a number of tanks for live fishes, and with balanced and other aquaria for study of aquarium management. Here students are taught to make accurate observations, record data, note habits, and to study reactions and the life histories of fishes.

FISH HATCHERY

The fish hatchery occupies about seven hundred square feet of floor space. It is furnished with hatching troughs, baskets, and other essential equipment for care of 1,000,000 salmon or trout eggs. A complete equipment consisting of batteries of open-top jars is provided for care of several million semi-buoyant eggs, such as those of the shad, whitefish and yellow perch. A tidal box is also available for handling eggs of saltwater species. Feeding tanks and aquaria are provided in which experimental work in fish culture may be carried on. A number of cement-lined ponds are available in the College grounds for rearing of various species of aquatic animals.

Within easy reach of the University are state and federal fish hatcheries where a study may be made of the actual conditions under which fish culture is carried on.

An arrangement has been effected with the U. S. Bureau of Fisheries under the terms of which the most promising seniors in fish culture will be afforded opportunity to spend five or six months at some one of the bureau's eighteen hatcheries in Washington, Oregon and Alaska, half of this period to be during the summer vacation. They will be given opportunity to familiarize themselves with building and repair of hatcheries, setting fish traps, stripping spawning fish, and fertilization and care of eggs until the young are hatched out. While so engaged students will be paid wages current for this class of work. At the expiration of this period the students will return to the University to complete their course. After passing the regular civil service examination, as many of these students as there is room for will be appointed to the position of fish culturist.

COMMERCIAL OPERATIONS

In or near Seattle and available for study are plants for the canning of fruits, vegetables, berries, fish, crabs, shrimps and clams; the manufacture of jam, jelly, fruit juices, vinegars; the mild-curing of salmon; the pickling of salmon, herring, and sablefish; the freezing and cold storage of fruits, vegetables, fish, and oysters; the dehydration of fruits, vegetables and fish; the smoking of fish; and the preparation of oil, fish meal and fertilizer from the waste. Two large can-making establishments, several plants manufacturing canning machinery, and a number of others supplying various machines and supplies for the industry, also are located in Seattle. Such of these industries as are not in Seattle are conveniently situated nearby, and the transportation costs to them are low.

Shellfish Culture.—On Puget Sound and in Hood Canal are numerous private oyster beds where cultivation has been practiced for some years. The state owns certain oyster reserves which are utilized for experimental purposes. These are all within reasonable distance of Seattle and are available for study purposes by the students of the college.

Fishery Operations.—Trap netting, purse and haul seining, gill netting, trolling, hand and long-line fishing, oyster gathering, clam digging, kelp harvesting, and other forms of commercial fishing, are carried on either in the harbor of Seattle, or waters adjacent, during the proper seasons, and can be observed and studied on the ground.

FIELD EXCURSIONS

Much of the instruction in fish culture and fisheries technology is given in the field, necessitating frequent excursions to nearby hatcheries, fishing camps, oyster beds, and industrial plants. The varied fishery apparatus owned by the college is used in nearby waters. The expense of such excursions will be comparatively small.

SUMMER WORK

Students of food preservation are advised to spend their summer vacations in some line of practical work connected with the canning and curing industry. As the college is convenient to the more important fish, fruit and vegetable canneries and dehydrating plants, ample opportunity is afforded for summer employment. Students not only acquire valuable experience in this way, but earn a considerable portion of their university expenses.

FISHERY CLUB

The Fishery Club is an organization open to all students of the College of Fisheries. It aims: (1) To promote acquaintance and good fellowship among students and instructors; (2) to keep in touch with everyday problems in fisheries and with men who are doing things worth while in this industry, and (3) to interest the public in the College of Fisheries and in the fishery problems of the state and nation.

OUTLINE FOR CURRICULA

Choice of Electives.—In the election of studies, students should follow the sequence of subjects as outlined in the curricula. Deviations from the prescribed order will not be allowed by class advisors unless such deviation is imperative. All electives must have the approval of class advisors.

Attention of the student is directed to the following courses as desirable electives, those to be selected depending on the curriculum followed: B.A. 11, 12, accounting; B.A. 54, 55, business law; B.A. 57, money and banking; B.A. 105, business organization; B.A. 106, economics of markets; B.A. 137, advertising; B.A. 167, plant management; Bact. 103, public

hygiene; Bot. 130, economic marine botany; Chem. 105-106-107, chemistry and food analysis; Chem. 123, industrial chemistry; Chem. 114, physiological chemistry; Chem. 193, chemistry of nutrition; M.E. 82, 198, mechanical engineering; modern language (Spanish or German preferred); Physics 3; Zool. 10-11, comparative anatomy; Zool. 101, cytology; Physiology 7;

I. FISH CULTURE

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Fisheries 1	2	Fisheries 2	2	Fisheries 6	2
Zoology 1	5	Zoology 2	5	Economics 3	3
Chemistry 1 or 21	5	Chemistry 2 or 22	5	Chemistry 8 or 23	5
C. B. 1	3	C. B. 2	3	English	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

SECOND YEAR

Fisheries 3	5	Fisheries 4	5	Fisheries 5	5
*Physics 1	5	*Physics 2	5	Zoology 165	5
Electives	5	C. B. 30	5	Botany 53	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

THIRD YEAR

Fisheries 101	5	Fisheries 102	5	Fisheries 103	5
Zoology 106	5	Fisheries 104	5	Fisheries 105	5
Bacteriology 101	5	Bacteriology 102	5	Zoology 107	5

FOURTH YEAR

Fisheries 150	5	Fisheries 151	5	Fisheries 152	5
Fisheries 117	5	Electives	10	Fisheries 115	3
Electives	5			Zoology 108	5
				Electives	2

GRADUATE

Fisheries 201—Research †	Fisheries 202—Research †	Fisheries 203—Research †
--------------------------	--------------------------	--------------------------

II. FISHERIES TECHNOLOGY

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Fisheries 1	2	Fisheries 2	2	Fisheries 6	2
Zoology 1	5	Zoology 2	5	Economics 3	3
Chemistry 1 or 21	5	Chemistry 2 or 22	5	Chemistry 8 or 23	5
C. B. 1	3	C. B. 2	3	English	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

SECOND YEAR

Fisheries 3	5	Fisheries 4	5	Fisheries 5	5
Chemistry 111	5	Chemistry 128	5	Chemistry 129	5
*Physics 1	5	*Physics 2	5	Electives	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

THIRD YEAR

Fisheries 106	5	Fisheries 107	5	Fisheries 105	5
Bacteriology 101	5	Fisheries 104	5	F-P. 150—Fundamentals	
B. A. 11	5	Bacteriology 102	5	of Canning	5
		Pharmacy 16	1	B. A. 12	5

FOURTH YEAR

Fisheries 108	5	Fisheries 156	5	Fisheries 157	5
B. A. 54	3	B. A. 55	3	Fisheries 147	3
Electives	7	Electives	7	Fisheries 115	3
				Electives	5

GRADUATE

Fisheries 205—Research †	Fisheries 206—Research †	Fisheries 207—Research †
--------------------------	--------------------------	--------------------------

*If the student has taken one year of physics in high school he will substitute electives for Physics 1 and 2.

†Time and credit to be arranged.

III. COMMERCIAL CANNING AND CURING OF FRUITS AND VEGETABLES

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
F. P. 1, Intro. to Food Pres.	2	F. P. 2, Intro. to Food Pres.	2	English	5
Chemistry 1 or 21	5	Botany 70	5	Mathematics 4	5
C. E. 1	3	Chemistry 2 or 22	5	Chemistry 3 or 23	5
English	5	C. E. 2	3		
Mil. Sci. or Phys. Ed. ..	1½	Mil. Sci. or Phys. Ed. ..	1½	Mil. Sci. or Phys. Ed. ..	1½

SECOND YEAR

*Physics 1	5	*Physics 2	5	*Physics 3	5
Chemistry 111	5	Chemistry 128	5	Chemistry 129	5
Electives	5	Electives	5	B. A. 3, Economics	3
Mil. Sci. or Phys. Ed. ..	1½	Mil. Sci. or Phys. Ed. ..	1½	Electives	2
				Mil. Sci. or Phys. Ed. ..	1½

THIRD YEAR

F. P. 120, Dehydration & Curing Fruits, Veg. 5	M. E. 82, Steam Eng. 3	F. P. 150, Fundamentals of Canning	5
M. E. 81, Mechanics ... 3	Bacteriology 102	Chemistry 129	5
Bact. 101	Pharmacy 16	M. E. 83, Steam Lab. ... 3	
Electives	Electives	Electives	7

FOURTH YEAR

F. P. 151, Com. Canning Fruits & Vegetables... 5	F. P. 152, Com. Canning Fruits & Vegetables... 5	F. P. 153, Com. Canning Fruits & Vegetables... 5
F. P. 155, Com. Jam, Jelly & Juice mfr. ... 3	B. A. 167, Plant Mgt. 5	F. P. 154, Adv. Food Pres.
Electives	Electives	Electives
		F. P. 156, Research Problems
		Electives

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

WINTER SESSION FOR FISHERMEN

The third annual short session for fishermen will open on January 4, 1924, continuing until about March 7. The following short courses, and such others as later investigation may determine necessary, are offered for the benefit of persons interested in various branches of fisheries. Admission to the courses is without examination. No previous preparation, training or fishery experience is required other than ability to read and write English. Past experience and future aims of each student are taken into consideration, and the character of his work arranged accordingly. If desired, examinations will be given in the various subjects at the close of the course and a certificate showing the work satisfactorily completed will be issued to each student.

The courses include the following subjects: The canning and curing of fishery products; Scotch and other methods of curing herring; fish culture and pond culture.

WINTER SESSION FOR CANNERS AND CURERS OF FRUITS AND VEGETABLES

A series of short courses for the benefit of those interested in the canning and curing of fruits and vegetables will open on January 4, 1924, and continue until about March 7. A detailed statement of the courses will be published later. These courses will be given at the same time as those for fishermen and the same requirements will hold good in both.

Enquiries in regard to the short courses may be addressed to the director of the College of Fisheries.

†Time and credit to be arranged.

*If the student shall not have taken physics in high school, it will be necessary for him to take Physics 1, 2 and 3, in the University, enrolling in Section H.

COLLEGE OF FORESTRY

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern).....	DEAN OF FACULTIES
HUGO WINKENWERDER, M.F. (Yale).....	Professor of Forestry; DEAN
BERT PERSONS KIRKLAND, A.B. (Cornell).....	Professor of Forestry
ELIAS TREAT CLARK, M.F. (Yale).....	Associate Professor of Forestry
BROD LEONARD GRONDAL, M.S.F. (Washington).....	Assistant Professor of Forestry
CONRAD W. ZIMMERMAN, A.B. (Washington).....	Lecturer in Timber Physics
<hr/>	
TREVOR KINCAID, A.M. (Washington).....	Professor of Zoology
HENRY KREITZER BENSON, Ph.D. (Columbia).....	Professor of Chemical Engineering
DAVID CONNOLLY HALL, M.D. (Chicago)....	University Health Officer; Professor of Hygiene
GEORGE SAMUEL WILSON, B.S. (Nebraska)...	Associate Professor of Mechanical Engineering
GEORGE IRVING GAVETT, B.S. (C.E.), (Michigan).....	Assistant Professor of Mathematics
JOHN WILLIAM HOTSON, Ph.D. (Harvard).....	Assistant Professor of Botany
CLINTON LOUIS UTTERBACK, M.S. (Washington).....	Instructor in Physics

GENERAL INFORMATION

The College of Forestry was established in 1907. Its location has exceptional advantages. The University campus comprises 582 acres, forty of which are timber offering splendid opportunities for field work in silviculture and forest measurements. Other excellent forests are within walking distance of the campus. The University owns large forest tracts in various parts of the state, where students may conduct extensive research work. The immense national forests within a few hours' ride of Seattle afford practical object lessons in forest management. Seattle is in the center of the timber industry of Washington and the Northwest. In its many sawmills and wood-working industries, the student has unrivaled opportunities for studying wood utilization.

FOREST CLUB

The Forest Club is comprised of all students of the College of Forestry. It aims: To promote acquaintance and good fellowship among students and instructors; to keep in touch with everyday problems in forestry and lumbering, and the leaders in these industries; to interest the public in the college and in the forestry and lumbering problems of the state.

The club has issued the *Forest Club Annual* regularly since 1913. This publication has been devoted to articles and illustrations of the college; to scientific and popular articles about forestry and to a complete roster of students and alumni. Beginning with April, 1922, the annual was superseded by a quarterly known as the *University of Washington Forest Club Quarterly*. The subscription price is \$2 a year. It is devoted largely to Western forestry and lumbering problems.

Officers of the club for the year 1922-1923 are: President, J. J. French; vice-president, Walter Crombie; secretary-treasurer, Leroy Huntington; editor, Lester Calder; advertising manager, Howard Place.

FIELD INSTRUCTION AND SUMMER WORK

Much of the instruction in technical forestry and lumbering is given in the field, in nearby forests, logging camps, saw mills, woodworking

plants, and plants that manufacture equipment. This work is intensely practical and enables the student to correlate theoretical class room instruction with its application in the field.

Students in forestry are urged to spend their summer vacations in some line of practical work connected with the forest industry. The college, situated in the heart of a great lumbering section and near extensive national forests, offers ample opportunity for summer employment. Students not only acquire valuable experience in this way, but earn a considerable portion of their university expenses.

LABORATORIES

For description of laboratories see page 33.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University, it is recommended that a student expecting to enter the College of Forestry should elect his work so as to offer the following subjects:

Advanced algebra	$\frac{1}{2}$ unit
Solid geometry	$\frac{1}{2}$ unit
Physics	1 unit
Botany	$\frac{1}{2}$ or 1 unit

Advanced Standing.—Credit will be given for subjects pursued at other colleges of recognized rank upon presentation to the registrar of certificates that such subjects have been satisfactorily completed. Graduates of this institution and others of similar rank are admitted to graduate standing. (See General Information, pages 46, 47.)

Short Courses for Forest Rangers and Lumbermen.—Applicants must be at least twenty years old and show ability to carry the work with profit to themselves. Admission to classes is without examination. (For details of short course, see page 144.)

Undergraduate Work.—For the degree of bachelor of science in forestry (B.S.F.) the student must complete, in addition to required subjects outlined in the curriculum, at least 46 credits in subjects selected from forestry, lumbering, engineering, or the botanical, chemical, zoological, geological or economic sciences, the subjects to be approved by the student's class advisor. In no case shall more than 25 elective credits in any department other than forestry be allowed for graduation. Exclusive of shop and military science, 180 credits are required for graduation. Candidates for the degree must receive grades of A, B, or C in at least three-fourths of the credits required for the degree.

Graduate Work.—Two advanced degrees are offered to students who have received the bachelor's degree at this University or other institutions of equal rank, and have a satisfactory knowledge of the fundamental sciences. The candidate for the degree of master of forestry (M.F.) must earn 225 credits at this University, of which at least 78 are in approved technical forestry subjects. The candidate for the degree of master of

science in forestry (M.S.F.) must present a minor in one or two subjects in the College of Science. In addition to these requirements the candidate for either degree must present a thesis embodying results of independent research and pass an oral examination open to all members of the faculty. Only grades of A and B can be counted toward a graduate degree.

SPECIAL OPPORTUNITIES FOR ADVANCED WORK

The physical equipment of the College of Forestry and the exceptional advantages of its location are particularly advantageous for graduate students. The advanced courses include dendrology, silviculture, management, wood technology, timber physics, wood preservation, advanced forest products, the business of lumbering, and research. A graduate from a college of forestry of equal rank with the College of Forestry of this University may complete the requirements for the advanced degree in one year. Graduates from other institutions of equal rank which give no courses in technical forestry may complete the required work in two years, providing they have training in the fundamental sciences, mathematics and surveying.

ORGANIZATION OF THE CURRICULUM

The curriculum of the College of Forestry is organized to give the student a broad general training in his first two years' attendance with opportunity for specialization in the two final years. Enough elementary technical work is included in the lower division to give the student definite preparation for some practical field of work by the end of his freshman or sophomore year.

A very fair degree of specialization can be made in the four year undergraduate course, but a year of graduate work is advised for thorough specialization. The College of Forestry offers work for thorough specialization in (1) forest service and state work, (2) logging engineering, (3) forest products, (4) the lumber business.

Arrangements may be made for specialization in forest pathology, forest entomology, recreation or any other lines into which a broad training in forestry enters. This may be done by substituting courses in other departments for some of the required courses in forestry. All such substitutions require the sanction of the dean and the University graduation committee.

Choice of Electives.—In election of studies students should follow the sequence of subjects as outlined in the curriculum. Deviations from the prescribed order will not be allowed by class advisors unless such deviation is imperative.

The curriculum of the college is virtually identical for all students in the first two years, but provides for specialization in the upper division courses in (1) forest management, (2) logging engineering, (3) forest products, and (4) the business of lumbering. Arrangements may be made for specialization in other lines associated with forestry and lumbering. Consult the Dean of the College of Forestry. Students should decide by the end of their sophomore year in which field they desire to specialize. The student should be especially careful to register for the electives required for his advanced specialized courses as no student will be admitted to the advanced subjects who has not had the necessary prerequisites given with the course descriptions below.

LOWER DIVISION

The lower division courses aim to give students who cannot go farther than the end of the second year, preparation for forest ranger service and training as assistants to logging engineers. On approval of the dean they will be allowed to substitute certain subjects of the junior year for some of the required freshman and sophomore work.

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
For. 1 (Dend.).....	5	Bot. 11.....	5	Bot. 12.....	5
For. 2 (Gen. For.)....	3	For. 3 (Gen. For.)....	3	Math. 56.....	3
Math. 54 (Foresters)...	3	Math. 55.....	3	For. 4 (Protection)...	3
English.....	3	C. E. 1.....	3	C. E. 56.....	5
For. 5 (Woodcraft).....	2	C. E. 55.....	2		
Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½	
Shop.....		Shop.....		Shop.....	

not required

SECOND YEAR

For. 53 (Construction)...	3	Chem. 2 (Gen. Chem.)...	5	For. 52 (Mensurat.)....	5
For. 57 (Silvics).....	3	For. 51 (Mensurt.)....	5	For. 58 (Silvicult.)....	5
Chem. 1 (Gen. Chem.)...	5	English.....	3	Geol. 3 (Forestry)....	5
Econ. 1 (Gen.).....	5	Elective.....	2		
Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½	

UPPER DIVISION

Beginning with the upper division, the student should carefully consider the electives with reference to the specialty he intends to make his life work.

THIRD YEAR

For. 101 (Technol.)....	5	For. 158 (Util.).....	5	For. 105 (Preserva.)....	5
Physics 1 (Engs.).....	5	Physics 2 (Engs.).....	5	Physics 3 (Engs.).....	5
M.E. 82 (Steam Engs.)...	3			For. 104 (Tim. Tests)...	5

Suggested Electives

Chem. 101 (Qual Anal.)	5	Chem. 111 (Quant An.)	5	Bot. 111 (Pathology)...	5
B.A. 11 (Accounting)...	5	B.A. 12 (Accounting)...	5	B.A. 56 (Bus. Law)....	3
C.E. 22 (Log. R.R.)....	5	B.A. 55 (Bus. Law)....	3		
B.A. 54 (Bus. Law)....	3	M.E. 83.....	3		

FOURTH YEAR

For. 151 (Management)...	5	For. 126 (Econ.).....	3	All elective.....	
For. 153 (Gen. Lumber)...	5	For. 152 (Management)...	5	Recreation.....	
		<i>Suggested Electives</i>			
For. 185 (Log. Eng.)....	4	For. 186 (Log. Eng.)....	4	For. 187 (Log. Eng.)...16	
For. 183 (Milling).....	5	For. 184 (Mfg. Prob.)...3		For. 188 (Adv. Prod.)...5	
		For. 110 (Admin.).....	3		

GRADUATE

The following subjects are primarily for graduate students. Seniors will be allowed to elect them only on recommendation of the dean and the instructor concerned. With the exception of the thesis none of the subjects, strictly speaking, is required, but the student will elect all those belonging to one specialty as determined on consultation with his class adviser. A sufficient number will have to be taken to fulfill the requirements for the master's degree.

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
For. 202 (Thesis).....	3	For. 202 (Thesis).....	3	For. 202 (Thesis).....	3
For. 201 (For. Geog.)...	3	For. 209 (Seminar)....	2	For. 223 (Adv. Manage.)	8
For. 208 (Seminar).....	2	Elective.....	10	For. 224 (Adv. Milling and Marketing).....	5
For. 221 (History).....	2				

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

PRACTICAL SHORT COURSES IN FORESTRY, LOGGING AND LUMBERING

GENERAL INFORMATION

Admission—Students are admitted to the short courses without examination. Applicants must be at least 20 years old and must show evidence of ability to carry the work with profit to themselves. If in doubt write. See special requirement under course in Logging.

Expenses—The total expenses for the twelve weeks, exclusive of fare to Seattle, need not exceed \$165.

Equipment Required—Since much of the field work is done in the woods each man should be equipped with suitable rough clothing and shoes. Men owning compasses or barometers are requested to bring them.

How to Enroll—On arrival at the University, students should report at the Office of the Dean, Room 209 Forest Products Laboratory, where they will be given all necessary directions.

As the time for the course is limited, all men should report for enrollment on January 2 or 3, so that all classes may begin promptly at 8 o'clock on the morning of January 4.

Attendance and Deportment—Students in these courses are expected to attend classes regularly and are required to observe the same rules that apply to the regular long course student in the University in all respects.

Examination and Certificate—Examinations will be given in the various subjects at the close of the course and a certificate showing the work satisfactorily covered is issued to each student.

Special Lectures and Demonstrations—Arrangements are under way for a number of special lectures and demonstrations by prominent men in forestry and lumbering.

Three distinct courses are offered:

I. Forestry: For men employed as forest rangers and guards who wish to increase their efficiency, for persons who wish to prepare for this work and for timberland owners who want practical knowledge of the care and management of their timber holdings. The course includes the following subjects: Forest Administration, Characteristics of Trees, Silviculture, Forest Measurements, Surveying, Logging, Forest Economics.

Note: Elective courses will be given only if sufficient number elect them.

II. Logging: For persons engaged in work with the donkey engine, scalers, cruisers, logging engineers, or timber workers who wish to prepare for advancement. It is not for men engaged in mill work. All persons wishing to enter this course must have had at least 3 months' experience in a logging camp and should bring a statement to this effect from a former employer or foreman at time of registration.

This course includes the following subjects: Characteristics of Trees, Surveying, Forest Measurements, Forest Economics, Logging, Electives from Forestry Course.

III. Lumber and Its Uses: Outlined especially for the use of persons engaged in office work at sawmills, lumber salesmen, architects, engineers, builders and building inspectors.

The course includes the following subjects: Characteristics of Trees, Properties of Wood, Wood Utilization, Forest Economics.

Other subjects to be elected from the course in forestry.

SCHOOL OF LAW

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California)	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern)	Professor of Law; DEAN
HARVEY LANTZ, A.M. (De Pauw), LL.B. (Kent)	Professor of Law
IVAN WILBUR GOODNER, LL.B., (Nebraska)	Professor of Law
CLARK PRESCOOTT BISSETT, A.B. (Hobart)	Professor of Law
LESLIE JAMES AYER, B.S., J.D. (Chicago)	Professor of Law
JOSEPH GRATTAN O'BRYAN, A.B. (Jesuit College)	Lecturer on Law
ARTHUR SYDNEY BEARDSLEY, LL.B. (Washington)	Law Librarian

ORGANIZATION AND EQUIPMENT

General Statement.—The School of Law was established in 1899. The case system is generally used and is designed to give an effective knowledge of legal principles and to develop the power of independent legal reasoning. A thorough legal training is offered to students of maturity and with previous preliminary education, and the courses offered are adapted to train and fit the student for practice in any state or jurisdiction. Special attention and emphasis is given to the law of the State of Washington, and in the illustration and development of legal principles. Cases and statutes are largely cited from the State of Washington and other Northwestern and Pacific states. The School of Law is a member of the Association of American Law Schools.

The Law Building.—The School of Law occupies the entire upper floor of Commerce Hall. The law library occupies the whole north end, and an idea of its roominess may be gained from its dimensions, which are, exclusive of stacks, forty by seventy feet. There is a large consultation room, twenty-five feet square, adjoining, three large lecture or recitation rooms, and a large room fitted and used exclusively for a trial court. Every convenience and improvement tending to add to the efficiency of the student, from an equipment standpoint, is present.

The Libraries.—The University law library contains about 25,000 volumes, including the reports of all the courts of last resort, the reported lower courts of several states and the Canadian and English courts. The latest revisions of all the state statutes and a large collection of the session laws of the various states, including a complete set of each of the Pacific Coast states, are useful features.

The University general library contains 121,957 volumes. It is especially strong in reference works.

The Seattle public library is open to the free use of students and is within easy distance of the campus by street car.

GENERAL INFORMATION

The four quarter system prevails in the School of Law. Each quarter is approximately twelve weeks in length. Credit is given usually on the basis of one credit representing a recitation or lecture one hour per week per quarter. The total hour values of courses prevailing in the schools of the Association of American Law Schools have been generally retained—e. g., courses formerly given two hours per week per semester under the quarter system are given three hours per week per quarter. This makes possible a better sequence of courses in the first year and permits students

to enter at the opening of any quarter. However, students beginning the study of law cannot be registered for the full fifteen-hour course except when entering at the first, or autumn quarter.

Fees.—A general tuition fee of fifteen dollars (\$15) a quarter for persons who have been domiciled in the state of Washington or territory of Alaska, for at least one year just prior to date of registration, and of fifty dollars (\$50) per quarter for all others, is charged in the Law School, payable at the beginning of each quarter. A law library fee of ten dollars (\$10) per quarter is also charged all law students, payable at the beginning of each quarter. A diploma fee of five dollars (\$5) is charged all students to whom diplomas are issued.

For information on other general University fees and expenses applicable to all students, see General Information, pages 50-54.

Admission to the Bar.—The University of Washington School of Law is by law the standard of approved law schools for admission to the bar of this state. Students intending to practice in the state of Washington should consult the dean of the Law School on entering the school, and register in accordance with the rules of the State Board of Law Examiners.

ADMISSION AND GRADUATION

To be admitted to regular standing in the Law School students must present acceptable credits or pass examinations entitling them to admission to this University and in addition thereto present a junior certificate from the College of Liberal Arts or the College of Science of this University, or present acceptable credits or pass examinations equivalent to the junior certificates. The entrance requirements are stated fully in the General Information, pages 42-49.

Advanced Standing.—If in addition to satisfying the entrance requirements for regular standing in the Law School, the student has earned credits in another law school of satisfactory standing, by regular attendance for at least one academic year of not less than eight months, he will ordinarily receive credit for such work, subject to the following restrictions: The work must equal in amount and character that required by this Law School. Not more than two years' credit will be allowed for such work. (No advanced credit for law work done elsewhere will be allowed except in accordance with the regulations of the Association of American Law Schools.) The right is reserved to refuse advanced credit in law in whole or in part, save upon examination. Candidates for a degree, with advanced standing, must spend at least one full college year in the Law School.

Special Students.—No person will be admitted as a special student in law, unless he is twenty-one years of age and his general education is such as to entitle him to take the state bar examination.

Special students who comply with these requirements and with the regulations for admission of special students (see General Information, page 48) will be admitted to such work in law as their previous preparation enables them to carry successfully, and on satisfactory completion of sufficient law work to entitle them to take the state bar examination, will be given a certificate or affidavit entitling them to apply for examination. Students who intend to follow this method are required by law to file notice of their intention with the clerk of the Supreme Court.

Special Students Becoming Candidates for Degree.—A special student may become a candidate for a degree by complying with all the entrance requirements as above set forth in reference to regular students. If a

special student intends to become a candidate for a degree by clearing up his entrance requirements during his law studies, he must notify the dean of the Law School on registration. Such a student will be permitted to carry a limited amount of work in the College of Liberal Arts or the College of Science to enable him to clear up his entrance requirements in law.

Combined Curriculum in Arts and Law.—This combined course allows the student with a good record to complete the requirements for the degrees of bachelor of arts and bachelor of laws in six years. It is open only to students who have maintained a uniformly good record for scholarship during the first three years of Liberal Arts.

The student is enrolled in the College of Liberal Arts during the first three years. If at the end of three years he has a uniformly good record for scholarship and has earned 135 or more credits, including all the re-quired work, he may in the fourth year register in the Law School for the first year's work in law and must earn in the College of Liberal Arts additional credits sufficient to make his total of arts and science credits amount to 144, and earn in the Law School at least 36 credits in the first year law work to apply on his bachelor of arts degree, thus making his 180 credits required for the degree of bachelor of arts. The degree of bachelor of arts may be granted on the completion of the fourth year.

The last two years of this combined course are devoted to completing the rest of the work in the Law School.

Students are advised to complete their full 144 credits in Liberal Arts by the end of the third year, so they can enter the law work clear in the fourth year.

Students from other schools entering this University with advanced standing may take advantage of this combined course, provided they are registered in the College of Liberal Arts for at least one full year's work and earn at least 45 credits in the University before entering the School of Law.

This privilege will not be extended to graduates of normal schools attempting to graduate in two years nor to undergraduates of other colleges who enter this University with the rank of senior.

Law Library Study.—All students admitted to this Law School for the first time in the school year of 1923-1924 must, in addition to the courses stated hereafter, complete a course in law library study to be outlined at the beginning of the school year of 1923-1924.

Examination.—Members of each class are examined daily throughout the year in their studies, and may be subjected to written examinations at any time in the discretion of the faculty without notice. At the end of each quarter the members of each class are subject to written examination on the courses during the year, and their promotion is dependent on successfully passing such examination.

To receive the degree of bachelor of laws it is necessary to pass satisfactory examinations in the entire course of three years. Students who pass these examinations with distinguished excellence will receive the degree of bachelor of laws *cum laude*.

Thesis.—It is the desire of the faculty to encourage original investigation and research by students. Each candidate for a degree is required to prepare and deposit with the dean of the Law School, before the beginning of the spring vacation of his senior year, a thesis not less than thirty folios in length, on some legal topic selected by the student and approved by the faculty. The student will be examined by the faculty on this the-

sis. It must be printed or typewritten, and is to be kept permanently in the library of the Law School.

Degrees.—The degree of bachelor of laws (LL.B.) will be conferred on all students who comply with the entrance requirements for regular student stated hereinbefore, remain in residence in the Law School for three school years, successfully complete all the law work in the Law School, aggregating 135 credits, and comply with all the rules and regulations of the faculty and board of regents of this University.

Students admitted to advanced standing based on credits earned at another law school may count that work toward graduation, subject to the restrictions heretofore stated.

The Jaggard Prize.—Miss Anna Wright Jaggard, daughter of the late Edwin James Jaggard, LL.D., justice of the supreme court of Minnesota, offers an annual cash prize of \$50 for the best thesis submitted by members of the senior class, candidates for the degree of bachelor of laws, on a subject in the courses of history of the law or jurisprudence.

Summer Session of the Law School.—Courses are offered each summer by the Law School for both beginning and advanced students. Different courses are offered successive summers. This work counts toward a degree as a part of the regular instruction of the Law School. By increasing the number of periods per week, the equivalent of a quarter's work in the regular session may be completed in each of the offered courses.

Instruction in Other Departments.—Students in the Law School may pursue studies, for which they are prepared, in other departments of the University without charge other than the prescribed fee for excess hours, except that in laboratory courses the usual laboratory deposits will be required.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

COLLEGE OF MINES

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....PRESIDENT
 JOHN THOMAS CONDON, LL.M. (Northwestern).....DEAN OF FACULTIES
 MILNOR ROBERTS, A.B. (Stanford)...Professor of Mining Engineering and Metallurgy; DEAN
 JOSEPH DANIELS, S.B. (Massachusetts Institute of Technology). M.S. (Lehigh)...Professor
 of Mining Engineering and Metallurgy.
 CLARENCE RAYMOND COREY, B.M. (Montana State School of Mines), A.M. (Columbia),
 Assistant Professor of Mining Engineering and Metallurgy.
 HEWITT WILSON, Cer.E. (Ohio State University).....Assistant Professor of Ceramics
 HARVEY L. GLENN, B.S. (Iowa State College).....Lecturer on Assaying of Bullion
 FREDERICK POWELL, E.M. (Columbia).....Lecturer on Gold Dredging
 JOHN G. SCHONING.....Foreman Miner in charge of Mine Rescue Training, U. S. Bureau
 of Mines, Mine Safety Station.
 GEORGE P. MCCORMICK.....Assistant in Metallurgy
 LYMAN M. KNUFF.....Assistant in Ore Dressing
 GEORGE MEEK.....Assistant in Ceramics

JOHN THOMAS CONDON, LL.M. (Northwestern).....Professor of Law
 HENRY KREITZER BENSON, Ph.D. (Columbia).....Professor of Chemical Engineering
 TREVOR KINCAID, A.M. (Washington).....Professor of Zoology
 FREDERICK ARTHUR OSBORN, Ph.D. (Michigan).....Professor of Physics
 ROBERT EDOUARD MORITZ, Ph.D. (Nebraska), Ph.D. (Strassburg).Professor of Mathematics
 CARL EDWARD MAGNUSSON, E.E. (Minnesota), Ph.D. (Wisconsin).....Professor of
 Electrical Engineering and Dean of the College of Engineering.
 EVERETT OWEN EASTWOOD, C.E., A.M. (Virginia), S.B. (Massachusetts Institute of
 Technology).....Professor of Mechanical Engineering
 DAVID CONNOLLY HALL, Sc.M., M.D. (Chicago).....Professor of Hygiene
 CHARLES CHURCH MORE, M.S., C.E. (Lafayette), M.C.E. (Cornell).....Professor of
 Civil Engineering.
 WILLIAM FRANKLIN ALLISON, C.E. (Cornell).....Professor of Municipal and Highway
 Engineering.
 LOREN DOUGLAS MILLMAN, A.B. (Michigan).....Assistant Professor of English
 CHARLES WILLIAM HARRIS, C.E. (Cornell).....Associate Professor of Civil Engineering
 GEORGE SAMUEL WILSON, B.S. (Nebraska)....Associate Professor of Mechanical Engineering
 EDGAR ALLEN LOEW, B.S., E.E. (Wisconsin)....Associate Professor of Electrical Engineering
 HENRY LOUIS BRAKEL, Ph.D. (Cornell).....Associate Professor of Engineering Physics
 *CHARLES EDWIN WEAVER, Ph.D. (California).....Associate Professor of Geology
 ALLEN FULLER CARPENTER, Ph.D. (Chicago).....Associate Professor of Mathematics
 HERMAN VANCE TARTAR, Ph.D. (Chicago).....Associate Professor of Chemistry
 GEORGE IRVING GAVETT, B.S., C.E. (Michigan).....Assistant Professor of Mathematics
 GEORGE E. GOODSPEED, S.B. (Massachusetts Institute of Technology).....Assistant
 Professor of Geology.
 GILBERT SIMON SCHALLER, B.S. (Illinois).....Instructor in Shop Metal Work

ADVISORY BOARD COLLEGE OF MINES

UNIVERSITY OF WASHINGTON

ROY H. CLARKE.....Mining Engineer,
 Peyton Building, Spokane.
 JOHN ERIKSON.....Mine Operator
 Erikson Building, Seattle.
 J. T. HEFFERNAN.....President of the Heffernan Engine Works, Mine Operator
 108 Railroad Avenue South, Seattle.
 CHARLES HUSSEY.....General Manager of Estate of John A. Finch, Mine Operator
 Empire State Building, Spokane.
 W. R. RUST....Founder of the Tacoma Smelter, President of Tacoma Exploration Company
 Box 1454, Tacoma.
 NATHANIEL D. MOORE.....General Manager of Pacific Coast Coal Company
 Seattle.

SCOPE AND FACILITIES

Degrees.—The College of Mines offers specialized training in mining engineering, metallurgy, and ceramics. The four-year curricula lead to degrees as follows:

- I. Bachelor of science in mining engineering, B.S. (Min. E.)
- II. Bachelor of science in geology and mining, B.S. (Geol. and Min.)
- III. Bachelor of science in metallurgical engineering, B.S. (Met. E.)
- IV. Bachelor of science in coal mining engineering, B.S. (Coal Min. E.)
- V. Bachelor of science in ceramic engineering, B.S. (Cer. E.)

The degree of engineer of mines (E.M.) is given to graduates in mining engineering who have practiced their profession for at least three years and who present a satisfactory thesis. Graduates in metallurgy may receive the degree of metallurgical engineer (Met.E.) under similar conditions, and the appropriate advanced degrees are also open to graduates of the other curricula.

Mining and Metallurgical Industries Available for Study.—Excellent opportunities for becoming familiar with mining and metallurgical operations are open to students in the College of Mines. Mining machinery of the best type is in operation within easy reach of the University. Much of the heavy mining machinery used in the neighboring states and Alaska is built in the city of Seattle, while patented machines, such as drills and concentrating tables of all makes, are kept in stock and as working exhibits by the firms that supply the North Pacific coast regions. More than 40 eastern firms dealing in mining equipment make their Seattle branches the distributing center for the Pacific Northwest, British Columbia and Alaska. Methods important to the mining engineer are the operations of the steam shovels, which are now used largely in iron, copper and gold mining. The engineers in charge of these plants have given the mining students every opportunity to become familiar with the methods of planning and carrying on the work, and the same statement applies to the mine operators throughout the state.

A partial list of the other available works of interest includes coal mines and coke ovens, with the largest production west of the Rocky mountains; metal mines of gold, silver, copper, arsenic, antimony, iron, etc.; cement plants, several stone quarries and dressing works; clay mines, clay and pottery works; gravel and sand pits with large production and approved methods; a region of varied geology with many economic minerals; the Tacoma smelters and refineries; the U.S. assay office; the West Seattle steel plant of the Pacific Coast Steel Co., and several plants engaged in electro-metallurgical work.

LABORATORIES

For description of mining, metallurgical and ceramics laboratories, see page 35.

MINING, METALLURGICAL AND CERAMIC RESEARCH

The purpose of this department is to stimulate and encourage development in the mining, metallurgical and ceramic industries of Washington, the Pacific Northwest and Alaska by research in the special problems presented, and to solve the problems through the efforts of fellowship holders and others studying in the department.

Graduates from suitable technical courses at institutions of recognized standing, or men who present evidence of technical training which has fitted them to undertake investigations, are eligible to enroll in mining and metallurgical research. The degree of master of science may be granted students holding suitable bachelor of science degrees who complete investigative work in compliance with the University requirements for

the master's degree. Although as much latitude as possible will be allowed in the choice of subjects for research, the general topics will be those of special importance to this region.

Research Fellowships.—In connection with the department, four research fellowships of \$810 annual value have been established. These fellowships are open to qualified graduates of scientific or technical courses in institutions of recognized standing. Each applicant should send a copy of his record from the registrar's office of the college where he has been, or will be, graduated, and the names and addresses of at least three references who know his character, training and ability. Application for these fellowships are due not later than June 1, and should be addressed to the Dean, College of Mines, Seattle, Washington.

Appointees to the fellowships report for duty on July 1, and are required to be on duty the entire year, except that in case of reappointment for a second year, the fellowship holder is given a vacation from June 15 to July 1.

Fellowship holders are required to register as graduate students in the University of Washington and to become candidates for the degree of master of science in mining engineering, metallurgical engineering, or ceramic engineering, unless an equivalent degree has previously been earned.

Arthur A. Denny Fellowship.—A fellowship of \$500 annual value is open to students in the College of Mines who are residents of the state of Washington. This fellowship is awarded for scholastic excellence and general merit, but only to those students who need financial assistance. Applications must be made to the Dean of the College before March 15 preceding the academic year for which the fellowship is to be granted. The purpose of the fellowship is to encourage graduate work in the College.

Investigations of Problems.—Under certain conditions, the University will permit mining and metallurgical companies who have special problems for solution, to detail a representative to work on such problems, or to meet the expense of engaging a man to do so. Experiments which can be carried on as readily in commercial laboratories and which do not require direction from the Bureau's experts are not undertaken. The research work shall be under the direction of the department, and complete records of all the data obtained in the investigation of the problems shall be filed with the department, which shall have the right to publish this information for the benefit of the mining and metallurgical industry.

MINING SOCIETY

The Mining Society, affiliated with the American Institute of Mining and Metallurgical Engineers, has a membership composed of all students in the College. At the monthly meetings of the society addresses are made by prominent mining engineers, and papers descriptive of their summer work are presented by the student members.

UNITED STATES BUREAU OF MINES NORTHWEST EXPERIMENT STATION

The United States Bureau of Mines maintains at the College of Mines, a mining and metallurgical experiment station for the Pacific Northwest and the coast regions of Alaska. The headquarters of the station, from which all operations in this territory are directed, are in the Bureau of Mines Building, between Mines and Bagley Halls. At present the principal investigations being conducted by the station are in electro-metallurgy, in the treatment and uses of coal, and in ceramics. Members of the experiment station staff give occasional lectures to the students of the University on subjects dealing with their special lines of work.

Mine Safety Station.—The Mine Safety Station occupies a separate building. Various types of oxygen rescue and resuscitation apparatus are kept on hand for practice and use in mine rescue work. The purpose of the station is to train miners in the use of oxygen helmets, which are used in cases of mine fires and explosions in both coal and metal mines. From ten days' to two weeks' time is required for the course of training. The applicant is taught the construction of the apparatus and is required to wear it for four hours each day, in two periods of two hours each. The practice is carried on in a room filled with gas which cannot be breathed without immediate danger, and the work performed is the same as that which would be required in actual mining operations or rescue work. The smokeroom represents a portion of a mine, and is equipped with mine car, track, overcast, timbers and brick. First-aid instruction is also given. Applicants who have completed the course of training receive a certificate from the United States Bureau of Mines.

A one-ton, 45-horsepower automobile truck, equipped with rescue apparatus ready for emergency calls, forms part of the equipment of the rescue station.

Instruction for Coal Mining Men.—Miners taking the rescue training also receive instruction in the College of Mines on the subjects of mine gases, explosions and the origin and distribution of Pacific Coast and Alaska coals. Laboratory experiments are carried on to show the methods of analyzing coals and determining the uses to which they may be put. The methods of testing for permissible explosives at the Pittsburgh station and the safe methods of charging, tamping, and firing are explained. Coal men interested in the washing of coals are given full practice with the several types of apparatus used for this purpose.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

In addition to the three units of English and the two units of mathematics required for admission to all colleges of the University all students expecting to enter the College of Mines should offer the following subjects for entrance:

Advanced algebra	½ unit
Solid geometry	½ unit
Physics	1 unit
Manual Training, shopwork.....	½ unit

If the student has not included these subjects in his high school elections, it will be necessary for him to include them among his elections in college.

CURRICULA OF THE COLLEGE OF MINES

MINING ENGINEERING (OPTION I)

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Mathematics 51	4	Mathematics 52	4	Mathematics 53	4
Civil Engineering 1.....	3	Civil Engineering 2.....	3	Civil Engineering 13.....	3
Civil Engineering 11.....	3	Civil Engineering 12.....	3	Civil Engineering 21.....	3
Chemistry 1 or 21.....	5	Chemistry 2 or 22.....	5	Chemistry 3 or 23.....	5
Min. Sci. or Phys. Ed... 1½		Min. Sci. or Phys. Ed... 1½		Min. Sci. or Phys. Ed... 1½	

SECOND YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Mathematics 61	3	Mathematics 62	3	English 4	3
Physics 97	5	Physics 98	5	Physics 99	5
Geology 1	5	Geology 21	5	Geology 120	5
Mining 51	3	Civil Engineering 27	3	Chemistry 111	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

‡Mining Practice in Summer Vacation.

THIRD YEAR

Civil Engineering 131... 3	Civil Engineering 132... 3	Geology 122	2
Geology 123	Electrical Eng. 101-102. 6	Electrical Eng. 121-122. 6	
Mining 101	Geology 124	Metallurgy 102	5
Metallurgy 101	Metallurgy 153	Mining 106	1
Mechanical Eng. 54..... 1			

FOURTH YEAR

Mining 151	3	Mining 192	2	Mining 107	1
Mining 191	2	Mining 193	3	Mining 152	5
Metallurgy 155	3	Geology 127	5	Mining 193	1
Metallurgy 162	2	Mining 108	1	Mining 182	3
Electives	5	Electives	4	Electives	6

GEOLOGY AND MINING (OPTION II)

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Mathematics 51	4	Mathematics 52	4	Mathematics 53	4
Civil Engineering 1..... 3		Civil Engineering 2..... 3		Civil Engineering 13..... 3	
Civil Engineering 11..... 3		Civil Engineering 12..... 3		Civil Engineering 21..... 3	
Chemistry 1 or 21..... 5		Chemistry 2 or 22..... 5		Chemistry 3 or 23..... 5	
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

SECOND YEAR

Mathematics 61	3	Mathematics 62	3	Geology 4	3
Physics 97	5	Physics 98	5	Physics 99	5
Geology 1	5	Geology 21	5	Geology 120	3
Mining 51	3	Civil Engineering 27..... 3		Chemistry 111	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

THIRD YEAR

Civil Engineering 131... 3	Civil Engineering 132... 3	Geology 122	2
Geology 123	Geology 124	Geology 125	2
Mining 101	Metallurgy 103	Metallurgy 102	5
Metallurgy 101	Metallurgy 153	Mining 106	1
Mechanical Eng. 54..... 1	Electives	English 4	3

‡Mining Practice in Summer Vacation.

FOURTH YEAR

Mining 151	3	Mining 192	2	Mining 107	1
Mining 191	2	Mining 193	3	Mining 152	5
Metallurgy 162	2	Geology 127	5	Mining 193	1
Geology 126	3	Mining 108	1	Mining 183	5
Electives	5	Electives	4	Electives	4

METALLURGICAL ENGINEERING (OPTION III)

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Mathematics 51	4	Mathematics 52	4	Mathematics 53	4
Civil Engineering 1..... 3		Civil Engineering 2..... 3		Civil Engineering 13..... 3	
Civil Engineering 11..... 3		Civil Engineering 12..... 3		Civil Engineering 21..... 3	
Chemistry 1 or 21..... 5		Chemistry 2 or 22..... 5		Chemistry 3 or 23..... 5	
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

‡Practice in mining, metallurgy, geology or ceramics, accompanied by a report on the work performed is required of all students during a summer vacation following the sophomore or junior year.

SECOND YEAR

Autumn Quarter		Credits	Winter Quarter		Credits	Spring Quarter		Credits
Mathematics 61	.....	3	Mathematics 62	.....	3	English 4	.....	3
Physics 97	.....	5	Physics 98	.....	5	Physics 99	.....	5
Geology 1	.....	5	Geology 21	.....	5	Geology 120	.....	3
Mining 51	.....	3	Civil Engineering 27	.....	3	Chemistry 111	.....	5
Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2	

THIRD YEAR

Civil Engineering 181	.....	3	Civil Engineering 182	.....	3	Electrical Eng. 121-122	.....	6
Mining 101	.....	3	Electrical Eng. 101-102	.....	6	Metallurgy 102	.....	5
Metallurgy 101	.....	5	Metallurgy 103	.....	3	Mining 106	.....	1
Mechanical Eng. 54	.....	1	Metallurgy 153	.....	3	Electives	.....	2
Electives	.....	3						

‡Mining Practice in Summer Vacation.

FOURTH YEAR

Mining 151	.....	3	Metallurgy 152	.....	2	Mining 107	.....	1
Metallurgy 101	.....	2	Metallurgy 163	.....	2	Mining 152	.....	5
Metallurgy 104	.....	5	Metallurgy 165	.....	2	Metallurgy 108	.....	1
Metallurgy 155	.....	3	Geology 127	.....	5	Metallurgy 168	.....	3
Metallurgy 162	.....	2	Mining 103	.....	1	Electives	.....	6
			Electives	.....	3			

COAL MINING ENGINEERING (OPTION IV)

FIRST YEAR

Autumn Quarter		Credits	Winter Quarter		Credits	Spring Quarter		Credits
Mathematics 51	.....	4	Mathematics 52	.....	4	Mathematics 53	.....	4
Civil Engineering 1	.....	3	Civil Engineering 2	.....	3	Civil Engineering 13	.....	3
Civil Engineering 11	.....	3	Civil Engineering 12	.....	3	Civil Engineering 21	.....	3
Chemistry 1 or 21	.....	5	Chemistry 2 or 22	.....	5	Chemistry 3 or 23	.....	5
Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2	

SECOND YEAR

Mathematics 61	.....	3	Mathematics 62	.....	3	Geology 4	.....	3
Physics 97	.....	5	Physics 98	.....	5	Physics 99	.....	5
Geology 1	.....	5	Geology 21	.....	5	Geology 120	.....	3
Mining 51	.....	3	Civil Engineering 27	.....	3	Chemistry 111	.....	5
Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2	

THIRD YEAR

Civil Engineering 181	.....	3	Civil Engineering 182	.....	3	Electrical Eng. 121-122	.....	6
Mining 101	.....	3	Electrical Eng. 101-102	.....	6	Metallurgy 102	.....	5
Mechanical Eng. 81	.....	3	Mining 122	.....	3	English 4	.....	3
Mechanical Eng. 82	.....	3	Metallurgy 103	.....	3	Mining 106	.....	1
Mechanical Eng. 83	.....	3						

‡Mining Practice in Summer Vacation.

FOURTH YEAR

Mining 151	.....	3	Mining 192	.....	2	Mining 107	.....	1
Mining 191	.....	2	Mining 171	.....	3	Mining 198	.....	1
Metallurgy 155	.....	3	Mining 176	.....	5	Mining 182	.....	3
Mining 170	.....	3	Mining 103	.....	1	Mining 178	.....	2
Mechanical Eng. 54	.....	1	Electives	.....	4	Electives	.....	9
Electives	.....	3						

CERAMIC ENGINEERING (OPTION V)

FIRST YEAR

Autumn Quarter		Credits	Winter Quarter		Credits	Spring Quarter		Credits
Mathematics 51	.....	4	Mathematics 52	.....	4	Mathematics 53	.....	4
Civil Engineering 1	.....	3	Civil Engineering 2	.....	3	Civil Engineering 13	.....	3
Civil Engineering 11	.....	3	Civil Engineering 12	.....	3	Civil Engineering 21	.....	3
Chemistry 1 or 21	.....	5	Chemistry 2 or 22	.....	5	Chemistry 3 or 23	.....	5
Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2		Mil. Sci. or Phys. Ed.	1 1/2	

‡Practice in mining, metallurgy, geology or ceramics, accompanied by a report on the work performed is required of all students during a summer vacation following the sophomore or junior year.

SECOND YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Mathematics 61	3	Mathematics 62	3	Ceramics 90	3
Physics 97	5	Physics 98	5	Physics 99	5
Geology 1	5	Geology 21	5	Geology 120	3
Mining 51	3	Civil Engineering 27	3	Chemistry 111	5
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½	

THIRD YEAR

Civil Engineering 131... 3	Civil Engineering 132... 3	English 4	3
Mining 101	Metallurgy 153	Metallurgy 102	5
Chemistry 181	Chemistry 182	Ceramics 102	3
Ceramics 100	Ceramics 101	Ceramics 110	2
Ceramics 104	Ceramics 105	Mining 106	1

FOURTH YEAR

Ceramics 121	5	Ceramics 122	5	Mining 107	1
Ceramics 191	3	Ceramics 192	3	Ceramics 123	5
Electives	7	Mining 108	1	Ceramics 193	2
		Electives	6	Electives	8

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

WINTER SESSION FOR MINING MEN

Instruction in the twenty-seventh annual winter session for mining men will open on January 4, 1924, and will continue until March 21. During this period each year twelve of the instructors in mining engineering offer a course for the benefit of persons interested in prospecting, mining, milling, assaying or smelting. A five-day excursion to a mining district is offered at the close of the session. Admission to the class is without examination. No previous preparation, training, or mining experience is necessary to enter the course, other than ability to read and write English. Many practical men with an interest in some branch of mining but with little education have obtained satisfactory results from the course; others with a college education and mining experience have gained much up-to-date training and information. The past experience and future aims of each student are taken into consideration, and the character of his work arranged accordingly. Prospectors and mining men may bring in their own ores and minerals for study, for assay, or for concentration tests by ordinary gravity methods or by flotation.

Instruction is given by lectures, laboratory exercises, and visits to mines and plants in operation. Each year a group of mining men is engaged to give special lectures during the short session. These men represent the fields of coal, quartz and placer mining, dredging, milling and smelting.

Four general groups of studies are offered: (1) quartz mining; (2) placer mining; (3) coal mining; (4) ceramics.

1. *Quartz Mining.*—For men interested in quartz or lode mining, the course outlined consists of geology, mineralogy, mining, milling, field trips, mining law, surveying, chemistry and fire assaying. Optional subjects are forge and foundry, mine-timber framing, and mine rescue and first-aid training.

2. *Placer Mining.*—The placer mining group embraces surveying, hydraulic mining, placer mining, geology, mineralogy, mining, milling, mining law, and forge and foundry.

3. *Coal Mining*.—For coal miners the courses consist of coal analysis, coal washing, gas and lamp testing, mine rescue and first-aid training, chemistry, geology, mineralogy and surveying.

4. *Ceramics*.—For claymen. Studies in geology, mineralogy, mining, chemistry, and clay products. The regular schedule includes the following subjects: Geol. S.C. 1, S.C. 2, Min. S.C. 1, Chem. S.C. 4, and Cer. S.C. 1, described on the following pages. Special ceramic work may be substituted for these courses.

GENERAL INFORMATION

Students need not enroll for all the subjects listed in a group; changes in the choice of subjects in each group may be made, depending on individual circumstances. For students who return a second year, special courses are arranged in continuation of their previous work.

A tuition fee of \$20 is required of all students registering in the winter mining session, and each student makes a deposit for laboratory supplies actually used and also buys his own books. The deposits in the various courses are stated under the description of the subjects. Books and supplies cost on the average about \$10. The total cost of the full course for three months is less than \$40 in the placer group and \$60 in the quartz mining studies. All deposits are made at the beginning of the course.

Rooms and board may be obtained in the university district at reasonable costs. The University operates a cafeteria. A list of boarding and rooming-houses is kept on file at Mines hall for the benefit of prospective students. The use of library, gymnasium, showers and the privileges of attending lectures, concerts and assemblies, are open to all winter session students.

Students who satisfactorily complete a course of study are given upon request a certificate stating the amount and character of the work done.

For more detailed information apply to the dean of the College of Mines.

COLLEGE OF PHARMACY

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....	PRESIDENT
JOHN THOMAS CONDON, LL.M. (Northwestern).....	DEAN OF FACULTIES
CHARLES WILLIS JOHNSON, Ph.C., Ph.D. (Michigan).....	Professor of Pharmaceutical Chemistry; DEAN AND STATE CHEMIST.
ELDIN VERNB LYNN, A.B. (Washington), Ph.D. (Wisconsin).....	Associate Professor of Pharmacology and Chemistry.
HENRY AUGUST LANGENHAM, Ph.G. (Illinois), Ph.D. (Wisconsin).....	Associate Professor of Pharmacy.
FOREST JACKSON GOODRICH, Ph.C., M.S. (Washington).....	Instructor in Materia Medica
OMEGA HILTON, Ph.C., M.S. (Washington).....	Instructor in Pharmacy
CORNELIUS OSSEWARD, Ph.G. (New York College of Pharmacy, Dept. of Columbia University), Ph.C. (Northwestern University).....	Lecturer on Pharmacy
JEAN ROBIN WILKES, Ph.C., B.S. (Washington).....	Assistant State Chemist
FRANK A. LEE.....	Assistant State Chemist
RUTH MAGDALENE DAVIS, Ph.C., B.S. (Washington).....	Arthur A. Denny Fellowship 1922-23
LUDWIG METZGER.....	In Charge of Garden of Medicinal Plants
FREDERICK MORGAN PADELFORD, Ph.D. (Yale).....	Professor of English and Dean of the Graduate School.
FREDERICK ARTHUR OSBORN, Ph.D. (Michigan).....	Professor of Physics
PETERB JOSEPH FRKIN, Ph.D. (Johns Hopkins).....	Professor of Romance Languages
THEODORE CHRISTIAN FRYE, Ph.D. (Chicago).....	Professor of Botany
ROBERT EDOUARD MORITZ, Ph.D. (Strassburg).....	Professor of Mathematics
HENRY K. BENSON, Ph.D. (Columbia).....	Professor of Chemical Engineering
JOHN WEINZEL, Dr.P.H. (Harvard).....	Professor of Bacteriology
LESLIE J. AYER, J.D. (Chicago).....	Professor of Law
HOWARD T. LEWIS, A.M. (Wisconsin).....	Professor of Economics and Dean of the College of Business Administration.
GEORGE BURTON RIGG, Ph.D. (Chicago).....	Associate Professor of Botany
ERNEST OTTO ECKELMAN, Ph.D. (Heidelberg).....	Assistant Professor of German
ELI VICTOR SMITH, Ph.D. (Northwestern).....	Assistant Professor of Zoology

THE COLLEGE AND ITS EQUIPMENT

The College of Pharmacy was organized in 1894 to provide opportunity for young men and women to become well trained practical pharmacists. The work of the original two-year course has been extended to three-, four- and five-year courses. In the three-year course complete training is offered in technical and commercial pharmacy; in the four-year course an opportunity for training in more advanced scientific pharmacy with a liberal training in other sciences and in languages. The five-year or graduate course offers opportunity for research in one of the most fertile fields of modern science.

REGISTRATION AS A PHARMACIST IN THE STATE OF WASHINGTON

1. An applicant for registration must be a graduate of a College or Pharmacy recognized by the Department of Licenses.
2. A graduate of the three-, four- or five-year course of the *University of Washington College of Pharmacy* has the right to reg-

ister as a pharmacist without further examination and without the requirement of practical experience in a pharmacy.

3. A graduate of *any two-year course* of a recognized College of Pharmacy must have two years of practical experience and pass the examination under the direction of the State Department of Licenses as listed in paragraph five.
4. A graduate of a recognized college of pharmacy located outside of the State of Washington may become a registered pharmacist as follows:
 - (a) A graduate of a two-year course must have two years of practical experience and pass an examination as listed under paragraph five.
 - (b) A graduate of a three-year course must have one year of practical experience and pass an examination as listed under paragraph five.
 - (c) A graduate of a four-year course is not required to have practical experience but must pass an examination as listed under paragraph five.
5. The examination embraces the following subjects: pharmacy, materia medica, chemistry, toxicology and posology, compounding of prescriptions, identification of drugs, and laws relating to the practice of pharmacy in Washington. The grade must not be less than 60% in any one subject and a general average of 75%.
6. Persons who register by examination in the State of Washington can become registered in forty-three other states of the Union without further examination. Graduates of the *University of Washington College of Pharmacy* are urged to register by passing the examination as listed in paragraph five so they may have the privilege of reciprocal registration in other states without examination.
7. A registered pharmacist must be over twenty-one years of age. Persons under twenty-one shall be classified as assistant registered pharmacists until the age of majority is attained.
8. Persons registered by examination in other states may register as a pharmacist in Washington without examination other than in the subject of laws relating to the practice of pharmacy in the state of Washington, providing such persons are graduates of recognized colleges of pharmacy.

Graduates of the University of Washington College of Pharmacy are registered *without examination* upon payment of a fee of \$8. Graduates who have not had the required amount of practical experience are registered as assistant pharmacists and upon completing the required amount of practical experience obtain full registration as pharmacists.

Higher Standards in Pharmacy.—The minimum course of study in the College of Pharmacy is *Three Years*. The aim of this course is to give thorough scientific training for retail pharmacists; if the student desires, he may elect certain studies in the College of Business Administration that will better fit him for the business side of retail pharmacy.

Retail pharmacy is recognized both as a profession and a business. The College of Pharmacy desires to meet these two conditions as far as possible. Special attention is given to a thorough scientific training for the compounding and dispensing of drugs and medicines. Such business training will be included as time will permit in the three-year course. Students desiring further business training can complete, in one year more, the four-year combined scientific and business course. In this four-year course the student receives training in economics, psychology, business law, account-

ister as a pharmacist without further examination and without the requirement of practical experience in a pharmacy.

3. A graduate of *any two-year course* of a recognized College of Pharmacy must have two years of practical experience and pass the examination under the direction of the State Department of Licenses as listed in paragraph five.
4. A graduate of a recognized college of pharmacy located outside of the State of Washington may become a registered pharmacist as follows:
 - (a) A graduate of a two-year course must have two years of practical experience and pass an examination as listed under paragraph five.
 - (b) A graduate of a three-year course must have one year of practical experience and pass an examination as listed under paragraph five.
 - (c) A graduate of a four-year course is not required to have practical experience but must pass an examination as listed under paragraph five.
5. The examination embraces the following subjects: pharmacy, materia medica, chemistry, toxicology and posology, compounding of prescriptions, identification of drugs, and laws relating to the practice of pharmacy in Washington. The grade must not be less than 60% in any one subject and a general average of 75%.
6. Persons who register by examination in the State of Washington can become registered in forty-three other states of the Union without further examination. Graduates of the *University of Washington College of Pharmacy* are urged to register by passing the examination as listed in paragraph five so they may have the privilege of reciprocal registration in other states without examination.
7. A registered pharmacist must be over twenty-one years of age. Persons under twenty-one shall be classified as assistant registered pharmacists until the age of majority is attained.
8. Persons registered by examination in other states may register as a pharmacist in Washington without examination other than in the subject of laws relating to the practice of pharmacy in the state of Washington, providing such persons are graduates of recognized colleges of pharmacy.

Graduates of the University of Washington College of Pharmacy are registered *without examination* upon payment of a fee of \$8. Graduates who have not had the required amount of practical experience are registered as assistant pharmacists and upon completing the required amount of practical experience obtain full registration as pharmacists.

Higher Standards in Pharmacy.—The minimum course of study in the College of Pharmacy is *Three Years*. The aim of this course is to give thorough scientific training for retail pharmacists; if the student desires, he may elect certain studies in the College of Business Administration that will better fit him for the business side of retail pharmacy.

Retail pharmacy is recognized both as a profession and a business. The College of Pharmacy desires to meet these two conditions as far as possible. Special attention is given to a thorough scientific training for the compounding and dispensing of drugs and medicines. Such business training will be included as time will permit in the three-year course. Students desiring further business training can complete, in one year more, the four-year combined scientific and business course. In this four-year course the student receives training in economics, psychology, business law, account-

ing, advertising, salesmanship and business management, useful in the every day life of the retail pharmacy.

Students desiring more extensive training in scientific pharmacy may complete the three-year course by including advanced work in prescriptions, manufacturing pharmacy, toxicology, physiological chemistry and bacteriology. Graduates of this course are trained for positions in strictly prescription stores and for work in clinical diagnosis.

Graduates of the four-year scientific course are trained for positions as expert laboratory workers in State and Federal laboratories, bacteriologists for physicians, city boards of health, and for State and Federal laboratories, manufacturing pharmacists and chemists for large pharmaceutical houses, and as teachers in colleges of pharmacy.

It should be noted that the college sets a high standard for pharmaceutical training and that a number of opportunities are open to graduates who take the time to thoroughly prepare themselves for responsible positions.

Preparation for Medicine.—Students in the four-year scientific course have the opportunity of electing studies that will give them clear entrance to the best medical colleges. Pharmaceutical training is an excellent preparation for medicine. It gives the student a knowledge of drugs and medicines that can be obtained in no other way and the graduate in pharmacy who completes medicine has the benefit of the two professions.

The American Conference of Pharmaceutical Faculties.—The College of Pharmacy is a member of the American Conference of Pharmaceutical Faculties. The objects of the conference are: to promote closer relations between the several colleges of pharmacy of the United States, to standardize pharmaceutical education and to encourage a higher standard of proficiency for members of the profession.

GENERAL INFORMATION

Garden of Medicinal Plants.—The College of Pharmacy maintains on the campus a garden in which plants of pharmaceutical importance are cultivated. The area and scope of this garden have been gradually extended, until the college has a complete collection of medicinal plants which furnishes valuable material for classes in botany, materia medica and drug assay.

Service to Pharmacists of the State.—It is the desire of the college to render every possible service to pharmacists of the state. We therefore invite the pharmacists to write us in regard to their prescription difficulties and manufacturing problems. Many pharmacists are now availing themselves of this privilege, and it is our wish to extend this service to the entire profession. Send your prescriptions and problems with a history of difficulties encountered to Professor H. A. Langenhan, who is in charge of practical pharmacy courses in the College of Pharmacy.

Food and Drug Analysis.—Enactment of the Food and Drug Act by Congress, and of similar legislation by most of the states (Washington included), has given great importance to pharmaceutical education. It is at once apparent that knowledge of drugs is equally important with chemistry in the administration and enforcement of this legislation. The graduate in chemistry is not wholly qualified to act as a food and drug inspection chemist for the government, states, private individuals, and corporations, if he is not trained in those subjects included in the collective name of pharmacy. These allied subjects are: Theory and practice of pharmacy, manufacturing pharmacy, drug assaying, pharmaceutical botany, study of the United States Pharmacopoeia and National Formulary, pharmacognosy, ma-

teria medica and therapeutics, etc. A great many pharmaceutical chemists are needed to carry out the analytical processes involved in the enforcement of this legislation, but the number of men adequately trained is very limited. Students with high school training are urged to consider these opportunities and to prepare themselves for such positions. The dean of the College of Pharmacy is chemist for the Washington State Department of Agriculture and is in close touch with government food and drug work. Courses are offered fitting students for this line of work.

Women in Pharmacy.—Opportunities for women in pharmacy are as great as for men. Women are finding a place in retail pharmacy and are becoming noted for the satisfaction they give in both the scientific and business side of the average drug store. Women graduates of the four year course are giving excellent satisfaction as food and drug chemists, bacteriologists and as teachers in colleges of pharmacy.

Library Facilities.—A branch of the University library containing books and current publications on pharmacy and chemistry is maintained in the pharmacy building. Practically all the domestic and some foreign journals on pharmacy are received by the college. The student is required to make use of the library and to report from time to time on current topics of interest. (See Phar. 125, 126, 127.)

The Arthur A. Denny Fellowship.—The College of Pharmacy is indebted to the Arthur A. Denny estate for a fellowship that pays \$500 per year to the student selected for this honor. The fellowship is granted each year to a graduate of the four-year course in pharmacy. The graduate is selected on the basis of excellence in scholarship and promise of ability to do research work in some subject of pharmaceutical importance.

Observation Trips.—Observation trips made each year by classes in pharmacy to various large manufacturing and wholesale establishments of Seattle and to large retail stores are an important feature of the work of the college. Among places visited in 1922-1923 were Stewart & Holmes Drug Company, branch houses of Parke, Davis & Co., H. K. Mulford Company and some of the leading prescription and commercial pharmacies of the city, and to the hydrastis and ginseng farm of Mr. C. E. Thorpe near the University campus.

Laboratories.—For description of pharmacy, materia medica and chemistry laboratories see pages 31, 36.

REQUIREMENTS FOR ADMISSION

Correspondence.—Credentials and all correspondence relating to admission to any college or school of the University should be addressed to the Registrar, University of Washington. Full information concerning admission, registration, and expenses may be found on pages 42, 49, 50.

Freshman Standing.—Freshman standing in the University is granted to any recommended graduate of a four-year accredited secondary school who meets the scholarship requirements outlined on page 42.

Advanced Standing.—Applicants for advanced standing are required to furnish a complete certified statement of both preparatory and college credits, with a letter of honorable dismissal from the institution last attended.

Admission by Examination.—Any graduate of an accredited secondary school who fails to meet the scholarship requirement for admission, has the privilege of qualifying for admission by passing the regular University entrance examinations in a sufficient number of subjects in which he has fallen below the grade of 80, to bring his average grade up to the required

two-thirds above 80. The successful passing of these examinations, however, will require a very thorough review of the subjects concerned after the work has been completed in high school.

Graduates desiring to take advantage of this privilege should consult with their principals regarding the best method of preparing for the entrance examinations. They should also notify the registrar of the University of their intention of taking examinations.

1. ADMISSION TO THE THREE-YEAR COURSE LEADING TO THE DEGREE OF PHARMACEUTICAL CHEMIST.

For admission to the three-year course, no subjects are prescribed beyond the general requirements for freshman standing in the University.

2. ADMISSION TO THE FOUR-YEAR COURSE, LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN PHARMACY.

For admission to this course a candidate must present the following credits, in the fifteen units required for freshman standing in the University.

2 units in one foreign language.

1 unit in one of the following sciences: physics, chemistry, botany, zoology, physiology, general biology.

3. ADMISSION TO THE FIVE-YEAR COURSE LEADING TO THE DEGREE OF MASTER OF SCIENCE IN PHARMACY.

Candidates for the degree of master of science, must have received the bachelor's degree from this college or from some other college of equal rank maintaining a four-year course which is the equivalent of the course at this institution.

DEGREES

1. The degree of pharmaceutical chemist (Ph. C.) will be conferred upon any student who has complied with the entrance conditions and completed the three-year course.

2. The degree of bachelor of science (B.S.) will be conferred upon any student who has fulfilled the entrance requirements and completed either the four-year scientific course or the combined scientific and business course. This degree with honors may be conferred upon a student of the College of Pharmacy if recommended for this distinction by the pharmacy faculty.

3. The degree of master of science in pharmacy (M.S.) will be conferred upon any graduate of the four-year course who has completed one year of graduate work and presented a satisfactory thesis.

4. The degree of doctor of philosophy (Ph.D.) with major and thesis in the pharmaceutical field may be taken by meeting all requirements of the graduate school. The bulletin of the graduate school should be consulted for information concerning graduate degrees.

NOTE.—Students who have entered as candidates for the two-year degree of graduate in pharmacy (Ph.G.) prior to September, 1921, have the right to complete the requirements for this degree.

CURRICULA REQUIRED FOR GRADUATION

1. A three-year course which prepares its graduates for responsible positions as practical pharmacists. The first two years of all courses are the same. At the beginning of the third year the student must elect the type of training he wishes for the next one or two years. Opportunity is

two-thirds above 80. The successful passing of these examinations, however, will require a very thorough review of the subjects concerned after the work has been completed in high school.

Graduates desiring to take advantage of this privilege should consult with their principals regarding the best method of preparing for the entrance examinations. They should also notify the registrar of the University of their intention of taking examinations.

1. ADMISSION TO THE THREE-YEAR COURSE LEADING TO THE DEGREE OF PHARMACEUTICAL CHEMIST.

For admission to the three-year course, no subjects are prescribed beyond the general requirements for freshman standing in the University.

2. ADMISSION TO THE FOUR-YEAR COURSE, LEADING TO THE DEGREE OF BACHELOR OF SCIENCE IN PHARMACY.

For admission to this course a candidate must present the following credits, in the fifteen units required for freshman standing in the University.

2 units in one foreign language.

1 unit in one of the following sciences: physics, chemistry, botany, zoology, physiology, general biology.

3. ADMISSION TO THE FIVE-YEAR COURSE LEADING TO THE DEGREE OF MASTER OF SCIENCE IN PHARMACY.

Candidates for the degree of master of science, must have received the bachelor's degree from this college or from some other college of equal rank maintaining a four-year course which is the equivalent of the course at this institution.

DEGREES

1. The degree of pharmaceutical chemist (Ph. C.) will be conferred upon any student who has complied with the entrance conditions and completed the three-year course.

2. The degree of bachelor of science (B.S.) will be conferred upon any student who has fulfilled the entrance requirements and completed either the four-year scientific course or the combined scientific and business course. This degree with honors may be conferred upon a student of the College of Pharmacy if recommended for this distinction by the pharmacy faculty.

3. The degree of master of science in pharmacy (M.S.) will be conferred upon any graduate of the four-year course who has completed one year of graduate work and presented a satisfactory thesis.

4. The degree of doctor of philosophy (Ph.D.) with major and thesis in the pharmaceutical field may be taken by meeting all requirements of the graduate school. The bulletin of the graduate school should be consulted for information concerning graduate degrees.

NOTE.—Students who have entered as candidates for the two-year degree of graduate in pharmacy (Ph.G.) prior to September, 1921, have the right to complete the requirements for this degree.

CURRICULA REQUIRED FOR GRADUATION

1. A three-year course which prepares its graduates for responsible positions as practical pharmacists. The first two years of all courses are the same. At the beginning of the third year the student must elect the type of training he wishes for the next one or two years. Opportunity is

given to specialize in advanced prescription and manufacturing pharmacy, business courses including economics, business law, accounting, business report writing, advertising, salesmanship, income tax problems, etc., food chemistry, advanced materia medica and medicinal plant cultivation, advanced pharmaceutical chemistry, toxicology and clinical diagnosis, bacteriology, and other pre-medical subjects.

2. A four-year scientific course which offers well-rounded scientific and liberal training. Graduates of this course are prepared for positions as, (a) practical and manufacturing pharmacists; (b) manufacturing and technical chemists; (c) bacteriologists; (d) teachers in colleges of pharmacy; (e) food and drug inspection chemists and bacteriologists in the United States Civil Service; (f) pharmaceutical journalism.

Graduates of the four-year course have clear entrance to the best medical colleges and are well equipped to carry on their medical studies.

3. A four-year combined scientific and business course which includes the regular pharmacy work of the three-year course together with advanced training in pharmacy, and courses in the College of Business Administration and Schools of Journalism and Law which insures the student a thorough business training. Special attention will be given to courses in business law, advertising, accounting, salesmanship, insurance, money and banking and business organization. This course is designed to produce well trained men for either retail or wholesale pharmacy.

4. A five-year course offers opportunity to the four-year graduate to do graduate and research work in some line of scientific pharmacy and graduate work in some branch of allied science. Graduates of this course are prepared for responsible positions in many different lines of work.

1. WITH DEGREE OF PHARMACEUTICAL CHEMIST. (Three-Year Course).

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Pharmacy 1	5	Pharmacy 2	5	Pharmacy 3	5
Chemistry 8	5	Chemistry 9	5	Chemistry 10	5
Physiology 6	5	Botany 13	5	Botany 14	4
Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½	Pharmacy 4	2
				Mil. Sci. or Phys. Ed. ...	1½

SECOND YEAR

Chemistry 37	5	Chemistry 38	5	Chemistry 39	5
Pharmacy 5	5	Pharmacy 6	5	Pharmacy 7	4
Pharmacy 9	3	Pharmacy 10	3	Pharmacy 11	3
English 4	3	Pharmacy 12	3	Pharmacy 13	3
Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½	Pharmacy 16	1
				Mil. Sci. or Phys. Ed. ...	1½

THIRD YEAR

Pharmacy 101	2	Pharmacy 102	2	Pharmacy 103	2
Pharmacy 117	2	Pharmacy 118	2	Bacteriology 101	5
Approved Electives	11	Approved Electives	11	Approved Electives	9

Total scholastic hours for graduation—135 plus 10 hours military or physical education. Electives in junior year may be arranged to meet requirements of either four-year course.

2. WITH DEGREE OF BACHELOR OF SCIENCE. (Four-Year Scientific Course).

FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Pharmacy 1	5	Pharmacy 2	5	Pharmacy 3	5
Chemistry 8	5	Chemistry 9	5	Chemistry 10	5
Physiology 6	5	Botany 13	5	Botany 14	4
Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½	Pharmacy 4	2
				Mil. Sci. or Phys. Ed. ...	1½

184+10

SECOND YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Chemistry 37	5	Chemistry 38	5	Chemistry 39	5
Pharmacy 5	5	Pharmacy 6	5	Pharmacy 7	4
Pharmacy 9	3	Pharmacy 10	3	Pharmacy 11	3
English 4	3	Pharmacy 12	3	Pharmacy 13	3
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½		Pharmacy 15	1
				Mil. Sci. or Phys. Ed... 1½	

THIRD YEAR

Pharmacy 101	2	Pharmacy 102	2	Pharmacy 103	2
Pharmacy 117	2	Pharmacy 118	2	Bacteriology 101	5
Language (Mod. Foreign) 5		Language (Mod. Foreign) 5		Language (Mod. Foreign) 5	
Laboratory Science ... 5		Laboratory Science ... 5		Laboratory Science ... 5	
Approved Elective		Approved Elective			

FOURTH YEAR

Language (Mod. Foreign) 5		Language (Mod. Foreign) 5		Approved Elective	5
Physics	5	Physics	5	Approved Elective	5
Laboratory Science ... 4-5		Laboratory Science ... 4-5		Approved Elective	5

The student is required to take 25 hours of one modern foreign language or 30 hours (15 each) if two languages are taken.

The elective work in science may be varied so as to prepare students for: (a) Entrance to colleges of medicine; (b) manufacturing pharmacists and chemists; (c) food and drug chemists; (d) bacteriologists; or (e) physiological chemists.

Total scholastic hours for graduation—180 plus 10 hours in military or physical education.

3. WITH DEGREE OF BACHELOR OF SCIENCE. (Four-Year Combined Scientific and Business Course.)

FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Pharmacy 1	5	Pharmacy 2	5	Pharmacy 3	5
Chemistry 8	5	Chemistry 9	5	Chemistry 10	5
Physiology 6	5	Botany 13	5	Botany 14	4
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½		Pharmacy 4	2
				Mil. Sci. or Phys. Ed... 1½	

SECOND YEAR

Chemistry 37	5	Chemistry 38	5	Chemistry 39	5
Pharmacy 5	5	Pharmacy 6	5	Pharmacy 7	4
Pharmacy 9	3	Pharmacy 10	3	Pharmacy 11	3
English 4	3	Pharmacy 12	3	Pharmacy 13	3
Mil. Sci. or Phys. Ed... 1½		Mil. Sci. or Phys. Ed... 1½		Pharmacy 15	1
				Mil. Sci. or Phys. Ed... 1½	

THIRD YEAR

Pharmacy 101	2	Pharmacy 102	2	Pharmacy 103	2
Pharmacy 117	2	Pharmacy 118	2	Bacteriology 101	5
Psychology 1	5	Approved Elective	5	Economics 3	3
Bus. Admin. 54 (Law) 3		Bus. Admin. 55 (Law) 3		Approved Elective	2
Pharmacy 125	1	Pharmacy 126	1	Bus. Admin. 56 (Law) 3	
Approved Elective	2	Approved Elective	2	Pharmacy 127	1

FOURTH YEAR

Bus. Admin. 11 (Acc'tg) 5		Bus. Admin. 12 (Acc'tg) 5		Approved Electives	5
Bus. Admin. 146 ... 5		Bus. Admin. 147 ... 5		Approved Electives	5
Approved Electives	5	Approved Electives	5	Approved Electives	5

Total scholastic hours for graduation—180 plus 10 hours of military or physical education.

Attention of the student is called to business administration courses number 57, Money and Banking; 70, Economics of Markets; 120, Business Report Writing; 126, Commercial Credits; 141, Fire Insurance; 157, Income Tax as desirable electives.

4. WITH DEGREE OF MASTER OF SCIENCE IN PHARMACY. (Five-Year Course).

Graduates of the four-year course may continue work for the master's degree as follows:

Not more than 22 credits allowed outside of the department of pharmacy. Election may be made in one or more of the following studies: Bacteriology, 8 to 22 credits; botany, 4 to 22 credits; physics, 10 to 22 credits; chemistry, 5 to 22 credits; zoology, 4 to 12 credits.

Not less than 23 credits shall be elected in the department of pharmacy. At least 12 credits of the major work must be a research problem and the preparation of a thesis. Examination and thesis must conform to the regulations of the Graduate School.

5. WITH DEGREE OF DOCTOR OF PHILOSOPHY

Students wishing to take the degree of doctor of philosophy with the thesis in the pharmaceutical field, shall take it under the same regulations as in the department of chemistry, writing the thesis under one of the pharmaceutical members of the department of chemistry. Prospective candidates for this degree should write for the Graduate School bulletin.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

GRADUATE SCHOOL

THE FACULTY

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....PRESIDENT
 JOHN THOMAS CONDON, LL.M. (Northwestern).....DEAN OF FACULTIES
 FREDERICK MORGAN PADELFORD, Ph.D. (Yale).....Professor of English; DEAN
 HENRY LANDES, A.M. (Harvard).....Professor of Geology and Mineralogy; Dean of the
 College of Science.
 EDMOND STEPHEN MEANT, M.L. (Wisconsin).....Professor of History
 J. ALLEN SMITH, Ph.D. (Michigan).....Professor of Political Science
 CAROLINE HAVEN ORR.....Professor of Spanish
 TREVOR KINCAID, A.M. (Washington).....Professor of Zoology
 MILNOR ROBERTS, A.B. (Stanford).....Professor of Mining Engineering and Metallurgy;
 Dean of the College of Mines.
 FREDERICK ARTHUR OSBORN, Ph.D. (Michigan).....Professor of Physics; Director of
 Physical Laboratories.
 WILLIAM SAVEY, Ph.D. (Harvard).....Professor of Philosophy
 DAVID THOMSON, B.A. (Toronto)...Professor of Latin; Dean of the College of Liberal Arts
 CHARLES WILLIS JOHNSON, Ph.D. (Michigan).....Professor of Pharmaceutical Chemistry;
 Dean of the College of Pharmacy.
 PIERRE JOSEPH FREIN, Ph.D. (Johns Hopkins).....Professor of French
 THEODORE CHRISTIAN FRYE, Ph.D. (Chicago).....Professor of Botany
 ROBERT EDOUARD MONITZ, Ph.D. (Nebraska), Ph.N.D. (Strassburg).....Professor of
 Mathematics.
 CARL EDWARD MAGNUSSON, Ph.D. (Wisconsin), B.E. (Minnesota).....Professor of
 Electrical Engineering; Dean of the College of Engineering.
 EVERETT OWEN EASTWOOD, C.E., M.A. (Virginia), S.B. (Massachusetts Institute of Tech-
 nology), Professor of Mechanical Engineering.
 WILLIAM ELMER HENRY, A.M. (Indiana).....Librarian and Director of the Library School
 HERBERT HENRY GOWEN, D.D. (Whitman), F.R.G.S., F.R.S.A.....Professor of Oriental
 History, Literature and Institutions.
 OLIVER HUNTINGTON RICHARDSON, Ph.D. (Heidelberg).....Professor of European History
 CHARLES CHUBB MORE, M.S., C.E. (Lafayette), M.C.E. (Cornell).....Professor of Civil
 Engineering.
 HENRY KREITZER BENSON, Ph.D. (Columbia).....Professor of Chemical Engineering
 JOHN WEINZIERL, Ph.D. (Wisconsin), Dr.P.H. (Harvard).....Professor of Bacteriology
 HUGO WINKENWERDER, M.F. (Yale)...Professor of Forestry; Dean of the College of Forestry
 VERNON LOUIS PARRINGTON, A.B. (Harvard), A.M. (Emporia).....Professor of English
 FREDERICK ELMER BOLTON, Ph.D. (Clark).....Professor of Education; Dean of the
 School of Education.
 EDWIN JOHN VICKNER, Ph.D. (Minnesota).....Professor of Scandinavian Languages
 EFFIE ISABEL RAITT, M.S. (Columbia).....Professor of Home Economics
 WILLIAM FRANKLIN ALLISON, B.S., C.E. (Cornell).....Professor of Municipal and
 Highway Engineering.
 STEVENSON SMITH, Ph.D. (Pennsylvania).....Professor of Psychology
 ALLEN ROGERS BENHAM, Ph.D. (Yale).....Professor of English
 HOWARD THOMPSON LEWIS, A.M. (Wisconsin).....Professor of Economics; Dean of
 the College of Business Administration.
 FRED CARLETON AYER, Ph.D. (Chicago).....Professor of Education
 WILLIAM MAURICE DEHN, Ph.D. (Illinois).....Professor of Chemistry
 HOWARD WOOLSTON, Ph.D. (Columbia).....Professor of Sociology
 MATTHEW LYLE SPENCER, Ph.D. (Chicago).....Professor of Journalism; Director of the
 School of Journalism.
 GEORGE MCPHAIL SMITH, Ph.D. (Frelburg).....Professor of Inorganic Chemistry

- BURT PERSONS KIRKLAND, A.B. (Cornell).....Professor of Forestry
 CHARLES EDWIN WEAVER, Ph.D. (California).....Professor of Geology
 JOHN LOCKE WORCESTER, M.D. (Birmingham School of Medicine)....Professor of Anatomy
 GEORGE WALLACE UMPHREY, Ph.D. (Harvard).....Professor of Spanish
 HOWARD H. PRESTON, Ph.D. (Iowa).....Professor of Business Administration
 ERIC TEMPLE BELL, Ph.D. (Columbia).....Professor of Mathematics
 EDWARD D. RANDOLPH, A.M. (Columbia).....Professor of Education
 JOSEPH DANIELS, M.S. (Lehigh).....Professor of Mining Engineering and Metallurgy
 THOMAS KAY SIDBY, Ph.D. (Chicago).....Associate Professor of Latin and Greek
 EDWARD McMAHON, A.M. (Wisconsin).....Associate Professor of American History
 GEORGE SAMUEL WILSON, B.S. (Nebraska)....Associate Professor of Mechanical Engineering
 OTTO PATZER, Ph.D. (Wisconsin).....Associate Professor of French
 CHARLES WILLIAM HARRIS, C.E. (Cornell).....Associate Professor of Civil Engineering
 EDGAR ALLEN LOEW, B.S. (E.E.) (Wisconsin).....Associate Professor of Electrical Engineering
 HENRY LOUIS BRAKEL, Ph.D. (Cornell).....Associate Professor of Engineering Physics
 GEORGE BURTON RIGG, Ph.D. (Chicago).....Associate Professor of Botany
 ARTHUR MELVIN WINSLOW, Ph.B. (Brown), B.S. (Massachusetts Institute of Technology),
 Associate Professor of Mechanical Engineering.
 RODERICK DUNCAN MCKENZIE, Ph.D. (Chicago).....Associate Professor of Sociology
 ELIAS TREAT CLARK, M.F. (Yale).....Associate Professor of Forestry
 ROBERT MAX GARRETT, Ph.D. (Munich).....Associate Professor of English
 FRIEDRICH KURT KIRSTEN, B.S., E.E. (Washington).....Associate Professor of Electrical
 Engineering.
 ROY MARTIN WINGER, Ph.D. (Johns Hopkins).....Associate Professor of Mathematics
 HERMAN VANCE TARTAR, Ph.D. (Chicago).....Associate Professor of Chemistry
 HENRY A. LANGENHAM, Ph.D. (Wisconsin).....Associate Professor of Pharmacy
 EDWIN JAMES SAUNDERS, A.M. (Harvard).....Assistant Professor of Geology
 ELI VICTOR SMITH, Ph.D. (Northwestern).....Assistant Professor of Zoology
 CLARENCE RAYMOND COREY, E.M. (Montana State School of Mines), A.M. (Columbia),
 Assistant Professor of Mining Engineering and Metallurgy.
 ERNEST OTTO ECKELMAN, Ph.D. (Heidelberg).....Assistant Professor of German
 JOHN WILLIAM HOTSON, Ph.D. (Harvard).....Assistant Professor of Botany
 LEWIS IRVING NEIKIRK, Ph.D. (Pennsylvania).....Assistant Professor of Mathematics
 SAMUEL HERBERT ANDERSON, Ph.D. (Illinois).....Assistant Professor of Physics
 CURT JOHN DUCASSE, Ph.D. (Harvard).....Assistant Professor of Philosophy
 BROOK LEONARD GRONDAL, M.S.F. (Washington).....Assistant Professor of Forestry
 LESLIE FOREST CURTIS, B.E. (Tufts).....Assistant Professor of Electrical Engineering
 EDWIN RAY GUTHRIE, Ph.D. (Pennsylvania).....Assistant Professor of Psychology
 HERWITT WILSON, Cert. Eng'r. (Ohio State University)....Assistant Professor of Ceramics
 CURTIS TALMAGE WILLIAMS, Ph.D. (Clark).....Assistant Professor of Education
 MARTHA KOEHNE, A.M. (Ohio).....Assistant Professor of Home Economics
 LESLIE SPIER, Ph.D. (Columbia).....Assistant Professor of Anthropology
 RALPH MASON BLAKE, Ph.D. (Harvard).....Instructor in Philosophy
 GRADUATE COUNCIL: DEAN PADELFORD, Chairman; DEANS CONDON, THOMSON, ROBERTS, and
 MAGNUSON; PROFESSORS MEANT, OSBORN, FRYE, MORITZ, DEHN, WOOLSTON, ———,
 WILLIAMS and GUTHRIE.

GENERAL STATEMENT

SPECIAL NOTE.—*For detailed information concerning special facilities for graduate work in the various departments, consult the bulletin issued by the Graduate School.*

The Aims of Graduate Study.—The principal aims of graduate study are the development of intellectual independence through cultivation of the scientific attitude of mind, and promotion of the spirit of research. The graduate student is therefore thrown more largely upon his own resources than the undergraduate, and must measure up to a more severe standard. The University is consistently increasing the emphasis on graduate work in order that it may be a strong center for advanced study.

Organization.—The Graduate School was formally organized in May, 1911. The graduate faculty includes:

1. All heads of departments which offer graduate work to major students and all full professors in such departments.

2. All associate professors, assistant professors and instructors offering graduate work for major students, provided no department shall have more than four representatives. If more than that number are eligible, the departmental representatives below the rank of full professor are elected by the members of the department.

Fees.—Graduate students pay a tuition fee of \$15 a quarter for the autumn, winter and spring quarters, if residents of the State of Washington or of Alaska, or \$50 a quarter for each of these quarters if non-residents. The regular fee for the summer quarter is \$20 for students at the University; \$15, including a \$3 laboratory fee, for students at the Biological Station.

Members of the staff on a full-time teaching schedule are relieved of all tuition. Teaching fellows, graduate scholars—formerly known as graduate assistants and graduate readers,—and non-instructional employees of the University pay a tuition fee of one dollar per quarter for each credit hour on the election blank.

Incidental fees, such as library and laboratory fees, are required from all who receive graduate instruction.

GRADUATE FELLOWSHIPS AND SCHOLARSHIPS

Loretta Denny Fellowships.—Three fellowships, of \$500 each, open to graduate students in any department of the University. Awarded by the faculty on the basis of scholastic excellence and general merit, but only to those who need financial assistance. Applications should be made on blanks supplied by the dean of the Graduate School and must be in his hands on or before March 15 preceding the academic year for which the fellowships are to be granted.

Arthur A. Denny Fellowships.—Six fellowships of \$500 each, open to graduate students in the departments of civil engineering, education, English, history, mining engineering, and pharmacy respectively. Awarded by the departments concerned on the basis of scholastic excellence and general merit, but only to those who need financial assistance. Applicants must be residents of the state of Washington. Applications should be made to the heads of departments concerned on blanks supplied by them, and must be in their hands on or before March 15 preceding the academic year for which the fellowships are to be granted.

National Research Fellowships.—Fellowships in physics and chemistry, offered by the National Research Council, are open to promising research students, who have already taken the doctor's degree or have equivalent qualifications. A successful candidate can pursue his research at any university or research institute chosen by him and which is acceptable to the

appointing board. The salary will ordinarily be \$1800 for the first year. Fellows are eligible for successive reappointments ordinarily with increase in salary. For details address the dean of the Graduate School or the heads of the departments.

University Honorary Fellowships.—Three honorary fellowships have been established by the University. These, like the Loretta Denny fellowships, are open to students in any department of the University. They carry no stipend, and are designed to furnish recognition of exceptional scholastic excellence in the case of graduate students who are not eligible for the Loretta Denny or the Arthur A. Denny fellowships, either because they do not need financial assistance or because they are not giving their entire time to their work in the University.

Research Fellowships in Mining and Metallurgy.—The College of Mines of the University in cooperation with the United States Bureau of Mines offers four fellowships in mining and metallurgical research. The fellowships are open to graduates of universities and technical schools who are properly qualified to undertake research work. The value of each fellowship is \$810 per year of twelve months. Fellowship holders are required to register as graduate students and to become candidates for the degree of master of science in mining engineering or metallurgy, unless an equivalent degree has previously been earned. Applications are due not later than May 15, and should be addressed to the Dean, College of Mines, University of Washington, Seattle, Washington.

Du Pont Fellowship.—Through its chemical department, Du Pont de Nemours & Co. offer a scholarship of \$500 in chemistry, known as the "Du Pont Scholarship," open to a senior student or graduate student in chemistry or chemical engineering.

The Bon Marche Industrial Fellowship.—The Bon Marche of Seattle offers an annual scholarship of \$600 to a graduate student in Home Economics for research work in textiles. The recipient of this fellowship is required to give one fourth of her time for eleven months to the testing of textiles for the Bon Marche.

University Teaching Fellowships.—The University each year provides a number of teaching fellowships in various departments. The graduate student receiving such a fellowship divides his time equally between his studies and assistance in the teaching work of the department in which he is enrolled. These fellowships range from \$540 to \$720.

Graduate Scholarships.—A number of graduate scholarships are open to students who perform service as laboratory assistants, assistants in charge of quiz sections, or readers. The remuneration is proportioned to the service, and ranges from \$180 to \$360.

Rosenberg Scholarship.—A scholarship of \$200, known as the "Samuel Rosenberg Scholarship, endowed in loving memory by Ella S. Rosenberg, his wife," is open to graduate students in French.

ADMISSION

Three classes of students are recognized in the Graduate School:

1. Candidates for the master's degree.
2. Candidates for the doctor's degree.
3. Students not candidates for a degree.

Admission.—A graduate of the University or of any other institution of equal rank, will be given full graduate standing. Before being recognized as a candidate for a degree, however, a student must be approved by

a committee appointed by the dean of the Graduate School, which shall also constitute the advisory committee to oversee the student's subsequent work. Unless the committee are already sufficiently acquainted with the candidate's capacity and attainments, there shall be a conference of the committee and the candidate, the purpose of which is twofold:

(a) To determine whether the student has the quality of mind and the attitude toward advanced work which would justify his going on for an advanced degree.

(b) To satisfy the major and minor departments and the graduate council that the student has the necessary foundation in his proposed major and minor subjects. If he lacks this foundation, he will be required to establish it through undergraduate courses or supervised reading.

If the student is from a college or university which falls below a satisfactory standard in curriculum, efficiency of instruction, equipment or requirements for graduation, he may be required to take other undergraduate courses in addition to those required as a foundation in the major and minor subjects.

After having been approved by his advisory committee, a candidate for a degree must file with the dean of the Graduate School an outline of his proposed work, on a blank provided for that purpose. When it has received approval of the graduate council and the student has been notified, he will be regarded as a candidate for a degree.

Students on the Staff.—Assistants, associates, or others in the employ of the University are normally permitted to carry five hours of graduate work if full-time employees, and ten to eleven hours if half-time employees. Permission to exceed these hours must be secured from the dean of the Graduate School and the dean of Faculties.

Graduate Study in the Summer.—As the summer offers leisure for advanced study to a large number of teachers, the University lays special emphasis on graduate work during the summer quarter. Graduates of colleges or universities in attendance then are urged to enroll for the strictly graduate courses as these courses give an opportunity to work with a select group of mature students toward the acquisition of an advanced degree.

Graduate students will enroll with the dean of the Graduate School.

Attendance during three summer quarters will satisfy the residence requirement for the master's degree. A fair amount of credit toward the doctor's degree may also be earned in the summer quarter.

DEGREES

THE DOCTOR'S DEGREE

Doctor of Philosophy.—Graduate students will be received as candidates for the degree of doctor of philosophy in such departments as are adequately equipped to furnish requisite training. Each department introduces its program of courses with a specific statement of the graduate training that it is prepared to direct, and of the distinctive opportunities that it offers for graduate work. This degree is conferred only on those who have attained proficiency in a chosen field and who have demonstrated their mastery by preparing a thesis which is a positive contribution to knowledge.

The requirements for the degree of doctor of philosophy are as follows:

1. At least three years of graduate work, of which not less than one year must be spent in residence at the University of Washington. If a candidate is otherwise engaged in any regular employment, a correspondingly longer period of study will be required.

2. Completion of courses of study in a major and two minor subjects, the work in the minors to constitute approximately one-third of this

work. The marks for graduate students shall be "passed" or "failed." In courses open to undergraduates and graduates, the passing grade for a graduate student shall be "B" or above if the course is in his major subject, "C" or above, if the course is in his minor subject. Before being recognized as a candidate for the degree, a student must be approved by a committee as provided above.

These courses of study cover at least two years of work. The work of the first year is virtually identical with that for the master's degree, and normally the candidate will wish to take this degree incidentally; the work of the second year is of still more advanced character. Not earlier than the end of the second year and at least a year before the time when the candidate expects to take the degree, the major and minor departments supplemented by a representative from the graduate council, shall submit the candidate to a careful oral and written examination, to determine whether he has the native equipment and the scholarship to warrant him in continuing.

3. The preparation of a thesis, as stated above, embodying the results of independent research. This thesis may properly be initiated in the second year, and should occupy the greater part of the third year. If the thesis is of such a character, or falls in such a department, that it requires library or laboratory facilities beyond the resources of the University, the student will be required to carry on his investigation at some other university, at some large library, or in some special laboratory. This thesis must be approved by a committee appointed by the major department, of which the instructor in charge of the thesis shall be a member, and also by a special committee from the graduate council.

4. Examinations as follows:

The Preliminary Examination.—An oral and written examination, covering the major and minor subjects. In so far as the examination is oral, it shall be before a committee appointed by the dean of not less than three representatives of the major department, not less than one representative of each of the minor departments, and a representative of the graduate council. The preliminary examination will normally be taken not less than two quarters before the final examination.

The Final Examination.—An oral, or oral and written examination, covering the work of the candidate, especially that part of it in which the thesis falls. The examination shall be given by a committee appointed by the dean including, so far as feasible, all of the instructors with whom the student has worked and a representative of the graduate council. If there is division of opinion in the committee in charge of either examination, the case shall be decided by the graduate council, with right of appeal to the graduate faculty.

5. Evidence of a reading knowledge of scientific French and German and of such other languages as individual departments may require. Such evidence must be filed with the dean and approved by him at least one academic year before the degree is granted. Only in rare cases shall the requirement of a reading knowledge of scientific French and German be waived and then only when, in the judgment of the council, substitutions for either or both of these languages will be to the advantage of the student's training.

6. One copy of the thesis in typewritten form (or library hand) shall be bound at the expense of the candidate and deposited with the librarian for permanent preservation in the University archives, at least four weeks before the date on which the candidate expects to take the degree.

The thesis, or such parts thereof, or such a digest as may be designated by the council, shall be printed. The candidate shall contribute \$100

to a fund for printing of theses, whether his thesis appears in the University series or elsewhere. From this fund the library is provided with 150 copies and the candidate with 50 copies.

7. A card certifying that all courses and examinations have been passed and that the thesis has been accepted and properly filed in the library, shall be presented to the dean at least one week before graduation. This card must bear the signatures of all major and minor instructors in charge of the student's work, of the committee appointed by the major department to pass on the thesis, and of the librarian or his appointed representative.

THE MASTER'S DEGREE

Master of Arts.—The degree of master of arts implies advanced liberal training in some humanistic field, gained through intensive study of one of the liberal arts supplemented by study in one or two supporting subjects. This detailed study culminates in a thesis which, if not an actual contribution to knowledge, is concerned with the organization and interpretation of the materials of learning. Creative work of a high quality may be offered in lieu of a thesis.

Master of Science.—The degree of master of science implies training similar to the above in some province of the physical or biological sciences. The thesis for this degree, however, must be an actual contribution to knowledge.

The requirements for the degrees of master of arts and master of science are as follows:

1. At least three full quarters or their equivalent spent in undivided pursuit of advanced study. If a candidate has done graduate work elsewhere, his program may be slightly less exacting, but this work must pass review in the examination, and shall not reduce the residence requirement at this University.

2. Completion of a course of study in a major and one or two minor subjects and of a thesis which lies in the major field. The work in the major and minor subjects shall total not less than 36 hours, of which 24 are normally in the major. The thesis normally counts for 9 hours in addition. The marks for graduate students shall be "passed" or "failed." In courses open to undergraduates and graduates, the passing grade for a graduate student shall be "B" or above if the course is in his major subject, "C" or above, if the course is in his minor subject.

The requirements of a minor or minors may be waived, but only on recommendation of the head of the major department and with the consent of the graduate council.

No work in the major subject may be counted toward the master's degree until the candidate has complied with the departmental requirements as to previous work in that subject, which in no case shall be less than eighteen hours.

Elementary or lower division courses may not count toward the minor requirement, and teachers' courses may not count toward either the major or minor requirements.

3. The preparation of a thesis, as defined above.

4. An oral, or written, or an oral and written examination, given by a committee appointed by the head of the major department, including so far as feasible, all the instructors with whom the student has worked. If division of opinion exists among the examiners, the case shall be decided by the graduate council, with right of appeal to the graduate faculty.

5. The candidate's thesis shall be in charge of the instructor in whose field the subject falls, and it must be approved by a committee of the major department, of which the instructor in charge shall be a member. If the committee is divided in opinion, the case shall be decided by the graduate council, with right of appeal to the graduate faculty. At least two weeks before the date on which the candidate expects to take the degree, one copy of the thesis in typewritten form or printed form (or library hand, in case the thesis is of such character that it cannot be typewritten) shall be deposited with the librarian for permanent preservation in the University archives. The thesis must meet the approval of the librarian as to form, and the cost of binding must be deposited with the thesis.

6. A card certifying that all courses and examinations have been passed, and that the thesis has been accepted and properly filed in the library, shall be presented to the dean at least one week before graduation. This card must bear the signatures of all instructors in charge of the student's work, of the instructors in charge of the thesis, and of the librarian or his appointed representative.

Master of Science in Technical Subjects.—The degree of master of science is given in technical subjects as follows:

- Master of Science in Chemical Engineering
- Master of Science in Civil Engineering
- Master of Science in Electrical Engineering
- Master of Science in Mechanical Engineering
- Master of Science in Ceramic Engineering
- Master of Science in Coal Mining Engineering
- Master of Science in Geology and Mining
- Master of Science in Metallurgy
- Master of Science in Mining Engineering
- Master of Science in Forestry
- Master of Science in Fisheries
- Master of Science in Food Preservation
- Master of Science in Pharmacy

The requirements for these degrees are essentially the same as those for the degrees of master of arts and master of science.

Master's Degree in Technical Subjects.—The master's degree is given in technical subjects as follows:

- Master of Forestry
- Master of Business Administration
- Master of Laws

The requirements for these degrees are essentially the same as those for the degree of master of arts and master of science, with the exception that all the work may be in the major.

PROFESSIONAL DEGREES

Professional Degrees.—The professional degrees of chemical engineer, civil engineer, electrical engineer, mechanical engineer, metallurgical engineer and engineer of mines may be conferred in three years on those who hold the bachelor of science degree in their respective lines from the University of Washington, who give evidence of having engaged continuously in acceptable engineering work and who present satisfactory theses.

COURSES

For description of courses, see Departments of Instruction, printed elsewhere in this catalogue. (See Index.)

DEPARTMENTS OF INSTRUCTION

EXPLANATIONS

This section of the catalogue contains a list of all courses of study offered in the University. The departments are arranged in alphabetical order.

The University reserves the right to withdraw temporarily any course which has not an adequate enrollment at the end of the sixth day of any quarter.

Courses bearing numbers 1 to 99 inclusive are normally offered to freshmen and sophomores; those from 100 to 199, to juniors and seniors, and those from 200 upward to graduate students.

Two or three numbers connected by hyphens indicate a course which ordinarily carries credit only when pursued for the full time; the instructor's permission must be obtained for credit for only a single quarter of such a course. No credit in a beginning foreign language is given for less than two quarters' work.

The credit indicated in connection with each course is the "quarter credit," being based on the class periods per week.

The descriptions of courses in each department include: (1) the number of the course as used in university records; (2) the title of the course; (3) a brief statement of its subject matter and method; (4) number of quarter credits given; (5) quarter in which it is given (autumn, winter, spring, summer); (6) name of instructor.

Courses preceded by * are not given in 1923-1924.

Courses preceded by ** are given if a sufficient number of students elect them.

DEPARTMENTS OF INSTRUCTION

AERONAUTICAL ENGINEERING

Engineering Hall

101. Aerodynamics.—Use of the wind tunnel in determining characteristics of aerofoils, selection of aerofoils for a given purpose. Prerequisite, junior standing. Three credits. Kirsten.

111. Aerial Propellers.—Theory and design of airscrews including review of methods of calculating thrust and efficiency. Prerequisite, junior standing. Three credits. Kirsten.

121. Airplane Design.—Selection of the type and construction of an airplane for a given purpose; computation of performance from aerodynamic data; design of flying boats and seaplanes; distribution of weights and proportioning of parts. Prerequisite, A.E. 101. Three credits. Kirsten.

****141. Airships.**—Aerostatics, including study of lighter-than-air machines. Prerequisite, A.E. 101, 121. Three credits. Kirsten.

****161. Aerial Transportation.**—Design and layout of landing fields and aircraft terminals. Aerial transportation as an industrial factor and as an instrument of warfare. Prerequisite, A.E. 111, 121, 141. Three credits. Kirsten.

ANATOMY

Science Hall and Anatomy Laboratory PROFESSOR WORCESTER

GROSS ANATOMY

101, 102, 103. General Human Anatomy.—Thorough study of the human body. Osteological collections are available. Especially for students taking the pre-medical, nurses', or physical education courses; open to others. Prerequisite, Zool. 1 and 7 or their equivalent. Lab. fee, \$7.50. Six credits a quarter; autumn, winter, spring. Worcester.

104. Topographic Anatomy.—Cross and sagittal sections for correlation. Prerequisites, Anat. 101, 102, and 103. Four credits; autumn, winter, and spring. Worcester.

108. Special Dissections.—For physicians or students who have completed the above courses in gross anatomy. Hours and credits to be arranged; autumn, winter, spring quarters. Worcester.

MICROSCOPIC ANATOMY

105, 106. Histology and Embryology.—Microscopic anatomy of developing and adult mammals studied both in their fresh and fixed conditions. Especially for students in pre-medical and nurses' courses but open to others. Prerequisite, Zool. 1 and 7 or their equivalent. Lab. fee, \$3. Six credits a quarter; autumn, and winter. Worcester.

107. Neurology.—Dissection of the human brain and cord and special organs of sense; comparative developmental history of the central nervous system; a microscopic study of the nuclei and fiber tracts. Prerequisites, Anat. 105 and 106 or their equivalents. Especially for pre-med students but open to others. Lab. fee, \$3. Six credits a quarter; spring. Worcester.

200. Graduate and research work in anatomy for those qualified. Credits and time arranged. Autumn, winter, spring. Worcester.

**Will be offered if a sufficient number of students elect the course.

ANTHROPOLOGY

Philosophy Hall

ASSISTANT PROFESSOR SPIER

51. *Growth of Culture*.—Origin and development of social institutions, industrial activities and arts, with special reference to race questions. Five credits; autumn.

**52. *Primitive Social Life*.

*92. *Peoples of Europe and Africa*.

*93. *Peoples of Asia and Oceania*.

101. *Basis of Civilization*.—Factors that determine the growth of civilization, as illustrated by the North American Indians. Five credits; autumn.

141. *Folk-tales*.—Three credits; autumn.

*143. *Origins of Art*.

*163. *Anthropometry*.—

*185. *Primitive Social and Political Institutions*.

*190. *Undergraduate Research*.

GRADUATE COURSES

*204, 205, 206. *Anthropological Methods and Theories*.

ARCHITECTURE

Education Hall

ASSOCIATE PROFESSOR GOULD; INSTRUCTOR MCCLELLAND

1-2. *History and Elements of Architecture*.—Illustrated lectures giving an historic survey of domestic architecture. Exercises in drawing and simpler elements of buildings. Excursions to buildings and building supply companies. Two credits a quarter; autumn, winter. Gould.

3. *History and Elements of Architecture*.—General survey of the important periods of architectural history studied, wherever possible, in terms of present-day conditions. Two credits; spring. Gould.

4-5-6. *Architectural Drawing*.—Problems in architectural drawing based on the Greek and Roman Orders. Studies in plan, elevation, and section. Three credits a quarter; autumn, winter, spring.

7. *Descriptive Geometry*.—Theoretical and practical problems. Orthographic projection. Emphasis on draftsmanship. Two credits a quarter; autumn.

8. *Shades and Shadows*.—Construction by descriptive geometry of shades and shadows found in architectural renderings. Prerequisite, Arch. 7. Two three-hour laboratory periods a week. Two credits; winter.

9. *Perspective Drawing*.—Theory of architectural perspective from simple problems in single point perspective up to and including the more

*Not offered in 1923-1924.

**Offered in extension as a correspondence course.

complicated problems. Office methods and short-cut methods will be studied and compared with the theory. Two 3-hour laboratory periods. Prerequisite, Arch. 7. Two credits; spring.

10, 11, 12. *Free-hand Drawing*.—Fundamentals of free-hand drawing and free-hand perspective. Drawing in charcoal or crayon from cast or architectural ornament and from still life. One credit a quarter; autumn, winter, spring. McClelland.

13, 14, 15. *Dimension Drawing*.—Fundamentals of draftsmanship; orthographic projection, shades and shadows, perspective, brief study of the classic orders and mouldings. Majors in painting, sculpture and design. Two credits a quarter; autumn, winter, spring.

47, 48. *Statics*.—Analysis of fundamental structural problems by application of the laws of equilibrium. Five credits a quarter; autumn and winter.

51. *History and Elements of Architecture*.—Egyptian, Greek, Roman. Two credits; autumn. Gould.

52. *History and Elements of Architecture*.—Byzantine—Romanesque—Gothic. Two credits a quarter; winter, spring. Gould.

53. *History and Elements of Architecture*.—Principles of design in terms of structural elements. Study and theory of planning. Two credits; spring. Gould and staff.

54, 55, 56. *Architectural Design*.—Problems in design and planning. Society of Beaux Arts Architects program will be used and work sent to New York City for judgment in competition with the work from leading architectural schools. Lab. fee, \$2. Five credits a quarter; autumn, winter, spring. Gould. 3 cr

60, 61, 62. *Building Construction and Inspection*.—Lectures on building construction methods. Full size and large scale studies of detail. Inspection trips. Two credits a quarter; autumn, winter, spring. McClelland.

73, 74. *Free-hand Drawing*.—Studies of architectural ornament and cast of the human figure. One credit a quarter; winter, spring.

101, 102, 103. *History of Architecture*.—The Renaissance. A comparative study of the period in Italy, France and England. Two credits a quarter; autumn, winter, spring. McClelland.

104, 105, 106. *Architectural Design*.—Advanced problems in ornamental design and planning as applied to different materials. Laboratory deposit, \$2. Five credits a quarter; autumn, winter, spring. McClelland.

113, 114. *Water Color*.—Still life studies, out-door subjects and architectural rendering. One credit a quarter; autumn, spring. McClelland.

115. *Sanitation and Plumbing*.—Methods of sewage disposal and water supply in modern buildings; modern appliances and office practice; specifications. Two credits; autumn.

116. *Specifications and Office Practice*.—Two credits a quarter; winter.

117, 118. *Structural Details*.—Three credits a quarter; autumn, winter.

151, 152, 153. *History of Architecture*.—Modern architecture; city and industrial planning. Prerequisite, Arch. 103. Two credits a quarter; autumn, winter, spring. Gould.

154, 155, 156. *Architectural Design*.—Beaux Arts Class A. projects first two quarters; third quarter, thesis. Lab. fee, \$2. Five credits a quarter; autumn, winter, spring. McClelland.

158, 159. *Free-hand Drawing*.—Three credits a quarter; winter, spring.

157 *authorized*
ASTRONOMY

The Observatory

INSTRUCTOR FARWELL

The work in astronomy is planned for (a) students who desire some knowledge of astronomy as part of a liberal education; (b) engineers and navigators who need some knowledge of the science as part of their technical training.

1. *Elements of Astronomy*.—Designed to give clear ideas regarding our place in the universe, the succession of the seasons, tidal phenomena, phases of the moon, etc., as well as some conception of the scope of astronomy and a clear idea of the scientific method. Five credits; autumn, winter, spring. Farwell.

2. *Introduction to Observing*.—Lectures illustrated by planetarium lantern slides and by views of the more interesting heavenly bodies with the equatorial telescope. Use of charts in the study of the sky with the unaided eye. Open to all students. Lab. fee, \$1. One credit; autumn. Farwell.

53. *Practical Observing*.—Prerequisite, Ast. 1 or B.A. 52. One credit; spring. Farwell.

BACTERIOLOGY AND PATHOLOGY

Science Hall

PROFESSOR WEINZIRL; LECTURERS NICKSON, MAGNUSSEN; GRADUATE ASSISTANT MISS JOHNSON

With the exception of general bacteriology all the courses offered are applied in one of the following fields: (a) medicine; (b) sanitation; (c) industry.

SUGGESTED ELECTIONS

For majors in bacteriology:

Sophomore year	101, 102, 103
Junior year	104, 105, 106
Senior year	210, 211, 212
	213, 214, 215

For medical, dental students and nurses..... 101, 105, 106
110, 111, 112

For home economics students..... 101, 102, 103

For fisheries students..... 101, 102, 103

For pharmacists and engineers..... 101

For graduatesAll courses above 100

4. *Bacteriology of Foods*...A brief study of the technique of handling bacteria. Most of the time is given to the bacteriology of fermentation, putrefaction, sterilization, sanitation, and canning. Especially for short course students in fisheries, but open to others. Lab. fee, \$3. Four credits; winter. Weinzirl.

101. *General Bacteriology*.—Technique in growing and examining bacteria, identification of species; common disease bacteria. Prerequisite, junior standing except for bacteriology majors. Knowledge of biology and general chemistry is desirable. Lab. fee, \$3. Five credits; autumn, spring, summer. Weinzirl and Johnson.

102. *Sanitary Bacteriology*.—Water supplies and sewage disposal; meat, milk and other foods; certain industrial applications. Prerequisite, Bact. 101. Lab. fee, \$3. Five credits; winter. Weinzirl and Johnson.

103. *Public Hygiene*.—Conservation of health; prevention of diseases; school hygiene; industrial hygiene, etc. Prerequisite, junior standing except for bacteriology majors. Five credits, lectures only; spring. Weinzirl.

104. *Serology*.—Types of immunity; immunization in animals and man; study of immune products. Prerequisite, Bact. 101, and senior standing. Lab. fee, \$4. Four credits; autumn. Magnusson.

105. *Infectious Diseases*.—Detailed study of the pathogenic bacteria, and methods of diagnosis of infectious diseases. Prerequisite, Bact. 101. Lab. fee, \$4. Four credits; winter. Magnusson.

106. *Clinical Diagnosis*.—Examination of blood, urine, gastric and intestinal contents, parasites, etc. Prerequisite, Bact. 101. Lab. fee, \$4. Four credits; spring. Magnusson.

110. *Pathology*.—Gross and microscopic study of tumors. Prerequisites, Bact. 101, Anat. 105. Lab. fee, \$4. Three credits; autumn. Nickson.

111. *Pathology*.—Gross and microscopic study of inflammation and degeneration. Prerequisite, Bact. 110. Lab. fee, \$4. Three credits; winter. Nickson.

112. *Pathology*.—Pathology applied to the systems of the body. Prerequisite, Bact. 111. Lab. fee, \$4. Three credits; spring. Nickson.

COURSES FOR GRADUATES ONLY

204, 205, 206. *Advanced Bacteriology*.—The student may pursue work along the following lines: (1) technique; (2) physiology; (3) enzymes; (4) special groups of bacteria; (5) analysis; (6) diagnosis; (7) serology; (8) other topics on consultation. Prerequisite, graduate standing. Credits to be arranged; autumn, winter, spring, summer. Weinzirl.

207, 208, 209. *Applied Bacteriology*.—By special arrangement the student may spend not less than 15 hours per week in state or city laboratories. Credit will depend upon a satisfactory statement from the director in charge of the laboratory. Prerequisites, graduate standing. Credits to be arranged; autumn, winter, spring, summer. Weinzirl.

210, 211, 212. *Seminar*.—Topics not included in the regular courses; reports on recent investigations and of research work done by the members. Prerequisite, senior or graduate standing, and Bact. 102 or 105. Credits to be arranged; autumn, winter, spring. Weinzirl.

213, 214, 215. *Research*.—Investigation of assigned problems. Open to qualified students after consultation. Credits and time to be arranged; autumn, winter, spring, summer. 2 to 5 cr Weinzirl.

BOTANY

Science Hall

PROFESSOR FRYE; ASSOCIATE PROFESSOR RIGG; ASSISTANT PROFESSOR HOTSON

SUGGESTED SELECTIONS

For the required biological science in the Colleges of Liberal Arts and Science, only courses 1, 2, 3, 105, 106, 107 will be accepted.

For a major: Courses 105, 106, 107, 140, 141, 142, 143, 144, 145 of which 105, 106, 107 are required.

For teaching botany: 105, 106, 107, 140, 141, 142, 143, 144, 145.

For pharmacy students: 13, 14.

For forestry students: 11, 12, 111, 140, 141, 142.

For fisheries students: 53, 70, 130.

3. *Elementary Botany*.—Plant analysis; field work with local flora. For students entering without botany. Lab. fee, \$2. Five credits; autumn. Frye and assistants.

2. *Elementary Botany*.—Types of the great groups of plants from the highest to the lowest. Open to students entering the second quarter without any previous botany. Lab. fee, \$2. Five credits; winter. Frye and assistants.

1. *Elementary Botany*.—Structure and functions of roots, stems, leaves and seeds. For those who have had no botany in high school. Lab. fee, \$2. Five credits; spring. Rigg and assistants.

11, 12. *Foresters' Botany*.—Types of plants illustrating the advance in complexity. For forestry students. Prerequisite, Bot. 1 or 3. Lab. fee, \$2. Five credits a quarter; winter and spring. Hotson and assistant.

13, 14. *Pharmacy Botany*.—Gross structure of vegetative and reproductive parts of seeds; brief study of spore plants; microscopy of powdered drugs. Lab. fee, \$2. Five credits, winter; four credits, spring. Rigg and assistant.

53. *Aquatic Botany*.—Plants of fresh water habitats especially those involved in the study of fishes and their culture. Lab. fee, \$2. Five credits; spring. Rigg.

70. *Fruits and Vegetables*.—Varieties of fruits and vegetables grown in the Northwest, their recognition and properties. Fruit and the vegetable areas with the reasons for their geographical distribution. A course for canners. Lab. fee, \$2. Five credits; winter. Frye.

105, 106, 107. *Morphology and Evolution*.—Morphological study of types to show advances in complexity. Required for all majors unless courses 11 and 12 were taken in the freshman year. Prerequisite, 10 hours botany, or Zool. 1 and 2. Lab. fee, \$2. Five credits a quarter; autumn, winter, spring. Frye, and assistant.

111. *Forest Pathology*.—Recognition and treatment of common wood destroying fungi. Prerequisite, Bot. 11 or 105. Lab. fee, \$2. Five credits; autumn. Hotson and assistant.

119. *Plant Histology*.—Preparation of slides for the microscope; a study of tissues. Prerequisite, Bot. 106. Lab. fee, \$3. Two to five credits; any quarter. Frye.

130. *Economic and Marine Botany*.—Economic marine plants, their condition, the products derived therefrom and process of manufacture. Prerequisite one year of chemistry and junior standing. Four credits; autumn.

140, 141, 142. *General Fungi*.—Morphology and classification of fungi as a basis for plant pathology. Prerequisite, Bot. 11 or 105, junior standing. Five credits a quarter; autumn, winter, spring. Hotson.

143, 144, 145. *Plant Physiology*.—Prerequisite, two quarters of botany and Chem. 21, junior standing. Lab. fee, \$3. Five credits a quarter; autumn, winter and spring. Rigg.

Educ. 160A. Teachers' Course in Botany.—Discussion of texts, subject matter and methods of presenting the subject. Prerequisite, two years of botany. Two credits; autumn. Frye.

187. *Journal Club*.—Reviews of articles in current journals, suggested for seniors, graduates and instructors in the department. No credit; each quarter. Frye.

190, 191, 192. *Rusts*.—Morphology and classification of the Uredinales. Prerequisite, Bot. 142. Five credits a quarter; autumn, winter, spring. Hotson and assistants.

COURSES FOR GRADUATES ONLY

200. *Proseminar*.—Semi-independent work by students. Open only on consultation with the head of the department. Credit to be arranged; any quarter. Frye, Rigg, Hotson.

233. *Research*.—Credit to be arranged; any quarter.

Frye, Rigg, Hotson.

240. *Phycomycetes*.—Prerequisite, Bot. 142. Five credits; any quarter. Hotson.

241. *Ascomycetes*.—Prerequisite, Bot. 142. Five credits; any quarter. Hotson.

242. *Basidiomycetes*.—Prerequisite, Bot. 142. Five credits. Any quarter. Hotson.

250. *Algae*.—Prerequisite, Bot. 105. Credits to be arranged; any quarter. Frye.

251. *Bryophytes*.—Prerequisite, Bot. 106. Credits to be arranged; any quarter. Frye.

252. *Pteridophytes*.—Prerequisite, Bot. 106. Credits to be arranged; any quarter. Frye.

253. *Gymnosperms*.—Prerequisite, Bot. 107. Credits to be arranged; any quarter. Frye.

254. *Angiosperms*.—Prerequisite, Bot. 107. Credits to be arranged; any quarter. Frye.

261, 262, 263. *Plant Pathology*.—Diseases of plants and the fungi which produce them. Prerequisite, Bot. 142. Five credits a quarter; autumn, winter, spring. Hotson.

271, 272, 273. *Experimental Morphology*.—Prerequisites, Bot. 106, 145, one year chemistry, graduate standing. Two credits a quarter. Frye.

279. *Colloidal Biology*.—Prerequisites, Bot. 143, Chem. 32, graduate standing. Five credits; any quarter. Rigg.

280. *Micrometabolism*.—Prerequisites, Bot. 12 or 107, 148, graduate standing. Five credits; any quarter.

CERAMICS

Mines Hall

ASSISTANT PROFESSOR WILSON

NOTE.—Mining, metallurgical, geological, or ceramic experience. Each student is required to spend at least one summer vacation, or its equivalent, in practical contact with the industry, and to submit upon his return to college a detailed report of his observations. Work of this nature offers an opportunity to secure data and material for the graduation thesis.

90 — 3er 100. *Ceramic Products*.—Principles governing the shaping of structural, refractory and fine ceramic wares. Prerequisite, Cer. 90. Three lectures. Three credits; autumn. Wilson.

101. *Drying and Burning*.—Principles of drying and burning; the operation and control of commercial dryers and kilns. Prerequisite, Cer. 100. Three lectures and recitations. Three credits; winter. Wilson.

102. *Ceramic Decoration*.—Preparation and characteristics of vapor, natural clay slip, raw lead, bristol, terra cotta, porcelain and fritted glazes, bright and mat, with methods of coloring. Prerequisite, Cer. 101. Three lectures and recitations. Three credits; spring. Wilson.

104, 105. *Ceramic Calculations*.—Chemistry and physics of preparing, drying and firing ceramic materials. Problems involved in standard methods of testing clays. The blending of raw materials for ceramic bodies and glazes. Prerequisite, Cer. 90. Three recitations. Three credits; autumn and winter. Wilson.

110. *Ceramic Physical-Chemical Measurements*.—Testing of clays and other ceramic materials. Determination of fineness of grain, shrinkage, porosity and specific gravity; plasticity, bonding power, vitrification and fusion, chemical purification and action of colloids. Prerequisite, Cer. 105. Lab. fee, \$10 a quarter. Two laboratory periods. Two credits; spring. Wilson.

*121, 122, 123. *Ceramic Products Laboratory*.

*125, 126, 127. *Ceramic Plant Design*.

*131, 132, 133. *General Ceramics*.—Occurrence, winning and preparation of materials used in ceramics. Process used in preparation of raw materials, shaping, drying and firing of ceramic products. One recitation and two laboratory periods. Lab. fee, \$10. Three credits; autumn, winter and spring.

140. *Pottery*.—Occurrence, winning and preparation of materials used in pottery manufacture. Processes used in molding, drying, firing, glazing, and decorating of pottery. Two lectures and recitations. Two credits; autumn. Wilson.

150. *Lime, Plasters and Cements*.—Raw materials, manufacture and testing of lime, calcined gypsum, sand-lime brick, and Portland cement. Prerequisite, Chem. 3. Three lectures and recitations. Three credits; winter. Wilson.

160. *Glass Technology*.—Theory and factory practice of glass manufacture. Prerequisite, Cer. 105. Two lectures and recitations. Two credits; autumn. Wilson.

170. *Metal Enamels*.—Theory and practice of metal enameling. Prerequisite, Cer. 105. Two lectures and recitations. Two credits; autumn. Wilson.

*Not offered in 1928-1924.

180. *Refractories*.—Origin, occurrence and physical properties of fire-clays and other refractory materials. The manufacturing problems of fire-clay, silica, magnesia, chromite brick, electric furnace products and special refractories. Prerequisite, junior standing. Two recitations and one laboratory period. Lab. fee, \$5. Three credits a quarter; autumn, winter and spring.

191, 192, 193, 194. *Ceramic Thesis*.—Original investigation of a ceramic problem of the Pacific Northwest. Laboratory deposit, \$5 a quarter. Laboratory and conference. Three credits; autumn, and winter; two credits, spring. Wilson.

3 or COURSES FOR GRADUATES ONLY

211, 212, 213, 214. *Graduate Thesis*.—Preparation of a thesis in ceramic engineering. Prerequisite, graduate standing. A fee will be required if the work involves the use of laboratory materials or equipment. Hours and credits to be arranged. Wilson.

221, 222, 223. *Ceramic Resources*.—Ceramic resources of Washington and the Pacific Northwest, or of some particular area in this region. Prerequisite, graduate standing. Hours and credits to be arranged. Wilson.

231, 232, 233. *Ceramic Manufacture*.—Studies in manufacture of clay products, especially the utilization of raw materials found in the Pacific Northwest. Prerequisite, graduate standing. Hours and credits to be arranged. 4 or Wilson.

CHEMISTRY

Bagley Hall

PROFESSORS BENSON, JOHNSON, DEHN, SMITH; ASSOCIATE PROFESSOR TARTAR; ASSISTANT PROFESSORS THOMPSON, LYNN; INSTRUCTORS BEUSCHLEIN, POWELL, GAILBY; ASSOCIATES RADFORD, PETERSON, SEMON, DRAVES.

Instruction in this department is designed to satisfy, as far as possible, the requirements of students who desire to study chemistry as a means of culture and as a necessary complement of a liberal education; but as the subject is eminently practical, it is also the desire of those in charge to guide the student so that he may fit himself for work in lines in which chemistry has become an applied science.

REQUIREMENTS OF THE DEPARTMENT

Students wishing to specialize in chemistry may select one of the three courses: (1) the elective curriculum for those who want a general course in chemistry, leading to the degree of B.S. in the College of Science (College of Science bulletin); (2) the suggested curriculum for those who intend to make use of chemistry as a vocation, leading to the degree of B.S. in Chemistry (College of Science bulletin); (3) the prescribed curriculum in chemical engineering for those who plan to engage in manufacturing industries, leading to the degree of B.S. in Chemical Engineering (College of Engineering bulletin).

The fee for each laboratory course is \$6.50 a quarter. This covers general laboratory expense such as gas, water and depreciation. For purchase of chemicals and apparatus, each student is required to buy a breakage ticket when he obtains his locker key. The cost of the ticket is \$5. Any unused portion will be refunded.

1-2. *General Inorganic Chemistry*.—Chemistry of the non-metallic elements. Open only to students not having had accredited high school chemistry. Three lectures and two laboratory periods a week. Five credits a quarter; any quarter. Smith, Tartar, Semon.

4. *General Chemistry*.—For short course miners. Three lectures and one 4-hour laboratory period a week. No credit; winter. Thompson.

5-6. *General Chemistry*.—Open only to women in home economics and physical education. Three lectures and two laboratory periods a week. Five credits a quarter; winter, spring. Tartar.

7. *Nurses' Course*.—General chemistry for nurses. Three lectures. Two 3-hour laboratory periods. Five credits; autumn, spring. Gailey.

8-9-10. *General Chemistry and Qualitative Analysis*.—Open only to pharmacy students. The work in the spring quarter is qualitative analysis. Three lectures and two laboratory periods a week. Five credits a quarter; autumn, winter, spring. Lynn.

21-22. *General Inorganic Chemistry*.—Chemistry of the non-metallic elements. Open only to students having had accredited high school chemistry. Three lectures and two laboratory periods a week. Five credits a quarter; any quarter. Smith, Tartar, Semon.

23. *Elementary Qualitative Analysis*.—Two lectures a week on chemistry of the metallic elements. One lecture a week and the entire laboratory time devoted to qualitative analysis. Prerequisite, Chem. 2, 22, or equivalent. Three lectures and two laboratory periods a week. Five credits; any quarter. Smith, Tartar, Semon.

37-38-39. *Organic Pharmaceutical Chemistry*.—Organic chemicals of the U.S. Pharmacopoeia. Open only to pharmacy students. Prerequisite, Chem. 10 or its equivalent. Three lectures and two laboratory periods a week. Five credits a quarter; autumn, winter, spring. Johnson.

52. *Chemical Technology*.—Application of the preceding courses to chemical manufacturing practice. No fee. Prerequisites, Chem. 23, Physics 97, Math. 61. Three lectures. Three credits; spring. Beuschlein.

55. *Forest Products*.—Prerequisite, Chem. 23. Three credits; winter. Benson.

101. *Advanced Qualitative Analysis*.—Two lectures and three laboratory periods a week. Prerequisite, Chem. 23 or its equivalent. Five credits; autumn, winter. Thompson.

104. *Food Chemistry*.—For home economics students. Methods of analysis of various foods and federal and state laws studied. Two lectures and two laboratory periods a week. Four credits; spring. Lynn.

105, 106, 107. *Food Chemistry*.—Laboratory and class work in analysis of food products, and study of federal and state laws regulating the sale of food products and drug products. Five credits per quarter; autumn, winter, spring. Lynn.

111. *Quantitative Analysis*.—Gravimetric and volumetric methods. Prerequisite, Chem. 23 or its equivalent. Two lectures and three laboratory periods a week. Five credits; autumn, winter, spring. Thompson.

112. *Quantitative Analysis*.—Gravimetric analysis. Prerequisite, Chem. 23 or its equivalent. Two lectures and three laboratory periods a week. Five credits; winter, spring. Thompson.

113. *Quantitative Analysis*.—Volumetric analysis. Two lectures and three laboratory periods a week. Prerequisite, Chem. 23 or its equivalent and 112. Five credits; autumn, spring. Thompson.

114. *Advanced Qualitative Analysis*.—Two lectures and three laboratory periods a week. Prerequisite, Chem. 23 and 113. Five credits; autumn. Thompson.

116, 117, 118. *Industrial Chemistry*.—Materials and processes in manufacturing industries. Autumn—fuels, materials of construction, water supply, sanitation; winter—acids, alkalies, salts; spring—oils, fats, resins, waxes. Three lectures. Prerequisite, Chem. 3 or 23 or equivalent. No fee. Three credits a quarter; autumn, winter, spring. Benson.

121, 122, 123. *Industrial Chemistry*.—Autumn—fuels, gases, cements, refractories, iron, steel, and alloys; winter—processes for manufacture of acids, alkalies; spring—organic industrial chemistry. oils, fats, paints, rubber, cellulose products. Three lectures and two laboratory periods a week. Prerequisite, Chem. 52, 111 or equivalent. Five credits a quarter; autumn, winter, spring. Benson.

128-129. *Organic Chemistry*.—For medical, chemical, engineering and technical students. Three lectures and two laboratory periods a week. Prerequisite, Chem. 23 or its equivalent. Five credits a quarter; winter, spring. Powell.

131, 132, 133. *Organic Chemistry*.—For major students in chemistry and for students in the College of Science. Three lectures and two laboratory periods a week. Prerequisite, Chem. 23 or its equivalent. Five credits; autumn, winter, spring. Dehn.

134. *Manufacture of Industrial Organic Chemicals*.—Manufacture of organic chemicals on a semi-commercial scale. May be taken independently or as the laboratory equivalent of Chem. 129 or 133. Two laboratory periods a week. Two credits; spring. Powell.

135-136. *Organic Chemistry*.—For home economic students. Only women are admitted. Three lectures and two laboratory periods a week. Prerequisite, Chem. 6 or its equivalent. Five credits a quarter; autumn, winter. Powell.

141-142. *Physiological Chemistry*.—For students of medicine, biology and bacteriology. Chemical composition of foods, tissues, secretions and excretions, their physiological and pathological changes. Prerequisite, Chem. 111 or 113 and 129 or equivalent. Three lectures and two laboratory periods. Five credits; autumn, winter. Gailey.

144. *Physiological Chemistry*.—For fisheries and other technical students. Prerequisite, Chem. 129 or equivalent. Two lectures and two laboratory periods. Five credits; spring. Gailey.

146. *Chemistry of Blood and Urine*.—Study of normal and pathological blood and urine. Intended for premedical students, nurses and clinical technicians. Prerequisite, Chem. 111 or 113 and 129 or equivalent. One lecture and two laboratory periods. Three credits; spring. Gailey.

150. *Industrial Seminar*.—For advanced students. Given by members of the staff especially qualified for some particular subject. Lectures and laboratory periods will be arranged. ~~Two~~ credits; winter. Dehn.

Educ. 160B. Teachers' Course in Chemistry.—Laboratory methods of instruction. Two credits; autumn, winter, spring. Smith.

160-161. *Elementary Physical Chemistry*.—Descriptive, non-mathematical, for premedic and science students not majoring in chemistry. Chemistry majors may, with the instructor's permission, take this instead of

3 cr

181-182. Two lectures and one laboratory period. Prerequisites, Chem. 111 or equivalent and ten hours of physics. Three credits a quarter; winter, spring. Tartar.

181-182. *Physical and Theoretical Chemistry*.—Fundamental theories of chemistry based on physical and chemical measurements. Three lectures and two laboratory periods a week. Prerequisite, Phys. 2 and Chem. 113. Five credits a quarter; autumn, winter. G. B. Jeffers took 3 hrs only lecture Tartar.

183. *Electro-Chemistry*.—Theories and laws of voltaic currents and laboratory work with electro-chemical processes and measurements. Three lectures and two laboratory periods a week. Prerequisite, Chem. 182. Five credits; spring. Tartar.

184. *Colloidal Chemistry*.—Fundamental properties of substances in the colloidal state. Surface phenomena such as surface tension and absorption. Two lectures and one laboratory period. Three credits; autumn, winter. Tartar.

192. *Chemistry of Plant and Animal Tissues*.—Application of physiological chemistry to the study of biology. Prerequisite, Chem. 111 or 113 and 129. One lecture and two laboratory periods. Three credits; winter. Gailey.

193. *Chemistry of Nutrition*.—Enzyme and chemical reactions involved in digestion and metabolism. Prerequisite, courses 111 or 113 and 129. Two lecture and one laboratory periods. Three credits; autumn. Gailey.

200. *Journal Seminar*.—Advanced students may register for assigned readings and reports on the chemical literature. Different members of the staff will have charge of the course during the various quarters. No fee. One credit a quarter; autumn, winter, spring.

COURSES FOR GRADUATES ONLY

*203. *Advanced Physical Chemistry*.

205, 206, 207. *Inorganic Preparations*.—Preparation of special substances involving representative laboratory methods. Any quarter may be taken independently. Credits and laboratory period to be arranged; autumn, winter, spring. Smith.

210, 211, 212. *Organic Preparations*.—Preparation of special substances involving representative laboratory methods. Any quarter may be taken independently. Credits and laboratory periods to be arranged. Autumn, winter, spring. Dehn.

213. *Organic Analysis*.—Special methods used in the analysis of organic substances. Prerequisite, Chem. 133 and 113. Autumn. Credits and laboratory period to be arranged. Dehn.

215, 216, 217. *Chemical Engineering*.—For seniors and graduates in chemical engineering. Autumn—selected chemical processes with special emphasis on factors of control and inspection; winter—drawings and specifications of fundamental apparatus; spring—evolution of a chemical process from assigned raw materials. This quarter's work may be reported in a thesis for the bachelor's degree. Prerequisite, Chem. 123, C. E. 2 and M. E. 90. Laboratory hours and fees to be arranged. Five credits a quarter; autumn, winter, spring. Benson, Bueschlein.

*219. *Advanced Chemical Engineering*.

*Not offered in 1923-1924.

221, 222, 223. *Advanced Inorganic Chemistry*.—The periodic system of the elements. Two quarters devoted to the elements and their ordinary compounds, and one quarter to the chemistry of the higher order compounds. Recommended for all majors and graduate students. No fee. Three credits a quarter; autumn, winter, spring. Smith.

224, 225. *History of Chemistry*.—Lectures and assigned readings. No fee. Prerequisite, Chem. 133, 182. Two credits; autumn, winter. Smith.

231, 232, 233. *Advanced Organic*.—Detailed study of special fields of organic chemistry. Any quarter may be taken independently. Prerequisite, Chem. 129, 182. No fee. Three lectures; three credits a quarter; autumn, winter, spring. Dehn.

250. *Research*.—The work in research is of three types: (1) Special investigations by advanced students under direction of members of the staff. (2) Research for the master's degree. Maximum credit nine hours. (3) Research for the doctor's degree under direction of any member of the senior staff of the department. Maximum credit forty-five hours.

5 cr.

CIVIL ENGINEERING

Engineering Hall

PROFESSORS MORE, ALLISON; ASSOCIATE PROFESSORS HARRIS, RUBEY; ASSISTANT PROFESSORS RATHBUN, COLLIER, MAY; INSTRUCTORS WHITE, HAMILTON, BROWN, DANA, WILCOX; ASSOCIATES WELD, STRANDBERG, WERNERKE.

1. *Engineering Drawing*.—Lettering; engineering sketching, fundamental principles of working drawings; mapping, map conventions. Lab. fee, \$2. Three credits; autumn, winter, spring. White.

2. *Engineering Drawing*.—Detail and assembly drawing; readings of drawings; use of instruments; tracing; standards and conventions. Prerequisite, C.E. 1. Three credits; autumn, winter, spring. White.

4. *Topographic Surveys*.—Field and office collection of information and platting of field notes for topographic surveys. For geology students. Lab. fee, \$2. Three credits a quarter; spring. Wilcox.

11. *Engineering Problems*.—Training in methods of attacking, analyzing and solving engineering problems. Coaching in proper methods of work and study, including training in systematic arrangement and clear workmanship. Deals with the dynamic side of the problems. Three credits; autumn, winter, spring. May.

12. *Engineering Problems*.—Continuation of the work in C.E. 11, most of the time being devoted to statics. Prerequisites, C.E. 1, C.E. 11 and Math. 51. Must be preceded or accompanied by Math. 52. Three credits; autumn, winter, spring. May.

13. *Engineering Problems*.—Detailed analysis and solution of engineering problems dealing with space and dimensions by the use of graphic methods. Prerequisites, C.E. 1 and C.E. 2. Three credits; autumn, winter, spring. White.

21. *Plane Surveying*.—Surveying methods, instruments, computations, mapping. U.S. public land surveys. Prerequisites, C.E. 1 and Math. 52. All freshmen engineers. Lab. fee, \$2. Three credits; autumn, winter, spring. Rubey.

22. *Railroad Surveying*.—Plane curves, grades and earthwork. Elementary railroad engineering. Prerequisite, C.E. 21. Lab. fee, \$2. Four credits; autumn. Rubey.

23. *Higher Surveying*.—Meridian observations; triangulation and base line measurements; computations and adjustment of measurements; plane table surveying. Prerequisite, C.E. 21. Lab. fee, \$2. Four credits; winter. Rubey.

24. *Field Engineering*.—Field and office practice in the survey of highways, railroads, canals, etc. Prerequisites, C.E. 21 and C.E. 22. Lab. fee, \$2. Four credits; spring. Rubey.

27. *Mine Surveying*.—Surface and underground practice; observation for meridian; topography; mining claim survey; tunnels, and vertical shaft work and connections; mapping. Prerequisite, C.E. 21. Sophomore mining engineers. Lab. fee, \$2. Three credits; winter. Rubey.

30. *Surveying*.—(Short course in forestry.) Lab. fee, \$2. Five credits; winter. Hamilton.

38. *Surveying*.—(Short course in mining). Lab. fee, \$2. Five credits; winter. Rubey.

55. *Forest Surveying*.—For students in forestry. Lab. fee, \$2. Two credits; winter. Hamilton.

56. *Forest Surveying*.—Chain, compass, transit and level surveying, with reference to work in forestry. Lab. fee, \$2. Five credits; spring.

91, 92, 93. *Mechanics*.—For civil engineers.—Applications of elementary principles of statics, dynamics, and mechanics of materials. Prerequisite C.E. 12. Three credits a quarter; autumn, winter, spring. More.

**112. *Railway Construction*.—Railway construction methods, machinery and tools; details of track, and terminal structures. Prerequisite, C.E. 24. Three credits; winter. Rubey.

**115. *Railway Economics*.—Economic theory of railway location, operation and maintenance. Prerequisite, C.E. 24. Three credits; spring. Rubey.

122. *Highways*.—Location and construction of standard types, with application to local conditions. Prerequisite, C.E. 22. Three credits; spring. Allison.

**126. *Roads and Pavements*.—Materials, construction and maintenance. Laboratory study of materials used in pavement. Prerequisite, C.E. 122. Lab. fee, \$2. Five credits; autumn. Allison.

131. *Mechanics*.—Algebraic and graphic application of elementary principles of statics. Prerequisites, C.E. 12 and Math. 62. Three credits; autumn, winter, or spring. More.

132. *Mechanics*.—Applications of elementary principles of dynamics. Prerequisite, C.E. 131. Three credits; autumn, winter, or spring. May.

133. *Mechanics*.—Continuation of C.E. 131 and C.E. 132; and mechanics of materials. Prerequisite, C.E. 132. Three credits; autumn, winter, spring. Dana.

134. *Framed Structures*.—Application of mechanics to analysis of structural details and simple framed structures. Prerequisite, C.E. 93 or C.E. 133. Three credits; autumn. Rathbun.

135. *Advanced Mechanics*.—General theories of flexure. Problems in indeterminate structures. Senior and graduate engineers. Prerequisite, C.E. 93 or C.E. 133. Five credits; spring. More.

**Will be offered if a sufficient number of students elect the course.

****137. *Mechanics.***—Analytical study of problems in mechanics. Prerequisite, C.E. 93 and Math. 2. Three credits; spring. Rathbun.

139. *Reinforced Concrete.*—Fundamental principles of reinforced concrete. Prerequisite, C.E. 93 or C.E. 133. Three credits; spring. More.

142 *Hydraulics.*—Flow of water through pipes, orifices, over weirs, and in open channels; energy and reaction of jets with application to impulse wheels; review of hydrostatics. Prerequisite, C.E. 132 or C.E. 93. Lab. fee, \$2. Five credits; autumn, winter, spring. Harris.

143. *Hydraulic Engineering.*—Complete problems presenting hydraulic engineering. Prerequisite, C.E. 142. Three credits; winter. Harris.

144. *Hydraulic Mining.*—(Short course in mining). Two credits; winter.

145. *Hydraulic Machinery.*—Development and theory of water wheels and turbine pumps; design of a reaction turbine; hydrostatic machinery and dredging equipment. Prerequisite, C.E. 142. Senior and graduate E.E. and M.E. Three credits; winter. Harris.

147. *Hydraulic Power.*—Generation of power; penstock and turbines; types of installations. Prerequisite, C.E. 142. Senior and graduate C.E. Five credits; spring. Harris.

153. *Water Supply.*—Principal engineering operations necessary to secure suitable water supplies for cities, towns and industrial plants. Senior and graduate C.E. Prerequisite, C.E. 142. Three credits; autumn. Allison.

154. *Sewerage and Drainage.*—Design and construction of sewerage and drainage systems for cities and towns. Senior and graduate C.E. Prerequisite, C.E. 142. Three credits; winter. Allison.

155. *Water Supply Problems.*—Methods used in obtaining a suitable supply; purification of water. Senior and graduate C.E. and Ch. E. Prerequisite, C.E. 142. Three credits; winter. Allison.

****157. *Irrigation Engineering.***—Investigation regarding duty of water and methods of obtaining it for irrigation purposes. Design and construction of irrigation works. Prerequisite, C.E. 142. Three credits; autumn. Allison.

****158. *Sewage Treatment.***—Supplementary to C.E. 154, especially relating to public health; sewage disposal; garbage collection and destruction. Senior and graduate C.E. and Ch. E. Three credits; spring. Allison.

****160. *Building Construction.***—Construction problems from the standpoint of the builder. Prerequisite, C.E. 93 or C.E. 133. Three credits; spring. Weld.

161. *Structural Design.*—Relation of theory of structures to engineering practice. Special application to roof and bridge trusses. Prerequisite, C.E. 134. Five credits; winter. Rathbun.

****164. *Advanced Structural Design.***—Reinforced concrete, arches, statically indeterminate truss design. Prerequisite, C.E. 161. Five credits; spring. Rathbun.

167. *Materials of Construction.*—Properties of materials used in engineering construction; timber, concrete, steel, etc. Recitations and laboratory. Prerequisite, C. E. 93. Lab. fee, \$2. Five credits; autumn. Collier.

169. *Engineering Relations*.—Construction and operation of projects, and of the involved business relations. Prerequisite, senior standing. Five credits; autumn. Rubey.

198. *Thesis*. Five credits.

210, 212, 214. *Research*.—Time to be arranged. Two to five credits; autumn, winter, spring.

CLASSICAL LANGUAGES AND LITERATURE

Denny Hall

PROFESSOR THOMSON; ASSOCIATE PROFESSOR SIDNEY; ASSISTANT PROFESSORS DENSMORE, CLARK

Requirements for a major: at least 36 hours in the department, chosen from courses other than Greek 8-9-10, 11, 13, 14, 15-16; Latin 1, 2, 3, 4, 5, 6, 11, 14, 15, 16. A student specializing in Greek must take at least nine hours of Latin; one specializing in Latin must take at least ten hours of Greek.

Doherty, Geraldine — To receive cr. for Ital. 2 Take. I. GREEK outside class.

1 (2, 3), 2 (3, 1), 3 (1, 2). *Elementary Greek*.—Introduction to a knowledge of the Greek language through the medium of Homer. Book I of the *Iliad* will be covered during the year. Supervised study one afternoon period each week. A maximum of five credits a quarter, beginning any quarter. Densmore.

4-5. *The World of Homer*.—Readings from the story of Achilles and the wanderings of Odysseus on a background of a general study of the history of the period down to Hesiod. Three credits; autumn, winter. Densmore.

6. *The Persian War Period*.—Wide readings in Herodotus. Three credits; spring. Densmore.

8-9-10. *Greek Art*.—Autumn, architecture; winter, sculpture; spring, painting, numismatics, and the minor arts. Alternates with that in Roman Art. Principally for fine arts students, but open to all. One credit a quarter; autumn, winter, spring. Sidey.

11. *Greek Civilization*.—Institutional and cultural survey of the Greek world from the earliest times to the Roman conquest. Illustrated lectures, conferences and discussions. Knowledge of Greek not required. Five credits; autumn. open only to freshmen in Fall & all in Sp. Densmore.

12 — 3 cr.
13. *Greek Literature*.—The masterpieces in English translations. Knowledge of Greek not required. Five credits; autumn, winter, spring. Clark.

14. *Greek and Roman Literature*.—Continuation of course 13 but may be elected by those who have not had Greek 13. Five credits; autumn, winter, spring. Sidey.

15-16. *Greek Civilization and Literature*.—Duplication of course 11, but including the literature in translation as a fundamental expression of the Greek genius. Five credits; winter, spring. Densmore.

101, 102, 103. *The Periclean Age*.—Greek civilization from the founding of the Delian confederacy to the death of Socrates. Readings, conferences, and reports. Prerequisite, Greek 4-5 or equivalent. Three credits a quarter; autumn, winter, spring. Densmore.

104, 105, 106. *Greek Poetry*.—Lyric, dramatic, pastoral. Prerequisite, Greek 6. Two credits a quarter; autumn, winter, spring. Densmore.

107, 108, 109. *Greek Prose Writers*.—Xenophon's *Economist*; The Constitution of Athens; Demosthenes; Plutarch's *Lives*. Two credits a quarter; autumn, winter, spring. Densmore.

121, 122, 123. 2 cr - a qtr.
151, 153, 152. 3 cr - a qtr.
201, 202, 203. 3 cr - a qtr.
1-2-3. *Elementary Latin*.—First and second year high school Latin. For those who previously have had little or no Latin, and wish to bring their preparation up to college requirements. Given if any considerable number desire it. Five credits a quarter; autumn, winter, spring. Sidey.

4, 5, 6. *Third Year Latin*.—Prerequisite, two years high school Latin or Latin 1-2-3 in the University. May be substituted for the requirement in ancient language, life and literature. Qualifies a student for Latin 21. Review of grammar and syntax. Selections from Cicero, Vergil. Five credits a quarter; autumn, winter, spring. Thomson, Clark.

14, 15-16. GREEK AND ROMAN LITERATURE 5
11. *Roman Civilization*.—The part played in history by the Romans; their contributions to modern civilization. Lectures, illustrated, when possible; collateral reading and reports. Five credits; autumn, winter, spring. Clark.

21. *Cicero De Senectute*.—Comparison of Cicero's work with similar essays. Exercises in grammar and composition. Prerequisite, three and one-half year's of high school Latin. Five credits; autumn. Sidey.

22. *Catullus*.—The Latin lyric. Emphasis on finished translation and comparison of the best English versions; grammar and composition. Prerequisite, three and one-half years of high school Latin. Three or five credits; winter. Sidey.

23. *Sallust: Jugurtha*.—Prerequisite, three and one-half years of high school Latin. Three or five credits; spring. Sidey.

50. *Livy*.—One book and selections from the other books. Prerequisite, Latin 21, 22, 23, or special permission. Five credits; autumn. Thomson.

60. *Horace*.—Selections from The Complete Works. Prerequisite, Latin 21, 22, 23, or special permission. Five credits; winter. Thomson.

70. *Plautus and Terence*.—Selected Plays. Prerequisite, Latin 21, 22, 23 or special permission. Five credits; spring. Thomson.

106. *Syntax and Prose Composition*.—Prerequisite, Latin 50 or 60 or 70. Three credits; autumn. Clark.

108. *Vergil's Aeneid*.—Books VII-XII. Prerequisite, Latin 50 or 60 or 70. Three credits; winter. Clark.

109. *Pliny's Letters and Tacitus, Germania*.—A reading course. Prerequisite, Latin 50 or 60 or 70. Three credits; spring. Clark.

113. *Roman Home Life & Religion* 3 cr winter
151. *Cicero, Tusculan Disputations and Seneca, Moralia*.—Two credits; autumn. 2 to 5 cr, Sidey.

152. *Quintilian, Book X and Horace, Ars Poetica*.—Two credits; winter. 2 to 5 cr, Sidey.

153. *Christian Latin*.—Selections from Minucius Felix, Augustine, Lactantius and other early Christian writers. Two credits; spring. Sidey.

2 to 5 cr.
154. *Latin Epistolary Lit & its influence upon mod lit* 3 to 5 cr winter

155. *Cicero De Oratore or Orator & Pro Plancio* 3 to 5 Spring

Educ. 160C. Teachers' Course in Latin.—Methods and problems in teaching high school Latin. Prerequisite, Lat. 50, 60, or 70. Except by special arrangement this course must be taken in combination with Latin 107. Two credits; autumn. Clark.

COMPARATIVE PHILOLOGY

The following courses in Comparative Philology are available in the department of Scandinavian Languages and Literature:

190-191. *Introduction to the Science of Language.*—Two credits; autumn, winter. Vickner.

192. *Life of Words.*—Two credits; spring. Vickner.

DRAMATIC ART

Denny Hall

PROFESSOR GORSUCH; INSTRUCTORS HUGHES, LOVEJOY

The work in this department is planned for three classes of students: (a) those who desire some knowledge of dramatic art as part of a liberal education; (b) those who need some knowledge of dramatic art as part of their technical training; and (c) those who wish to pursue the subject more intensively than either of the former groups.

For a major the department requires 38 to 60 credits, of which 24 must be in the department, including courses 1-2-3 and 21-22-23.

Courses 1-113 (inclusive) may be entered at the beginning of the first, second or third quarters.

1-2-3. *Dramatic Literature.*—Introductory course. Selected plays of the great dramatists are studied with the purpose of increasing the student's power of analysis and appreciation. Three credits a quarter; autumn, winter, spring. Gorsuch.

21-22-23. *Shakespeare.*—Dramatic reading and interpretation of selected plays. Courses 21-22-23 have as their general purpose the interpretation of the drama. Selected plays are used as exercises in dramatic delivery and for the study of effectiveness in the heading of lines. Three credits a quarter; autumn, winter, spring. Gorsuch, Lovejoy.

27-28-29. *Contemporary Drama.*—Dramatic reading and interpretation of selected plays. For further information see courses 21-22-23. Gorsuch.

31. *Practical Public Speaking.*—Introductory course. Principles of public speaking are studied and short, original talks are prepared and delivered. Prerequisite, English 1. Three credits a quarter; autumn, winter, spring. Gorsuch, Lovejoy.

*32-33-34. *Practical Public Speaking.*

101-102-103. *Play-acting and Play-producing.*—Practical course in the art of acting, with some time given to the problems of producing. Interpretation of both standard and original plays. Four credits a quarter; autumn, winter, spring. Lovejoy.

111, 112, 113. *Play-writing.*—Principles of dramatic composition, with experimental creative work. Five credits a quarter; autumn, winter, spring. (May receive credit in English). Hughes.

127, 128, 129. *The History of Theatre Art.*—Origin and development of theatre art. Physical structure of playhouses. Evolution of stage ma-

*Not offered in 1928-1924.

chinery and settings. Masks, marionettes. Realism and symbolism. Lectures and required readings. Two credits; autumn, winter, spring. (May receive credit in English). Hughes.

141, 142, 143. *Advanced Play Acting*.—Prerequisite, membership in the Associated Students' casts, or permission of the instructor. Three credits; autumn, winter, spring. Gorsuch.

ECONOMICS AND BUSINESS ADMINISTRATION

Commerce Hall

PROFESSORS LEWIS, AYER, GOULD, PRESTON, MORIARTY, COX, DAKAN; ASSOCIATE PROFESSORS SMITH, SKINNRR, ATKINSON; ASSISTANT PROFESSORS MCMAHON, GREGORY; LECTURERS MCCONAHAY, ROBERTSON, DAVIS, BURTON, DRAPER; ASSOCIATES VAN DE WALKER, WOODBRIDGE; INSTRUCTORS LEIB, DRISCOLL, HAMACK, FARWELL, MORSE; ACTING INSTRUCTOR RUSSELL; ASSISTANT BUTTERBAUGH.

1. *General Economics*.—General principles of economics. Prerequisite to all sophomore, junior and senior courses in bus. admin. Fee, \$1. Five credits; autumn, winter, spring, summer. Lewis and staff.

2. *Applied Economics*.—Practical applications of fundamental economic principles. Fee, \$1. Five credits; winter, spring, summer. Lewis and staff.

3. *General Economics*.—Same as B.A. 1 above, abbreviated for students in chemistry, pharmacy, forestry and fisheries. Fee, \$1. Three credits; spring. Skinner.

7. *Economic Resources of the World*.—The world's principal agricultural and mineral resources; geographical distribution and development; governmental policies of conservation; world commerce, trade routes. Fee, \$1. Five credits; autumn, winter, spring, summer. Skinner.

11. *First Year Accounting*.—First half. Functions of accounts; trial balances; balance sheets; profit and loss statements; books of original entry; ledgers; business forms and papers. Fee \$1. Five credits; autumn, winter, spring, summer. Sections: Butterbaugh, Lamont.

12. *First Year Accounting*.—Second half. Accounts peculiar to partnerships and corporations; correct classification of accounts; manufacturing and cost accounts; controlling accounts and subsidiary ledgers; voucher systems. Fee \$1. Five credits; autumn, winter, spring, summer. Sections: Woodbridge, Van de Walker, Butterbaugh, Lamont.

15. *Typewriting I*.—Fundamental principles of typewriting. Fee \$10. No credit; autumn, winter, spring, summer. Sections. Newman.

16. *Typewriting II*.—Devoted to increasing the speed of the student on the typewriter. Fee \$10. No credit; autumn, winter, spring, summer. Sections. Hamack and Newman.

18. *Shorthand I*.—Fundamental principles of shorthand in the first twelve lessons of the manual. Fee \$10. No credit; autumn, winter, spring, summer. Sections. Hamack.

19. *Shorthand II*.—Correlary principles of shorthand in the last part of the manual, vocabulary building, etc. Prerequisite B.A. 18. No credit; autumn, winter, spring. Hamack.

52. *Navigation*.—Correction of courses; the sailings, dead reckoning, piloting, latitude, longitude, azimuth, amplitude, determination of position at sea by the methods of Marc Saint Hilaire and Aquino; compass adjusting. Fee, \$1. Five credits; spring. Gould.

54. *Business Law*.—Fundamental principles of law. General and practical principles developed from problems and selected cases, particularly as related to the law of contracts, property, agency, negotiable papers; insurance, partnership and corporations with special lectures on the statutory regulations pertaining thereto. Fee, \$1. Three credits; autumn. Ayer.

55. *Business Law*.—A continuation of B.A. 54. Fee, \$1. Three credits; winter. Ayer.

56. *Business Law*.—A continuation of B.A. 55. Fee, \$1. Three credits; spring. Ayer.

57. *Money and Banking*.—Introductory course. Functions of money; standards of value; financial conditions, and principles of banking with special reference to the banking system of the United States. Prerequisite B.A. 1. Fee, \$1. Five credits; autumn, winter, spring, summer. Preston.

58. *Risk and Insurance*.—The risk factor in its economic and social consequence; ways of meeting risk; the general broad outline of life, fire and other insurance. Prerequisite B.A. 1. Fee, \$1. Five credits; autumn. Smith.

61. *Social and Economic Standards of Living*.—Their origin and development; class standards and their influence on industry. A comparative study of budgets. Prerequisite, B.A. 1. Fee, \$1. Five credits; autumn, winter, spring. McMahon.

64. *Second Year Accounting*.—First half. Preparation of balance sheets and profit and loss statements; factory costs; general principles of valuation; causes and methods of treating depreciation; capital and revenue concepts. Prerequisite B.A. 11-12. Fee, \$1. Five credits; Sections. Autumn, winter, spring, summer. Gregory, Van de Walker.

65. *Second Year Accounting*.—Second half. Valuation of balance sheet and revenue statement items; surplus and reserves; dividends; sinking funds; liquidation of partnerships and corporations; consolidated balance sheets; reports of trustees and receivers. Prerequisite, B.A. 64. Fee, \$1. Five credits; autumn, winter, spring, summer. Sections. Gregory, Draper, Van de Walker.

66. *Ship Operation*.—Types of vessels, with reference to materials and methods of construction, stress and stability of hulls, methods of propulsion, measurement and stowage of cargo. Fee, \$1. Five credits; autumn and winter. Farwell.

67. *Paper Work in Shipping*.—Forms used in documenting, entering and clearing, and in making coastwise and foreign shipments, with the solution of a number of practice problems. Fee, \$1. Five credits; autumn and winter. Gould.

70. *The Economics of Marketing and Advertising*.—Development of economic principles in marketing and advertising and their application to present day problems in those fields. Fee, \$1. Five credits; winter and spring. Moriarty.

81. *Secretarial Correspondence*.—For students who have a thorough knowledge of shorthand and typewriting, covering the responsibilities placed on the secretary in handling correspondence, letter writing, etc. Prerequisites, B.A. 15, 16, 18, 19. Fee, \$5. Five credits; autumn. Hamack.

82. *Secretarial Forms and Papers*.—For students who have a thorough knowledge of typewriting, or have completed B.A. 15, 16. Includes

a knowledge of the many uses to which the typewriter is put in the preparation of business forms and papers. Prerequisites, B.A. 15-16. Fee, \$5. Five credits; autumn. Hamack.

83. *Office Training and Practice*.—General principles of business conduct, ethics of the office; shipping, filing systems, etc., and general handling of work to be assigned as nearly like actual office work as possible. Prerequisites, B.A. 15, 16, 18, 19. Fee, \$5. Three credits; winter. Hamack.

102. *Office Management*.—The office manager's problems of office administration. Attacks the problem of office control by the various activities and studies each in relation to all the others. Fee, \$1. Five credits; winter. Draper.

103. *Teachers' Course in Shorthand and Typewriting*.—To prepare students for teaching shorthand and typewriting. Methods and principles of teaching typewriting and shorthand; correlation of this work with actual work in business houses. Prerequisites, B.A. 15, 16, 18, 19. Fee, \$1. Five credits; spring. Hamack.

104. *Economics of Transportation*.—Relation of transportation to industry and society; development and present status of American transportation systems; organization of the service; traffic associations; classification territories; routes; traffic agreements; rates and regulations. Prerequisite, B.A. 1. Fee, \$1. Five credits; autumn. Atkinson.

105. *Business Organization*.—Business corporations, associations, combinations, special reference to their functions, operation, advantages and disadvantages, relation to the anti-trust laws. Prerequisite, 10 hours of economics and business administration, including B.A. 1. Fee, \$1. Five credits; autumn. Leib.

109. *Marketing of Lumber*.—Study of the inter-relations of manufacturers, wholesalers and retailers of lumber applying economic principles to effective methods of marketing lumber. Fee, \$1. Five credits; spring. Russell.

111. *Third Year Accounting*.—First half. Advanced partnership and corporation accounting; nature of profits; dividends; the legal status of same; statement of affairs; realization and liquidation accounts. Fee, \$1. Prerequisites, B.A. 64-65. Five credits; autumn, winter, spring. Cox.

112. *Third Year Accounting*.—Second half. Bond and stock issue problems; premiums and discounts on securities; funds and reserves; mergers and consolidations; graphs and comparative statements; estate accounting. Prerequisites, B.A. 111. Fee, \$1. Five credits; autumn, winter, spring. Cox.

113. *Ports and Terminals*.—Factors of a well coordinated port; modern terminal facilities; representative river, lake and sea ports. Fee, \$1. Three credits; winter. Farwell.

119. *Water Transportation*.—Economics of shipping with particular reference to organization and management; ship building and operating costs; rate practice and control; pools, agreements, conferences; ocean routes; shipping subsidies, etc. Fee, \$1. Five credits; spring. Farwell.

120. *Business Report Writing*.—Methods of securing and arranging facts, use of references, preparation of outlines, effective use of charts or graphs, checking or proof reading. Special attention to accounting papers. Fee, \$1. Five credits; autumn, winter, spring, summer. Sections. Leib, Driscoll.

121. *Corporation Finance*.—Financial problems connected with promotion of corporations, underwriting and sale of securities, management, expansion and reorganization of unsuccessful corporations. Prerequisites, B.A. 1, 11-12. Fee, \$1. Five credits; winter. Preston.

122. *Railroad Finance and Administration*.—Organization and administration of the departments of the modern American railroad with comparative study of foreign systems. Survey of Federal administration. Prerequisite, B.A. 104. Fee, \$1. Five credits; winter. Atkinson.

123. *Investments and Speculation*.—Distinction between investment and speculation; selection of sound investments; how investments are made; character of the investment market; relation to the money market. Prerequisite, B.A. 121. Five credits; spring. Dakan.

125. *Banking Practice*.—Methods and machinery of bank operations. Internal organization of the bank; relation of the different functions; accounting methods; finding costs for the bank; problems of bank administration. Prerequisites, B.A. 11-12, 57. Fee, \$1. Five credits; winter. Dakan.

126. *Commercial Credits*.—Extension of credit; the credit department; sources of information; credit analysis; credit insurance; practical problems. Prerequisite, B.A. 57. Fee, \$1. Five credits; winter. Dakan.

127. *Foreign Exchange and International Banking*.—Theory of international exchange; rates of exchange; financing imports and exports; specie movements; foreign money market factors; foreign banking by American institutions; financing foreign trade; present status of foreign exchange. Prerequisite, B. A. 57. Fee, \$1. Five credits; autumn. Preston.

136. *Market Analysis*.—Analysis of products, sociology of markets, methods of distribution, methods of demand creation. Prerequisite, B.A. 106 or 70. Fee, \$1. Five credits; autumn. Russell.

137. *Advertising Campaigns*.—Purposes and limitations of the advertising campaign; advertising media and their relations to the desired market; the tools of advertising men; the reader as a psychological phenomenon; practice exercises. Fee, \$1. Five credits; winter. Russell.

138. *Sales Management*.—Sales plans; establishing sales policies; constructing sales machinery; supervising sales forces. Fee, \$1. Five credits; spring. Russell.

*141. *Fire Insurance*.—

142. *Life Insurance*.—Functions of life insurance; premiums; reserves; kind of companies and policies; dividends; lapses. Disability, group and industrial insurance. State regulations of life insurance business. Prerequisite, B.A. 58. Fee, \$1. Five credits; spring. Smith.

146. *Retail Sales Problems*.—Fundamental principles underlying retail selling. Problems of stock, display, personnel, and the consumer viewed from the point of view of the selling force. Fee, \$1. Five credits; autumn. Morse.

147. *Retail Buying Problems*.—Problems of the buyer in relation to the sales force, the consumer, store policy, and net profit. Fee, \$1. Five credits; winter. Morse.

148. *Retail Store Organization Problems*.—Fundamental principles underlying departmentalization; and financial, personnel, and administrative organization. Fee, \$1. Five credits; spring. Morse.

149. *Marine Insurance*.—History, principles and practice of marine insurance as applied to ships, freight and cargo. Prerequisite, B.A. 58. Fee, \$1. Five credits; winter. Smith.

151. *Rail and Marine Rates*.—Principles of rate making, and interpretation of federal and state statutes affecting rail and water rates; influence of competitive forces; traffic geography; classifications; rate adjustments; survey of decisions of commissions and courts, interstate and local rate problems. Prerequisite, B.A. 104. Fee, \$1. Five credits; spring. Atkinson.

152. *Shipping and Consular Regulations*.—Navigation laws relating to prevention of collisions at sea, inspection of vessels; employment of seamen; carrying of cargo and passengers; towage and pilotage; wharfage and moorage; liability of vessels and owner; duties of consular officials; administration of the navigation laws. Fee, \$1. Three credits; spring. Farwell.

154. *Corporation Accounting*.—Different corporation securities; corporation records; accounts; stock and dividend transactions; funds and reserves; redemption of bonds; preparation of corporate reports; methods of consolidation; reorganization, receivership and dissolution. Fee, \$1. Prerequisites, B.A. 111-112. Five credits; winter. Burton.

155. *Cost Accounting*.—Production factors; cost finding methods for different businesses; material, labor records; distribution of indirect expense; preparation of operating statement; production, service departments; cost reports for administration officials. Fee, \$1. Five credits; spring. Prerequisite, B.A. 111-112. McConahey.

156. *Auditing*.—Auditing procedure; balance sheet audits; analysis of asset and liability values; profit and loss statement audits; analysis of income and expense; certifications and reports; classification of audits and investigations. Fee, \$1. Five credits; winter. McConahey.

157. *Income Tax Accounting*.—Government decisions affecting the practical determination of taxable income; persons, corporations, partnerships subject to tax; exemption and exception; deductions and allowances; preparation and analysis of returns. Fee, \$1. Five credits; spring. Burton.

158. *Accounting Systems*.—Organization and duties of accounting department in business concerns; suggested systems for various types of business. Fee, \$1. Five credits; autumn. Burton.

159. *Advanced Money and Banking*.—Selected topics in monetary science and business finance; value of money; financial effects of the great war, the Federal Reserve system; agricultural credit, business cycles. Prerequisite, B.A. 57. Fee, \$1. Five credits; spring. Preston.

Educ. 160D. Commercial Teachers' Course.—Typical business courses are examined and made the basis for discussions on needs of local business conditions; high school commercial courses and texts studied. Prerequisites B.A. 11, 12, 64, 65, 81, 82, 84 and 85. Five credits; spring. Draper

160. *Advanced Economics*.—Thorough training in economic theory, application to concrete problems. For seniors and graduate students. Prerequisite, B.A. 1 and senior standing. Fee, \$1. Five credits; autumn, winter, spring, summer. Moriarty.

161. *American Labor Problems*.—Relation between the development of the American Labor Movement and free lands, immigration, economic organization, prices, industrial crises. Prerequisite, B.A. 1. Fee, \$1. Five credits; autumn. McMahon.

162. *European Labor Problems*.—Labor movements of modern Europe; economic and political backgrounds, in relation to types of labor organizations. Prerequisite, B.A. 1. Fee, \$1. Five credits; winter.

McMahon.

163. *Industrial Management*.—Problems of promotion and location of industrial plants. Selection of site, layout of processes and control of material. Types of buildings, lighting, safety appliances, economic and psychological effect of scientific management. Fee, \$1. Five credits; autumn.

Leib.

164. *Labor Legislation*.—Development of the law, its interpretation in the solution of the American and European labor problems. Prerequisite, B.A. 1. Fee, \$1. Two credits; spring.

McMahon.

*165. *Economics of Consumption*.

166. *Women in Industry*.—The evolution of women's work; relative importance of women in industry; social reaction in labor legislation. Prerequisite, B.A. 1. Fee, \$1. Three credits; spring.

McMahon.

167. *Employment Management*.—Labor survey, employment forms, job analysis and job specifications, time study, foreman training, wage determination, labor turnover, employees' associations and effective correlation of labor with manager and plant. Fee, \$1. Five credits; winter.

Leib.

168. *History of Economic Thought*.—The chief contributors to economic theory from Adam Smith to Böhm-Bawerk as a basis for understanding present economic problems. Prerequisite, B.A. 1. Fee, \$1. Five credits; autumn.

Moriarty.

*170. *Real Estate and Casualty Insurance*.

171. *Exporting and Importing*.—Technique of exporting and importing; analysis of markets; preparation of documents and calculation of values of staples and of manufactured products and the financing of shipments. Prerequisite, B.A. 1 and 7. Fee, \$1. Five credits; autumn.

Atkinson.

172. *Executive Technique*.—Internal organization of the business, departmental organization and coordination, various systems of management, use of reports and charts and consideration of problems presented by local industries. Fee, \$1. Five credits; spring.

Leib.

173. *Commercial Policies*.—Commercial policies of the nations of the world in connection with the development of American foreign trade. Fee, \$1. Five credits; autumn.

Driscoll.

174. *International Commercial Relations*.—Rules and regulations of states applying to foreign commerce; with special attention devoted to conflicts of commercial interests; commercial treaties; effect of war upon commerce. Fee, \$1. Five credits; winter.

Driscoll.

175. *Business Statistics*.—Collection, presentation and interpretation of statistical data relating to business operations, including consideration of business barometers, market analysis, sales and advertising. Prerequisite, Math. 13. Fee, \$1. Five credits; spring.

Dakan.

177. *Trade of Far and Near East*.—Resources and trade of China, Japan, Siberia, the Philippines, French Indo-China, Siam, India, the Malay Peninsula, the Dutch East Indies, Australia, Persia, Mesopotamia, Syria, Arabia, Turkey and the Balkan States. Prerequisite, B.A. 7. Fee, \$1. Five credits; winter.

Skinner.

*Not offered in 1923-1924.

178. *Trade of Europe*.—Resources of Europe and Africa, and of the trade relations of these sections with the rest of the world, especially the United States. Prerequisite, B.A. 7. Fee, \$1. Five credits; winter.

Atkinson.

180. *Trade of the Americas*.—Resources and trade of Mexico and the Central American and South American countries. Prerequisite, B.A. 7. Fee, \$1. Five credits; spring.

Atkinson.

185. *C.P.A. Problems*.—Selected problems covering various accounting principles. Work taken from American Institute and state C.P.A. examinations. Emphasis is placed on speed, accuracy and forms of presentation. Fee, \$1. Five credits; autumn.

McConahey.

187 *ABC. Research in Secretarial Training*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Draper.

188 *ABC. Apprenticeship in Merchandising*.—Students are placed full time in autumn and spring quarters in actual business. Four-six credits; autumn, winter, spring, summer. Hours to be arranged.

Morse.

191 *ABC. Research in Accounting*.—Two-five credits; autumn, winter, spring. Wednesdays and Fridays, 7:30-9:00 P.M.

Davis.

192 *ABC. Research in Insurance*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Smith.

193 *ABC. Research in Transportation*.—Railway traffic problems from the standpoint of the shipper and carrier. Two-five credits; autumn, winter, spring. Hours to be arranged.

Atkinson.

195 *ABC. Research in Foreign Trade*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Atkinson.

196 *ABC. Research in Business and Industrial Management*.—Autumn, winter, spring. Hours to be arranged.

Leib.

197 *ABC. Research in Business Finance*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Preston.

198 *ABC. Research in Marketing and Advertising*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Russell.

199 *ABC. Industrial Research*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Gregory.

GRADUATE COURSES

201 *ABC. Graduate Seminar*.—Two-five credits; autumn, winter, spring. Wednesdays, 7:00-9:30 P.M.

Lewis.

203 *ABC. Auditing Technique*.—Five credits; autumn, winter, spring. Tuesdays and Thursdays, 7:00-9:30 P.M.

Robertson.

205 *ABC. Seminar in Value and Distribution*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Moriarty.

207 *ABC. Seminar in Labor*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

McMahon.

EDUCATION

Education Hall

PROFESSORS BOLTON, AYER, RANDOLPH; ASSISTANT PROFESSORS WILLIAMS, TERRY;
ASSOCIATE ROBERTS; TEACHING FELLOW HUGHES

I. MINIMUM REQUIREMENTS FOR NORMAL DIPLOMA

101.—Introduction to the Study of Education.—General course covering the field of education. Open to sophomores who have earned 65 credits. Prerequisite to all other courses in education. Five credits; autumn, winter, spring, or summer. Ayer.

110.—Psychology of Teaching Methods.—An attempt to discover the psychological foundation of methods. The application of these to concrete illustrations of teaching. Especially applied to high school instruction. Prerequisite Educ. 101. Five credits; autumn, winter, spring, or summer. Williams.

115.—Child Study.—Development of humanitarian and scientific interest in children; scope, methods, problems relating to education in the home, school and society. Great leaders in child study including Froebel, Pestalozzi, Hall, Dewey, Montessori. Two credits; autumn. Bolton.

119.—Secondary Education: Problems of the High School Teacher.—Secondary school curricula and closely related problems. Prerequisite, Educ. 101. Recommended also 110. Three credits; autumn, winter, spring, or summer. Terry.

145. Practice Teaching I.—One lecture a week, conferences with the instructor, assigned readings, and one period each day devoted to observation and practice teaching under supervision in the Seattle city schools. Prerequisite, Educ. 101, 110, 119. Five credits; (For Phys. Educ. majors, two, three or five credits.) Autumn, winter or spring. Roberts.

146. Practice Teaching II.—A second quarter of practice teaching may be elected. The amount of credit will vary according to department and individual needs. Two, three or five credits; autumn, winter or spring. Roberts.

Courses 101 and 110 are prerequisite to courses 160A to 160Z. One of the "teachers' courses" required for the normal diploma.

160A. Teachers' Course in Botany.—Discussion of texts, subject matter and methods of presenting the subject. Prerequisite, two years of botany. Two credits; autumn. Frye.

160B.—Teachers' Course in Chemistry, Laboratory Methods of Instruction.—Two credits; autumn, winter, spring. Smith.

160C. Teachers' Course in Latin.—Methods and problems in the teaching of high school Latin. Prerequisite, Latin 50 or 60 or 70. Except by special arrangement this course must be taken in combination with Latin 107. Two credits; autumn. Clark.

160D. Commercial Teachers' Course.—Typical business courses are examined and made the basis for discussions on needs of local business conditions. Study of the content of high school commercial courses and of texts. Prerequisites, B.A. 11-12, 64-65, 81, 82, 84 and 95. Five credits; spring. Draper.

*160E. *Teachers' Course in English.* Fall '23 - 2 cr.

160F. Teachers' Course in Geography.—Teaching of geography, physical geography, and commercial geography in the schools. Prerequisites, one term of geology, physiography and geography. Two credits; winter. Saunders.

160G. Teachers' Course in German.—Aims and methods in the application to the teaching of German; lesson plans; courses of study for high schools; textbooks and aids in teaching; coaching of underclassmen in elementary classes. Prerequisite, Ger. 110. Two credits; spring. Eckelman.

160H. Methods of History Teaching.—With special reference to the work of the high school. Required of majors in history who expect to teach. ~~Five~~ credits; autumn, winter. *2 cr., Fall* Winger. *Winter - To have H again* McMahon.

160I-160J. Teachers' Course in Home Economics.—Curricula, methods of teaching and equipment. Prerequisite, H.E. 5-116, 107, 112-113, 143, 144, 145; Arch 1-2; Physics. 89-90; Bact. 101. Three recitations. Three credits each quarter; autumn, winter. Raitt, Denny.

160M. Teaching of Mathematics.—Problems peculiar to the teaching of high school mathematics. Nature and value of mathematics with their pedagogic bearings. Critical review of courses and methods of teaching. Required of mathematics majors who are candidates for the normal diploma. Prerequisite Math. 109. ~~Two~~ credits; spring. *3 cr.* Winger.

160N. Teachers' Course in School Music.—Prerequisite, Music 113, 114. Two credits; spring. Dickey.

160O. Civics in Secondary Schools.—Attitude of approach. arrangement of material, methods of presentation; development of an appreciation of the reality of our political system; use of material, textbooks, current articles, legislative bills, sample ballots, observation of local government agencies, etc. Two credits; spring. Laube.

160P. Methods of Teaching Art.—Courses of study methods and material. Two credits; autumn. Rhodes.

160R. Teachers' Course in Physical Education.—Curricula, application of educational principles to the teaching of physical education, administration in public schools. Prerequisites, Phys. Educ. 101-102-103, 104-105-106, 111-112-113. Two credits; autumn quarter. Gross.

160T. Teachers' Course in French.—Aims, and methods best suited to attain them. Prerequisites, French 41, 101, 102, 103, 158, and 159. Two credits; spring. Frein.

160U. Teachers' Course in Spanish.—Methods of teaching Spanish. Practice in the classroom. Prerequisites, Span. 101, 102; Span. 103 and 191 must be taken concurrently with 159. Two credits; spring. Ober.

160X. Teachers' Course in Piano Playing.—A survey of teaching material, with supervised practice. Continued in the winter and spring quarters as Music 165, 166. Two credits; autumn.

160Z. Teachers' Course in Zoology.—For students preparing to teach zoology in high schools. Prerequisite, Zool. 1-2. Two credits; winter. Gunthorp.

II. ADVANCED UNDERGRADUATES AND GRADUATES

To be admitted to courses in this group (II) students must have earned at least 10 credits in education, including courses 101, 110.

150. Introduction to Educational Measurements.—Development of the use of tests and scales in improving instruction in the public schools. Con-

150C - Saturday class - 2 cr.

sideration of elementary statistical methods, intelligence tests and subject tests. Lab. fee, \$4.50. Three credits; autumn, winter or spring. Hines.

151. *Educational Sociology. Social Foundations.*—Nature of the fundamental social structures and their relation to progress, followed by a special application of modern social knowledge to the problems promoting human welfare through educational activities. Three credits; autumn, winter, spring, or summer. Randolph.

152. *Social Surveys of School Studies and Activities.*—Critical study of the literature seeking to evaluate the existing materials and to suggest fruitful reconstruction in the light of social needs. Two credits; autumn, winter, spring, or summer. Randolph.

154. *Junior High School.*—History of the movement for reorganization; functions and features of this new organization. Prerequisite, Educ. 119. Two credits; autumn, winter, summer. Terry.

156. *High School Organization: The high school principal.*—Supervision in high school including the school population, extra-curricular activities, publicity, cooperative curriculum making, etc. Prerequisite, Educ. 119. Three credits; spring. Terry.

161. *History of Education.*—Social interpretation of the historic beginnings of education, contributions of the Greeks and Romans, development of Christianity, medievalism, and the beginning of modern education. Development of educational practices since the Renaissance. Five credits; autumn. Randolph.

170. *Educational Psychology.*—Psychological basis of educational processes. Native endowment as the basis for learning; individual differences; habit formation; technique of learning, the learning curve, transfer of training; emotional and volitional behavior. Five credits per quarter; winter, spring. Bolton.

172. *Psychology of Elementary School Subjects.*—Survey of experimental studies which furnish the basis for current practice in learning and teaching reading, writing, arithmetic, spelling, drawing, language. Three credits; winter. Williams.

173. *Psychology of High School Subjects.*—Consideration of experimental studies which form the basis for learning and teaching the subjects in the high school curriculum; history, mathematics, English, foreign language, science, etc. Three credits; spring. Williams.

176-177-178. *Educational Guidance.*—Methods and literature of personal, vocational, and educational guidance in the public schools, advisory systems, child account, classification, promotional plans, predictions, placement. For advanced students and teachers only. Two credits a quarter; autumn, winter, and spring. Ayer.

181. *Educational Problems of Adolescence.*—Physical, intellectual, emotional, moral and social characteristics of adolescents, and the educative activities suited to the period of secondary school education. Five credits; autumn. Bolton.

191. *Educational Administrations State and County.*—Principles of proper administration of school systems in states and counties, including comparison of school laws and school systems in several states with special attention to Washington and neighboring states. Three credits; autumn. Ayer.

192-193. *Educational Administration: City School.*—For those preparing for superintendencies, principalships, and other supervisory positions. Three credits a quarter; winter and spring. Five credits in summer. Ayer.

195. *School Supervision*.—Focusing on recognized techniques of effective classroom work as the central factor of in-service education and the common concern of teacher and supervisor. In connection with the treatment of each type of activity the special opportunities of the supervisor will be pointed out. Five credits; winter, spring, or summer. Randolph.

196, 197, 198. *Intelligence and Its Measurement*.—The concept of intelligence with its practical bearing on school and social ability. Practice in individual and group tests of intelligence. For advanced students, teachers, and principals. Lab. fee, \$2.50. a quarter Two credits a quarter; autumn, winter, spring. Hines.

III. FOR GRADUATES ONLY

To be admitted to courses in this group (III) students must be college graduates, and must have earned at least 18 credits or the equivalent in education. The following courses may be counted toward the masters' and doctors' degrees.

211-212-213. *Comparative Education*.—Modern education in foreign countries, especially in Germany, France, England, Norway, Sweden and Canada. Relations between social ideals of nations and their educational systems. Influence upon educational theories and practices in America. Two credits a quarter; winter, spring. Bolton.

215. *Experimental Education*.—Method and practice in experimental procedure and technique in conducting experiments in connection with school work. Three double periods a week. Three credits; autumn.

231-232-233. *Advanced Educational Psychology*.—Contributions to educational psychology with special emphasis upon learning, its progress, conditions and effects. Two credits; autumn, winter, spring.

241-242-243. *Current Literature of Education*.—Readings and discussions. Periodical lectures by members of staff. Designed for well-prepared students who desire to make a thorough investigation of present day problems in American education. Two credits a quarter; autumn, winter, spring.

261-262-263. *Seminar in Educational Sociology*.—Recent contributions to educational sociology and study of special problems. Two credits a quarter; autumn, winter and spring. Randolph.

271-272-273. *Seminar in Educational Surveys*.—Two credits a quarter; autumn, winter, spring. Ayer.

275-276-277. *Seminar in Secondary Education*.—Research in problems of high school administration and supervision. Two credits a quarter; autumn, winter, and spring. Terry.

285-286-287. *Seminar in Educational Measurements*.—Theory of educational measurements. Critical evaluation of new test material. Reports. Arranged especially for teachers of Seattle and vicinity. Lab. fee, \$4.50. Two credits a quarter; autumn, winter, and spring.

298-299-300. *Individual Research or Thesis Work*.—Intensive study and original investigation of special problems. Results are usually reported in one of the seminars and when especially meritorious may be published. The special problems are directed by the members of the department representing the fields of work chosen by the students. Three to five credits; autumn, winter, spring. Staff.

ELECTRICAL ENGINEERING

Engineering Hall

PROFESSOR MAGNUSSON; ASSOCIATE PROFESSORS LOEW, KIRSTEN; ASSISTANT PROFESSOR SHUCK; INSTRUCTORS KALIN, HOARD, TOLMIE, G. S. SMITH

101. Direct Currents.—Short course in continuous current machinery, for non-electrical students, to be taken in connection with E.E. 102. Prerequisite, Phys. 98. Four credits; autumn, winter, spring. Kalin, Hoard.

102. Direct Currents Laboratory.—Continuous current machinery, for non-electrical students. Prerequisite, Phys. 98. Lab. fee, \$4. Two credits; autumn, winter, spring. Hoard, Kalin.

109. Direct Currents.—Theory of electric and magnetic circuits; construction, operation and characteristics of direct current generators and motors. To be taken with E.E. 110. Prerequisite, Phys. 98. Four credits; autumn, winter, spring. Hoard, Tolmie.

110. Direct Currents Laboratory.—Direct current machinery. Prerequisite, Phys. 98. Lab. fee, \$4. To be taken in connection with E.E. 109. Two credits; autumn, winter, spring. Shuck, Kalin.

111. Direct Currents.—Continuation of E.E. 109 in direct current machinery. Storage batteries. Regulation and control of direct current systems. To be taken in connection with E.E. 112. Prerequisite, E.E. 109. Four credits; autumn, winter, spring. Shuck, Tolmie.

112. Direct Currents Laboratory.—Experimental work on direct current dynamo machinery and on storage batteries. To be taken with E.E. 111. Prerequisite, E.E. 110. Lab. fee, \$4. Four credits; autumn, winter, spring. Shuck, Smith.

15. Elementary Direct Currents.—(Extension Night Class). Laws of the electric and magnetic circuits with application to direct current machinery without the aid of advanced mathematics. For electricians having at least two years of practical experience with electrical machinery. Shuck.

20. Elementary Alternating Currents.—(Extension Night Class). Alternating current theory with experimental work on alternating current machinery. Prerequisite, E.E. 15. Shuck.

121. Alternating Currents.—Alternating currents, for non-electrical students. To be taken with E.E. 122. Prerequisite, E.E. 101. Four credits; autumn, winter, spring. Hoard, Smith.

122. Alternating Currents Laboratory.—Experimental work on alternating current machinery. To be taken with E.E. 121. Prerequisite, E.E. 102. Lab. fee, \$4. Two credits; autumn, winter, spring. Shuck, Kalin.

131. Electric Communication.—Wire and radio telephone and telegraph. Theory, construction and operation of electric communication systems. Central telephone station practice. Junior or senior elective. Prerequisite, E.E. 109, 110. Four credits; autumn, winter. Tolmie.

****132. Telephones and Telegraphs.**—Details of automatic and manual switchboards; testing and locating faults; multiplex telegraphy; railway signal systems. Junior or senior elective. Prerequisite, E.E. 131. Lab. fee, \$2. Three credits. Tolmie.

**Will be offered if a sufficient number of students elect the course

141. Illumination.—Electric lamps; commercial photometry; adaptation of electric lighting to commercial requirements. Junior or senior elective. Prerequisite, E.E. 109, 110. Lab. fee, \$2. Four credits; winter Kirsten.

152. Electrical Machine Design.—Complete design of one direct current generator or motor. Prerequisite, E.E. 111, 112. Five credits; autumn, winter, spring. Loew.

****154. Design of Electrical Apparatus.**—Switchboards, transformers, alternators, alternating current motors, etc. Prerequisite, E.E. 152. Four credits. Kirsten.

161. Alternating Currents.—Theory of singlephase and polyphase system; energy storage in magnetic and dielectric fields; vector diagrams and the symbolic methods of analysis; power factor and power measurements; hysteresis and eddy currents; theory of the transformer, singlephase and polyphase induction motors. To be taken with E.E. 161. Prerequisite, E.E. 111. Six credits; autumn, winter, spring. Loew, Hoard.

162. Alternating Currents Laboratory.—Experimental work with alternating current machinery. To be taken with E.E. 161. Prerequisite, E.E. 112. Lab. fee, \$4. Four credits; autumn, winter, spring. Shuck, Smith.

163. Alternating Currents.—Theory of alternators, rotary converters, synchronous and commutator motors and transmission lines; high tension phenomena; corona; commercial wave forms; unbalanced and inter-linked systems. To be taken with E.E. 164. Prerequisite, E.E. 161. Six credits; autumn, winter, spring. Loew, Shuck.

164. Alternating Current Laboratory.—To be taken with E.E. 163. Prerequisite, E.E. 162. Lab. fee, \$4. Four credits; autumn, winter, spring. Hoard, Smith.

171. Electric Railways.—Equipment, roadbed, construction and operation. Prerequisite, E.E. 109, 110. Four credits; autumn, winter. Hoard.

173. Central Stations.—Location, design and operation of electric central stations. Prerequisite, E.E. 163, 164. Four credits; autumn, spring. Kirsten.

175. Power Transmission.—Theory, design and operation of electric power transmission lines. Prerequisite, E.E. 163, 164. Four credits; autumn, spring. Loew.

181, 182. Radio.—Radio systems; lineal, open and complex oscillations; coupled circuits; resonance; transmitters; receivers; vacuum tubes in radio work; quenched and undamped oscillations. Prerequisites, E.E. 161, 162. Lab. fee, \$2. Five credits a quarter; winter, spring. Tolmie.

186, 188. Thesis.—After consultation with the head of the department the student selects a suitable topic for investigation. Reports of progress are made weekly to the instructor in charge of the work selected. A complete report of the work is typewritten and bound and a copy deposited in the University library. Two to five credits a quarter; autumn, winter, spring. Magnusson, Loew, Kirsten, Shuck.

191. Engineering Equations.—Mathematical investigation of electrical phenomena with quantitative solutions of typical engineering problems. Prerequisite, E.E. 161, 162. Three credits; spring. Hoard.

195. Electric Transients.—Exponential law of simple transients; single and double energy transients; current oscillations and traveling waves;

******Will be offered if a sufficient number of students elect the course.

natural period of transmission lines; short circuit transients; surges; corona; lightning phenomena. Prerequisite, E.E. 163, 164. Two credits; autumn, winter, spring. Magnusson.

196. *Electric Transients Laboratory*.—To be taken in connection with E.E. 195. Prerequisite, E.E. 164, Lab. fee, \$2. Two credits; autumn, winter, spring. Kalin.

198. *Electric Transients Laboratory*.—Continuation of E.E. 196. Lab. fee, \$2. Two credits; autumn, winter, spring. Kalin.

210, 212, 214. *Research*.—Two to five credits a quarter; autumn, winter, spring. Magnusson, Loew, Kirsten.

ENGINEERING SHOPS

INSTRUCTOR SCHALLER; ASSISTANT SULLIVAN

52. *Pattern Shop*.—Designing and building wooden patterns and foundry flask equipment. Lab. fee, \$2. One credit; winter, spring. Schaller.

53. *Foundry*.—Bench and floor moulding, use of moulding machines, core making, cupola practice, and foundry management. Lab. fee, \$2. One credit; autumn, winter, spring. Schaller.

54. *Forge*.—Forge practice, acetylene welding and heat treatment of steels. Lab. fee, \$2. One credit; autumn, winter, spring. Schaller, Sullivan.

55. *Machine*.—Elementary machine shop practice and management. Lab. fee, \$2. One credit; autumn, winter, spring. Schaller, Sullivan.

56. *Assembly*.—Machine assembly, bench work and inspection, shipping. Prerequisite, Shop 53. Lab. fee, \$2. One credit; autumn, winter. Schaller, Sullivan.

105. *Advanced Machine Shop Practice, Millwrighting*.—Prerequisite, Shop 53. Lab. fee, \$2. One credit; autumn. Schaller, Sullivan.

106. *Principles of Shop Management as Applied to Engineering Shops*.—Prerequisite, Shop 105. Lab. fee, \$2. One credit; winter. Schaller.

107. *Industrial Management*.—Design and equipment of a representative manufacturing plant. Prerequisite, Shop 106. Lab. fee, \$2. Two credits; spring. Schaller.

108. *General Shop Practice*.—Prerequisite, Shop 53. Lab. fee, \$2. One credit; autumn, winter, spring. Schaller.

ENGLISH

Denny Hall

PROFESSORS PADelford, PARRINGTON, BENHAM; ASSOCIATE PROFESSORS MILLIMAN, COX, GARRETT; ASSISTANT PROFESSORS HARRISON, BROWN; INSTRUCTORS HUGHES, BRELAND, LADD; ASSOCIATES P. JONES, VICKNER, KERRIGAN, LAWSON; ASSISTANTS MCCAUSLAND, HALL, RIGO, McMorran; AND TEACHING FELLOWS.

REQUIREMENTS FOR MAJOR STUDENTS

The plan of work for major students consists normally of (1) a minimum of 27 hours work in lecture and recitation courses, and (2) a course of individual reading in English and American literature under departmental tutors, extending throughout the senior year.

At the conclusion of the senior year all major students are required to take an examination in the history of English literature and the plan of work should be designed to that end.

1-2-3. *Elementary Composition*.—Principles and practice of composition, with conferences for personal criticism. The work belongs rather to the high school than to the University. Those whose preliminary training has been superior are excused from the course on examination. A grade of "A" in course 1 excuses a student from 2. Five credits for two quarters. For Fine Arts students, three credits; autumn, winter, spring. Five credits; autumn, winter, spring. Padelford in charge.

4. *Elementary Composition*.—For students in engineering, forestry, fisheries, and pharmacy. Students are required to repeat the course if their work is not of high quality. Three credits for one quarter. Padelford in charge.

5. *Elementary Composition*.—A second quarter's work for students in fisheries and forestry. Three credits a quarter. Padelford in charge.

21. *Introduction to Poetry*.—Designed to develop appreciation and understanding of poetry. Study of the poetic mind, and of the materials and methods of poetic art. Illustrative reading from poets of all periods. Five credits; autumn, winter, spring. Hughes.

24, 25, 26. *Victorian Prose and Verse*.—The poets and essayists of the middle and later nineteenth century. Five credits a quarter; autumn, winter, spring. Brown.

37. *Argumentation*.—Special attention to analysis, evidence, proof, and refutation. Each student required to construct briefs and to develop them into finished arguments. Prerequisite, Eng. 1. Five credits; autumn, winter, spring. Breland.

38, 39. *Debating*.—Oral application of the principles of argumentation. Preparation of briefs required for each discussion. Important questions studied and debated in class. Prerequisite, Eng. 37 or special permission. Five credits; winter, spring. Breland.

40-41. *Preparation of Public Addresses*.—The rhetoric and psychology of public address. Special lectures on methods of successful speakers. Much practice required. Prerequisite, Eng. 1. Five credits; autumn, winter. Breland.

42. *Extempore Speaking*.—Aims to develop accurate thinking, ease on the platform, and forceful extemporization. Material for each speech carefully planned; only the language is extempore. Prerequisite, Eng. 40-41 or special permission. Five credits; spring. Breland.

51, 52, 53. *Advanced Composition*.—Composition based on model English and American essays. May be taken for upper division credit. Prerequisite, Eng. 1-2. Two sections. Three credits a quarter; autumn, winter, spring. Milliman.

54, 55, 56. *Advanced Composition*.—Criticism and style designed to give a critical and philosophical basis to one's judgments on men, affairs, literature and art. May be taken for upper division credit. Prerequisite, English 1-2. Three credits a quarter; autumn, winter, spring. Cox.

61, 62, 63. *Verse Writing*.—The principles of versification, with practice in verse writing. Prerequisite, Eng. 1-2. Two credits a quarter; autumn, winter, spring. Hughes.

64, 65. *Literary Backgrounds*.—Important works in English literature. Open to all. Required in the freshman year of pre-journalism majors. Five credits a quarter; autumn, winter. Garrett.

66. *Great Books*.—Books which have had a continuous influence on literature, including Arabian Nights, Plutarch's Lives, Cervantes' Don Quixote, Moliere's Comedies, Goethe's Faust, and Praise of Folly by Erasmus. Five credits; spring. Garret.

67, 68, 69. *Great American Writers*.—Studies in the works of Emerson, Hawthorne, Longfellow, Lowell, Whitman, Poe, Bryant, Whittier, Mark Twain, and others. Two credits a quarter; autumn, winter, spring. Milliman.

70, 71. *Shakespeare*.—Detailed study of a few plays, with rapid reading of the remainder. Three credits a quarter; autumn, winter. Two sections. Padelford, Ladd.

73, 74, 75. *Lower Division Contemporary Literature*.—Studies of European and American thought in the nineteenth century and later. Three to five credits; autumn, winter, spring. Milliman, Harrison, Ladd.

*81, 82, 83. *Literature of the English Colonies*.

98. *The Bible as Literature*.—The literature of the Old Testament. Open to all. Three credits a quarter; spring. Padelford.

101. *Intercollegiate Debating*.—Students who represent the University in intercollegiate debates will, on recommendation from the debate coach, be allowed ~~two~~ credits for the quarter in which the debating takes place, the credit being entered as English 101. Breland.

102. *Advanced Composition for Engineers*.—Open to engineering students who have done superior work in English 4. Three credits for one quarter; winter, spring.

104, 105, 106. *Contemporary Literature*.—Three credits a quarter; autumn, winter, spring. Cox, Harrison, Brown.

Dram. Art 111, 112, 113. Play-writing.—Five credits a quarter. Hughes.

Dram. Art 127, 128, 129. History of Theatre Art.—Two credits a quarter. Hughes.

124. *Chaucer*.—The poetical works of Chaucer. Three credits; autumn. Garrett.

125. *Mediaeval Literature*.—Life and ideals of the Middle Ages and their influence upon modern literature. Texts read will include Piers Plowman, Aucassin and Nicolette, The Pearl, Malory's Morte d'Arthur. Three credits; winter. Garrett.

126. *Mediaeval Literature (continued)*.—Texts read will include the mediaeval lyric and drama, Froissart, Dante, the Story of Burnt Njal, the Nibelungenlied. Three credits; spring. Garret.

*127, 128, 129. *Milton and His Contemporaries*.

130, 131, 132. *The English Drama*.—Plays representative of the origin and development of English drama. Three credits a quarter; autumn, winter, spring. Benham.

133, 134, 135. *Main Tendencies in English Literature, I*.—English national ideals, from the beginnings to 1642. Open to sophomores expecting to major in English. Three credits a quarter; autumn, winter, spring. Benham.

136, 137, 138. *Main Tendencies in English Literature, II*.—English national ideals from 1642 to the present. Open to sophomores who are expecting to major in English. Three credits a quarter; autumn, winter, spring. Parrington.

*Not offered in 1923-1924.

141, 142. *Social Ideals in Literature*.—Model commonwealths, and such other literature as illustrates the development of social and economic thought. Three credits a quarter; winter, spring. Benham.

*144, 145, 146. *Romantic Revolt*.

*147, 148, 149. *The English Novel*.

161, 162, 163. *American Culture*.—Development of American ideals and their expression in literature and other arts. From the beginnings to 1870. Three credits a quarter; autumn, winter, spring. Parrington.

164, 165, 166. *American Literature since 1870*.—Autumn, the beginnings of realism; winter, tendencies from 1900 to 1915; spring, contemporary fiction and poetry. Three credits a quarter; autumn, winter, spring. Parrington.

167, 168, 169. *Later American Poetry and Criticism*.—An advanced course. Open by permission. Two credits a quarter; autumn, winter, spring. Parrington.

170, 171, 172. *Shakespeare*.—His work as a whole in the light of Elizabethan dramatic conditions. Three credits a quarter; autumn, winter, spring. Brown.

174, 175, 176. *Nineteenth Century English Poetry*.—Wordsworth, Shelley, Keats, Tennyson, Browning, Swinburne, Morris, Arnold, Rosetti. Three credits a quarter; autumn, winter, spring. Padelford.

183, 184, 185. *General Literature*.—Readings in European literature, with conferences and reports. Three credits a quarter; autumn, winter, spring. Brown.

187. *Philosophy in Contemporary Drama*.—Social and philosophical ideas in contemporary drama. Three credits; autumn. Benham.

*188, 189. *Advanced Teachers' Course*.

190 given
191, 192, 193. *Major Conference*.—Individual conferences to correlate studies and for guidance in individual reading. Each student is expected to meet his instructor once a week in conference. Three credits a quarter; autumn, winter, spring. Harrison, Cox, Ladd.

*194, 195, 196. *Studies in Romance*.

GRADUATE COURSES

For other courses that may be counted toward an English major for an advanced degree, see French 210, 211, 212, *French Criticism*; and Liberal Arts 214, 215, 216, *Studies in Realism*.

201, 202, 203. *Introduction to Graduate Study*.—Methodology and bibliography of the English language and literature. One credit a quarter; autumn, winter, spring. Benham.

204, 205, 206. *Pro-Seminar in Chaucer*.—The works of Chaucer and the problems of Chaucerian scholarship. Excursions into the literature of Chaucer's contemporaries. Two to eight credits a quarter; autumn, winter, spring. Garrett.

*207, 208, 209. *English Literature from Chaucer to Dryden*.

211, 212, 213. *A Pro-Seminar in 16th Century Literature*.—For the coming year the class will study the poetry of Edmund Spenser as a fusion of

*Not offered in 1923-1924.

classical, medieval and Renaissance impulses and traditions. May be taken to advantage by students who have already studied Spenser during a summer session. Two to eight credits a quarter; autumn, winter, spring. Padelford

221, 222, 223. *Modern English Literature.*

224, 225, 226. *American Literature.*

230, 231, 232. *Old and Middle English.*—Early English Grammar. Readings in Old and Middle English authors. Three credits a quarter; autumn, winter, spring. Benham

COURSES IN FOREIGN LITERATURE TAUGHT IN ENGLISH

(For details see foreign language departments)

French 115, 116, 117; German 106, 107, 108; Greek 13, 14; Italian 181, 182, 183; Oriental Literature and Language 30, 31, 32, 50, 51, 52; Scandinavian 180, 181, 182.

COMPARATIVE PHILOLOGY

The following courses in Comparative Philology are available in the department of Scandinavian Languages and Literature.

190, 191. *Introduction to the Science of Language.*—Two credits: autumn, winter. Vickner.

192. *Life of Words.*—Two credits; spring. Vickner.

FISHERIES

Fisheries Hall

PROFESSORS COBB, KINCAID, FELLERS; INSTRUCTORS ANDERSON, CRAWFORD;
LECTURER CLOUGH

I. FISHERIES

1, 2. *Introduction to Fisheries.*—General review and history of the world's fisheries. Two credits a quarter; autumn, winter. Cobb.

3, 4, 5. *Ichthyology.*—Structure, classification and habits of economic fishes. Course 5 will include other economic marine animals, particularly oysters and clams. Prerequisite, Zool. 1, 2. Lab. fee, \$3. Five credits a quarter; autumn, winter, spring. Kincaid, Crawford.

6. *Pacific Fisheries.*—General review and history of fisheries of the Pacific. Winter quarter is open to short course students. Two credits; winter, spring. Cobb.

Courses 7, 8, 9, 10, 12, 13.—(Short course subjects see College of Fisheries bulletin, pages 14, 15.)

50. *Elements of Fisheries.*—Fishery science, stressing economic and cultural aspects of the subject. Lectures, demonstrations, and occasional trips. Offered only to students not enrolled in the College of Fisheries. Three credits; autumn. Cobb, Kincaid, Crawford.

101-102-103. *Fish Culture.*—Developmental history and artificial propagation of economic fishes, lobsters, etc. Prerequisite, Fish. 3, and Zool. 5. Lab. fee, \$3. Five credits a quarter; autumn, winter, spring. Crawford.

104-105. *Fishery Methods.*—Construction and uses of apparatus; handling and transportation of products, etc. Three lectures and two laboratory periods. Lab. fee, \$3. Five credits a quarter; winter, spring.

106. *Handling Fresh and Frozen Fishery Products.*—Handling, care, and transportation of fresh and frozen aquatic animals. Prerequisite, Fish. 3, 4 and 5. Three lectures and two laboratory periods. Lab. fee \$4. Five credits; autumn. Anderson.

107. *Curing of Fishery Products.*—Commercial methods of curing and preservation, by drying, salting, smoking and spicing of aquatic animals. Prerequisite, Fish. 106. Three lectures and two laboratory periods. Lab. fee, \$4. Five credits; winter. Anderson.

108. *Canning of Fishery Products.*—Commercial methods of canning aquatic animals in either tin or glass. Prerequisite, Fish. 106 and 107. Three lectures and two laboratory periods. Lab. fee \$4. Five credits; autumn. Cobb, Anderson.

112. *Oyster and Clam Culture.*—Development and propagation of oysters and clams. Prerequisite, Fish. 5. Lab. fee, \$3. Five credits a quarter; autumn. Kincaid.

115. *The Economic Fishery Resources of North America.*—Fishery resources of the North American continent and adjacent seas, their development and commerce, and government policies of conservation. Three credits; spring. Cobb.

117. *Diseases of Fish.*—Nature and causes of disease in fishes. Three lectures and two laboratory periods. Lab. fee, \$4. Five credits; autumn. Jameson.

140. *Aquarium Management.*—Study and care of ornamental freshwater fishes in balanced and running water aquaria. Prerequisite, Botany 53. Three lectures and three two-hour laboratory periods. Lab. fee, \$3. Five credits; autumn. Crawford.

147. *Preparation of Secondary Products.*—Manufacture of fish meal, fertilizer, oils, glues, leathers and furs from aquatic animals. Prerequisite, Fish. 106, 107 and 108. Three lectures and demonstrations. Three credits; spring.

150, 151, 152. *Problems in Fish or Shellfish Culture.*—Students with proper preparation, which should include 15 hours in fish culture or 15 hours in shellfish culture and Fish. 5, will be assigned special problems to be worked out under direction of the instructor. Five credits a quarter; autumn, winter, spring. Kincaid, Crawford.

155, 156, 157. *Problems in Fisheries.*—Students with proper preparation, which should include at least 15 hours' in fishery methods and preparation of fishery products, will be assigned special problems to be worked out under direction of the instructor. Five credits a quarter; autumn, winter, spring. Cobb, Clough, Anderson.

II. FRUIT AND VEGETABLE PRESERVATION

1, 2. *Introduction to Food Preservation.*—General review and history of the art of food preserving. Two credits a quarter; autumn, winter.

120. *Dehydration and Curing of Fruits and Vegetables.*—Principles and methods used in drying, salting and pickling fruits and vegetables. Five credits; autumn.

150 *Fundamentals of Canning.*—Principles on which canning is based; sterilization, including heat penetration, effect of acid foods on bacteria, and fill of can; exhaust and vacuum, including methods of obtaining, purposes, and effect of temperature and altitude upon vacuum; corrosion of tin plate. Five credits; spring.

207

202 for D. R. Crawford + Estelle Dodge

151-152-153.—*Commercial Canning of Fruits and Vegetables*.—Methods of canning fruits and vegetables, particularly those grown in the Pacific Northwest, including preparation, grading, syruling or brining, exhausting, peeling, cooking, cooling and storing. Proper design of plants is also considered. Five credits a quarter; autumn, winter, spring.

154. *Advanced Food Preservation*.—Manufacture of marmalades, glace fruits, candied fruits, maraschino cherries, and conserves. Three credits; spring.

155. *Commercial Jam, Jelly and Juice Manufacture*.—Scientific principles and practical methods on which the manufacture of these products is based. Three credits; autumn.

156. *Research Problems*.—Students with the proper preparation, which should include at least 15 hours' work in food preservation methods, will be assigned special topics to be worked upon under direction of the instructor. Five credits; spring.

FORESTRY AND LUMBERING

Forest Products Laboratory

PROFESSORS WINKENWERDER, KIRKLAND; ASSOCIATE PROFESSOR CLARK; ASSISTANT PROFESSOR GRONDAL; LECTURER ZIMMERMAN

1. *Elementary Dendrology*.—Nomenclature, classification and indention of trees, including all northwest species and of one type species of each genus of the important timber trees of North America. Prerequisite, high school botany. Required of freshmen. Two recitations, one quiz and two 3-hour laboratory periods a week, field trips additional. Lab. fee, \$2.00. Five credits; autumn or spring. Winkenwerder and assistant.

2.—*General Forestry*.—To familiarize the student with the field of work he is about to enter. Required of freshmen. Three credits a quarter; autumn. Winkenwerder.

3. *General Forestry*.—Continuation of For. 2, but need not be preceded by it. Winter. Winkenwerder.

4. *Forest Protection*.—Its economic importance; forest fires, their prevention and control. Required of freshmen. Three credits; spring. Winkenwerder.

5. *Woodcraft*.—Food and clothing, camp equipment and sanitation, packing a horse, and general woodcraft. A section will be arranged for students not enrolled in forestry if not less than 12 apply. Two lectures a week; demonstrations and practice work additional. Lab. fee, \$2. Two credits; autumn. Clark.

6. *General Forestry*.—For students not majoring in forestry. Prerequisite to all other courses in forestry for non-majors in forestry, offered primarily for business administration students who desire to prepare for work in lumber marketing. Others admitted until section is full. Five credits; winter. Winkenwerder.

51. *Forest Mensuration*.—Principles and methods of computing, scaling, cruising, mapping; construction of volume tables, taper tables, and form factors. Open to short course students. Three recitations, two 3-hour laboratory periods. Lab. fee, \$2. Five credits; winter. Winkenwerder, Clark.

52. *Forest Mensuration*.—Methods of studying growth in diameter, height and volume; sample plot methods; construction and use of growth

and yield tables. Three recitations and two 3-hour laboratory periods. Prerequisite, For. 51. Lab. fee, \$2. Five credits; spring.

Winkenwerder, Kirkland.

53. *Construction*.—Trails, roads, logging railroads, telephone lines, wooden bridges, cabins, barns, and fences; clearing from the standpoint of United States Forest Service improvement work, and logging construction. Required of sophomores. Lab. fee, \$2. Three credits; autumn.

Clark and assistants.

57a. *Silvics*.—Climate, soil and life factors which determine character of forest vegetation. Form and character of the individual tree. Life history of the forest. Silvical characteristics of tree species. Lectures and quiz. Required of sophomores. Prerequisite, 10 hours botany, For. 1 and 52. Three credits; autumn.

Kirkland.

57b. *Field Methods in Silviculture*.—To accompany 57a. One 3-hour laboratory period. Elective. Lab. fee, \$2. One credit; autumn.

Kirkland.

58. *Silviculture*.—Regeneration of forests by natural reproduction, seeding or planting. Care of young, middle-aged and older stands. Required of sophomores. Prerequisite For. 57a. Lab. fee, \$2. Five credits; spring.

Kirkland.

101. *Wood Technology*.—Wood structure and identification of commercial timbers of the United States; physical properties of woods; kiln drying. Required of juniors. Prerequisite to all courses in forest products; prerequisites, college botany, For. 1, 10 hours chemistry and general physics. Lab. fee, \$2. Five credits; autumn.

Grondal.

102. *Wood Identification*.—Laboratory work of For. 101. Open to students in other departments. Prerequisite, college botany, 8 hours. Lab. fee, \$2. Two credits; autumn.

Grondal.

103. *Wood Analysis*.—Identification, physical properties and characteristics of woods used in building construction. Open only to architecture students. Two credits; spring.

Grondal.

104. *Timber Testing*.—Stresses, tests, theory of flexure, moisture and strength; mechanical properties of wood. Required of juniors. Prerequisite, Math. 54, 55, 56, and For. 101, general physics. Lab. fee, \$2. Five credits; spring.

Zimmerman.

105. *Wood Preservation*.—Nature of decay of timber and methods and economics of preservation. Laboratory work with the college treating plant and reports on local creosoting plants. Required of juniors and graduates. Prerequisites, For. 101 and one year of chemistry. Lab. fee, \$2. Five credits; spring.

Grondal.

110. *Characteristics of Trees*.—Identification, distribution, life habits, and uses of trees of the Pacific Northwest. Offered only to students not enrolled in forestry. Two lectures weekly and occasional field trips. Two credits; spring.

Winkenwerder.

112. *Properties and Uses of Woods*.—Offered only as a correspondence course.

Grondal.

119. *Forest Administration*.—Objects, principles and methods of administering private and public forests and forest industries. Prerequisite, For. 126 or may be taken concurrently. Three credits; winter.

Kirkland.

126. *Forest Economics*.—Forests of the United States, their uses and relation to other industries and resources. Statistics of production and

consumption. Required of juniors or seniors in forestry and open to students in other departments. Prerequisite, B. A. 1. Three credits; winter. Kirkland.

151. *Forest Finance and Valuation*.—Mathematics of forest finance and operations; cost of growing timber; valuation of land for forest production. Required of students in senior or graduate year. Prerequisites, For. 52 and 58. Five credits; autumn. Kirkland.

152. *Forest Organization*.—Principles of forest organization and regulation of the cut; advantages of foresight and planning in forest operations for a term of years in advance; sustained yield management of forests; forest working plans. Required of students in senior or graduate year. Prerequisite, For. 151. Five credits; winter. Kirkland.

153. *General Lumbering*.—Comparative methods of lumbering on the Pacific Coast and in other lumbering regions of the United States. Prerequisite to all courses in logging and milling. Required of juniors. Five credits; autumn. Clark.

157. *Lumber and its Uses*.—Wood structure, leading to identification of local species; physical and mechanical properties of wood. Primarily for business administration students (not open to students majoring in forestry). Prerequisite, For. 6. Four class periods and one 3-hour lab. period. Five credits; winter. Grondal.

158. *Forest Utilization*.—Pulp and paper manufacture, tannic acid, naval stores and other secondary forest products; lumber and its economic uses in construction. Required of juniors and graduates. Prerequisite, For. 101, and one year in chemistry. Five credits; winter. Grondal.

183. *Milling*.—The sawmill; yard arrangements; practical operation, practical problems at local saw-mills. For seniors and graduates. Prerequisites, M.E. 82, For. 153, 158, 104. Five credits; autumn. Grondal.

184. *Manufacturing Problems*.—Technical trade requirements, routine of sawmill practice; relation of waste to marketing, lumber grades and their uses. Prerequisite, For. 183. Three credits; winter. Grondal.

185-186-187. *Logging Engineering*.—Logging machinery and equipment, organization of logging companies, construction of railroads, camps, etc. Lectures, demonstrations at plants manufacturing logging machinery, and field work in nearby logging camps. During the third quarter all the work is transferred to the field, where extensive work in logging engineering is conducted. No credit is given for 186 unless followed by 187. Primarily for seniors and graduates. Prerequisites, For. 52, 53, 58, 104, 153, M. E. 82, C.E. 22. Lab. fee for 187, \$3. Four credits a quarter, autumn and winter; sixteen credits; spring. Clark.

188, 189. *Advanced Forest Products*.—Advanced studies in wood technology and utilization, with individual problems. A laboratory course. Prerequisite, For. 101, 158. Lab. fee, \$3. Five credits. Any quarter. Grondal.

201. *Forest Geography*.—Advanced dendrology. Silvicultural regions, their relation to regional industrial development and general problems of lumbering and management. Prerequisite, senior or graduate standing in forestry. Three credits; autumn. Winkenwerder.

208, 209. *Seminar*.—Reviews, assigned readings, reports, and discussions on current periodical literature and the more recent Forest Service publications. Prerequisite, senior or graduate standing in forestry. Two credits a quarter; autumn, winter. Winkenwerder, Kirkland, Grondal.

Thesis 202 - OK for graduate student

213, 214, 215. *Senior or Graduate Research*.—Credits to be arranged any quarter. Instructors assigned according to nature of work. Not open to students below senior standing. Lab. fee, \$3.

221. *Forest History and Policy*.—Forest policy of the United States; forestry in the states and island possessions; the rise of forestry abroad. Prerequisite, senior or graduate standing. Three credits; autumn.

Kirkland.

223. *Advanced Forest Management*.—About one week of field work on a tract of 50,000 to 100,000 acres. Formation of a working plan for regulation of the yield and organization of all forest work on the area, with estimates of outlay and income. Prerequisite, For. 151-152. Eight credits; spring.

Kirkland.

224. *Advanced Milling and Marketing*.—Sawmill design and a detailed study of special problems in sawmill operation and management. Prerequisites, senior or graduate standing, For. 183, 184. Five credits; spring.

Grondal.

(For short course subjects see College of Forestry bulletin, pages 17-19.)

GEOLOGY

Science Hall

PROFESSOR LANDES; ASSISTANT PROFESSORS SAUNDERS, GOODSPEED;
INSTRUCTOR HANNA

Courses in the department are grouped to lead into different fields of geological work, as follows:

General Geology: Courses 1-9, 100-109, 200-209.

Geography, Climatology, and Physiography: Courses 10-19, 110-119, 210-219.

Mineralogy, Petrography and Economic Geology: Courses 20-29, 120-129, 220-239.

The year in geology for Liberal Arts students may be satisfied by the following combinations: Courses 1 and 2; 11 and 12; 12 and 2.

1. *General Geology*.—Physical. Geological agencies and processes affecting the earth. Lectures and laboratory work, with occasional half-day field trips. Lab. fee, \$2. Five credits; autumn, winter, spring. Goodspeed.

2. *General Geology*.—Historical. Continuation of course 1, dealing with the origin and evolution of the earth. Lectures and laboratory work, with some field excursions. Prerequisite, Geol. 1, or 12. Lab. fee, \$2. Five credits; autumn, winter, spring. Hanna.

4. *Principles of Geology*.—Historical. The earth's origin and the general history of the continent. For College of Mines students only. Lectures, recitations and field trips, without laboratory work. Three credits; spring. Hanna.

10. *Modern Geography*.—Problems of modern geography; scientific investigation of geographic environment and its influence; use of maps and charts; geographic control of production and trade; major geographic features of the continents. Five credits; autumn. Saunders.

11. *Meteorology and Elementary Climatology*.—Weather elements and controls; causes and effects of atmospheric conditions; principles and methods of weather forecasting and use of instruments. With or without laboratory work. Lab. fee, \$1. Three or five credits; winter. Saunders.

12. *Physiography*.—Land forms or earth's features with reference to origin and characteristic changes under different agencies during the geographic cycles. Occasional field trips. With or without laboratory work. Lab. fee, \$1. Three or five credits; spring. Saunders.

21. *Mineralogy*.—Crystallography followed by descriptive mineralogy and blowpipe methods. At least a high school course in chemistry is essential as a prerequisite, and a quarter in general geology is desirable. Lab. fee, \$2. Five credits; winter. Goodspeed.

31. *General Paleontology*.—Broad principles of paleontology. Elementary course, open to all students. Prerequisite, Geol. 2. Lab. fee, \$2. Five credits; autumn. Hanna.

107. *Geology of Washington*.—Lectures with assigned readings and laboratory study. Prerequisite, one quarter of general geology or physiography. Two credits; spring. Landes.

111. *Climatology*.—Broader aspects of climate controls and characteristics of different climates and climatic provinces, with special references to United States and the Pacific Coast. Prerequisite, Geol. 10 or 11 or equivalent work. Three credits; spring. Saunders

112. *Physiography of the United States*.—Physiographic regions of the United States and their effects on development and history of the country. Lectures and map study. Prerequisite, Geol. 10 or 12, or 1. Lab. fee, \$1. Three credits; autumn. *SCV*, Saunders

113. *Physiography of Europe*.—Physiographic regions of Europe and effects of topography and climate on development and relations of different countries. Lectures and map study. Prerequisite, Geol. 10 or 12, or 1. Lab. fee, \$1. Three credits; winter. Saunders

114. *Oceanography*.—The ocean, oceanic circulation and temperatures in their geographic relations and influence. Prerequisite, Geol. 10 and 11 or equivalent work. Two credits; spring. Saunders.

116. *Economic Geography of Washington*.—Economic and industrial development of the state, based on the geological, physiographic and climatic conditions. Three credits; autumn. Landes.

117. *Geography of Asia*.—Study of the continent by natural regions based on geology, topography and climate. Three credits; spring. Saunders.

118. *Geography of South America*.—Physiographic and geologic features, climate and resources of the continent and their effects on development and relations of different countries. Three credits; winter. Saunders.

120. *Petrology*.—Rocks, their components, occurrence and structural relations. Occasional field trips. Lab. fee, \$2. Prerequisite, Geol. 21 and either 1 or 12. Three credits; spring. Goodspeed.

121. *Advanced Mineralogy*.—Opaque, metalliferous minerals studied with the reflecting microscope, or "mineragraphy"; relation of the latter to geologic, mining and metallurgical problems. Prerequisite, Geol. 21. Three credits; spring. Goodspeed

122. *Field Methods*.—Principles and methods of geologic surveying and mapping. Detailed field work in small areas, with field trips. Prerequisite, Geol. 1, 2, 21, and 120. Two credits; spring. Goodspeed

123. *Optical Mineralogy*.—Use of the polarizing microscope in the examination of minerals and rocks in thin sections. Prerequisite, Geol. 1 and 21. Lab. fee, \$2. Three credits; autumn. Goodspeed.

124. *Petrography*.—Principles of petrography and petrographic methods in the systematic study of igneous, sedimentary and metamorphic rocks. Prerequisite, Geol. 123. Lab. fee, \$2. Four credits; winter. Goodspeed

125. *Advanced Petrography*.—Continuation of the work in petrography for majors in mining and geology. Prerequisite, Geol. 124. Two credits with additional credits optional; spring. Goodspeed

126. *Economic Geology*.—Economic deposits of the principal non-metallic minerals, their production and uses. Lectures and discussions of papers. Prerequisites, Geol. 1 and 21. Three credits; autumn. Landes

127. *Economic Geology*.—Economic deposits of the chief metallic minerals, their production and use. Lectures and discussion of papers. Prerequisites, Geol. 1, 21 and 124. Five credits; winter. Landes

128. *Economic Geology*.—Petroleum fields of the world. Lectures and discussion of papers. Prerequisites, Geol. 1 and 2. Three credits; spring. Landes

129. *Economic Geology*.—Minor or less known metallic minerals used in the arts and industries. Prerequisite, Geol. 127. Three credits; autumn. Landes

130. *Economic Geology*.—Minor or less known non-metallic minerals of commercial importance. Prerequisite, Geol. 126. Three credits; winter. Landes

131. *Invertebrate Paleontology*.—Detailed and systematic biological study of fossil and living representatives of the Mollusca. Prerequisite, Geol. 31. Lab. fee, \$2. Five credits; autumn, winter. Hanna

133. *Stratigraphic Paleontology*.—Fundamental principles of stratigraphy and the characteristic fossils by means of which the geologic formations of the continent may be determined. Prerequisite, Geol. 2. Lab. fee, \$2. Five credits; spring. Hanna

Educ. 160F. Teachers' Course in Geography.—Teaching of geography, physical geography, and commercial geography in the schools. Prerequisites, one term of geology, physiography and geography. Two credits; winter. Saunders.

COURSES FOR GRADUATES ONLY

200. Field studies or advanced work in general geology. Credits and hours to be arranged.

210. Advanced or research work in geography, climatology or physiography. Credits and hours to be arranged. Each quarter.

220. Advanced or research work in mineralogy, petrography and metamorphism. Credits and hours to be arranged. Each quarter.

225. Advanced or research work in economic geology. Credits and hours to be arranged. Each quarter.

230. Advanced or research work in paleontology and stratigraphy. Credits and hours to be arranged. Each quarter.

SPECIAL SHORT COURSES

S.C. 1. *Geology*.—Two lectures a week. Lab. fee, \$1. winter. Landes.

S.C. 2. *Mineralogy*.—Laboratory course in physical determination of minerals and the use of blowpipe methods. Three laboratory periods per week. Lab. fee, \$2. Winter. Landes.

GERMANIC LANGUAGES AND LITERATURE

Denny Hall

ASSISTANT PROFESSOR ECKELMAN; ASSOCIATE KRAFFT

Requirements for a departmental major: at least 35 hours in the department chosen from courses other than German 1, 2, 3. For the departmental or academic major, who wishes a recommendation to teach: the same, including Ger. 110, Educ. 160G and at least 9 credits in literature.

Credit is allowed for any quarter in any course except 1-2.

All courses are conducted in German unless otherwise specified.

1-2. *First Year*.—Stage pronunciation, grammar, reading of easy prose and verse, conversation. Five credits a quarter; autumn, and winter, winter and spring, spring and summer. Eckelman and Krafft.

3. *First Year Reading*.—Reading of modern prose, conversation, composition, continuation of grammar. Prerequisite, Ger. 1-2 or one year in high school. Five credits a quarter; autumn, winter, spring. Eckelman, Krafft.

5. *Second Year Reading*.—Pronunciation, vocabulary building, reading of modern prose, simple conversation. Prerequisite, Ger. 3 or two years high school. Three credits; autumn, winter. Krafft.

6. *Second Year Rapid Reading*.—Modern prose, vocabulary building, simple conversation. Prerequisite, Ger. 5, 10 or 11, or 60, or two and one-half years high school. Three credits; spring. Krafft.

10, 11. *Second Year Supplementary Reading*.—Modern prose, grammar review with emphasis on syntax, simple conversation. Prerequisite as for Ger. 5. Two credits; autumn, winter. Krafft, Eckelman.

60. *Lower Division Scientific German*.—Introduction to chemical German. Class work. Suitable outside reading. Vocabulary building. Prerequisite, Ger. 5, 10 or 11; combinations with consent of instructor. Two or three credits; winter. Krafft.

100. *Schiller*.—Life and dramatic works. Jungfrau von Orleans. Don Carlos or Wallenstein. Prerequisite, Ger. 5 or 6. Three credits; autumn. Krafft.

101, 102. *Recent Writers*.—The best prose and dramatic literature adapted to rapid reading and representative of German middle class and industrial life. Written and oral reports. Prerequisite, Ger. 5 or 6. Three credits; winter, spring. Krafft.

106, 107, 108. *German Literature in Translation*.—Goethe, the lyric poet. The novel and the drama of the nineteenth century. Reading and discussion of the most significant works. Written reports. No knowledge of German required. Two credits; autumn, winter, spring. Eckelman.

110. *Advanced Prose Composition and Conversation*.—Written exercises, letter writing, themes. Extemporaneous reproduction. Recitation or series, narrative and dramatic selections. Grammar and syntax. Prerequisite, Ger. 5 and 10 or 11. Two credits; winter. Eckelman.

115, 116, 117. *Upper Division Scientific German*.—Scientific essays, monographs, technical periodicals. Each student does private reading in his own field under guidance of the instructor and major professor. Confer-

*Not offered in 1923-1924.

ences. Prerequisite courses 5 and 10, or 5 and 60, or 6, or three years in high school. Two or three credits a quarter; autumn, winter, spring. Eckelman.

*118-119-120. *German Prose Reading*

*121. *Phonetics.*

*130-131-132. *German Institutions.*

*133-134-135. *Modern Novels.*

136. *Modern Drama.*—Works of Hauptmann, Lienhard, Widmann and other representative literature. Class reading and assigned topics. For advanced students. Three credits; graduate students may exceed this credit; autumn. Eckelman.

*142. *Lyrics and Ballads.*

*151. *Lessing.*

152, 153. *Goethe's Lyrics and Dramatic Works.*—Growth and development of the lyric poet. Outside reading and reports. Goetz, Egmont, Iphigenie, Faust I. Three credits, graduate students may exceed this credit; winter, spring. Eckelman

Educ. 160G. Teachers' Course in German.—Aims and methods in the teaching of German; lesson plans; high school courses and texts; coaching of underclassmen in elementary classes. Prerequisite, Ger. 110. Two credits; winter. Eckelman.

← 183, 184, 185. *Nineteenth Century Literature.*—Study of the drama and novel to 1880. Kleist, Grillparzer, Hebbel, Ludwig, Raabe, Keller, Storm, C. F. Meyer. Three credits, graduate students may exceed this credit; autumn, winter, spring. Eckelman

*200-201-202. *Goethe's Lyrics and Letters.*

*203-204-205. *Storm and Stress Period.*

*206-207-208. *Romantic School.*

*220-221-222. *Inter-relations of German and English Literature.*

*250-251-252. *History of the German Language.*

*253. *Middle High German.*

*256-257-258. *Gothic.*

*259. *Old Saxon.*

COMPARATIVE PHILOLOGY

The following courses in Comparative Philology are available in the department of Scandinavian Languages and Literature:

190-191. *Introduction to the Science of Language.*—Two credits; autumn, winter. Vickner.

192. *Life of Words.*—Two credits; spring. Vickner.

*Not offered in 1928-1924.

Ok for 6 ev for 183 for J, Selman Wingeldt

HISTORY

Denny Hall and Philosophy Hall

PROFESSORS MEANT, RICHARDSON; ASSOCIATE PROFESSOR McMAHON; ASSISTANT PROFESSORS LUCAS,¹ LARSEN; INSTRUCTOR FARRAR; ASSOCIATES DAHLIN, BUCHANAN; PROFESSOR GOWEN OF THE DEPARTMENT OF ORIENTAL LANGUAGES AND LITERATURE.

REQUIREMENTS OF THE DEPARTMENT

The University requirements in history may be satisfied by one of the following courses:

Medieval and Modern European History (1-2). It is desirable that this course be selected in fulfillment of the history requirements and that it be taken in the freshman year. It is repeated each quarter.

History of the United States (57-58-59). Primarily for sophomores.

English Political and Social History (5-6). Open without prerequisites to freshmen, sophomores and upperclassmen.

Ancient History (71-72-73). Open without prerequisites, to sophomores and upperclassmen.

For a major at least eighteen credits must be obtained in advanced undergraduate courses. Course 1-2 is required of all history majors.

It is recommended that all history majors shall take, in excess of departmental requirements, additional work in history, political and social science, philosophy, modern languages, and English literature. Medieval Latin is desirable for those who intend to study history for advanced professional purposes.

Prospective teachers of history as a major subject in high schools who desire the recommendation of the department of history must become acquainted with the elementary facts requisite for the teaching of all courses in history and in civil government taught in the high schools of the state, and have specialized knowledge in their chosen fields. Courses in history, government and economics should be elected with this aim in view.

The work in undergraduate courses consists of lectures, papers, assigned and collateral readings, with quiz sections organized for the larger classes. Graduate courses are devoted to research work and reports thereon.

1-2. Medieval and Modern European History.—General survey from the Roman world empire of Augustus to our own times. Five credits a quarter; autumn, winter. Lucas, Larsen, Buchanan.

The above course is repeated beginning with the winter quarter.

5-6. English Political and Social History.—Political, social, economic and intellectual development of the English people from the Saxon conquest to the present time. Five credits a quarter. By special work under direction of the instructor upper division students may receive upper division credit. Autumn, winter. Richardson.

8. Westward Movement in the U.S. to 1812.—The advance of the frontier and its effect on American ideals from the colonial period to the war of 1812. Two credits; autumn. Dahlin.

9. Westward Movement in the U.S. 1812-1860.—The frontier from the war of 1812 to the civil war. Two credits; winter. Dahlin.

10. The Agrarian Crusade in the U.S., 1860-1920.—The agrarian movements for control, their causes and results. Two credits; spring. Dahlin.

¹Absent on leave, autumn quarter, 1923.

21-22. *History of China*.—From the earliest times to the present. Three credits a quarter; autumn, winter. Gowen.

23. *History of Japan*.—Three credits a quarter; spring. Gowen.

57-58-59. *History of the United States*.—A general survey with emphasis on political and economic history. Not open to freshmen. Three credits a quarter; autumn, winter, spring. McMahon.

60. *Makers of the Nation*.—Period of Revolution and the Constitution. Two credits; autumn. Meany.

61. *Makers of the Nation*.—Period of the Monroe Doctrine and Boundary Settlements. Two credits; winter. Meany.

62. *Makers of the Nation*.—Period of National Development. Two credits; spring. Meany.

71-72-73. *Ancient History*.—History of the ancient world to the times of Augustus. By special work under direction of the instructor upper division students may receive upper division credit. Not open to freshmen. Three credits a quarter; autumn, winter, spring. Larsen.

81. *England Since the Accession of George I*.—Construction of the British commonwealth, Imperial problems, internal economic and institutional developments, especially the growth of democracy. Prerequisite, Hist. 1-2 or 5-6. By special work under direction of the instructor upper division students may receive upper division credits. Not open to freshmen. Five credits; spring. Buchanan.

85-86. *Medieval Civilization*.—Main cultural features of the period from about 300 to 1300—thought, politics, art, literature, commerce and industry. By special work under direction of the instructor upper division students may receive upper division credit. Prerequisite, Hist. 1-2. Five credits a quarter; winter, spring. Lucas.

90. *History of Alaska: Russian Expansion, 1581-1867*.—Two credits; autumn. Farrar.

91. *History of Alaska: First American Period, 1867-1896*.—Two credits; winter. Farrar.

92. *History of Alaska: Second American Period, 1896-1912*.—Two credits; spring. Farrar.

102. *The Greek World: From Alexander to its Conquest by the Romans*.—Institutions that influenced the Roman empire and thus western Europe receive special attention. Three credits; autumn. Larsen.

103-104. *The Roman Empire from Augustus to Justinian*.—Three credits a quarter; winter, spring. Larsen.

105-106-107. *English Constitutional History*.—Development of legal and governmental institutions of the English people to the present time. Valuable for students of political science and law as well as history. Prerequisite, Hist. 5-6, except for upper division students who are majoring in economics, sociology and political science, or who are taking 5-6. Open to pre-law sophomores who have taken 5-6 in freshman year. Pre-law sophomores who elect this course and have not taken 5-6 are required to take course 108-109-110. Three credits a quarter; autumn, winter, spring. Richardson.

108-109-110. *English Political History, Pre-law*.—Open only to pre-law sophomores and majors in political science who are taking Hist. 105-

106-107. All pre-law sophomores who are taking 105-106-107 and who have not taken 5-6 are *required* to take this course. Two credits a quarter; autumn, winter, spring. Richardson.

*114-115-116. *Renaissance and Reformation.* Lucas.

*117. *France from the Reformation to the French Revolution.* Lucas.

*121-122-123. *Prussia and Northern Europe.* Richardson.

129. *The French Revolution and Napoleonic Era.*—Prerequisite, Hist. 1-2. Five credits; winter. Buchanan.

*130. *Europe, 1814-1870.*

131. *Europe Since 1870: The War and its Background.*—Historical background, fundamental causes and progressive development of events and issues in the world war. Five credits; spring. Richardson.

*139. *The Southern Colonies.*

*140. *The New England Colonies.*

*141. *American Revolution.*

143. *History of the United States, 1789-1815.*—Open only to juniors, seniors and graduates. Three credits; ~~spring~~ *Fall*. McMahon.

144. *History of the United States, 1815-1846.*—Open only to juniors, seniors and graduates. Three credits; winter. McMahon

145. *History of the United States, 1846-1860.*—Open only to juniors, seniors, graduates. Three credits; spring. McMahon

147. *History of the Civil War Period.*—Open only to juniors, seniors, and graduates. Three credits a quarter; autumn. McMahon

148. *History of the Reconstruction Period.*—Open only to juniors, seniors and graduates. Three credits a quarter; winter. McMahon

149. *History of National Development.*—Development of the American nation from the close of the reconstruction period to the present time. Open to juniors, seniors, graduates and to such sophomores as have completed Hist. 57-58. Five credits a quarter; spring. McMahon.

153. *The Pacific Rim.*—History of the countries bordering upon the Pacific Ocean with especial reference to recent changes. Open to juniors, seniors and graduates. Three credits a quarter; autumn. Meany

154. *Spain in America.*—Rise and fall of Spanish power in America, and an outline of the history of the Spanish-American republics. Open to juniors, seniors and graduates. Three credits a quarter; winter. Meany.

155. *History of Canada.*—Canadian development to the present time. Open to juniors, seniors and graduates. Three credits a quarter; spring. Meany

157-158-159. *History of American Diplomacy.*—American relations with foreign powers from colonial times to the present. Open to juniors, seniors and graduates. Two credits a quarter; autumn, winter, spring. Meany

Educ. 160H. Methods of History Teaching.—Special reference to the work of the high school. Required of majors in history who expect to teach. ~~Five~~ Credits; autumn winter. McMahon.

*Not offered in 1923-1924.

163-164-165. Northwestern History.—From the earliest voyage to the Pacific Northwest to the organization of the present form of government. Open to juniors, seniors and graduates. Two credits a quarter; autumn, winter, spring. Meany

COURSES FOR GRADUATES ONLY

201-202-203. Methods of Historical Research and Criticism.—Open only to graduates and a few qualified seniors who obtain the consent of the instructor. One credit a quarter; autumn, winter, spring. Richardson

***204-205-206. Historiography.**

***215-216-217. Seminar in English History.**

221-222-223. Seminar in American History.—Two credits a quarter, autumn, winter, spring. McMahon

227-228-229. Seminar in State History.—Two credits a quarter; autumn, winter, spring. Meany

HOME ECONOMICS

Home Economics Hall

PROFESSOR RAITT; ASSISTANT PROFESSORS DENNY, PATTY, BLISS, KOBINE;
INSTRUCTORS DRESSLAR, LUSBY

(For curricula in Home Economics see College of Science Bulletin)

1. Food Preparation.—General elective for non-home economics majors. Marketing, cookery, meal planning and service. Laboratory work to accompany Phys. Educ. 54, 55, and 56. Three 2-hour periods, recitation and laboratory work. Lab. fee, \$6. Three credits; autumn. Dresslar.

***2. Elements of Nutrition.**

***3. Elements of Home Management.**

4. Food: Selection and Preparation.—Credit for cookery in high school exempts students from this course. Three 2-hour periods, recitation and laboratory work. Lab. fee, \$6. Three credits; autumn, spring. Dresslar.

5. Food: Selection and Preparation.—Prerequisite, H.E. 4 or one year high school cookery or equivalent, Chem. 5-6, Physiology 7. Two lectures and three 2-hour periods, recitation and laboratory work. Lab. fee, \$6. Five credits a quarter; winter, spring. Dresslar.

7. Home Economics Survey.—Analysis of the subject. Relation to supporting courses. Budgets and accounts. Required of all freshmen majoring in home economics. Two recitations. Two credits; autumn, spring. Raitt.

8. Clothing.—Elements of hand and machine sewing. Materials, design and construction. Comparison with factory made garments. Problems of garment making. Credit for high school clothing exempts students from this course. Three 2-hour periods, recitation and laboratory work. Lab. fee, \$2. Three credits; autumn. Patty.

9. Food Preparation and Elements of Nutrition.—Open only to student nurses. Composition, principles underlying cookery, function, and nutritive value of foods. Principles of sanitation. Two lectures and three 2-hour periods, recitation and laboratory work. Lab. fee, \$6. 5 credits; autumn, spring. Dresslar, Adams.

*Not offered in 1923-1924.

189. *Special Food Problems*.—Investigation of food products, nutrition, individual assignments. Prerequisite, H.E. 106 or 107. Recitation and special investigation. Lab. fee, \$2. Three credits; autumn. Raitt.

190. *Advanced Nutrition*.—A study of one or more of the following phases. Open to graduates or advanced undergraduates. Koehne.

a. *Child Nutrition*.—Work centers around the University Cooperative Child Nutrition Service. Consultation with physicians and instructor, follow-up case work in homes of the children and visits to institutions for child care. Prerequisites, H.E. 105 or 107. Two hours recitation, three hours laboratory period, three hours field work. Lab. fee, \$2. Three to four credits; autumn, winter, spring

b. *Intensive Study of Dietary Deficiency Diseases*.—Laboratory work on experimental animals. Prerequisites, H.E. 107-108 or consent of instructor. Two hours recitation, three to six hours laboratory. Lab. fee, \$4-\$6. Three to four credits; spring.

c. *Diet in Disease*.—Three lectures and recitations, one laboratory period and visits to hospitals. Prerequisite, H.E. 107. Lab. fee, \$4. Four to five credits; spring.

GRADUATE COURSES

*200. *Special Food Problems*.

202. *Seminar*.—The present status of home economics education with special attention to the work in the elementary and high schools of the state of Washington. Prerequisites, 30 credits in home economics, including Educ. 160I, 160J. Four to six credits; spring. Raitt.

*203. *Research*.

204-205-206. *Research in Nutrition*.—Animal experimentation on some special problem. Open to graduate students. Prerequisites, H.E. 107-108. Chemistry and Physiology majors may take this course with consent of instructor. Hours and credits to be arranged. Lab. fee, \$2 for hour credit. Autumn, winter, spring. Koehne.

207-208-209. *Research in Textiles*.—Prerequisites, H.E. 25, Econ. 1. Credit to be arranged. Lab. fee, \$1 per hour credit; autumn, winter, spring. Denny.

210-211-212. *Research in Costume Design*.—Prerequisites, H.E. 112-113, 133. Credit to be arranged; autumn, winter, spring. Patty.

JOURNALISM

Commeroe Hall

PROFESSOR SPENCER; ASSOCIATE PROFESSOR JONES; ASSISTANT PROFESSOR KENNEDY; ASSOCIATE O'CONNOR; INSTRUCTOR BORAH

151. *News Writing*.—Practice in news writing; study of news sources. Required in the sophomore year of pre-journalism majors. Laboratory fee, \$2. Five credits a quarter; autumn, winter, spring. Borah, O'Connor.

61. *The Community Newspaper*.—Editorial problems peculiar to the community weekly. Two lecture hours and one laboratory period a week. Required in the sophomore year of pre-journalism majors. Laboratory fee, \$2 a quarter. Three credits a quarter; spring. Borah.

*Not offered in 1923-1924.

I Journalism as a profession. Required in 1st term of the Freshman year of all pre-journalism students — 1 credit

90, 91, 92. *Current Events*.—Current state, national and world movements. One quarter required of majors in journalism. Prerequisite, Journalism 51. Laboratory fee, \$1. One credit a quarter; autumn, winter, spring. Borah.

101. *Reporting*.—Study of all types of stories covered by a reporter. Required of majors in journalism. Prerequisite, Journalism 51. Laboratory fee, \$2. Five credits a quarter; autumn, winter. Borah.

104. *Newspaper Administration*.—Newspaper organization and management. Prerequisite, Journalism 51. Laboratory fee, \$1. Two credits a quarter; spring. Jones.

*105. *The Sporting Page*.

109. *Literary and Dramatic Reviewing*.—Routine work of the literary and dramatic editors. Prerequisite, Journalism 51. Two credits a quarter; spring.

115. *Elements of Publishing*.—Head styles; proof-reading; binding; engraving, press work; problems of production. Required in the sophomore year of pre-journalism majors. Laboratory fee, \$2 a quarter. Three credits a quarter; autumn. Kennedy.

120. *Copy Reading*.—Required of majors in journalism. Prerequisite, Journalism 101. Laboratory fee, \$2. Five credits a quarter; winter, spring. Borah.

130. *Fundamentals of Advertising*.—Laboratory fee, \$2. Five credits a quarter; autumn. Jones.

131. *Display Advertising*.—Prerequisite, Journalism 130. Laboratory fee, \$2. Five credits a quarter; winter. Jones.

133. *Advertising Typography*.—Type families; application of type; advertising type units; type problems. Laboratory fee, \$2 a quarter. Prerequisite, Journalism 115. ~~Three~~ credits a quarter; spring. Kennedy.

136. *Comparative Journalism*.—Prerequisite, Journalism 101 and 120. Laboratory fee, \$2. Three credits a quarter; spring. Borah.

138. *History of American Journalism*.—Required of majors in journalism. Prerequisite, Journalism 51. Five credits a quarter; spring. Jones.

140. *The Business Office*.—Simplified accounting for newspaper plants; business office management. Required of majors in journalism. Prerequisite, Journalism 115. Laboratory fee, \$2 a quarter. Five credits a quarter; winter. Kennedy.

150. *Editorial Writing*.—Required of majors in journalism. Prerequisite, Journalism 101 and 120. Five credits a quarter; winter. Jones.

160. *Trade Journalism*.—Prerequisite, Journalism 51. Laboratory fee, \$2. Five credits a quarter; winter. Jones.

170, 171, 172. *Magazine and Feature Writing*.—Practice in writing special newspaper and magazine articles; study of current magazines and newspaper supplements. Articles are graded according to their probable marketability. Laboratory fee, \$2. Two credits a quarter; autumn, winter, spring. Spencer.

173. *The Short Story*.—Critical appreciation of the short story. Laboratory fee, \$2. Three credits a quarter; autumn. Spencer.

*Not offered in 1923-1924.

174, 175. *Short Story Writing*.—Prerequisite, Journalism 173. Laboratory fee, \$2 a quarter. Three credits a quarter; winter, spring. Spencer.

*188. *News Writing for Teachers*.

250. *Research in Journalism*.—Admission only by consent of the instructor. Three to five credits a quarter; autumn, winter, spring. Jones.

LAW

Commerce Hall

PROFESSORS CONDON, LANTZ, GOODNER, BISSETT, AYER; LECTURER O'BRYAN

FIRST YEAR

All first year courses required

100. *Agency*.—Wambaugh's Cases. Five credits; spring. Ayer.

103-104. *Contracts*.—Corbin's Cases. Five credits per quarter; autumn and winter. Lantz.

106-107. *Criminal Law and Procedure*.—Derby's Cases supplemented by Washington Criminal Code and Cases. Three credits per quarter; autumn and winter. O'Bryan.

108-109. *Pleading and Procedure*.—Sunderland's Cases on Common Law Pleading, and Sunderland's Cases on Code Pleading, and Washington Code and Cases. Five credits per quarter; winter and spring. Goodner.

115. *Property I.—Personal*.—Bigelow's Cases, Vol. I. Three credits; autumn. Bissett.

116. *Property II.—Real*.—Bigelow's Cases, Vol. II. Five credits; spring. Bissett.

117-118. *Torts*.—Bohlen's Cases. Four and two credits respectively; autumn and winter quarters. Ayer.

121. *Legal Ethics* (Sam Rieber) spring qtr. Condon
SECOND YEAR

125-126. *Equity*.—Ames' Cases in Equity Jurisdiction, Vol. I and II. Three credits per quarter; autumn and winter. Ayer.

128. *Damages*.—Beale's Cases on Damages, supplemented by Washington Cases. Three credits; spring. O'Bryan.

129-130. *Evidence*.—Wigmore's Cases. Five and four credits, respectively; autumn and winter. Condon.

133. *Insurance*.—Vance's Cases. Three credits; spring. Lantz.

137. *Negotiable Instruments*.—Huffcut's Cases. Three credits; winter. Bissett.

138. *Quasi-Contracts*.—Woodruff's Cases. Three credits; spring. Lantz.

139-140. *Property II. (continued)*.—Aigler's Cases, Vol. III, and Kale's Cases, Vol. IV; autumn and winter quarters, four and two credits, respectively. Bissett.

142-143. *Public Utilities*.—Beale and Wyman's Cases. Three credits per quarter; winter and spring. Lantz.

*Not offered in 1923-1924.

143- Wash Statute Law - 3 cr. - Condon
 140- Property 2
 150- International Law - 3 " - "

DEPARTMENTS OF INSTRUCTION

229

146-147. *Sales*.—Woodward's Cases. Three credits per quarter; winter and spring. Ayer.

161. *Procedure IV*.—Procedure in civil actions in the Superior Court of Washington. Five hours. Three credits; autumn. Goodner.

179. *Partnership*.—Gilmore's Cases. Three credits; spring. O'Bryan.

THIRD YEAR

153. *Property III*.—Aigler's Cases, Vol. III, and Kale's Cases, Vol. IV. Three credits; autumn. Bissett.

159. *Wills*.—Costigan's Cases. Three credits; autumn. Goodner.

163. *Procedure VI*.—Probate Proceedings, covering administration of estates, probate of wills, appointment of guardians, etc. Five hours. Four credits; winter. Goodner.

165. *Admiralty*.—Ames' Cases. Three credits; autumn. Lantz.

166. *Office Practice*.—Conveyancing and examination of abstracts, care of a law office generally, drawing wills and contracts, preparation of briefs and office accounts. Five credits; spring. Condon.

168. *Conflict of Laws*.—Lorenzen's Cases. Five credits; winter. Lantz.

170-171. *Constitutional Law*.—Hall's Cases. Three credits per quarter; autumn, winter. Bissett.

187-188. *Private Corporations*.—Canfield and Wormser's Cases. Three credits per quarter; autumn and winter. Goodner.

191. *Property: Community*.—Washington Statutes and selected cases on community property. Five credits; spring. Bissett.

196. *Trusts*.—Kenneson's Cases. Five credits; spring. Goodner.

NOTE.—Fifteen hours or credits in each quarter are required, making a minimum total of 185 hours or credits for completion of the law course.

Students are limited to fifteen hours per quarter, except upon special permission of the dean, and payment of an additional fee of \$1 per credit hour in excess of fifteen.

200 - 3 cr.

LIBERAL ARTS

Denny Hall

PROFESSOR H. E. CORY

1. *Introduction to Modern Thought*.—Especially for freshmen, but open to all, and designed to help students to get their intellectual bearings. Required reading supplemented by lectures on such topics as Matter and Energy, Making of the Earth, Origin and Nature of Life, Ancient Art and Ritual, Psychology, Political Thought from Herbert Spencer to the Present Day. Five credits; autumn, winter, spring. Cory.

180, 181, 182. *Great Studies of Human Nature*.—Hobbes, Montaigne, Rabelais, Rousseau, Goethe, Balzac, Samuel Butler, Dostoyevsky, Bergson, James. Lectures, conferences, and reports. Open only to upper division students. Two or three credits a quarter; autumn, winter, spring. Cory.

214, 215, 216. *Studies in Realism*.—Analysis of realistic and naturalistic theories as they have evolved in philosophy and literature from the days of John Locke and Daniel Defoe to the present. Two to eight credits a quarter; autumn, winter, spring. Cory.

LIBRARY SCIENCE

Library

PROFESSOR HENRY; ASSOCIATE PROFESSOR SMITH; INSTRUCTORS HOWE, SPENCER, ALFONSO

174. *Order Routine, Trade Bibliography, and Circulation.*—Ordering, receiving, checking, accessioning and mechanical preparation of books; elements of trade bibliography; lending systems. Two credits; autumn.

Howe

175. *Classification and Subject Headings.*—Decimal classification studied in detail, followed by the survey of Expansive and the Library of Congress classifications. Use of subject headings and classification and assignment of subject headings to specified books. Three credits; autumn.

Spencer.

176. *Cataloging.*—Fundamentals of dictionary cataloging, assignment of book numbers, shelf-listing, and alphabetizing. Three credits; autumn.

Alfonso

184. *Cataloging.*—Continuation of 176, dealing with more difficult phases of the subject, including authorities. Three credits; winter.

Alfonso

177, 185, 193. *Reference.*—These courses give a working knowledge of important types of reference books and develop the power of research. Lectures cover books and methods. Practical problems and work with government documents. Two credits a quarter; autumn, winter, spring.

Smith

194. *Subject Bibliography.*—Preparation of bibliographic lists; lectures on sources and methods of work. Problems cover arrangement and form of entry. One piece of independent bibliographic work is required of each student. Two credits; spring.

Smith

186, 195. *Practice.*—Each student is expected to do 300 hours of practice or laboratory work under expert personal supervision. The practice work is given in both the University Library and the Seattle Public Library and consists of 15 hours per week for twenty weeks. Five credits a quarter; winter, spring.

178. *History of Books and Libraries.*—Lectures, readings and reports. Two credits; autumn.

Henry

187. *Library Organization and Extension.*—Legalization and organization of a general library system for city, county or state, as the unit of organization. Organization of various types of libraries with varying degrees of equipment. Two credits; winter.

Henry

179, 188, 196. *Book Selection.*—To cultivate taste and good judgment in evaluation of books through a study of the principles of book selection, annotation and book reviewing. Three credits; autumn. Two credits; winter and spring.

Howe.

197. *Library Administration and Library Literature.*—Lectures, readings and discussions on library legislation, local taxation, library budget, and all means of realizing the educational and social functions of the library. Reading and class discussion of literature of libraries and librarianship. Three credits; spring.

Henry

189. *Work with Children and Schools.*—To meet the needs of general library assistants and librarians in charge of small libraries. Principles of book selection with special attention to choice of books for children of various ages. Students read and discuss children's books with these ideals in mind. Two credits; winter.

Howe.

198. *Special Lectures by Active Librarians.*—Ten lectures, each on some vital problem of library service or administration, by persons selected because of their experience and success in dealing with the problems treated. One credit; spring.

MATHEMATICS

Philosophy Hall

PROFESSORS MORITZ, BELL; ASSOCIATE PROFESSORS CARPENTER, WINGER; ASSISTANT PROFESSORS GAVETT, NEIKIRK, SMALL; INSTRUCTOR STAGER; ASSOCIATES WEST, CRAMLET, TAYLOR, JEBBERT.

The courses in mathematics are planned to meet the needs of three distinct professions: (1) The teaching of mathematics in the high schools; (2) The teaching of mathematics in colleges and universities; (3) Statistical and actuarial occupations.

Suggested courses of study leading to these professions will be found in the College of Science bulletin, page 15.

REQUIREMENTS OF THE DEPARTMENT

For a major in mathematics, 36 credits, including course 5 and 109.

Candidates who are not majors in mathematics but wish to teach mathematics as a minor subject must have earned at least 15 credits in mathematics, including courses 4 and 5, before receiving the recommendation of the department.

Major students in mathematics should, if possible, select their courses in mathematics in the following order: Math. 4, 5, 6, 107, 108, 109. In addition they should elect physics as their freshman science and take solid geometry (Math. 2) in their freshman year.

1. *Advanced Algebra.*—Algebra from quadratics on. Prerequisite, one year of high school algebra. Five credits; autumn, winter.

2. *Solid Geometry.*—Prerequisite, one year of plane geometry. Five credits; winter, spring.

4. *Plane Trigonometry.*—For students in the Colleges of Liberal Arts, Science, Education, Fisheries, Law, and Pharmacy. Prerequisites, one year of algebra and one year of plane geometry. Five credits; each quarter.

5. *College Algebra.*—Prerequisite, course 1 or one and one-half years high school algebra. Five credits; winter. Winger.

6. *Analytical Geometry.*—Especially for students in the College of Science. Prerequisite, Math. 1, 2, and 4. Five credits; spring. Winger.

11-12. *Theory of Investments.*—Primarily for commerce students. First quarter: preliminary processes of algebra; interest and annuities; second quarter: annuities, amortization, capitalization and depreciation, sinking funds, etc. Life contingencies, applied to the computation of single and annual premiums. Prerequisite, one year algebra, one year geometry. Five credits a quarter; autumn, winter, spring.

13. *Elements of Statistical Methods.*—Data obtained by observation, enumeration or estimate, and their application to interpreting social and natural phenomena. Prerequisite, one year algebra, one year plane geometry. Five credits; each quarter. Gavett.

51. *Trigonometry.*—Primarily for engineering, mines and architecture students. Prerequisites, one and one-half years algebra and one year plane geometry. Four credits; autumn, winter, spring.

52. *College Algebra*.—Primarily for mines and architecture students. Prerequisite, Math. 51. Four credits; autumn, winter, spring.

53. *Analytical Geometry*.—Primarily for engineering, mines and architecture students. Prerequisite, Math. 52. Four credits; each quarter.

54, 55, 56. *Mathematics for Foresters*.—Advanced numerical and graphical methods and solution of plane triangles by trigonometric methods. Prerequisite, one and one-half years algebra, one year plane geometry. Three credits a quarter; autumn, winter, spring. Taylor.

61, 62, 63. *Calculus*.—Primarily for students in the Colleges of Engineering and Mines. Prerequisites, Math. 2 and 53. Three credits a quarter; autumn, winter, spring.

FOR GRADUATES AND UNDERGRADUATES

101. *Spherical Trigonometry with Applications*.—Prerequisite, Math. 2 and 4. Two credits; autumn. Moritz.

102, 103. *Solid Analytical Geometry*.—Prerequisite, course 108 or 63. Two credits a quarter; winter, spring. Moritz.

107, 108, 109. *Calculus*.—Elements of differential and integral calculus, primarily for students in the College of Science. Prerequisite, Math. 6. Five credits a quarter; autumn, winter, spring. Moritz.

114, 115. *Ordinary and Partial Differential Equations*.—With applications to problems in physics, chemistry, astronomy and engineering. Prerequisite, Math. 108 or 63. Three credits a quarter; autumn, winter. Carpenter.

117, 118, 119. *Projective Geometry*.—Classical theory through Pascal and Brianchon, selected topics in involution, binary forms, algebraic invariants, the conic as a rational curve and a ternary form. To meet needs of teachers and professional mathematicians. Prerequisite, calculus, unless it is taken concurrently. Two credits a quarter; autumn, winter, spring. Winger.

*151. *Mathematical Theory of Finance*.

*152. *Mortality Tables*.

*153. *Insurance—Premiums and Reserves*.

Educ. 160M. Teaching of Mathematics.—Problems peculiar to the teaching of high school mathematics. Critical review of courses and methods of teaching. Required of mathematic majors who are candidates for the normal diploma. Prerequisite, Math 109. ~~Two~~ credits; spring. Winger.

*161, 162, 163. *Analytical Mechanics*. 3

164, 165, 166. *Mathematic Physics*.—For students of science, aiming to give the student sufficient mathematics to enable him to read the easier scientific papers in the current literature. It presupposes a thorough grasp of elementary physics and mathematics through the calculus. Differential equations should be taken before or concurrently. Three credits a quarter; autumn, winter, spring. Neikirk.

GRADUATE COURSES

201, 202, 203. *Differential Geometry*.—First and second quarters: metric differential geometry; third quarter: projective differential geometry. Prerequisites, Math. 115, Math. 119. Two credits each quarter. Carpenter.

*Not offered in 1923-1924.

204, 205, 206. *Modern Algebra*.—Theory of matrices, linear dependence, linear transformations, bilinear and quadratic forms, algebraic invariants, and elementary divisors. Prerequisites, Math. 103, Math. 109. Three credits each quarter. Moritz.

*207-208-209. *Theory of Relativity*.

*211, 212, 213. *Foundations of Mathematics*.

*214, 215, 216. *Complex Variable*.

*217, 218 219. *Elliptic and Theta Functions*.

*221, 222, 223. *Higher Plane Curves*.

*224, 225, 226. *Real Variables*.

227, 228, 229. *Theory of Numbers*.—Prerequisite, Math. 109. Two credits each quarter. Bell.

251, 252, 253. *Mathematical Journal and Research Club*.—Meets the second Thursday of each month, Philosophy Hall, room 137, at 5 p.m. For advanced students and teachers in the department. The purpose of the club is to discuss the research work carried on by the members, and to review important recent mathematical literature. Open to all graduate students in mathematics. No credit; autumn, winter, spring

MECHANICAL ENGINEERING

Engineering Hall

PROFESSOR EASTWOOD; ASSOCIATE PROFESSORS WILSON, WINSLOW;
INSTRUCTORS MCINTYRE, McMINN, EDMONDS

70. *Marine Gas Engines*.—Arranged for the short course in fisheries. Two credits; winter. Wilson.

71. *Airplane Gas Engines*.—Arranged for military science department. Two credits; spring. Wilson.

81. *Mechanism*.—Operation of machines involving the transmission of forces and the production of determinate motions. Prerequisite, C.E. 13, Math. 52, Three credits; autumn, winter, spring. Wilson, Winslow, McIntyre, McMin.

82. *Steam Engineering*.—Various steam apparatus used in modern steam plants; construction, use, and reason for installation. Not open to freshmen. Prerequisite, drawing. Three credits; autumn, winter, or spring. Eastwood, Winslow, McMin.

83. *Steam Engineering Laboratory*.—Calibrations of thermometer, gages and indicator springs; tests of the simple steam engine; one complete engine and boiler test with report. Preceded or accompanied by M. E. 82. Lab. fee, \$2. Three credits; autumn, winter, spring. Wilson, Winslow, McIntyre.

91, 92, 93. *Machine Design*.—Design of machine details. Prerequisite, C.E. 13. Two credits a quarter; autumn, winter, spring. McIntyre, Edmonds, McMin.

101, 102. *Machine Design*.—Advanced problems in machine design. Prerequisite, M.E. 93, C.E. 132. Two credits a quarter; autumn and winter. Winslow.

*Not offered in 1923-1924.

103. *Steam Engine Design*.—Computations and drawings for the design of a steam engine. Prerequisite, M.E. 124, C.E. 132. Three credits; spring. Winslow.

123, 124. *Engines and Boilers*.—Generation and use of steam in various types of boilers and engines. Prerequisite, M.E. 83, 93, also preceded or accompanied by C.E. 131. Three credits a quarter; autumn, winter. Winslow.

151, 152, 153. *Experimental Engineering*.—Continuation of M.E. 83, involving more extended and complete investigations. Prerequisite, M.E. 83. Lab. fee, \$2. Three credits a quarter; autumn, winter, spring. Wilson, Winslow.

167. *Engineering Materials*.—Properties of various materials used in engineering construction, including iron, steel, reinforced concrete and timber. Recitation and laboratory. Prerequisite, C.E. 132. Junior mechanical and electrical engineers. Lab. fee, \$2. Three credits; autumn, winter and spring. Winslow, McMinn.

179. *Steam Turbines*.—Theory, construction and design of steam turbines. Prerequisite, M.E. 82. Three credits; spring. Eastwood.

182. *Heating and Ventilation*.—Various systems of heating and ventilating methods, designs and tests. Prerequisite, M.E. 82. Three credits; winter, spring. Eastwood.

183. *Thermodynamics and Refrigeration*.—Fundamental principles underlying the transformation of heat into work, with special application to engineering. Prerequisite, M.E. 82. Five credits; autumn. Eastwood.

184. *Power Plants*.—Design of steam power plants, involving their location, buildings, prime movers, and power transmission. Prerequisite, M.E. 123, 83. Three credits; spring. Eastwood.

**185, **186, **187. *Naval Architecture*.—Theory of naval architecture, as pertains to displacement, stability and strength, and the usual calculations involved in construction. Not open to freshmen. Three credits a quarter; autumn, winter, spring. Eastwood.

**188, **189. *Ship Design*.—Application of the principles of naval architecture to the design of a ship for a definite purpose. Prerequisite, M.E. 186. Two credits a quarter; autumn and winter. Eastwood.

**190. *Marine Engineering*.—Power plant equipment of ships, including boilers, engines, auxiliaries and propellers. Prerequisite, M.E. 82, 185. Three credits; spring. Eastwood.

195. *Thesis*.—Investigation, design or experiment under direction of the professor in charge. Three credits; senior year.

Eastwood, Wilson, Winslow.

198. *Gas Engineering*.—Development of gas engineering; stationary, marine, automobile and airplane motors, and gas producer plants. Prerequisite, M.E. 82. Three credits; autumn, winter, spring. Wilson.

199. *Gas Engine Design*.—Calculations and plans for the design of a given type of motor. Prerequisite, M.E. 198. Three credits; spring.

211. *Research*.—Time to be arranged. Three credits a quarter.

Eastwood, Wilson.

**Will be offered if a sufficient number of students elect the course.

MILITARY SCIENCE AND TACTICS

The Armory

COLONEL BRADY, LIEUT. COLONEL NOYES, LIEUT. COLONEL MAIZE, MAJOR SOHRADDER, MAJOR ROWLAND, MAJOR HARMON, MAJOR GREGORY, CAPTAIN UNDERWOOD, CAPTAIN HALS, CAPTAIN PRIEST, LIEUT. NOLAN, LIEUT. HALTER, WARRANT OFFICER WHITE, FIRST SERGEANT THOMAS, QUARTERMASTER SERGEANT WUNDERLICH, SERGEANTS LANG, BOYLE, BAILEY, KENT, BECKETT; PRIVATES FIRST CLASS FREEMAN, MAUGHAN.

All male students in the University who are American citizens, and not physically disqualified, are required to take military training throughout the first two years of attendance. The present requirement is five hours per week.

The instruction of these two years, together with that provided for the third and fourth years, constitute the courses prescribed by the war department for institutional units of the Reserve Officers' Training Corps. Three of these units have been established in this University: infantry, coast artillery and air service, each leading to commissions as reserve officers in the appropriate corps. The advanced courses, those of the third and fourth years, are open to all students who have completed the first two years—basic course—of instruction and training.

All assignments for instruction and training will be made at the time of registration with the military department.

For those students who desire to major in military science, a four-year curriculum has been arranged. (See curricula of the College of Science, bulletin, page 16.)

FIRST YEAR

1-2-3. Basic Infantry, Coast Artillery, Air Service.—Infantry drill, physical training, rifle marksmanship and ceremonies. Five hours a week. One and two-thirds credits a quarter; autumn, winter, spring.

11-12-13. Band.—Five hours a week. One and two-thirds credits a quarter; autumn, winter, spring.

SECOND YEAR

51-52-53. Basic Infantry.—Map reading, and military sketching, infantry weapons, musketry, military hygiene, sanitation and first aid, infantry drill and leadership. Five hours a week. One and two thirds credits a quarter; autumn, winter, spring.

61-62-63. Basic Coast Artillery.—Coast Artillery materiel and leadership. Five hours a week. One and two-thirds credits a quarter; autumn, winter, spring.

71-72-73. Basic Air Service.—General air service subjects, air service weapons, communications, field engineering and leadership. Five hours a week. One and two thirds credits a quarter; autumn, winter, spring.

81-82-83. Band.—Five hours a week. One and two thirds credits a quarter; autumn, winter, spring.

THIRD YEAR

101. Advanced Infantry.—Field engineering and leadership. Three credits; autumn.

102. Advanced Infantry.—Accompanying weapons and leadership. Three credits; winter.

103. Advanced Infantry.—Tactics and leadership. Three credits a quarter; spring.

111. *Advanced Coast Artillery*.—Orientation and leadership. Three credits a quarter; autumn.

112. *Advanced Coast Artillery*.—Gunnery and leadership. Three credits a quarter; winter.

113. *Advanced Coast Artillery*.—Gunnery and leadership. Three credits a quarter; spring.

121. *Advanced Air Service*.—Communications, liaison, aeronautical engines and leadership. Three credits a quarter; autumn.

122. *Advanced Air Service*.—Communications, liaison, aeronautical engines and leadership. Three credits a quarter; winter.

123. *Advanced Air Service*.—Aerial photography, minor tactics, aeronautical engines, administration and leadership. Three credits a quarter; spring.

FOURTH YEAR

151. *Advanced Infantry*.—Military law, history and policy, and leadership. Three credits a quarter; autumn.

152. *Advanced Infantry*.—Tactics and leadership. Three credits a quarter; winter.

153. *Advanced Infantry*.—Tactics, company administration, and leadership. Three credits a quarter; spring.

154. *Military Thesis on Infantry*.—Five credits.

161. *Advanced Coast Artillery*.—Military law, history and policy, and leadership. Three credits a quarter; autumn.

162. *Advanced Coast Artillery*.—Tactical employment of heavy artillery and leadership. Three credits a quarter; winter.

163. *Advanced Coast Artillery*.—Company administration, field engineering and leadership. Three credits a quarter; spring.

164. *Military Thesis on Coast Artillery*.—Five credits.

171. *Advanced Air Service*.—Aerial gunnery, navigation, aeronautical engines and leadership. Three credits a quarter; autumn.

172. *Advanced Air Service*.—Bombardment equipment, aeronautical engines, airplanes, rigging and leadership. Three credits a quarter; winter.

173. *Advanced Air Service*.—Airplanes, air service organization, aeronautical engines and leadership. Three credits a quarter; spring.

METALLURGY

Mines Hall

PROFESSORS ROBERTS, DANIELS; ASSOCIATE PROFESSOR COREY; ASSISTANT REDMOND

NOTE.—Mining, metallurgical, geological, or ceramic experience. Each student is required to spend at least one summer vacation, or its equivalent, in practical contact with the industry, and to submit upon his return to college a detailed report of his observations. Work of this nature offers an opportunity to secure data and material for the graduation thesis.

101. *Fire Assaying*.—Testing of reagents, crushing, sampling and assaying of ores, furnace and mill products. Prerequisite, Chemistry 111. One recitation and three laboratory periods. Lab. fee, \$20. Five credits; autumn. Corey, McCormick.

102. General Metallurgy.—Properties of metals and alloys, fuels, refractory materials; furnaces; the extraction of the common metals from their ores. Visits to smelters. Prerequisite, junior standing. Three recitations and two laboratory periods. Lab. fee, \$10. Five credits; spring.

Corey.

103. Metallurgical Fuels.—Analysis of fuels and consideration of the most effective utilization of the country's present supplies. Prerequisite, junior standing. Two recitations and one laboratory period. Lab. fee, \$5. Three credits; winter.

Daniels.

104. Non-ferrous Metallurgy.—Metallurgy of copper, lead, gold and silver, especially the methods of roasting, smelting, lixiviation and refining. Prerequisite, Met. 102. Five recitations. Five credits; autumn.

Corey.

153. Wet Assaying.—Technical methods for the determination of copper, lead, zinc, etc., in ores and furnace products. For students in ceramics, analysis of clays and ceramic products. Prerequisite, Met. 102, Chem. 111. One recitation and two laboratory periods. Lab. fee, \$12. Two credits; winter.

Corey.

155. Iron and Steel.—Metallurgy and manufacture of commercial iron and steel; especial reference to their properties and uses in engineering work. Prerequisite, junior standing. Three recitations. Three credits; autumn.

Daniels.

157. Design of Plant.—Design of a piece of equipment or a structure for mining, milling, or metallurgical purposes. Prerequisite, senior or graduate standing. Three drafting periods. Three credits; spring.

Roberts, Daniels.

158. Minor Metals.—Metallurgy of zinc, antimony, tin, aluminum, nickel, etc.; a study of the plant required, the methods and costs of treatment. Three credits; spring.

Corey.

160. Metallurgical Analysis.—Technical methods of analysis of slags and industrial products. Prerequisite, Met. 153. Two laboratory periods. Lab. fee, \$12. Two credits; spring.

Corey.

162. Metallography.—Constitution and microstructure of metals and alloys, especially iron and steel. Prerequisite, senior standing. Two recitations. Two credits; autumn.

Corey.

163. Metallography.—Preparation and study of metal sections, photomicrography and use of the microscope in testing industrial alloys. Two laboratory periods. Lab. fee, \$5. Two credits; winter.

Corey.

165. Metallurgy Calculations.—Physical chemistry for the metallurgists, slag calculations, etc., illustrated by figures quoted from the present practice at a number of smelting plants. Prerequisite, senior standing. Two credits; winter.

Corey.

166. Electrometallurgy.—Study of methods and practice with special consideration of the possibilities of electrometallurgical industries in the Pacific Northwest. Prerequisite, senior or graduate standing. Three credits; spring.

Corey.

191, 192, 193, 194. Thesis.—Preparation of a graduation thesis. A fee of \$5 a quarter will be required to cover cost of materials. Completed thesis must be submitted at least one month before graduation. Prerequisite, senior standing. Five laboratory periods. Total of five credits required.

Corey.

211, 212, 213, 214. *Metallurgical Research*.—Study of methods applicable to the development of metallurgical processes for special ores and metals. Prerequisite, graduate standing. Hours and credits to be arranged.

Corey.

221, 222, 223. *Advanced Metallurgy*.—Application of electro-chemical and electrometallurgical knowledge to the solution of the particular problems of the Pacific Northwest. Prerequisite, graduate standing. Hours and credits to be arranged.

Corey.

MINING

Mines Hall

PROFESSORS ROBERTS, DANIELS; ASSOCIATE PROFESSOR COREY; ASSISTANT PROFESSOR WILSON; LECTURERS GLENN, POWELL; ASSISTANTS SCHONING, MCCORMICK, KNUFFE

NOTE.—Mining, metallurgical, geological, or ceramic experience. Each student is required to spend at least one summer vacation, or its equivalent, in practical contact with the industry, and to submit upon his return to college a detailed report of his observations. Work of this nature offers an opportunity to secure data and material for the graduation thesis.

51. *Elements of Mining*.—The field of mining, considering prospecting, boring, drilling, explosives, rock breaking, timbering, methods of development and working, transportation and drainage. Prerequisite, sophomore standing. Three recitations. Three credits; autumn. Daniels.

101. *Milling*.—Preliminary course, designed to familiarize all students in the department with the principles and uses of the various types of crushing, sampling, concentrating and washing machinery in the Mines Building. Prerequisite, junior standing. Two recitations and one laboratory period. Lab. fee, \$5. Three credits; autumn. Roberts, Daniels.

103. *Mine Rescue Training*.—Twenty-five hours of instruction. Practice in the care and use of oxygen rescue apparatus, smokeroom training, and first-aid-to-the-injured work in the U.S. Bureau of Mines Safety Station. Required of all students in the College of Mines. One credit; winter. Daniels, Schoning.

106. *Mining Excursion*.—A trip of five days, taken in the spring of the junior year to a neighboring mining region; detailed examinations of mining and metallurgical industries. Expense is approximately \$25. One credit; spring. Roberts, Daniels, Corey.

107. *Mining Excursion*.—A trip of five days, taken in the spring of the senior year, similar to Min. 106. One credit; spring.

Roberts, Daniels, Corey.

120. *Coal Resources of North America*.—Occurrence of coal in North America with special reference to geographic distribution and structure; classification and commercial requirements of coals. Prerequisite, Min. 51. Three recitations. Three credits; spring. Daniels.

122. *Coal Mining Methods*.—Prospecting and development. Detailed study is made of a nearby mine. Prerequisite, Min. 51. Three recitations. Three credits; winter. Daniels.

151. *Mining Engineering*.—Lectures on exploration, mine development, power generation, air compression, hoisting and transportation. Practice with air compressors, machine drills, and mine equipment in laboratories and local plants. Prerequisite, senior standing. Two recitations, one laboratory period. Lab. fee, \$5. Three credits; autumn. Roberts.

152. *Ore Dressing*.—Certain branches of ore dressing, mill tests of ores checked by assays. Prerequisite, senior standing. Three recitations and two laboratory periods. Laboratory fee, \$10. Five credits; spring.

Roberts, Daniels.

158. *Mining Law*.—Lectures on the mining laws of the United States and Alaska; illustrated by diagrams and mine maps. Two lectures. Two credits; winter.

O'Bryan.

162. *Cost of Mining*.—Mining methods and costs. Prerequisite, senior mining standing. Three recitations. Three credits; winter.

Roberts.

163. *Mine Operation*.—Complete operations at typical mines, including mining, transportation and treatment of ore, disposal of products, company finances, and management. Illustrated by ores and products, maps and photographs, and other materials. Prerequisite, senior standing. Three recitations. Three credits; winter and spring.

Roberts.

170. *Coal Mining Machinery*.—Coal cutting machines, mine locomotives, fans, hoists, and pumps with especial reference to application to coal mining. Prerequisite, senior standing. Three recitations. Three credits; autumn.

Daniels.

171. *Mine Gases and Ventilation*.—Composition and properties of mine gases, methods of testing; lighting of mines; principles of ventilation; ventilating machinery. Prerequisite, Min. 122. Three recitations. Three credits; winter.

Daniels.

172. *Coal Mining Plant*.—Design of plant and machinery employed in mining and preparing coal for market. Prerequisite, senior standing. Three drafting periods. Three credits; spring.

Daniels.

176. *Coal Preparation*.—Methods of preparing coal for market, together with laboratory tests and runs on various coals, to determine best methods of preparation. Prerequisite, Min. 101, Met. 103. Two recitations and three laboratory periods. Lab. fee, \$10. Five credits; winter.

Daniels.

178. *Coal Preparation Machinery*.—Machines and equipment used in tipples and washeries for the screening and washing of coal. Prerequisite, Min. 176. Two recitations. Two credits; spring.

Daniels.

182. *Mine Management*.—Organization and administration of engineering plants, the keeping and interpretation of cost accounts, the efficiency of labor and methods, the financial, legal and social aspects of engineering operation. Prerequisite, senior standing. Three recitations. Three credits; spring.

Daniels.

191, 192, 193, 194. *Thesis*.—Preparation of a graduation thesis. A fee of, \$5 a quarter is required to cover cost of materials. Completed thesis must be submitted at least one month before graduation. Prerequisite, senior standing. Five laboratory periods. Total of five credits required.

Roberts, Daniels.

201, 202, 203. *Seminar*.—Lectures and discussions by Bureau of Mines staff, College of Mines faculty and fellows. Required of Bureau of Mines fellowship holders. Prerequisite, senior or graduate standing. One credit; autumn, winter, spring.

Roberts, Daniels, Corey, Wilson.

211, 212, 213, 214. *Graduate Thesis*.—Preparation of a thesis in mining engineering, in geology and mining, or in metallurgy. Prerequisite, graduate standing. A fee will be required if the work involves the use of laboratory materials or equipment. Hours and credits to be arranged.

Roberts, Daniels, Corey.

OK for Fall
(very necessary quarter)

221, 222, 223. *Mine Development.*—Preparation of a plan of development for a metal mine, including studies of the geological conditions, surface and underground explorations, mining methods, layout of plant. Prerequisite, graduate standing. Hours and credits to be arranged. Roberts.

231, 232, 233. *Mill Design.*—Design of a plant for ore dressing purposes. Prerequisite, graduate standing. Hours and credits to be arranged. Roberts.

241, 242, 243. *Coal Mining.*—Methods applicable to the solution of problems in the coal mining industry; higher recovery of minable coal; economical layout of mine and plant; application of improved methods and machinery. Prerequisite, graduate standing. Hours and credits to be arranged. Daniels.

251, 252, 253. *Coal Preparation.*—Advanced study of methods of coal preparation based on careful preliminary studies of character of coal and impurities in any locality. Laboratory testing will be emphasized. Prerequisite, graduate standing. Hours and credits to be arranged. Daniels.

261, 262, 263. *Utilization of Coal.*—Investigation of the possibilities of use of coals of low rank and quality. Briquetting, pulverization, and distillation will be given special attention. Prerequisite, graduate standing. Hours and credits to be arranged. Daniels.

MINING AND METALLURGICAL RESEARCH

THE TECHNICAL STAFF OF THE UNITED STATES BUREAU OF MINES NORTHWEST EXPERIMENT STATION IN CO-OPERATION WITH THE INSTRUCTORS IN THE COLLEGE OF MINES

Class work is directed by members of the instructional staff of the University. The research is under the joint direction of the United States Bureau of Mines and the College of Mines. The subjects of research relate to the mining and metallurgical industries of the state and adjacent regions.

During the coming year investigations are contemplated in the following subjects:

1. Preparation and utilization of coal.
2. Ceramics.
3. Electrometallurgy.

MUSIC

Music Building

PROFESSOR GLEN; ASSOCIATE PROFESSORS ROSEN, VENINO, WOOD; ASSISTANT PROFESSORS DICKEY, VAN OGLE; INSTRUCTORS KIRCHNER, ADAMS, TELLEY, FRENCH, FREYMAN; ASSISTANTS BENTON, WILSON, BURCH, CANFIELD.

1, 2, 3. *Music Appreciation.*—Planned to aid music students and all interested in music to become intelligent and discriminating listeners. Musical masterpieces, both instrumental and vocal, of different periods and forms, will be presented and discussed. Two credits a quarter; autumn, winter, spring. Van Ogle, French.

4, 5, 6. *History of Music.*—Progress of musical development from the primitive period to the modern. Two credits a quarter; autumn, winter, spring. French.

7, 8, 9. *Sight Singing.*—For prospective grade supervisors and for music students. Two sections—one for beginners and the other for students who have had some experience in sight singing. Two credits a quarter; autumn, winter, spring. Dickey, Wilson.

allowed U.D. cr. in cases where student has been enrolled at least 2 yrs in courses in

DEPARTMENTS OF INSTRUCTION

241

music,

^{10, 11, 12.} **Choral Study.**—The University chorus provides opportunity for those qualified to study the more serious as well as the lighter forms of choral composition. Candidates must satisfy the director as to the extent of their musical ability. One credit a quarter; autumn, winter, spring. Glen.

14, 15, 16. Ear Training and Melody Writing.—Principles of melodic invention and training in hearing accurately; study in notation. Two credits a quarter; autumn, winter, spring. Dickey, Wilson.

14D. Ear Training.—Intensive course for qualified students. Equivalent to Mus. 14, 15, 16. Five credits a quarter; autumn. French.

17. Choral Study.—Part songs for men's voices. Candidates admitted only upon examination. Two credits; autumn. Glen.

see note for 10, 11, 12

18, 19, 20. Applied Music (Freshman).

68, 69, 70. Applied Music (Sophomore).

118, 119, 120. Applied Music (Junior).

168, 169, 178. Applied Music (Senior).

¹²⁰ Students of other colleges and schools may earn one or two credits a quarter in the applied music courses. Students of the College of Fine Arts carry a larger number of credits—one and one-half to three—as indicated in the set courses. Students enrolled in these courses will be given opportunity, on demonstration of the required ability, to participate in public recitals of the department.

Unless excused by reason of advanced standing on entrance, students who major in courses in applied music will require two lessons a week, ordinarily, to cover the work necessary for a degree. One to three credits a quarter.

(a) **Piano.**—Venino, Van Ogle, Ferryman.

(b) **Violin.**—Rosen, Benton.

(c) **Voice.**—Glen, Tilley.

(d) **Violoncello.**—Kirchner, Canfield.

(e) **Pipe Organ.**—Burch.

22, 23, 24. University Band.—Competent players of band instruments are admitted to the band upon consent of the bandmaster. Two credits a quarter; autumn, winter, spring. Adams.

28, 29, 30. Ensemble Singing.—A choral course for women. Only advanced students will be admitted. One credit a quarter; autumn, winter, spring. Glen.

ditto

31, 32, 33. University Orchestra.—The orchestra affords qualified students opportunity for study of the better grades of orchestral composition. No one is eligible to enter the course unless the director is satisfied of the ability of the applicant. One credit a quarter; autumn, winter, spring. Glen.

ditto

^{applied} **34, 35, 36. Voice Training.**—Principles of correct breathing and tone production essential to good singing. Two credits a quarter; autumn, winter, spring. Bogardus.

ditto

51, 52, 53. Harmony.—Ear training, analysis, and keyboard practice. Prerequisite, Mus. 7, 8, 9, and 14, 15, 16. Three credits a quarter; autumn, winter, spring. Wood, Wilson.

¹²⁰ Only those who have successfully completed the work in course 11 will be eligible for registration in course 12.

51D, 52D. *Harmony*.—An intensive course for qualified students. Equivalent to Mus. 51, 52, 53. Prerequisite, Mus. 14, 15, 16, or 14D. Five credits a quarter; winter and spring. French.

54, 55, 56. *School Music*.—A course for supervisors. Prerequisite, Mus. 7, 8, 9, and 14, 15, 16. Two credits a quarter; autumn, winter, spring. Dickey.

57, 58, 59. *Advanced Sight Singing*.—Study of larger choral works. Prerequisite, Mus. 7, 8, 9, or instructor's permission. Two credits a quarter; autumn, winter, spring. Dickey.

61, 62, 63. *Advanced Ear Training*.—Dictation and keyboard work supplementary to Mus. 51, 52, 53. Prerequisite, Mus. 14, 15, 16. Two credits a quarter; autumn, winter, spring. Wilson.

101, 102, 103. *Advanced Harmony*.—Prerequisite, Mus. 51, 52, 53. Three credits a quarter; autumn, winter, spring. Wood, Wilson.

104, 105, 106. *History of Music*, Advanced.—Important periods and composers of modern music. Two credits a quarter; autumn, winter, spring. Van Ogle.

107, 108, 109. *Counterpoint*.—Regulation of two or more simultaneous melodies. Prerequisite, Mus. 15, 52, 53. Two credits a quarter; autumn, winter, spring. Wood.

110, 111, 112. *Instrumental Form*.—Analysis of many examples and simple exercises in composition. Prerequisite, Mus. 51, 52, 53. Two credits a quarter; autumn, winter, spring. Wood.

113, 114. *Music Education*.—Psychological and pedagogical principles and their application to the teaching of music. Prerequisite, Mus. 54, 55, 56. Two credits a quarter; autumn, winter. Dickey.

124, 125, 126. *Chamber Music*.—Advanced study of musical literature for string trios, quartets and quintets. One credit a quarter; autumn, winter, spring. Rosen.

*127, 128, 129. *Advanced Sight Singing*.

130, 131, 132. *University Band (advanced)*.—Continuation of the work of the freshman and sophomore years in the study and production of more difficult compositions for band. One credit a quarter; autumn, winter, spring.

151, 152, 153. *Musical Appreciation*.—Appreciative study of some modern composers and schools. Two credits a quarter; autumn, winter, spring. Van Ogle.

154, 155, 156. *Music Education and Supervision*.—For seniors and students of experience. High school, normal school and institute music. Prerequisite, Mus. 113, 114, and Educ. 160N. Two credits a quarter; autumn, winter, spring. Dickey.

157, 158, 159. *Free Composition*.—Choral work, piano accompaniment idioms, vocal and instrumental solos and pieces in the smaller forms. Prerequisite, Mus. 101, 102, 103. Two credits a quarter; autumn, winter, spring. Wood.

Educ. 160N. *Teachers' Course in School Music*.—Prerequisite, Mus. 113, 114. Two credits; spring. Dickey.

*Not given in 1923-1924.

Educ. 160X. Teachers' Course in Piano Playing.—A survey of teaching material, with supervised practice. Continued in the winter and spring quarters as Mus. 165, 166. Two credits; autumn.

161, 162, 163. *Polyphonic Forms.*—Free counterpoint applied to the invention, canon, fugue, etc. Analysis and composition. Prerequisite, Mus. 107-108-109. Two credits a quarter; autumn, winter, spring. Wood.

165, 166. *Piano Teaching.*—(In combination with Educ. 160X). Teaching methods and a survey of teaching material, with supervised practice in teaching of piano. Two credits a quarter; winter, spring.

*180, 181, 182. *University Band (advanced).*

COLLEGE COURSES IN APPLIED MUSIC

The courses outlined are not arbitrary. They indicate the amount and character of the work the student is expected to cover for his musical degree. Credit will be given for equivalent courses pursued elsewhere prior to entering the University.

PIANO

Scholarship in Piano Study.—Mr. A. F. Venino offers an annual scholarship to the candidate showing the greatest proficiency and promise in piano playing. The scholarship carries free tuition for one weekly lesson throughout the autumn, winter and spring quarters. All candidates must submit their application in writing to Dean Glen before September 1. The competitive examination preliminary to the award will be held in the Music Building at 2 p.m. of the Saturday before registration day.

Freshman and Sophomore Years.—Major and minor scales and arpeggios; studies selected from Czerny, Cramer, Loeschorn, Kullak, Hiller and Krause; sonatas by Scarlatti, Haydn, Clementi, Mozart and Beethoven; shorter compositions and inventions by Bach; and works from the classic and romantic schools.

Junior and Senior Years.—Scales in thirds, sixths and tenths; studies by Czerny, Clementi, Chopin, Brahms, MacDowell and Moszkowski; well-tempered Clavichord and suites of Bach; sonatas, pieces including at least one concerto, taken from the classic, romantic or modern composers. At least one recital program must be played from memory from the repertoire studied.

VOCAL MUSIC

The course in vocal music is even more flexible than that outlined for piano study. The purpose is to develop the voice and musical understanding so that the best in vocal music may be faithfully interpreted. The fact of having studied vocal music for four years will not necessarily entitle a student to graduation.

Freshman.—Practical work in voice placing, breathing studies from among the following: Concone, Op. 9; Marchesi, Op. 1; Panofka, Op. 85; Vaccai, Book 1; simple Italian and English songs.

Sophomore.—Progressive tone work; Bordogni, Concone, Marchesi, Panofka, simple Italian arias, Italian and English songs.

Junior.—Tone work; advanced technique. Arias from Italian, French and German operas. German song classics; modern French and English songs.

*Not offered in 1928-1924.

Senior.—Tone work and technique. Repertoire in opera and oratorio; recitals; senior program.

VIOLIN

Freshman.—Violin Method, Book I, Rosen; Exercises Op. 45, Book I, Wohlfahrt; Book I, De Beriot; Exercises Op. 68.

Sophomore.—Scales, Hrimaly; Studies, Blumenstengel Op. 33, Mazas, Books I and II; Concerto, Accoly; Scene de Ballet, De Beriot.

Junior.—Scales, Book II, Baillot; Exercises, Books I and II, Schraedieck; Etudes, Kreutzer, Fiorillo, Rode, Rovelli; Concerto, 9 and 7, De Beriot; Concerto, 2 and 8, Spohr, also one sonata by Handel.

Senior.—Scales, Rosen; Etudes, Dancla; Op. 73, Gavini; Op. 35, Dont; Sonata for violin alone, Bach; Concerto, Bruch, Mendelssohn, D-Minor, Wieniaski and No. 4 Vieuxtemps.

In the last quarter the student is obliged to memorize one sonata by Bach for violin alone and one of the concertos given in the fourth year.

FEEs

Since most of the work in the courses in applied music must necessarily be of the character of individual instruction, the student is required to pay tuition fees for this work in addition to the general University tuition fee.

All fees are payable in advance to the comptroller of the University. The following quotations of regular fees are based on one lesson a week. More than one lesson a week will be charged for at the same rate. All lessons are one-half hour in length.

Piano.—Mr. Venino, \$22 a quarter; Mrs. Van Ogle, \$22 a quarter; Miss Ferryman, \$15 a quarter.

Vocal Music.—Miss Tilley, \$22 a quarter.

Dean Glen will give individual instruction in singing and repertoire to a maximum number of ten students. The fee will be at the rate of \$27 a quarter for one lesson weekly.

Violin.—Mr. Rosen, \$22 a quarter. Miss Benton, \$15 a quarter.

Pipe Organ.—Miss Burch, \$15 a quarter.

Violoncello.—Mr. Kirchner, \$22 a quarter; Miss Canfield, \$15 a quarter.

Band and Orchestra Instruments.—Mr. Adams, \$15 a quarter.

Arrangements may be made for individual instruction in other musical courses if necessary or desirable.

Piano for practice may be rented at the comptroller's office at the following rates:

One hour daily, \$3 a quarter.

Two hours daily, \$5 a quarter.

Pipe organ for practice; one hour daily, \$12.50 a quarter.

All rental charges must be paid in advance. No rebate in these charges will be allowed. Lessons lost through enforced absence may not be made up unless the teacher in charge has been previously notified of the intended absence and is willing to accept the excuse for the absence.

NURSING

Home Economics Hall

ELIZABETH S. SOULE

1. *History of Nursing*.—Informational study of nursing from the earliest times; traditions of nursing as a profession. Open to any woman student in the University. Five credits; autumn. Soule

3. *Ethics of Nursing*.—Designed to introduce the student to recognized principles which govern her relationship to the patient, the physician, the hospital and the public. Three credits; spring. Soule

5. *Home Care of the Sick*.—Practical course for women students. Instruction given in baths and bed making, care of patients ill with common communicable diseases, care of chronics, invalids and babies. Two credits; autumn, winter, spring. Soule

51, ^{withdrawn} 52, 53. *Public Health and Special Fields*.—Lectures on various phases of public health work in relation to special problems. Case plans discussed and study of records made. Two credits a quarter; autumn, winter, spring. Soule

102. *Principles of Public Health Nursing*.—Lectures on social and nursing technique in public health nursing. Discussion and observation of infant welfare, school, industrial, tuberculosis, and general visiting nursing. Theoretical and practical work required. Prerequisite, graduate registered nurse. Three credits; autumn. Soule

103. *Administration of Public Health Nursing*.—Organization and administration of societies for visiting nursing, methods of collecting funds, boards of directors, and various committees of these associations, office equipment, records, vital statistics, and supervision of staff nurses. Prerequisite, Nurs. 102. Three credits; winter, spring. Soule

110. *Public Health Nursing*.—Field work to give a practical knowledge of the field of public health nursing. Discussion of family problems, demonstration in nursing technique, culture taking, milk modification, maternity care, district problems, etc. Prerequisite, Nurs. 102. Eight to sixteen credits; time to be arranged.

ORIENTAL HISTORY, LITERATURE AND LANGUAGES

Philosophy Hall

PROFESSOR GOWEN

The requirement of one year's work in ancient languages and literature may be satisfied by courses 50, 51 and 52. Courses 21, 22 and 23 count for credits in the department of history; courses 40, 41 and 42 in the College of Business Administration; and courses 114, 115 and 116 in the department of philosophy. Courses above 100 are for juniors, seniors and graduates.

21. *History of China I*.—History of China from the earliest times to the Manchu Conquest. Three credits; autumn. Gowen

22. *History of China II*.—History of China from the Manchu Conquest to the present day. Three credits; winter. Gowen

23. *History of Japan*.—Japan from the earliest times to the present. Three credits; spring. Gowen

30, 31, 32. *Semitic Literature*.—The literature of the Old Testament. Continuous through the three quarters, but each course independent and self-contained. One credit a quarter; autumn, winter, spring. Gowen

40-41. *Oriental Institutions.—Japan, Russia and China.*—The physical geography, social character and commercial resources of the Orient. Two credits a quarter; autumn, winter. Gowen

50. *Literature of India.*—Five credits; autumn. Gowen

51. *Literature of Egypt, Babylonia, and Palestine.*—Five credits; winter. Gowen

52. *Literature of Arabia and Persia.*—Five credits; spring. Gowen

100-101-102. *Hebrew.*—Giving of these courses depends upon registration. Five credits a quarter; autumn, winter, spring. Gowen

104-105-106. *Sanskrit.*—Giving of these courses depends upon registration. Five credits a quarter; autumn, winter, spring. Gowen

*107. *Advanced Hebrew.*

*108, 109. *Arabic.*

114-115-116. *History of Religion.*—Autumn: Primitive conceptions of religion, the religions of Egypt and the Euphrates Valley. Winter: Religions of the Far East. Spring: Judaism, Muhammadanism, and Christianity. Three credits a quarter; autumn, winter, spring. Gowen

200, 201, 202 5 Cr per gl

220, 221, 222 3 PAINTING, SCULPTURE AND DESIGN

Philosophy Hall

ASSOCIATE PROFESSOR ISAACS; ASSOCIATES PATTERSON, WORMAN, WEHN, BUTLER; INSTRUCTORS EDENS, LACY, RHODES, TRULLINGER; ASSISTANT STORM

Advanced students applying for credit must present work to head of department.

3. *Principles of Design.*—Principles of design in line, dark and light, and color. For students in home economics. Four credits; autumn, winter, spring. Rhodes, Edens.

5-6-7. *Free-hand Still Life and Cast.*—Technique of drawing from elementary forms, with all mediums—water color, oil, pen, etc. Prerequisite for any subsequent course in drawing and painting; cast drawing from models of antique and modern sculpture. Lab. fee, \$1. Three credits a quarter; autumn, winter, spring. Patterson, Isaacs, Butler.

9-10-11. *Art Structure.*—Principles of design in line, dark and light, and color, to develop power of appreciation and creation of good design. Prerequisite for any subsequent course in art structure. Lab. fee, \$1. Four credits a quarter; autumn, winter, spring. Edens, Rhodes, Storm.

16-17-18. *Art Appreciation.*—Historical development, from the art of primitive man to the present day. One credit a quarter; autumn, winter, spring. Isaacs.

53. *Advanced Design.*—Lab. fee, \$1. Four credits; autumn. Storm.

54. *Art Structure.*—Lab. fee, \$1. Four credits; winter. Storm.

55. *Art Structure.*—Lab. fee, \$1. Four credits; spring. Storm.

56-57-58. *Illustration.*—Drawing and painting, from the draped model in various mediums, for reproductive processes such as magazines, newspapers and commercial work. Prerequisite, freshman free-hand. Lab. fee, \$3. Three credits a quarter; winter, spring. Butler.

*Not offered in 1923-1924.

59-60-61. *Household Design*.—Designs for tiles; leaded glass, metal-works, fixtures and embroidery. Three credits a quarter; autumn, winter, spring.

72-73-74. *Sculpture*.—*Elementary*.—Construction of plaster moulds, elementary construction; modeling in clay and wax. Lab. fee, \$3. Three credits; autumn, winter, spring. Wehn.

101. *Public School Drawing*.—For drawing supervisors. The working out of such drawings as would be used in the public schools. Three credits; spring. Rhodes.

103-104. *Art Structure*.—*Pottery*.—Advanced students will be allowed to work for advanced credits. Lab. fee, \$2. Three credits a quarter; autumn, winter. Worman.

105. *Art Structure*.—Design as applied to lettering, advertising, and posters. Three credits; autumn.. Rhodes.

106. *Art Structure*.—Posters. Three credits; winter. Edens.

107-108-109. *Portrait*.—Portraiture in all mediums. Prerequisite, freshman free-hand. Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Patterson.

110-111-112. *Art Structure*.—Interior decoration. Three credits a quarter; autumn, winter, spring.

113-114-115. *Furniture Design*.—Lectures on the history of furniture and the working out of original designs in furniture. Two credits a quarter, autumn, winter, spring.

116, 117, 118. *Advanced Illustration*.—Drawing, painting and composition work with and without models, in all mediums for reproductive processes, for magazines, newspapers and other commercial work. Prerequisite, P.S.D. 56, 57, 58. Lab. fee, \$3. Three credits a quarter, autumn, winter, spring. Butler.

122, 123, 124. *Sculpture, (advanced)*.—Lab. fee, \$3. Three credits; autumn, winter, spring. Wehn.

151-152. *Art Structure*.—Landscape design in wood-block and other processes. Three credits a quarter; winter, spring. Rhodes

157. *Art Structure*.—Simple metal work—etching, sawing, and hammering of copper and brass. Lab. fee, \$2. Three credits; autumn. Edens.

158. *Art Structure*.—Jewelry. Lab. fee, \$2. Three credits; winter.

Educ. 160P. Methods of Teaching Art.—Courses of study, methods and material. Two credits; autumn. Rhodes.

160-161-162. *Life*.—Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Isaacs.

163-164-165. *Mural Decoration*.—Decorative compositions done in oil applied to the beautifying of wall spaces, in harmony with the scheme of architecture. Prerequisite, junior standing. Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Isaacs.

166-167-168. *Stage Design*.—Stage decoration, setting and costuming of different types of plays, stage lighting and color theory applied to costumes and setting. Making of small stage models. Three credits a quarter; autumn, winter, spring. Edens.

169-170-171. *Textile and Costume Drawing*.—Prerequisite, at least one quarter of P.S.D. 3 or 9-10-11. Two credits a quarter; autumn, winter, spring. Edens.

172-173-174. *Interior Decoration*.—Advanced problems in interior decoration in elevation and perspective. Five credits a quarter; autumn, winter, spring.

Suggested elective for P.S.D. majors, Anth. 141.—Origins of Art. Spier.

PHARMACY AND PHARMACEUTICAL CHEMISTRY, MATERIA MEDICA AND FOOD CHEMISTRY

Bagley Hall

PROFESSOR JOHNSON; ASSOCIATE PROFESSORS LYNN, LANGENHAM; LECTURER OSSEWARD;
INSTRUCTORS GOODRICH, HILTON, AND ASSISTANTS

1, 2, 3. *Theoretical and Manufacturing Pharmacy*.—Principles of pharmaceutical operations, and manufacture of Pharmacopoeial and National Formulary preparations. Two lectures, one quiz and two laboratory periods a week. Lab. fee, \$6.50 a quarter. Five credits a quarter; autumn, winter, spring. Langenhan, Hilton and assistants.

4. *Commercial Pharmacy*.—A lecture course covering the commercial problems of the practical pharmacist. Two credits; spring. Osseward.

5, 6, 7. *Drug Assaying*.—Experiments in gravimetric and volumetric analysis. Training in fundamental principles of quantitative analysis with analysis of substances of pharmaceutical importance. Alkaloid assay of crude drugs and assay of volatile oils. Two lectures and three laboratory periods a week, autumn and winter quarter. Two lectures and two laboratory periods a week, spring quarter. Five credits; autumn, winter. Four credits; spring. Lab. fee, \$6.50 in autumn and winter quarters, and \$4.50 in spring quarter. Goodrich.

9, 10, 11. *Prescriptions*.—Dispensing and laboratory practice. Students criticize and compound approximately two hundred selected prescriptions. One lecture, one quiz and one laboratory period a week. Lab. fee, \$3 a quarter. Three credits a quarter; autumn, winter, spring. Langenhan and assistants.

12, 13. *Materia Medica*.—Crude organic drugs, their source, methods of collecting and preserving, identification, active constituents and adulterations. Three lectures a week. Three credits; winter, spring. Goodrich.

15. *Field Materia Medica*.—Native medicinal plants of Washington and plants under cultivation in the drug garden. One laboratory period a week, consisting largely of work in the drug garden and field trips. Lab. fee, \$1. One credit; spring. Goodrich.

16. *Food Laws*.—National, state and foreign food laws. For students in the department of fisheries. One credit; winter. Lynn.

101, 102, 103. *Pharmacology and Toxicology*.—Physiological actions of drugs in health and disease; therapeutic uses and posology; symptoms and treatment in cases of poisoning. Two credits a quarter; autumn, winter, spring. Lynn.

105, 106, 107. *Chemistry and Analysis of Food*.—Methods of analysis of food products and study of federal and state laws regulating sale of foods and drug products. Methods of the Association of Official Agricultural Chemists are used. Lab. fee, \$6.50 a quarter. Five credits a quarter; autumn, winter, spring. Lynn.

112. *Materia Medica*.—Advanced course in dealing largely with animal drugs and biological products. Three credits; spring. Goodrich.

113, 114, 115. *Advanced Prescriptions*.—Difficult and incompatible prescriptions. Special problems in dispensing, and New and Non-Official Remedies. Two lectures, one quiz and two laboratory periods. Lab. fee, \$6.50 a quarter. Five credits; autumn, winter, spring.

Langenhan and assistant.

117, 118, 119. *United States Pharmacopoeia and National Formulary*.—Chemistry and pharmacy of the U.S.P. and N.F. preparations and inorganic chemicals. Two recitations a week. Two credits; autumn, winter, spring.

Langenhan.

121, 122, 123. *Toxicology*.—Laboratory in separation, identification and estimation of inorganic and organic poisons and in analysis of alkaloids. Lab. fee according to credit. Credit to be arranged; autumn, winter, spring.

Johnson.

125, 126, 127. *Current Problems*.—Lecture and recitation in current pharmaceutical problems, commercial and scientific. Use is made of the current number of most of the pharmaceutical journals published in the United States, and of several medical journals. One credit; autumn, winter, spring.

Langenhan.

*129, 130, 131. *Manufacturing Pharmacy and Hospital Dispensing*.

201, 202, 203. *Investigation*.—Senior and graduate students may undertake original investigation in pharmacy, pharmaceutical chemistry or chemistry of foods under the direction of an instructor. Lab. fee according to credit. Credit to be arranged; autumn, winter, spring.

PHILOSOPHY

Philosophy Hall

PROFESSOR SAVERY; ASSISTANT PROFESSOR DUCASSE; INSTRUCTOR BLAKE;
TEACHING FELLOWS AND ASSISTANTS

The Liberal Arts requirement is five credits in philosophy. This requirement may be satisfied by any one of the following courses: Philosophy 1, 2, 3, 5. (None of these has any prerequisites).

Philosophy 2 is required of seniors in the College of Business Administration.

Philosophy 1, 2 and 5 are suited to arts-law students.

Psychology 1 is required of majors in philosophy.

1. *Introduction to Philosophy*.—Five credits; autumn, winter, spring.

Savery, Ducasse, Blake

2. *Introduction to Social Ethics*.—Social ideals and problems, with special emphasis upon the opposition of democracy and aristocracy in government, industry, law, education, art, and religion. Five credits; winter.

Savery and assistants

3. *Introduction to Ethics*.—Ethical principles and their application to the problems of life. Five credits; spring.

Blake and assistants

5. *Introduction to Logic*.—Conditions of clear statement, adequate evidence, and valid reasoning, and their establishment in the mental processes of the student. Five credits; autumn, winter, spring.

Ducasse

*Not offered in 1923-1924.

101-102-103. *History of Philosophy*.—Ancient, medieval and modern. Three credits a quarter; autumn, winter, spring. Blake

104-105-106. *Metaphysics*.—Metaphysics, with special reference to the concepts and principles of science. For advanced students in philosophy or in the physical or biological sciences. Three credits a quarter; autumn, winter, spring. Savery

113. *Philosophy of Religion*.—Religious experience, origin, nature and types. Social aspect of religion. Mystical experience. The truth of religion; proofs of the existence of God, basis of faith, pessimism, optimism and meliorism, immortality. Prerequisite, Phil. 1. Five credits; spring. Savery.

Oriental Languages and Literature. 114-115-116. *History of Religion*.—Autumn quarter: Primitive conceptions of religion, the religions of Egypt and the Euphrates Valley. Winter quarter: religions of the Far East. Spring quarter: Judaism, Muhammadanism, and Christianity. Three credits per quarter; autumn, winter, spring. Gowen

*123. *Philosophy in English Literature of the Nineteenth Century*.

129. *Esthetics*.—The origin and motives of art and the esthetic principles of the different forms of art. Five credits; autumn. Ducasce.

132. *Social Ethics*.—(Same as Phil 2.)

133. *Ethical Theory*.—An advanced course in the fundamental concepts and principles of ethics. Prerequisite, Phil. 2 or 3. Two credits; spring. Savery

141-142-143. *Contemporary Philosophy*.—Modern movements and controversies. Readings and discussions on pragmatism, new intuitionism, mysticism, philosophy of faith, fate and free will, mechanism and vitalism, materialism and idealism, the finite and infinite, the new realism, etc. Two credits a quarter; autumn, winter, spring. Blake

English 187. *Philosophy of Contemporary Drama*.—Social and philosophical ideas in contemporary drama. Five credits; autumn. Benham

GRADUATE COURSES

207-208-209. *Philosophy of Science*.—Scientific method; fundamental principles and concepts of the sciences—mathematical, physical and biological. Interpretation of the scientific view of the world and its place in the human economy. Two or three credits a quarter; autumn, winter, spring. Savery

231-232-233. *Seminar in Ethics*.—Modern systems of ethics. The works of Green, Bradley, Bosanquet, Royce, Sidgwick, Moore, Rashdall, Hobhouse, Levy-Bruhl, Westermarck, Holt, Perry, Santayana will be read and discussed. Two or three credits a quarter; autumn, winter, spring. Blake.

*241-242-243. *Plato and Aristotle*.

244-245-246. *Seminar in Hume and Kant*.—A critical study. Open to students upon approval of instructor. Three credits a quarter; autumn, winter, spring. Ducasce

*247-248-249. *Seminar. The Philosophy of Schopenhauer and Nietzsche*.

PHYSICAL EDUCATION AND HYGIENE FOR MEN

Gymnasium

ASSISTANT PROFESSOR ARBUTHNOT, DIRECTOR; ASSOCIATES BAGSHAW, EDMUNDSON, GRAVES;
PROFESSOR HALL, UNIVERSITY HEALTH OFFICER

Requirements for Graduation.—All students, both men and women, are required to take a prescribed amount of directed physical training and hygiene or military science and tactics.

Military Training.—Requirements in military science and tactics take precedence over the requirements in physical education. (See Military Science and Tactics.)

Physical Examinations.—Upon entering college each student is given a physical examination. On the basis of their examination students are segregated in three divisions: A, B, and C.

All able bodied men shall satisfy all requirements in this department with two years of military science and tactics. Students exempt from military training for any reason must take the same number of hours in physical training.

Requirements for a Major.—1. Students intending to major in physical education in the School of Education should complete in the freshman year 10 hours in English 1-2, 10 hours in Zoology 1-2 (or 3-4) and 5 hours in physical education 1-2-3 (which may be counted as scholastic credit for men who complete 10 hours in military science or approved substitute); and in the sophomore year, 10 hours in Zoology 10-11.

2. Students using physical education as a major are advised to complete a second teaching major in *two* teaching minors (which may be started before entering the School of Education).

3. With the consent of the director of the department, courses in anatomy, physiology, and anthropometry may be counted in a physical education major.

Intramural Athletics.—Intramural contests under the supervision of the department are conducted in the following sports: football, basketball, ice-hockey, baseball, cross country, tennis, track, boxing, and wrestling. All students are urged to turn out for some sort of athletic competition.

All physical education majors in the School of Education are required to take courses 1-2-3, 101-102-103, 110, 115, 131-132-133. Courses 120, 121, 122, 123, 124 are optional.

The following curriculum is especially arranged for men who plan to prepare for coaching athletics and directing physical education in the public schools. Their first few years of service will be in the smaller high schools where athletic coaching must be combined with teaching academic subjects. Thus it is possible for a student in the School of Education to select athletic coaching either as a major or a minor.

1-2-3. Calisthenics and Gymnasium.—Introductory courses for freshmen. One and two-thirds credits a quarter; autumn, winter, spring. Arbuthnot

16-17-18. Intramural Sports and Games.—For freshmen. One and two-thirds credits a quarter; autumn, winter, spring.

51-52-53. Calisthenics and Gymnastics.—For sophomores. One and two-thirds credits a quarter; autumn, winter, spring.

57-58-59. Intramural Sports and Games.—For sophomores. One and two-thirds credits a quarter; autumn, winter, spring.

101-102-103. Athletic Coaching: Gymnastic Terminology.—Classification of gymnastic material, principles and technique of teaching. Prerequisite, or accompanying courses, Anat. 101-102. Two credits a quarter; autumn, winter, spring. Arbuthnot

110. Athletic Coaching: First Aid.—Treatment of accidents on the athletic field, public playground or in the gymnasium. Two credits; autumn. Hall

**112. Physical Diagnosis.*

113. Athletic Coaching: Playground Supervision. — Organization and equipment. Trips to city playgrounds with practice teaching in same. One-hour lecture, three-hour laboratory. Two credits; spring. Arbuthnot

115. Athletic Coaching: Organization and Administration. — Physical methods and tests, organization of departments. Two credits; spring. Arbuthnot

120. Athletic Coaching.—Football: Prerequisite, one regular season's practice in football. Two credits; spring. Bagshaw.

121. Athletic Coaching: Theoretical Basketball.—Prerequisite, one regular season's practice in basketball. Two credits; winter. Edmundson

122. Athletic Coaching: Theoretical Track.—Prerequisite, one regular season's practice in track. Two credits; winter. Edmundson

123. Athletic Coaching: Theoretical Baseball.—Prerequisite, one regular season's practice in baseball. Two credits; spring. Graves

124. Athletic Coaching: Theoretical Boxing and Wrestling.—Prerequisite, one season's practice in boxing or wrestling. Two credits; autumn.

131-132-133. Athletic Coaching: Theory and Practice of Corrective Gymnastics. Deformities, their causes, prevention and treatment. Corrective exercises. Prerequisite, Anat. 101-102, Physiology 54-55. Three credits a quarter; autumn, winter, spring. Arbuthnot

PHYSICAL EDUCATION AND HYGIENE FOR WOMEN

Gymnasium

ASSISTANT PROFESSOR GROSS, DIRECTOR; INSTRUCTORS AID, ANDERSON; LECTURER BURDON; ASSOCIATE BLOOM; ASSISTANT FOREHEMER

There are two kinds of courses in this department.

(1) Those required for graduation. All women, during the freshman year of college attendance are required to participate two hours a week in some form of healthful exercise; the sophomore year may be taken in the sophomore, junior or senior year. The kind of exercise is determined by the medical and physical examination, and the amount of physical education the student has had in accredited high schools. The course in Personal Hygiene is required of freshmen; the course in Principles of Nutrition is required of sophomores. Ten credits, six in healthful and recreational exercise, two in Hygiene and two in Principles of Nutrition, are required for graduation.

The policy of allowing the sophomore healthful exercise to be taken during the sophomore, junior or senior year, at the election of students, is a temporary one, adopted by the University on account of the congested conditions in the University gymnasium.

Women who do not take physical education during the sophomore year must obtain written notices of deferrment from the head of the department and file these in the registrar's office.

(2) Those leading to a major in physical education in the College of Science, or in the School of Education. (Courses numbered above 100.)

(a) Students not majors may elect these courses.

Teachers well trained in all phases of physical education are in demand, the most frequent calls being for school supervisors and recreation leaders. Students interested in courses in recreation and community leadership should see announcement for School of Education.

Intramural Athletics.—Intramural contests, under supervision and control of the department, are conducted in baseball, hockey, tennis, basketball, archery, field events, volley ball and golf. The Women's Athletic Association co-operates with the department in the conduct of these activities. All students are urged to enroll for at least one sport.

Uniforms.—A uniform, consisting of serge tunic, white blouse and black gymnasium shoes is required of all students, and may be purchased at the University Book Store. The cost is \$11. No part of the uniform should be purchased before entering college.

Courses.—Courses 1-2-3 and 7-8-9 are open to freshmen who have had less than two years of physical education. Hygiene (P.E. 4, 5, 6) is required of all freshmen. Courses 10-11-12 are open to freshmen who have had two years or more of physical education. Courses 60 to 99 are open to sophomores who have had three quarters of freshman work. Principles of Nutrition, (P.E. 54, 55, 56), is required of all sophomores. Courses 100 to 200 are open to all students who have the prerequisites; these courses carry academic credit.

1, 2, 3. *Healthful Activities.*—Gymnastics, dancing, athletics. For students who have had less than two years in high school, two hours practice a week. One credit a quarter; autumn, winter, spring.

Anderson, Forchemer, Aid

4, 5, 6. *Hygiene.*—One hour of lecture. Two-thirds credit a quarter; autumn, winter, spring.

Burdon

7, 8, 9. *Corrective Gymnastics.*—Two hours of practice. One credit a quarter; autumn, winter, spring.

Bloom

10, 11, 12. *Advanced Healthful Gymnastics.*—Gymnastics, dancing, and athletics. Open to freshmen who have had at least two years' physical education in high school. One credit; autumn, winter, spring.

Aid, Anderson, Forchemer.

13, 14, 15. *Freshman Limited Healthful Activities.*—Light gymnastics, the less strenuous games and athletic activities, and dancing. Open, upon the recommendation of the examining physician, to students for whom the regular classes are too strenuous. Two hours a week. One credit a quarter; autumn, winter, spring.

Forchemer

51, 52, 53. *Sophomore Prescribed Activities.*—One credit a quarter; autumn, winter, spring.

Anderson

54, 55, 56. *Principles of Nutrition.*—Food and nutrition as related to health. Required of all second year women. One lecture a week. Two-thirds of a credit; autumn, winter, spring.

Adams.

57, 58, 59. *Sophomore Corrective Gymnastics.*—Two hours of practice. One credit a quarter; autumn, winter, spring.

Bloom.

61, 62, 63. *Dancing.*—Two hours of practice. One credit a quarter; autumn, winter, spring.

Aid, Forchemer

64. *Hockey.*—Two hours of practice. One credit; autumn.

Forchemer.

65. *Basketball.*—Two hours of practice. One credit; winter. Anderson

67. *Elementary Tennis*.—Two hours of practice. One credit; autumn, spring. Anderson

69. *Advanced Tennis*.—Prerequisite, Phys. Educ. 67. Two hours practice. One credit; spring. Anderson

72. *Rifle Shooting*.—Two hours of practice. One credit a quarter; autumn, winter, spring. Hall

75. *Archery*.—Two hours practice. One credit; spring. Aid

81. *Baseball*.—Two hours practice. One credit; spring. Anderson

82-83-84. *Limited Healthful Activities*.—Continuation of Phys. Educ. 13-14-15. For students for whom regular work is too strenuous. Two hours practice. One credit; autumn, winter, spring. Forchener

87. *Golf*.—Two hours practice. Fee, \$3. One credit; autumn, winter, spring. Jefferson

88. *Advanced Golf*.—Prerequisite, Phys. Educ. 87. Fee, \$3. One credit; spring. Jefferson

101-102-103. *Methods of Gymnastics*.—Drill in gymnastics. Gymnastic terminology, classification of gymnastic material. Natural gymnastics. Principles and technique of teaching. Prerequisites, or accompanying courses, Anat. 101-102 and Physiology 54-55. Two hours lecture and two hours practice a week. Three credits a quarter; autumn, winter, spring. Aid

104-105-106. *Methods of Folk Dancing*.—Dances of the nations arranged for teaching in schools. Technique, methods of teaching, relation of music to dancing; costuming, school festivals, etc. Prerequisite, 1 year of dancing or Phys. Educ. 111-112-113. One hour lecture and two hours practical work a week. Two credits a quarter; autumn, winter, spring. Gross

111-112-113. *Plays and Games*.—Singing games, dramatic plays, graded games, organization and administration of playgrounds, conduct and equipment of play centers. Commercial and municipal recreation and agencies promoting activity. One lecture and three hours practical work a week. Three credits a quarter; autumn, winter, spring. Gross

131-132-133. *Theory and Practice in Corrective Gymnastics*.—Study of deviations from the normal, remedial gymnastics and application of exercises for correction, kinesiology. Two hour lectures and four hours practice. Prerequisites, Anat. 101-102 and Physiology 54-55. Four credits a quarter; autumn, winter, spring. Bloom

152. *Administration of Physical Education*.—Curricula for grades and high schools; school administration. Value of various types of activities. Prerequisite, Phys. Educ. 101-102-103, 104-105-106, and 111, 112, 113. Two credits a quarter; winter. Gross.

153. *Methods in Health Instruction*.—Material and methods in teaching hygiene in the grades. Two hours a week. Two credits; spring. Gross

154-155-156. *Natural Dancing*.—Technique of natural dancing, based on natural movements. Composition of dance dramas. One hour lecture and two hours practice. Prerequisite, participation in dance drama and upper division standing. Two credits a quarter; autumn, winter, spring. Aid.

Educ. 160R. Teachers' Course in Physical Education.—Curricula, application of educational principles to the teaching of physical education, administration in public schools. Prerequisites, Phys. Educ. 101-102, 104-105-106, 111-112-113. Two credits; autumn. Gross.

*161. *Normal Diagnosis.*

*Anth. 163. *Anthropometry and Biometrics.*

167. *Hockey Coaching.*—Methods of coaching hockey. Prerequisites, Psych. 1, and knowledge of and participation in hockey. One hour lecture and two hours practice. Two credits; autumn. Forchheimer.

169. *Tennis and Archery Coaching.*—Prerequisite, Psych. 1 and knowledge of and participation in both sports. One hour lecture, two hours practice. Two credits; spring. Anderson, Aid.

170-171-172. *Advanced Athletic Coaching.*—Coaching in basketball, baseball. Students will take charge of classes in sports. Prerequisite, Psych. 1, Educ. 101 and knowledge of game. One hour lecture and two hours of practice. Two credits; autumn, winter, spring. Anderson

174. *Teachers' Course in Swimming.*—Methods of teaching strokes, diving, life saving. The construction and hygiene of the pool. Methods of filtration and general organization. Prerequisite, ability to swim at least two strokes. Y.W.C.A. pool. Lab. fee, \$2.50, One credit; winter,

179. *Public Recreation.*—Problems in civic and community recreation with practice in field houses and playfields. Prerequisites, Phys. Educ. 104-105-106 and 111-112-113. Three credits; winter. Gross

180. *Campcraft.*—The philosophy of and practice in campcraft, including fire building, camp cooking, outdoor games, types of camp shelters, camp sanitation, hygiene of camp clothing, health of the camper. Two week-end trips to the physical education lodge will be included. Two credits; spring. Gross

PHYSICS

Denny Hall

PROFESSOR OSBORN; ASSOCIATE PROFESSOR BRAKEL; ASSISTANT PROFESSOR ANDERSON;
INSTRUCTORS UTTERBACH AND ELLER; DEMONSTRATOR HIGGS

NOTE.—Students may elect Phys. 1, 2, 3, or 97, 98, 99, without having had a full year of high school physics, by enrolling in Section H of the course desired. If they were conditioned in physics for admission to the University, such condition will be removed when they have received fifteen hours' credit in either of the above two groups. For the present there will be a Section H for 97 in the autumn, for 98 in the winter, and for 99 in the spring only.

1-2. *General Physics.*—Courses 1-2 will satisfy the physical science requirement in the colleges of Liberal Arts and Science. Prerequisite, high school physics or enrollment in Section H of 1 and 2. Lab. fee, \$2. Five credits a quarter; autumn, winter. Osborn

3. *General Electricity.*—Required of physics majors; of mathematics majors taking physics as a minor; and of all pre-med students. Prerequisite, 1-2; (See Note.) Lab. fee, \$2. Five credits; spring. Osborn

50-51. *Sound and Music.*—For fine arts students only. Lab. fee, \$2. Five credits a quarter; winter, spring. Anderson

54. *Photography for Amateurs.*—Open to students who have had elementary physics or chemistry. Lab. fee, \$5. Three credits; spring. Higgs

89-90. *Physics of the Home.*—For home economics students only. Lab. fee, \$2. Five credits; autumn, winter. Osborn

97. *Physics for Engineers.*—Mechanics. Prerequisites, high school physics or enrollment in Section H (See Note), and fifteen hours of mathematics. Lab. fee, \$2. Five credits; autumn, winter, spring.

Brakel, Anderson, Utterbach

*Not offered in 1923-1924.

98. *Physics for Engineers*.—Electricity. Prerequisite, Phys. 97 (See Note). Lab. fee, \$2. Five credits; autumn, winter, spring.

Brakel, Anderson, Utterbach

99. *Physics for Engineers*.—Light and Heat. Prerequisite, Phys. 97 (See Note). Lab. fee, \$2. Five credits; autumn, winter, spring.

Brakel, Anderson, Utterbach

101. *Introduction to Modern Theories*.—Prerequisite, Phys. 3. Five credits; autumn.

Anderson

102. *Mechanics*.—(Given 1924-1925.)

103. *Heat*.—(Given 1924-1925.)

105. *Electricity*.—Prerequisites, Phys. 3 and 10 hours of mathematics. Lab. fee, \$2. Five credits; winter.

Brakel

113. *Acoustics and Illumination*.—For fine arts students. (Given 1924-1925.)

114. *Electrical Measurements*.—For engineering students. Prerequisite, Phys. 97, 98, 99. Lab. fee, \$5. Three credits; autumn, winter, spring.

Brakel

126. *Physics of A.C. and D.C. Circuits*.—(Given 1924-1925.)

160. *Physical Optics*.—Prerequisites, Phys. 3 and fifteen hours of mathematics. Lab. fee, \$2. Five credits; spring. (See Physics 170.)

Osborn

167, 168, 169. *Special Problems*.—Students are admitted after consultation with the instructor. Credit arranged; autumn, winter, spring.

Osborn, Brakel, Anderson, Utterbach

170. *Spectroscopy*.—Prerequisite, Phys. 3 and fifteen hours of chemistry. Lab. fee, \$2. Five credits, spring. Which of the courses, 160 or 170, is given any year will be determined by the needs of the students desiring work in optics.

Osborn.

175. *High Temperature Thermometry*.—(Given 1924-1925.)

GRADUATE COURSES

200-201-202. *Dynamics*.—Three credits, autumn; two credits, winter; two or 3 credits, spring.

Anderson & p

203-204. *Theoretical Electricity and Magnetism*.—(Given 1924-1925.)

205. *Vibratory Motion and Sound*.—Lab. fee, \$2. Three credits; winter.

Osborn.

206. *Advanced Optics*.—(Given 1924-1925.)

207-208. *Modern Theories*.—(Given 1924-1925.)

209. *Thermodynamics*.—Two credits, autumn.

Utterbach

210, 211, 212. *Seminar*.—Credits arranged; autumn, winter, spring.

213, 214, 215. *Research*.—Credits arranged; autumn, winter, spring.

POLITICAL SCIENCE

Philosophy Hall

PROFESSOR J. ALLEN SMITH; INSTRUCTOR LAUBE

The work in the department of political science is designed to give a scientific account of the activities of the state and of the functioning of the electorate and legislative bodies in determining state action. Some of the courses are planned to give that knowledge of public affairs which ought to

be part of a liberal education, while others lead to a special study and investigation of problems and methods in the different branches of the government. The aim is to train the powers of observation and reasoning, to develop correct methods of research, and to apply the knowledge gained to the solution of practical problems.

All majors in the department are required to take Pol. Sci. 60, 100, 120, 130 and 131.

1. *Elements of Government*.—Introductory. Special attention to the citizen's part in government. Five credits; autumn, winter or spring. Smith

50. *Comparative Government*.—Constitutional organization of the principal governments of Europe; with emphasis on political parties and current questions. Prerequisite, Pol. Sci. 1. Five credits; winter. Laube

52. *Political Parties*.—Organization and methods of modern political parties; growth and theory of the party system. Prerequisite, Pol. Sci. 1. Three credits; spring. Laube

60. *Public Finance and Taxation*.—Prerequisite, Pol. Sci. 1 and Econ. 1. Five credits; autumn. Laube

61. *Problems in Taxation*.—With special reference to the state of Washington. Prerequisite, Pol. Sci. 60. Three credits; winter. Laube

62. *Municipal Finance*.—Prerequisite, Pol. Sci. 60. Three credits; spring. Laube

100. *Municipal Government*.—Municipal organization and administration in the United States and Europe with some consideration of functions and problems. Prerequisite, Pol. Sci. 1. Five credits; autumn. Laube

102. *Municipal Problems*.—Problems of city government, with special attention to municipal utilities. Prerequisite, Pol. Sci. 1. Three credits; winter. Laube

111. *International Politics*.—Prerequisite, Pol. Sci. 1. Three credits; spring. Laube

120. *Governmental Functions*.—Study of government with reference to individual liberty; the individualistic and the socialistic theory of governmental functions; influence of political democracy on state interference. Prerequisite, eight hours in political science. Three credits; autumn. Smith

130. *American Government*.—General study of the American system of national government. Prerequisite, Pol. Sci. 1. Three credits; winter. Smith

131. *State Government*.—General study of the American system of state government. Prerequisite, Pol. Sci. 1. Three credits; spring. Smith

150, 151, 152. *Reading Course*.—Discussions based on selective readings in political theory. Prerequisite, eight credits in political science. Two credits a quarter; autumn, winter, spring. Smith

Educ. 1600. Civics in Secondary Schools.—Attitude of approach, arrangement of material, methods of presentation; development of an appreciation of the reality of our political system; use of material, textbooks, legislative bills, sample ballots, observation of local government agencies. Two credits; spring.

181-182-183. *Research in Public Finance*.—Prerequisite, Pol. Sci. 60. Two credits a quarter; autumn, winter, spring. Time to be arranged. Laube

201, 202, 203. *Seminar in Political Theory*.—Two to five credits. Autumn, winter, spring. Smith

PSYCHOLOGY

Philosophy Hall

PROFESSOR SMITH; ASSISTANT PROFESSOR GUTHRIE; INSTRUCTOR WILSON;
ASSISTANT MISS WILKINSON

Students in the College of Liberal Arts, as well as students in the College of Science, may major in psychology.

The Liberal Arts requirements are five credits in psychology.

For psychology as prerequisite to education, see announcement of department of education.

Majors in psychology may count five hours in Phil. 1, or in 101-102-103 toward satisfying their major requirement.

1. *General Psychology*.—Survey of the science as a whole. No prerequisites. Three lectures, one discussion section, and one 2-hour laboratory a week. Five credits; course repeated every quarter. Wilson, Smith, Guthrie

101. *Physiological Psychology*.—Man's behavior viewed as a result of his neurological mechanism. Students who so desire will be offered an opportunity for individual work in dissection and microscopic study. Prerequisite, Psych. 1. Three credits; winter. Guthrie

106. *Experimental Psychology*.—Students receive training in laboratory methods, are made familiar with the more important kinds of psychological apparatus, and perform many of the classical experiments in psychology. Prerequisite, Psych. 1. Three credits; spring. Guthrie

109. *Mental Tests*.—Training in applying tests for intelligence and for mental analysis. The principles of experimental procedure, methods of measurement, the preparation of tests and statistical treatment of results. Essential to work in clinical psychology. Prerequisite, ten credits in psychology. Three credits; spring. Wilson

111. *History of Psychology*.—Origin and development of psychology, beginning with the primitive conceptions of mind, and including a comprehensive view of the sources of scientific psychology. Prerequisite, Psych. 1. Two credits; autumn. Guthrie

112. *Modern Psychological Theory*.—Criticism of psychological theories in the light of recent experimental findings. Prerequisite, Psych. 1. Three credits; spring. Guthrie

114. *Current Psychological Literature*.—Reading and discussion in the direction of the student's particular interest, covering a wide range of subjects treated in recent journals and with the new developments in psychology. Prerequisite, Psych. 1. Two credits; winter. Guthrie

116. *Animal Behavior*.—The mind of animals as shown by their behavior under natural conditions and in the laboratory. Prerequisite, Psych. 1. Three credits; autumn. Wilson

118. *Folk Psychology*.—A psychological study of social human nature; language, custom, public opinion, morals, war, family, caste, nationalism, religion. Prerequisite, Psych. 1. Two credits; autumn. Guthrie

121. *Applied Psychology*.—Psychology as applied to personal efficiency, vocational guidance, the measurement of vocational fitness, and scientific management. Psychology of advertising, legal testimony and the mental states affecting its reliability. The significance of sex and individual differences in practical life. Prerequisite, Psych. 1. Five credits; winter. Wilson.

124. *Psychology of Learning*.—The principles of learning and the transfer of training. Prerequisite, ten credits in psychology. Two credits; spring. Smith

126. *Abnormal Psychology*.—The explanation of unusual behavior and the influence of the subconscious mind upon conduct. Prerequisite, ten credits in psychology. Three credits; winter. Guthrie

131. *Child Psychology*.—Mental development from infancy to adult age with the purpose of giving the student a scientific understanding of childhood. Prerequisite, Psych. 1. Three credits; autumn. Smith

132. *Psychology of Exceptional Children*.—The nature and cause of mental defects and peculiarities of children, with special reference to methods of diagnosis and to physical pathology. Prerequisite, Psych. 1. Three credits; spring. Smith

151, 152, 153, 154. *Undergraduate Research*.—Prerequisites, Psych. 1 and 106. Three credits; each quarter. Smith, Guthrie, Wilson

COURSES FOR GRADUATES ONLY

Before a student registers for graduate courses his topic of research must be approved by the department.

201, 202, 203, 204. *Graduate Research*. Smith, Guthrie, Wilson

Seminar.—Open to all research students in the department. Weekly meetings.

PUBLIC SPEAKING

Denny Hall

(See Dramatic Art)

ROMANIC LANGUAGES AND LITERATURE

Denny Hall

PROFESSORS FREIN, OBER, UMPHREY; ASSOCIATE PROFESSORS PATZER, GOGGIO; ASSISTANT PROFESSORS HELALINGB, DE VRIES; INSTRUCTORS WHITTLESEY, DE SOLENNI; ASSOCIATE HAMILTON; TEACHING FELLOWS G. MERCIER, SIMPSON.

Students entering with high school credits in French or Spanish will be admitted to classes upon the basis of one high school semester counting as the equivalent of one University quarter. Exceptional cases will be determined by the head of this department.

Students may not begin French 1 and Spanish 1, (nor Italian), during the same quarter, and it is better to have three quarters of one Romanic language before beginning another. If the entrance requirement in foreign language has not been fulfilled, no credits will be given for courses 1, 2, 3, 4, and 7 in any of the Romanic languages. Freshmen and sophomores may enter any advanced course (100 to 200) for which they have the prerequisites.

I. FRENCH

Requirements of the Department.—Courses 41, 101, 102, 103, 158, 159, Educ. 160T, and at least nine credits in literature are required of majors and those who wish to be recommended to teach.

1, 2, 3. *Elementary*.—As much as possible French will be used in the class room. Each of the courses 1, 2, 3, is repeated each quarter. No credits will be given for French 1 and 2 until 3 has been completed. Five credits a quarter; autumn, winter, spring.

not officially approved

1 cr. for
R. Bohan
See letter
11-30-23

4, 5, 6. *Reading of Modern Texts*.—Each of the courses 4, 5, 6, is repeated each quarter. French 4 may be combined with 7, making a five-hour course. The same is true of 5 and 8, 6 and 9. Prerequisite to French 4 is 3, or equivalent. Three credits a quarter; autumn, winter, spring.

7, 8, 9. *Grammar and Composition*.—Must be taken by majors in French, unless they have done the equivalent in high school. French 7 may be combined with 4. The same is true of 8 and 5, 9 and 6. Prerequisite to French 7 is 3, or equivalent. Two credits a quarter; autumn, winter, spring.

41. *Phonetics*.—Designed to furnish the student an opportunity to acquire a reasonably correct pronunciation, and to bring more order out of what seems a mass of exceptions. Prerequisite, French 3. Three credits; repeated each quarter. Frein

71, 72, 73 or 111, 112, 113. *Scientific French*.—For students in science; reading in their special lines will be assigned by the head of their department, but the examinations will be given by this department. Credits, two to five, according to work done.

101, 102, 103. *Composition and Conversation*.—With each of these courses is offered (at the same hour, but not on the same days) a course in advanced reading under the same instructor. See French 104, 105, 106. Prerequisites, French 6 and 9. Three credits a quarter; autumn, winter, spring.

104-105-106-200 Helmlinge, De Vries, Whittlesey

107. *Themes*.—Writing of original compositions upon assigned topics. Prerequisite, French 103. Two credits a quarter; winter. Helmlinge

115, 116, 117. *Survey of French Literature*.—Lectures in English, and collateral reading of English translation. Those who have studied French sufficiently will be assigned French texts to read. No prerequisites. Three credits a quarter; autumn, winter, spring. De Vries

*121, 122. *The French Novel*.

124, 125. *The Short Story*.—Development of the French short story from its beginnings in Old French to modern times. Masterpieces of Daudet, Maupassant, Bazin and LeMaitre will be read and discussed. Prerequisite, French 104 or equivalent. Three credits a quarter; winter, spring. Helmlinge

131. *Lyric Poetry*.—Study of the best lyrics of the nineteenth century, especially those of Lamartine, Hugo and Musset. Rules of French versification. Prerequisite, French 104 or equivalent. Two credits; spring.

Helmlinge.

*141, 142. *The French Drama*.

151, 152, 153. *History of the French Literature of the Nineteenth Century*.—Lectures in French, and assignments of reading to be done outside of class. Intended to give an opportunity to hear French spoken connectedly, though slowly. Prerequisite, French 6 and 9, or equivalent. Two credits a quarter; autumn, winter, spring. De Vries.

158, 159. *Advanced Syntax*.—French syntax from the teacher's standpoint. These courses are prerequisite to the teachers' course. Prerequisite, French 103. Two credits a quarter; autumn, winter. Frein

Educ. 160T. Teachers' Course in French.—Aims, and methods best suited to attain them. Prerequisites, French 41, 101, 102, 103, 158, and 159. Two credits; spring. Frein.

161. *Eighteenth Century Literature*.—Rapid review of the literature of the whole century, followed by more detailed study of the greatest authors

*Not offered in 1923-1924.

of this period. Prerequisite, French 6 and 9, or equivalent. Five credits; spring. Patzer

171, 172. *Seventeenth Century Literature*.—Survey of the entire century and a more intimate acquaintance with the great authors of the classical French period. Plays of Corneille, Moliere and Racine will be read in class. Assignments for outside reading. Prerequisite, French 6 and 9, or equivalent. Five credits a quarter; autumn, winter. Patzer

COURSES FOR GRADUATES ONLY

201, 202, 203. *Middle French and Sixteenth Century*.—Masterpieces of the fourteenth, fifteenth and sixteenth century will be read, and their influence upon later French literature studied. Open to graduates and seniors who have studied French at least four years. Two credits a quarter; autumn, winter, spring. Frein

211, 212, 213. *French Criticism*.—Exposition of the several theories by which French critics have tested literature. Prerequisite, a good knowledge of French or English literature. Course given in English. Two credits a quarter; autumn, winter, spring. De Vries

221, 222, 223. *Old French Readings*.—One of the most helpful courses for teachers of French. Open to graduates and seniors who have studied French at least four years. Three credits a quarter; autumn, winter, spring. Goggio

231, 232, 233. *History of Old French Literature*.—Lectures and assigned readings. Open only to those who can read Old French. Three credits a quarter; autumn, winter, spring. Frein

241, 242, 243. *French Historical Grammar*.—Phonology, morphology, and the most summary rules of the syntax of Francien, the old language which is the basis of modern French. Useful for graduate students of English, and necessary for a good knowledge of modern French. Unless the majority of graduate students prefer course 231, 232, 233, this course will be given in 1923-1924. Open to graduate students in this department, to all who can read Old French, to those who have studied Latin at least six years, and to graduate students in English who have had four years of Latin and at least two years of modern French. Three credits a quarter; autumn, winter, spring. Frein

II. ITALIAN

No student will be allowed to begin Italian and French, or Spanish, the same year.

1-2-3. *Elementary*.—No credit will be given for Ital. 1 and 2 until 3 has been completed. Five credits a quarter; autumn, winter, spring. Goggio

111, 112, 113. *Modern Italian Literature*.—Prose and poetry of the eighteenth and nineteenth centuries. Lectures and collateral reading. Composition. Prerequisite, Ital. 3. Two to five credits a quarter; autumn, winter, spring. Goggio

*121, 122, 123. *The Italian Novel*.

181, 182. *Dante*.—The Divine Comedy of Dante will be read and studied to bring out the character of the imaginative and philosophical ideas contained in it, and the relations of these ideas to medieval thought. Knowledge of Italian not necessary. Two credits a quarter; autumn and winter. Goggio

184. *Renaissance Literature of Italy*.—Stress will be laid on the works of Petrarch and Boccaccio especially, and on those of Machiavelli, Casti-

*Not offered in 1923-1924.

glione, Ariosto, Cellini, and Tasso. Lectures in English and collateral read. Knowledge of Italian not necessary. Two credits; spring. Goggio.

COURSES FOR GRADUATES ONLY

201. *Research in Italian Literature*.—The number of credits will be determined by the amount of work done. Goggio

III. SPANISH

Requirements of the department: Span. 159, 101, 102, 103, Educ. 160U, and at least 9 credits of literature are required of majors and of all who wish to be recommended as teachers. Freshmen and sophomores may enter any course, except graduate, for which they have the prerequisites.

1-2-3. *Elementary*.—No credit will be given for Span. 1 and 2, until 3 has been completed. Each of the courses 1, 2, 3, is repeated each quarter. Five credits a quarter; autumn, winter, spring.

4-5-6. *Reading of Modern Authors*.—Reading of some of the best works of the nineteenth century. Span. 4, 5, 6 may be combined with 7, 8, 9, making a five-hour course each quarter. Prerequisite to 4 is 3 or equivalent. Three credits a quarter; autumn, winter, spring.

7, 8, 9. *Grammar, Composition, Conversation*.—May be combined with Span. 4, 5, 6, making a five-hour course. Prerequisite to Span. 7 is 3. Course 7 is prerequisite to 8. Two credits a quarter; autumn, winter, spring.

101, 102, 103. *Advanced Composition*. — Prerequisite, Span. 9. Three credits a quarter; autumn, winter, spring. Goggio

112. *Commercial Spanish*.—Commercial terms and business correspondence. Prerequisite, Span. 9. Five credits; spring. Solenni.

115. *Survey of Spanish Literature*.—Selected texts, collateral reading, lectures. Prerequisite, Span. 6. Five credits; autumn. Umphrey

121, 122, 123. *The Novel*.—Origins of the Spanish novel. Reading of selected texts; collateral reading and reports. Lectures. Prerequisite, Span. 6 or its equivalent. Students entering the course in the winter or spring should have permission of instructor. Three credits a quarter; autumn, winter, spring. Umphrey

*131, 132. *Lyrics and Ballads*.

*141, 142, 143. *Drama*.

159. *Advanced Syntax*.—Problems in syntax studied from the teacher's standpoint. Prerequisite, Span. 101, 102. Three credits; spring. Ober

Educ. 160U. *Teachers' Course in Spanish*.—Methods of teaching Spanish. Practice in the class room. Prerequisites, Span. 101, 102. Spanish 103 and 191 must be taken concurrently with 159. Two credits; spring. Ober.

184, 185, 186. *Spanish American Literature*.—Representative writings of Spanish American authors. Collateral reading and reports. Lectures. Prerequisite, Span. 6. Two credits a quarter; autumn, winter, spring. Umphrey

COURSES FOR GRADUATES ONLY

221. *Old Spanish Readings*.—Reading and linguistic study of the Poema de mio Cid and other old Spanish texts. Five credits; winter. Umphrey

*231. *Epic Poetry*. For Spring for Miss Mac Donald

*Not offered in 1923-1924.

241. *Spanish Historical Grammar*.—Five credits; spring. Umphrey

COMPARATIVE PHILOLOGY

The following courses in Comparative Philology are available in the department of Scandinavian Languages and Literature:

- 190-191. *Introduction to the Science of Language*.—Two credits; autumn, winter. Vickner

192. *Life of Words*.—Two credits; spring. Vickner.

SCANDINAVIAN LANGUAGES AND LITERATURE

Denny Hall

PROFESSOR VICKNER

- 1-2-3. *Elementary Swedish*.—Grammar and reading; composition and conversation. Course 1-2-3 are so arranged that they may be taken with 4, 5, 6 making a five-hour course. Three credits a quarter; autumn, winter, spring. Vickner.

- 4-5-6. *Swedish Reading Course for Beginners*.—Reading of easy texts. Supplementary to courses 1, 2, 3, but may also be taken separately by students desiring a reading knowledge of Swedish. No previous knowledge of Swedish necessary. Two credits a quarter; autumn, winter, spring.

- 10-11-12. *Elementary Norwegian-Danish*.—Grammar and reading; composition and conversation. Courses 10, 11, 12, are so arranged that they may be taken with 13, 14, 15, making a five-hour course. Three credits a quarter; autumn, winter, spring. Vickner.

- 13-14-15. *Norwegian-Danish Reading Course for Beginners*.—Reading of easy texts. Supplementary to 10, 11, 12, but may also be taken separately by students desiring a reading knowledge of Norwegian-Danish. No previous knowledge of Norwegian-Danish necessary. Two credits a quarter; autumn, winter, spring. Vickner.

- 20-21-22. *Norwegian-Danish Literature*.—Representative authors in connection with a survey of the Norwegian-Danish literature. Prerequisite, ability to read easy Norwegian-Danish. May be entered at the beginning of any quarter. Two credits a quarter; autumn, winter, spring. Vickner.

- 23-24-25. *Swedish Literature*.—Representative authors in connection with a survey of the Swedish literature. Prerequisite, ability to read easy Swedish. May be entered at the beginning of any quarter. Two credits a quarter; autumn, winter, spring. Vickner.

- *40, 41, 42. *Great Scandinavian Writers in English Translation*.

- 103, 104, 105. *Recent Swedish Writers*.—Representative writers of the nineteenth and twentieth centuries, including Strindberg, Fröding, Selma Lagerlöf. May be entered any quarter. Two credits a quarter; autumn, winter, spring. Vickner.

- 106, 107, 108. *Recent Norwegian-Danish Writers*.—Representative writers of the nineteenth and twentieth centuries are read, including Ibsen, Björnson, Kielland, Jacobsen, Drachman. May be entered any quarter. Two credits a quarter; autumn, winter, spring. Vickner.

*Not offered in 1923-1924.

109, 110, 111. *Modern Scandinavian Authors in English Translation.*—Ibsen, Björnson, Strindberg, Selma Lagerlöf and Hamsun. Open to all. No knowledge of the Scandinavian languages necessary. May be entered any quarter. One credit a quarter; autumn, winter, spring. Vickner.

180, 181, 182. *Recent Scandinavian Literature in English Translation.*—The principal writers of recent Scandinavian literature will be read. Lectures, reports, and discussion. May be entered at the beginning of any quarter. Two credits; autumn, winter, spring. Vickner

*201-202. *Old Icelandic.*

*203-204. *History of the Swedish Language.*

*205-206. *Scandinavian Literature in the Nineteenth Century.* — *Gabriel*

*208. *Scandinavian Lyric Poetry.*

*209. *History of Scandinavian Literature.* — *Hjalmar Olson*

COMPARATIVE PHILOLOGY

190-191. *Introduction to the Science of Language.*—General principles of linguistic development with special reference to English. Lectures and discussions. Prerequisite, some knowledge of one of the classical languages and of one modern foreign language or Old English. Two credits; autumn, winter. Vickner

192. *Life of Words.*—Etymology and semasiology; growth of vocabulary; word values. Lectures, discussions, and exercises. Prerequisite, same as for courses 190-191. This course is a continuation of course 190-191, but may be taken separately. Two credits; spring. Vickner

SOCIOLOGY

Philosophy Hall

PROFESSORS WOOLSTON, LICHTENBERGER, (University of Pennsylvania, Exchange Professor, autumn); ASSOCIATE PROFESSOR MCKENZIE; INSTRUCTOR WALDKORNIK; ASSOCIATE MISS JOHNSON

Sociology treats of the development, organization and functions of human groups. Its general purpose is to explain the relations of institutions; to stimulate a critical and constructive attitude toward programs of reform and to furnish a sound basis of information for intelligent citizenship. It prepares for advanced study, field investigation, teaching and administration in community and industrial welfare, law, diplomacy, journalism, public health and institutional management; and supplements specialized training along these lines.

Sociology is related to many problems treated in biology, psychology, history, economics, politics, education, home economics, literature and philosophy. Students choosing sociology as a major or minor subject are urged to consult members of the department staff regarding their elections. Work in other departments may be essential for success in this field, and may, when approved, be credited toward advanced requirements.

The following basic and supplementary courses are particularly recommended—Anthropology 51, 92, Math. 13, Geology 10, Zoology 16, 17, Psychology 109, 118, 121, Home Econ. 109, 123, Economics 61, 161, 162, 164, 165, Pol. Sci. 100, History 105, 106, 107, 131, 149, English 73, 74, 75, 136, 137, 138, 141, 142, 164, 165, 166, Phil. 2.

Students are advised to postpone work in sociology until lower division requirements in biology, psychology, economics, and political science are completed. Sociology 1 or its equivalent is prerequisite throughout,

*Not offered in 1923-1924.

and satisfies minimum requirements in this subject. The following are fundamental for advanced work and should be taken by major students before electing special lines. Courses 55 or 63, 60.

Further work is arranged along these lines:

- (1) Social Problems and Methods of Reconstruction offer prevocational instruction leading to two general lines of social work, for which the following courses are especially recommended:
 - A Case Work: Courses 57, 58, 155, 171-2-3, 191-2-3.
 - B Community Organization: Courses 58, 62, 63, 160.
- (2) Social Theory and Methods of Investigation offer preliminary training and background for vocational use as follows:
 - A Teachers of Social Science: Courses 150, 170, 161.
 - B Social Investigation: Courses 29, 60, 129, 130.

For a major in sociology 36 credits are required. Upper division courses should not be elected before such elementary work as instructors in special fields may suggest is completed. Courses numbered over 200 are primarily for graduates. Qualified seniors may be admitted by permission of the instructor in charge. Advanced students are required to secure the approval of their program by the head of this department before completing their registration. Graduate students must complete undergraduate requirements before being accepted as candidates for the master's or doctor's degree in sociology.

COURSES

1. *Introductory Sociology*.—General survey of social relations, with discussion of the forces at work, practical problems and methods of solution. Required of all students in the department. Five credits; autumn, winter, spring.

29. *Social Statistics*.—Methods and sources for quantitative investigation, as applied to ethnography, demography, vital statistics, social maladjustment, and their related fields. Prerequisite, consent of the instructor. Five credits; autumn. Waldkoenig.

55. *Community Organization*.—Geographic, economic and social forces which determine the size and structure of the local community. Evolution of community functions and agencies. Factors making for community disorganization. Case studies in experiments in community reorganization. Five credits; winter. McKenzie.

56. *Family Life*.—Historical development of the family. Problems of American family life and programs for family welfare. Three credits; autumn.

57. *Child Welfare*.—Rights of childhood to health, education, recreation and protection and of measures now in use to secure them. Three credits; winter.

58. *Community Betterment*.—Social service programs of various forces in the community, such as selected departments of city government and schools, churches, men's and women's clubs, civic and philanthropic organizations. Three credits; spring.

60. *Group Behavior*.—The instinctive and reflective side of man, and his adjustments to civilization. Prerequisite, Psych. 1. Three credits; winter. Woolston.

*62, *Public Recreation*.

*Not offered in 1923-1924.

63. *Municipal Sociology*.—Social conditions and problems of modern social life in American cities and a discussion of the various agencies developed to deal with them. Five credits; spring. McKenzie.

****103. *Problems of Maladjustment.***

104. *Population Problems*.—Economic and social aspects of population growth, selection, migration, assimilation. Five credits; autumn. McKenzie.

105. *Industrial Groups*.—Survey of the conditions making for disharmonies of relationship between management and the worker. Case studies of social and individual experiments in industrial reorganization. Five credits; winter. McKenzie

129. *Social Exhibits*.—Technique of preparing tables, graphs, charts and other types of visual representation of sociological data pertaining to community problems. Prerequisite, consent of the instructor. Five credits; spring. Waldkoenig.

130. *Social Surveys*.—Methods of planning, conducting, and presenting results of investigations of communities and institutions. Five credits; winter.

150. *General Sociology*.—Advanced course in theory for seniors and graduates. Mature students may substitute this work for Soc. I upon personal approval by the instructor. Five credits; spring. Woolston

155. *Poverty and Philanthropy*.—Industrial, social and biological backgrounds of poverty. Types of dependents and the evolution of private and public organizations for treatment and prevention. Five credits; autumn. McKenzie

156. *Criminology*.—Social, economic, and hereditary causes of crime; various theories and plans of prison reform; the relations of prisons and criminals to society. Five credits; spring. McKenzie

157. *Social Pathology.

160. *Programs of Social Reform*.—Critical examination of individualism, conservation, philanthropy, social justice, liberalism, unionism, the co-operative movement, the single tax, socialism and syndicalism. Three credits; winter. Woolston

161. *Theories of Social Progress*.—Factors involved in improving society and an estimate of their efficiency. Three credits; spring. Woolston

162. *Social Ideals.

170. *History of Social Theory*.—The principal contributions to sociological science, from the standpoint of their background. Five credits; autumn. Lichtenberger.

171-172-173. *Social Work Practice I*.—Supervised field work in local social agencies. Eight hours field work, one hour conference. Permission of instructor required for admission. Three credits; autumn, winter, spring.

181. *Psychology of Nations.

182. *The Urban Habit of Mind.

191-192-193. *Social Work Practice II*.—Advance field work. Twelve hours field work, one hour conference. Prerequisite, 171-172-173. Five credits; autumn, winter, spring.

*Not offered in 1923-1924.

**Offered in extension as a correspondence course.

COURSES FOR GRADUATES ONLY

207-208-209. *Community Research*.—Original investigation of special community problems. Prerequisite, graduate standing or special permission. Two credits a quarter; autumn, winter, spring. McKenzie

221-222-223. *Seminar*.—For graduate students who are candidates for higher degrees and for approved major students in the department, when recommended by an instructor in charge of their special work. The purpose is to train in methods of original research and investigation. Two credits; autumn, winter, spring. Autumn, Lichtenberger; winter, spring, Woolston

ZOOLOGY

Science Hall

PROFESSOR KINCAID; ASSISTANT PROFESSORS E. V. SMITH, GUNTHERP, GUBERLET

✓ 1-2. *Elements of Zoology*.—General review of zoological science, stressing the philosophic and economic aspects of the subject. Lab. fee, \$2. Five credits a quarter; autumn, winter, repeated winter, spring.

Kincaid, Gunthorp and assistants.

✓ 3-4. *Pre-Medical Zoology*.—For students entering a medical course. Lab. fee, \$2. Five credits a quarter; autumn, winter. Guberlet.

✓ 5. *General Embryology*.—Comparative developmental history of animals, with emphasis on vertebrate forms. Prerequisite, Zool. 1-2 or 3-4. Lab. fee, \$2. Five credits; spring. Guberlet.

✓ 16. *Evolution*.—Lectures on the more important biological problems related to the general theory of evolution. Two credits; autumn. Kincaid.

✓ 17. *Eugenics*.—Principles of evolution in their relation to human welfare. Two credits; spring. Kincaid.

✓ 60, 61. *Comparative Anatomy*.—Comparative structure of the vertebrate animals. Prerequisite, Zool. 1-2 or 3-4. Lab. fee, \$2. Five credits a quarter; autumn, winter. Guberlet.

✓ 101. *Cytology*.—Anatomical, physical and chemical properties of the animal cell with special reference to the problems of development and inheritance. Prerequisite, Zool. 1-2 or 3-4. Lab. fee, \$2. Five credits; autumn. Gunthorp

✓ 103. *Ecology*.—The adaptation of animals to their environment. Prerequisite, Zool. 1-2. Lab. fee, \$2. Five credits; spring. Gunthorp

✓ 106. *Plankton*.—Classification, adaptations and interrelationships of the microscopic fauna of the sea. Field work in Puget Sound. Prerequisite, Zool. 1-2. Lab. fee, \$2. Five credits; autumn. Kincaid

✓ 107. *Parasitology*.—Animal parasites. Prerequisite, Zool. 1-2 or 3-4. Lab. fee, \$2. Five credits; spring. Guberlet.

✓ 108. *Limnology*.—Classification and interrelationship of the organisms found in lakes and streams. Field work in the neighboring fresh-water bodies. Prerequisites, Zool. 1-2. Lab. fee, \$2. Five credits; spring. Kincaid

✓ 111. *Entomology*.—The structure, classification and economic relations of insects. Prerequisite, Zool. 1-2 or equivalent. Lab. fee, \$2.50. Five credits; spring. Kincaid

✓ 121. *Microscopic Technique*.—Methods of imbedding, sectioning and staining animal tissues. Prerequisite, Zool. 1-2 or its equivalent. Lab. fee, \$2. Three credits; winter. Guberlet.

✓ 155-156-157. *Elementary Problems*.—Students will be assigned minor problems under direction of an instructor in the department. Prerequisite, twenty hours in zoology or physiology. Lab. fee, \$2. Three credits; autumn, winter, spring. Kincaid, Smith, Gunthorp, Guberlet.

Educ. 160Z. Teachers' Course in Zoology.—For students preparing to teach zoology in high schools. Prerequisites, Zool. 1-2. Two credits; winter. Gunthorp.

GRADUATE COURSES

✓ 201-202-203. *Research*.—Students capable of carrying on independent work will be assigned problems under direction of an instructor. Prerequisite, twenty-five hours of zoology. Credit to be arranged. Kincaid, Gunthorp.

PHYSIOLOGY

✓ 6. *Elementary Physiology*.—Human structure and function, designed to meet the needs of students in pharmacy. Lab. fee, \$2. Five credits; autumn. Smith.

✓ 7-~~8~~ *Elementary Physiology*.—Structure and functions of the human body, with special emphasis on metabolism, and the nervous and vascular systems. Lab. fee, \$2. Five credits; winter, spring. Smith.

✓ 54-55. *Physiology*.—Adapted to meet the need of students expecting to teach the subject in high school. Required of students majoring in physical education; recommended for students in dietetics and in sanitary science. Lab. fee, \$2.50. Five credits; autumn, winter. Smith.

✓ 115. *Principles of General Physiology*.—Application of the laws of physics and chemistry to physiological processes. Prerequisites, one year each, zoology, chemistry and physics. Lab. fee, \$2.50. Five credits; spring. Smith.

✓ 151-152-153. *Advanced Physiology*.—Arranged for students in medicine and advanced students who wish to make a careful study of experimental methods. Prerequisites, one year each, zoology, chemistry and physics. Lab. deposit, \$3. Five credits; autumn, winter, spring. Smith.

GRADUATE COURSES

✓ 204-205-206. *Research*.—Students capable of carrying on independent work will be assigned problems for investigation. Prerequisites, twenty-five hours of zoology or physiology. Credit to be arranged. Smith.

SUMMER QUARTER

FREDERICK E. BOLTON Ph.D.....DIRECTOR

Facilities.—The summer quarter is an integral part of the university year and its courses coordinate with the other quarters. It offers especial opportunities for teachers and others whose regular work is suspended during the summer months.

By the four-quarter plan regular students are able to take their vacations during any quarter of the year, or by attending the four quarters each year they may complete the college course in three years. Regular work is offered in the college of Liberal Arts, Science, Fine Arts, Business Administration, the Graduate School, Schools of Education and Law, and in the Pre-medical course. The Puget Sound Biological Station at Friday Harbor maintains a session of six weeks. In 1924 this will begin June 18 and end July 27. The laboratories, libraries and museum are open and the various departments offer both undergraduate and graduate work equal in quality to that maintained during the rest of the year. In most departments three grades of work are offered: (a) courses for beginners, (b) courses for advanced undergraduates, and (c) courses for graduate students. In a large number of cases, heads of departments are in charge of the work. In addition to regular members of the faculty prominent teachers from outside the University give courses.

For whom intended.—Besides regular undergraduate work in the various colleges opportunities are afforded for the following classes of persons:

1. College and university graduates who wish to specialize in some particular field or to work for advanced degrees.
2. Superintendents and principals who wish to acquaint themselves with recent progress in education or to study special problems.
3. High school teachers who wish to advance in their special lines of work.
4. Supervisors and teachers of music, domestic science, drawing and other special fields of work, who find many courses suited to their needs.
5. School teachers who wish to work toward college degrees.
6. Directors of gymnasiums and teachers of physical education and playground work. The University campus offers unusual opportunities for playground demonstration, and special emphasis is placed on this important phase of education. The city of Seattle and the public schools afford splendid objective illustrations of playground and recreation centers.
7. Undergraduates who for some good reason find it desirable to shorten the period of their college course.
8. Recent high school graduates who expect to enter the University in the fall and wish to become familiar with the University before that time. High school pupils find this a very advantageous plan.
9. Persons desiring training in child welfare work, social workers, Y.M.C.A., Y.W.C.A. directors and teachers.
10. County superintendents who desire to study problems of rural school organization and social center and community center work.
11. Candidates for certificates who need special courses in education and psychology or other subjects.
12. Persons who are preparing to become specialists in college and normal school positions.
13. Persons who desire practical field work in botany, geology and zoology in a region possessing unique facilities.
14. Students who wish regular courses in law or special courses in law in preparation for teaching the commercial branches.

Registration.—Registration for the summer quarter of 1924 will take place on Tuesday, June 18. Students expecting to be in attendance during the last six weeks only may register on or before Friday, July 25. Students should go first to Administration hall, where notices will be posted giving the order of procedure in registration.

Students desiring to enroll in any college or school of the University will be assigned by the registrar to the deans of the respective divisions for assistance in election of studies; those not intending, at the time, to become candidates for graduation will be assigned to the director of the summer quarter.

Admission.—The courses of the summer quarter are open to all persons eligible for admission to the University as either regular, unclassified or special students. As far as possible, all credentials for prospective students and applications for admission as special students should be in the hands of the registrar before the opening of the session.

Credits.—Students desiring university credit will be required to pass examinations during the closing week of each term. A maximum of nine quarter hours of credit may be obtained during each term.

Persons expecting to be candidates for any degree or the normal diploma at the close of the quarter should make application through the registrar on registration at the beginning of the session.

Fees.—The regular tuition fee of twenty dollars (\$20) is required of all students, and admits to all the privileges of the summer quarter, except certain laboratory courses and to special music courses requiring individual instruction. (See the statements of these courses for the special fees.) No reduction of fees will be made because of late registration or early withdrawal. Open lectures are free to all students regularly registered in the summer quarter and to the public.

Masters' Degrees Through Summer Quarters.—At each succeeding summer quarter a larger number of graduate students are in attendance. Last summer about a third of the whole number of attendants were graduate students. Many were planning definitely to apply their work toward higher degrees. The University will accept 36 credits earned during at least 36 weeks of residence in summer quarters as a fulfilment of the year of required residence.

Correspondence Courses.—The University has established correspondence courses in many departments. These will be of special advantage to students who have been in attendance at summer quarters and who wish to go forward to the bachelor's degree. The correspondence work can be advantageously planned as a continuation of the regular summer quarter. For detailed information concerning correspondence courses communicate with the Extension Service.

Education.—The summer quarter and the School of Education stand in very close relations to each other. Those who plan to obtain a degree, or a normal diploma, through the School of Education can accomplish much in summer quarters.

Business Administration.—An interesting curriculum of business courses is offered in the summer quarter for students who contemplate going into business. These courses are along lines of business organization, corporation, finance, employment management, and kindred subjects. Teachers of commercial subjects will also find subjects of special importance in preparation for their work.

For bulletin of the summer quarter address the Editorial Secretary, University of Washington. For other information address Frederick E. Bolton, Director of the Summer Quarter.

PUGET SOUND BIOLOGICAL STATION

FRIDAY HARBOR, WASHINGTON

THEODORE CHRISTIAN FRYE, Ph.D.....DIRECTOR

Station and Surroundings.—The Puget Sound Biological Station is situated in a sheltered bay near Friday Harbor, the county seat of San Juan County, with a population of approximately 500. It is between Bellingham and Victoria, about 25 miles from the former and about 20 miles from the latter.

San Juan County consists of an archipelago of about 100 islands separated by channels cut by glacial action. The northern islands of the county are composed of sandstone, comparatively easily eroded, and wearing into potholes and peculiarly pocketed walls. In the sandstone are occasional beds of fossils, notably on the Sucia Islands. On Waldron Island and the Sucia Islands the sandstone has been cut for paving blocks for city streets.

Some of the islands are partly limestone, notably the north end of San Juan and the west side of Orcas. The largest lime works in Washington is at Roche Harbor, at the northwest corner of San Juan Island. However, comparatively little of the shore line of the archipelago is limestone.

Most of the islands are composed of metamorphic rock, which is very resistant to weathering and therefore changes very little. This is one of the reasons for the remarkable wealth of fauna and flora. Here and there are beaches of glacial material, or of sand, or flats of mud. There are no large streams on the islands, and therefore the water is exceptionally free from river detritus. Through the channels between the islands the tides rush at times with a velocity of seven to ten miles an hour, filling and again draining the Gulf of Georgia. This gulf is a body of water roughly 100x20 miles, and the spring tides are about twelve feet. The channels in the Friday Harbor region are the chief points of entrance and escape for this immense volume of water. Thus the rocky points are swept clean from erosion deposits, the water is constantly aerated and changed, and a good habitat for water forms insured. Some of the channels are over 100 fathoms deep, affording opportunity for study of forms of life to a considerable depth. Those who have been at the station have again and again attested to the abundance of marine life. A 12-foot tide exposes a wide beach, and gives excellent opportunity for the study of shore life.

The site of the station is on a steep, rocky hillside, forested with conifers. The land was donated by Mr. Andrew Newhall, and is about a quarter of a mile from the village. A road runs through the grounds to the village. The village contains about a dozen stores, and any ordinary purchases may be made there.

The University of Washington also owns 485 acres about one mile from the present site, where suitable buildings are to be erected in the near future.

Building and Equipment.—The zoological laboratory was built in the spring of 1910. It is about 30x60 feet, two stories and attic. The building is just above high tide on a steep shore. Material can therefore be landed from a small floating dock anchored to the pillars of the laboratory itself. On the first floor are laboratory tables and stock room. The attic is a general store-room and drying loft. Both fresh and salt water are piped to all parts of the building.

The botanical laboratory was built as a part of the dining hall in the spring of 1913. It has fresh water piped into it, and there is a dark room adjacent.

Compound microscopes from the University of Washington are used. Some general glassware is supplied. Certain ordinary glassware, containers, and preservatives may be obtained at the stock room. It is the aim to have in the stock room things ordinarily called for. Unusual things cannot be supplied. Those wishing special apparatus should write the director. Usually the station hires a shrimp trawler for one month. Rowboats are on hand for general use.

A valuable addition to the station's equipment this year is a \$12,000 towing boat, given to the University by Robert Moran of Rosario, to be used in obtaining specimens of deep-sea life. The boat is 45 feet long and 12 feet wide, with a hull of extra strength, and handsome interior finishings of hard wood. It contains sleeping quarters of teak wood finish, and carries a gasoline supply sufficient for two weeks so that it can be used for ocean dredging.

Supply Departments.—A supply department has been established for the purpose of supplying museums and schools with zoological and botanical material for exhibits or classes. A price list will be furnished on application to the Director of the Station. Those who attend the station may have a reasonable amount of material for their own laboratories put up very nearly at cost. This permits scientists to put their whole time on class work and investigation. The collection of material by private individuals is not permitted. Scientists are urged to co-operate with the station in its endeavor to earn part of its running expense through its supply department.

Library.—The library contains about 1000 volumes, of which about 210 are bound volumes of reprints. A limited number of books are shipped to the station every summer from the University.

Lectures.—General lectures by the station staff or by visitors are given as the occasion arises.

Registration.—Experience has shown that it is wise to register for one full course only. Six weeks is a very short time for any course, even though one's whole time is devoted to the work. Advanced students have found it profitable to begin some line of investigation in the same field in which they are carrying a course. All registration is at the station.

Credit.—Students giving their whole time to the work may earn one semester-credit or one and one-half quarter-credits a week.

Expenses.—For one person for six weeks the cost is about as follows:

Tuition fee	\$12.00
Laboratory fee	3.00
Tent, two or more per tent.....	4.50
Board (estimate)	33.00
Stockroom, breakages, etc., (estimate).....	2.00
Books (estimate)	2.00
Incidentals (estimate)	3.50
Total.....	\$60.00

The tuition pays the running expenses; the laboratory fee is for maintenance of equipment, scopes, instruments, etc.

For persons occupying the research rooms the total station fee is \$50, covering tuition and laboratory fees.

Tents.—These are 10x12 feet, on board platforms with three-foot board walls, making the lowest part about five feet. Included in the rent

are bed springs, mattresses, lamp, camp chair, bucket, wash basin, and drinking cups. Before and after the session the rental is \$1 a week. Stoves may be rented for \$2.50 for the season. Bedclothes and pillows are not furnished, but they may be bought at Friday Harbor. Persons coming to the Station should bring a sufficient supply of bedding for cold nights. The whole lodging system is merely self-supporting over a term of years. A deposit of \$4.50 reserves a tent for the six weeks. The tent sites are not equally desirable. Sometimes the demand exceeds the supply, but there has always been room in the village.

Meals.—These are served in the dining hall at \$5.50 a week. The service is merely self-supporting over a term of years, and as nearly co-operative as the conditions permit. The combination living room, library and dining hall is about 75 feet above the sea level, and commands a splendid view of channels and islands in the foreground, with Mount Baker lifting its ice-covered peak 12,000 feet high in the distance.

For bulletin of the Puget Sound Biological Station address the Editorial Secretary, University of Washington. For other information address T. C. Frye, Director of the Puget Sound Biological Station.

UNIVERSITY EXTENSION SERVICE

OFFICERS OF ADMINISTRATION AND INSTRUCTION

HENRY SUZZALLO, Ph.D., (Columbia), LL.D., (California).....President of the University
JOHN THOMAS CONDON, LL.M., (Northwestern).....Dean of Faculties
EDWIN AUGUSTUS START, A.M., (Harvard).....Director of the Extension Service

ADMINISTRATIVE BOARD

DIRECTOR START, CHAIRMAN	
DEAN THOMSON, Liberal Arts	DEAN MILLER, Business Administration
DEAN LANDES, Science	PROFESSOR RAITT, Home Economics
DEAN BOLTON, Education	COMPTROLLER CONDON

THE FACULTY

The Extension faculty is composed of members of the general faculty who give extension courses and of the following instructors on the Extension staff:

ALLETTA MARIA GILLETTE, A.B., (Smith), A.M., (Washington).....Instructor in English
JAMES M. MCCONAHEY, LL.B., (Northwestern), C.P.A.....Lecturer in Accounting
WILLIAM HENDERSON.....Lecturer in Foreign Trade
EMUEL J. FORMAN.....Lecturer in Water Transportation

OFFICE STAFF

MARY C. GRADY.....Office Manager
CORINNE B. BARCOCK.....Secretary in Charge of Seattle City Office
EDNA HINDMAN, A.B., (Washington).....Secretary for Correspondence Study
HARRIETTE R. BAILEY.....Stenographer

OFFICES

The general offices of the Extension Service are on the University campus, in a small building devoted exclusively to their use. It is the third building on the right from the Fortieth Street entrance.

A city office is maintained in the Henry Building, in the business district of Seattle.

THE EXTENSION SERVICE

The Extension Service of the University of Washington (known as the Extension Division until 1917) was organized in 1912, as an integral part of the University to promote and administer its work outside the campus. At the present time its field embraces university teaching by correspondence and in classes for those who cannot attend the University.

DIVISION OF INSTRUCTION

Extension teaching is primarily for adults and for those who cannot attend the University. Many of the subjects offered may be taken for credit toward a university degree, but this is a secondary object, the primary one being to make university instruction available to as many persons as possible who could not otherwise obtain it.

This teaching is carried on by correspondence, which is available to anyone, anywhere, at any time; and by classes conducted at different places.

Home Study courses by correspondence are offered in the departments of botany, classical languages and literature, (Greek, Latin), economics and business administration, education, English, geology, history, home economics, navigation, philosophy, political science, psychology, Romanic languages and literature (French, Italian, Spanish), sociology, and zoology.

Class work is offered in Seattle, and in other cities as far as practicable, in many of these departments and in some others. Both lists are subject to change from time to time, as courses are added or withdrawn.

The greater number of the extension courses parallel the resident university work and may be taken by qualified persons for credit toward a university degree. Some are planned to meet vocational needs of those who have no university degree in view.

Announcements of the Extension Service are published in bulletins issued at intervals of one or two months.

In Seattle the Extension Service maintains a city office and downtown classrooms, where a program of classes in various subjects is annually carried on. This schedule varies somewhat from year to year but usually includes general economics, accounting (three full year courses), advertising, business correspondence, business law, foreign trade, journalism and short story writing, public speaking, literature, public health nursing, water transportation, English, French, Italian, Spanish, home economics, philosophy and psychology.

Extension classes have been conducted in Aberdeen, Bellingham, Everett, Hoquiam, Olympia, Spokane, Tacoma, and Yakima. On account of time and distance it has not been possible to develop this work on the same basis of permanence and regularity as that in Seattle, but as much is done as possible and any real demand is generally met.

Fees had to be somewhat increased in 1921, because of the desire of the Legislature that extension work be made as nearly self-supporting as possible.

GRADUATE MEDICAL LECTURESHIP

In 1916 the Extension Service, with the cooperation of the Washington State Medical Society and the King County Medical Society, instituted a Graduate Medical Lectureship. The King County Medical Society annually appoints a committee which works with the representatives of the Extension Service in planning the course. The lectures are held in the early summer, and occupy five days. They are open to graduate physicians and surgeons. A fee is charged and any surplus over the expenses of the year goes into a special fund to be used as a reserve fund for the maintenance of this lectureship, or for the extension of medical education. The lectureship has proved of great value to the physicians and surgeons of the Pacific Northwest, bringing to them each year some of the best thought of the medical education centres of the country.

The lecturers have been:

- 1916. Dr. Charles L. Mix, Chicago, Northwestern University.
- 1917. Dr. Martin H. Fischer, University of Cincinnati.
Dr. Allen B. Kanavel, Chicago, Northwestern University.
- 1918. Omitted on account of the war
- 1919. Dr. Charles Lyman Greene, St. Paul.
Dr. Dean Lewis, Chicago.
- 1920. Dr. Henry A. Christian, Boston, Harvard University.
Dr. Barton Cooke Hirst, Philadelphia, University of Pennsylvania.
- 1921. Dr. Charles F. Hoover, Cleveland, Western Reserve University.
Dr. Carl A. Hamann, Cleveland, Western Reserve University
Dr. Harris P. Mosher, Boston, Harvard University.

1922. Dr. John B. Deaver, Philadelphia, University of Pennsylvania
 Dr. Hobart Amory Hare, Philadelphia, Jefferson Medical College.
 Dr. William McKim Marriott, St. Louis, Washington University.
 Dr. Joseph Colt Bloodgood, Baltimore, Johns Hopkins University.
 Dr. Walter Bradford Cannon, Boston, Harvard University.
 Dr. William Engelbach, St. Louis, St. Louis University.
1923. Dr. John M. T. Finney, Baltimore, Johns Hopkins University.
 Dr. Alfred Stengel, Philadelphia, University of Pennsylvania.
 Dr. Oliver S. Ormsby, Chicago
 Dr. E. C. Rosenow, Minneapolis, University of Minnesota.

SCHOOL FOR NURSES

A required curriculum of six subjects for graduate nurses given over a two year period, is maintained by the Extension Service at Firland Sanatorium, at the request and with the cooperation of the authorities of that institution. The first class completes its work this year and will receive certificates from the University. The curriculum is as follows:

	Credits
Principles of Public Health Nursing.....	3
Administration of Public Health Nursing.....	3
Sociology, with field work.....	5
Nutrition	3
Psychology	3
Public Speaking.....	3

A course of six lectures in general literature and how to read has also been given as an elective.

OFFICE OF THE EDITORIAL SECRETARY

110 Commerce Hall

MATTHEW O'CONNOR, A.B. Editorial Secretary
HARRIETT WESTMORELAND Assistant

All official publications of the University of Washington are issued under the direction of the editorial secretary.

The occasional publications include:

The University of Washington Publications in Geology.

The University of Washington Publications in Language and Literature.

The University of Washington Publications in Mathematics.

The University of Washington Publications in Political and Social Science.

The University of Washington Bulletin (Engineering Experiment Station Series).

Puget Sound Biological Station Series.

The periodical publications include:

The Washington Historical Quarterly.

The Washington Newspaper (published each month for the newspaper profession of the state).

The University of Washington Bulletin, General Series including the bulletins of the various colleges and schools, the General Catalogue, the Summer Quarter Bulletin, and the University Directory, each of which is published annually.

It is the purpose of this office to inform the public as to the progress of education, science and research at the University, and as to the services performed by the institution for the commonwealth; to scrutinize the daily events of the campus for facts of interest to the public as a whole, and to make them available to the newspapers of the state as expeditiously as possible. To that end a weekly Press Bulletin is issued, supplemented by other material on occasion. The editorial secretary will be pleased to cooperate with publicists and editors who desire information regarding the University or any of its specialized departments.

BIBLIOGRAPHY

Publications from April 1, 1922 to April 1, 1923.

BACTERIOLOGY

WEINZIERL, JOHN

The Cause of Explosion in Chocolate Candles.—*Journal of Bacteriology*, Vol. 7, No. 6, pp. 599-604. 1922.

BOTANY

HOTSON, JOHN WILLIAM

White Pine Blister Rust in the West.—*Forest Club Quarterly*, University of Washington. May, 1922.

RIGG, GEORGE BURTON

A Bog Forest Near Victoria, B. C.—*Ecology*, Vol. 3, pp. 207-213. 1922.

The Sphagnum Bogs of Mazama Dome.—*Ecology*, Vol. 3, pp. 321-324. 1922.

Effects of Copper Wire on Trees.—*Science*, Vol. 58, p. 687. 1922.

Birch Succession in Sphagnum Bogs.—*Journal of Forestry*, Vol. 20, pp. 848-850. 1922.

CHEMISTRY

BENSON, HENRY KREITZER (with A. L. Bennett)

New Solvents for Rosin Extraction.—(with A. L. Bennett)—Journal of Industrial and Engineering Chemistry, Vol. 14. 1922.

Port Developments and Manufacturing Enterprises.—Pacific Ports, January, 1923.

DEHN, WILLIAM M.

Modifications of the Sand Test for Detonators.—Chemical and Metallurgical Engineering, Vol. 27, No. 16, October 18, 1922.

Processes of Increasing the Sensitiveness and Power of Explosive Compositions.—U. S. Patent 1428011. September, 1922.

Process of Impregnating Plant Tissues with Ammonium Nitrate for Explosive Purposes.—U. S. Patent 1444594. February, 1923.

HEATH, FRED H.

Laboratory Manual of Quantitative Analysis.—University Book Store, Seattle. October, 1922.

SEMON, WALDO L.

The Preparation of Hydroxylamine Hydrochloride and Acetoxime.—Journal of the American Chemical Society, Vol. 45, No. 1. January, 1923.

SMITH, G. McPHAIL

Note on the Precipitation of Metals by Hydrogen Sulfide.—Journal of the American Chemical Society, Vol. 44, No. 7. July, 1922.

Addition Compounds of Gold Halides with Benzyl Sulfide.—Journal of the American Chemical Society, Vol. 44, No. 8. August, 1922.

TARTAB, H. V.

The Electrolytic Preparation of Arsenate of Lead.—(with Gary G. Grant)—Journal of Industrial and Engineering Chemistry, Vol. 14, No. 4. April, 1922.

The Role of Hydrogen-Ion Concentration in the Precipitation of Colloids.—(with Zalia Jencks Galley)—Journal of the American Chemical Society, Vol. 44, No. 10. October, 1922.

DRAMATIC ART

HUGHES, GLENN

The Balcony (translation).—(with Edwin J. Vickner)—Poet Lore, December, 1922.

Bottled in Bond. A Play in One Act.—Drama Magazine. February, 1923.

Repressed Acting and Shakespeare.—Drama Magazine. March, 1923.

ECONOMICS AND BUSINESS ADMINISTRATION

FAHWELL, RAYMOND F.

Water Transportation.—Chapter in *Economic Resources of the Northwest.* Lowman and Hanford, Seattle. 1923.

PRESTON, H. H.

Branch Banking in California.—Journal of Political Economy. August, 1922.

History of Banking in Iowa.—Iowa Economic History Series, pp. 458. Iowa State Historical Society, 1922.

EDUCATION

BOLTON, FREDERICK E.

The New Education School.—The Washington Alumnus, May, 1922.

The New School of Education in the University of Washington.—School and Society, August 12, 1922; Washington Education Journal, May, 1922.

AYER, FRED C.

Vocational Guidance.—Washington State Manual for High Schools. 1922.

The Administrative Organization of the Seattle Public Schools.—Seattle Public Schools, 1922.

The Curriculum.—Seattle Public Schools, 1922.

The Seattle Research Survey.—The Seattle Grade Teachers' Magazine, December, 1922.

HINES, HARLAN C.

Measuring the Intelligence of School Pupils.—The American School Board Journal, April, 1922.

Measuring the Achievement of School Pupils.—The American School Board Journal, November, 1922.

The Education of Mental Defectives in the Public Schools of Seattle.—School and Society, February 24, 1923.

A Guide to Educational Measurements.—Riverside Textbooks in Education, Houghton Mifflin Company. March, 1923.

ROBERTS, ALEXANDER C.

- Objective Measures of Intelligence in Relation to High School and College Administration.*—Educational Administration and Supervision, December, 1922.
Problems of College Admission.—School and Society, March 3, 1923.

TERRY, PAUL W.

- How Numerals are Read.*—No. 18, Supplementary Educational Monographs, June, 1922.
Recommendations Concerning Reports on High Schools by State Departments of Education.—Educational Administration and Supervision, November, 1922.
A Comparison of Local High Schools with the Average High School of Washington.—Washington Education Journal, February, 1923.

WILLIAMS, CURTIS T.

- A Criterion of the Quality of Teaching.*—(with Dudley W. Willard)—Educational Administration and Supervision, March, 1923.

ENGINEERING

CIVIL ENGINEERING

ALLISON, WILLIAM F.

- Sewage Disposal for Suburban Homes and Isolated Institutions.*—Bulletin No. 16, Engineering Experiment Station, University of Washington, 1922.
Sanitary Engineering on the Pacific Coast.—Report of the State Commissioner of Health, 1922.

RATHBUN, J. CHARLES

- Ranking Students from their Literal Grades.*—School and Society, September 16, 1922.

ELECTRICAL ENGINEERING

LOEW, EDGAR ALLAN

- Limits of Electrical House Heating.*—Electrical World, April, 1922.
Electric Heating of Residences in Tacoma.—Heating and Ventilating Magazine, April, 1922.

MAGNUSSON, CARL E.

- Electric Transients.*—(with Albert Kalin and J. R. Tolmie), pp. 200. McGraw-Hill Book Company, Incorporated. 1922.

SHUCK, GORDON R.

- Resistivities of Some Granular Resistor Carbons.*—(with Clyde E. Williams). Presented at Forty-second Meeting of the American Electrochemical Society, Montreal, September, 1922. Printed, not published.

MECHANICAL ENGINEERING

EASTWOOD, E. O.

- Combustion—Internal and External.*—Combustion, December, 1922.

WILSON, GEORGE S. W.

- Heavy Oil Engines.*—Southern Engineer, April, 1922.
The Diesel Engine.—Southern Engineer, May, 1922.

ENGLISH

BENHAM, ALLEN R.

- The Economic Interpretation of Literary History.*—University Book Store, Seattle. July, 1922.
The Process of the Label of English Poetics, Exhorting All England to Keep the Sea, etc.—Reprinted from Hakluyt's Voyages. University Book Store, Seattle, December, 1922.

GARRETT, ROBERT MAX

- An Illustration of the Bestiary.*—Notes and Queries, 12 S. Vol. 10. May, 1922.
Cargoes.—Sewanee Review, October, 1922.
Burning Pans Asinorum.—Inter-Mountain Educator, Vol. 18, No. 2. October, 1922.
Oleopatra the Martyr and her Sisters.—Journal of English and German Philology, Vol. 22, No. 1. January, 1923.

PADELFORD, FREDERICK M.

- The Spiritual Allegory of the Faerie Queene, Book One.*—Journal of English and German Philology, Vol. 22, No. 1. January, 1923.

FISHERIES

ANDERSON, CLARENCE L.

Bergen: Hub of Norway's Fishing Industry.—Second Section. The Fishing Gazette, Vol. 39, No. 6. May, 1922.*The Herring Industry at Aalesund, Norway.*—The Pacific Fisherman, Vol. 20, No. 6. June, 1922.*The Norwegian Cod Fisheries.*—The Fishing Gazette, Vol. 39, No. 7. July, 1922.*Norsk nationalitet og næringsliv i norske omgivelser i Alaska.*—Normands Forbundets Julhefte, 1922.*Norgest Fiskerier.*—Normands forbundet. Aarg. 16, Hefte 1, 1923.

COBB, JOHN N.

Canning of Crab Meat on Pacific Coast.—Pacific Fisherman, Vol. 21, No. 2. February, 1923.

NORGORE, MARTIN

Salmon Eggs as Food for Salmon Fry.—Transactions American Fisheries Society, Vol. 51, 1922.

FORESTRY

KIRKLAND, BURT P.

Practicability of Forestry in Western Washington.—Forest Club Quarterly, Vol. 1, No. 4. January, 1923.

PEARCE, J. KENNETH

The Development of Modern Logging Methods.—Aberdeen World, special edition. February, 1923.

WINKENWERDER, HUGO

How a Complete and Far-reaching Forest Policy is Prepared for the State of Washington.—West Coast Lumberman, May, 1922.*Apprenticeship Training in Logging Engineering.*—Proceedings, Pacific Logging Congress, 1922.*Land Classification Preliminary to Reforestation.*—Proceedings, Land Classification Conference and Western Forestry Conservation Association, 1922.*Official Report State Forestry Conference.*—(with Bror L. Grondal)—Forest Club Quarterly, January, 1923.

GEOLOGY

WEAVER, CHARLES E.

Fauna from the Eocene of Washington.—(with Katherine Van Winkle Palmer)—University of Washington Publications in Geology, Vol. 1, No. 3. June, 1922.

HISTORY

LUCAS, HENRY S.

The Beginnings of Dutch Immigration to Western Michigan, 1846.—Michigan History Magazine, Vol. 6, No. 4. 1922.

MEANY, EDMOND S.

Origin of Washington Geographic Names.—Washington Historical Quarterly, Vol. 13, Nos. 2, 3, 4. 1922.*Newspapers of Washington Territory.*—Washington Historical Quarterly, Vol. 13, No. 4. October, 1922.

McMAHON, EDWARD

James Bryce, a Tribute.—Washington Historical Quarterly, Vol. 13, No. 2. April, 1922.

HOME ECONOMICS

DENNY, GRACE G.

Fabric Fallacies.—Pictorial Review, October, 1922.*Fabrics and How to Know Them.*—J. B. Lippincott Company, January, 1923.

JOURNALISM

JONES, R. W.

Service to the Advertiser.—The American Press, February, 1923.*Better Makeup.*—American Press, March, 1923.

LIBRARY

SMITH, CHARLES W.

Notes on the Life and Historical Services of Thomas W. Prosch.—Washington Historical Quarterly, Vol. 14, January, 1923.

MATHEMATICS

BELL, ERIC TEMPLE

A Revision of the Bernoullian and Eulerian Functions.—Bulletin of the American Mathematical Society, November, 1922.

MORITZ, ROBERT E.

Ueber gewisse Infinitesimal Operationen der Hoheren Operations-Stufen. Pt. 2.—Tohoku Mathematical Journal, July, 1922.

The General Theory of Cyclo Harmonic Curves.—Annals of Mathematics, September, 1922.

WINGER, R. M.

Infinite and Imaginary Elements in Algebra and Geometry.—American Mathematical Monthly, September, 1922.

An Introduction to Projective Geometry.—D. C. Heath and Company. pp. xiii plus 443. 1923.

MINING

ROBERTS, MILNOR

The Glacier as an Aid to the Prospector.—Canadian Mining Journal, Vol. 48, No. 36. September, 1922. Reprinted in Pacific Mining News of the Engineering and Mining Journal-Press, Vol. 1, No. 7. November, 1922.

WILSON, HEWITT

Preliminary Report on the Kaolins and Feldspars of the Pacific Northwest.—Journal of the American Ceramic Society, March, 1923.

ORIENTAL LANGUAGES AND LITERATURE

GOWEN, HERBERT H.

Christ and Colosse or The Gospel of the Fullness.—Skeffington and Son, Ltd., London. pp. 127. 1922.

PHARMACY

LANGENHAN, H. A.

Liquor Potassi Arsenitis.—Bulletin of the University of Wisconsin, General Series 936, No. 1158. pp. 57. 1922.

PHYSICS

ANDERSON, S. H.

Radii of the Atoms of the Alkali Metal Atoms.—Physical Review, Vol. 20. August, 1922.

Overtones from Large Tuning Forks.—Physical Review, Vol. 21. March, 1923.

PSYCHOLOGY

SMITH, STEVENSON

Exhibitionism.—(with E. R. Guthrie)—Journal of Abnormal Psychology and Social Psychology. July, 1922.

WILSON, WILLIAM R.

Mental Tests and College Teaching.—School and Society, Vol. 15, No. 389. June, 1922.

A Test for the Measurement of Intelligence.—University of Washington Press. January, 1923.

ROMANIC LANGUAGES

GOGGIO, CHARLES

The Use of the Conditional Perfect for the Conditional Present in Italian.—Publications of the Modern Language Association of America, Vol. 37, No. 3. September, 1922.

UMPHREY, GEORGE W.

Peruvian Literature.—Hispania, December, 1922; March, 1923.

SCANDINAVIAN

VICKNER, E. J.

Swedish Composition and Word Study.—Augustana Book Concern. pp. 232. September, 1922.

The Balcony (translation).—(with Glenn Hughes)—Poet Lore, December, 1922.

SOCIOLOGY

McKENZIE, R. D.

The Neighborhood.—University of Chicago Press. pp. 150. March, 1923.

SPIER, LESLIE

Havasupai Days.—American Indian Life, 1922.

ZOOLOGY

JAMESON, A. PRINGLE

A Report on the Diseases of Silkworms in India.—Calcutta, Superintendent Government Printing, India. pp. 165. plates 8. November, 1922.

STUDENT PUBLICATIONS

CHEMISTRY

CLOUGH, RAY WILLIAM

A Biochemical Study of Pacific Coast Salmon with Particular Reference to the Formation of Indol and Skatol during Decomposition.—Publications Puget Sound Biological Station, Vol. 3, No. 67. December, 1922.

FISHERIES

FIEDLER, REGINALD H.

Bacteriological Analysis of an Experimental Pack of Canned Salmon.—Transactions American Fisheries Society, Vol. 51. 1922.

MATHEMATICS

PEPPER, ECHO D.

On Multiplicative and Enumerative Properties of Numerical Functions.—Tohoku Mathematical Journal, Vol. 22, Nos. 1 and 2. December, 1922.

DEGREES

DEGREES CONFERRED JUNE 20, 1922

BACHELOR DEGREES

COLLEGE OF LIBERAL ARTS

BACHELOR OF ARTS

Aitken, Florence Rose	Grant, Thomas Selby
Albee, Archie Veryl	Gray, Ruth Marie
Allen, Doris	Grossen, Tilda F.
Allen, Mabelle ¹	Gundlach, Wilford Richardson
Anderson, Helen Ethelyn	Gyde, Sally Reeves
Anderson, Mary Holderman ¹	Hart, Artie-Lee
Anderson, Pearl Adella	Haynes, Charles Delano (<i>magna cum laude</i>)
Andrews, Emery E.	Hazen, Claris Madolyn
Ayers, Dorothy Adelaide	Hennes, Albert F.
Bailey, William Locke	Heyes, Alice Dorothy.
Banks, Hugh Thomas	Hill, Lella Dunwoody
Barclay, Elizabeth	Hjertoos, Gurina Oline ¹
Bartlett, Clara	Hoover, Ralph Leonard ¹
Bell, John Karl	Hudson, Marjorie Merle
Bell, Wyloha	Johnson, Mrs. Leta E. ¹
Berglund, Myrtle Ivana	Johnson, Ursula E.
Blake, Emilie Isabelle	Jones, Margaret Bell
Bringhurst, Alice Constance	Joy, Aryness Ione
Burrows, Eleanor W.	Kangley, Lucy ² (<i>cum laude</i>)
Campbell, Jean Allison ¹	Ker, Genevieve
Cartwright, Laura Dorothy	Kirkham, Martha Bernice
Chen, Suen ¹	Knapp, Frances E. ³
Clark, Elizabeth Roulston ¹	Krogstad, Elva
Clift, Inez Mildred	Lee, George Chia-Chi
Cobb, Christina Marie ¹	Legg, Emily
Cochran, Catharyn Elizabeth ¹	Leonard, Annette ³
Coffman, Mabel Maurine ¹	Linklater, Margaret Ruth (<i>cum laude</i>)
Cook, Philetus George	Liston, James Gregory
Cooper, Rebecca ² (<i>cum laude</i>)	Lutz, Mrs. Martha Knapp
Crane, Lillian Alice Dean ³	McClung, Ryland Eugene
Criswell, Lois ¹	McColloch, Elizabeth Zane
Cunningham, Creigh James ³	McCredy, Rosamond Pauline ²
Curtiss, Verne Elizabeth	McGill, Vivian Jerauld ¹
Cutts, Beatrice Tylor ¹	McNichols, Mrs. Esther Zook
Dahlgreen, Evelyn V.	Mapes, Carl Herbert
Dally, Katharine Nichols	Marchand, Leslie A.
Davis, Annie Gertrude ³	Martin, Lenore ¹
Dodge, Florence Frances	Martin, Mary Geneva ¹
Dunn, Alice Julia (<i>magna cum laude</i>)	Masatomi, Emile ²
Dunphy, Helen Cecelia	Mason, Irma Ruth ¹
Ehrlich, Dorothy Olive ²	Merritt, Fred Sherrill ¹
Elford, Gertrude Louise	Meyer, May E. ²
Enger, Olive M.	Miller, Carl A.
Englehorn, Ruth ³	Miller, Margaret Elizabeth
Erickson, Sylvia Patricia	Minton, Harriett L.
Ewing, Lucille Elliott	Mitchell, Dubois ² (<i>cum laude</i>)
Fairbanks, Adelaide L.	Moreland, Mildred ¹
Fleenor, Mrs. Mame ¹	Morrison, Millard Campbell ²
Forbes, Edith ¹ (<i>cum laude</i>)	Morrison, Ruth Louise ¹
Fosdick, Helen Whitman ²	Neil, Lelores Anne
Fox, Edna M.	Nix, Martha Jeannette
Frazier, Enid Adelaide	Nordholm, Olga Eleanor
Freeman, Vivian Claire	Osgulach, John Augustine
Frein, Alice Virginia O. (<i>cum laude</i>)	Ostrand, Hildur
Gellerman, Louis Wanger	Owen, Mrs. Elizabeth Hayden Pratt ¹
Gellerman, Mildred Prescott ² (<i>cum laude</i>)	Paddock, Faith Elizabeth
Gellerman, William ¹ (<i>magna cum laude</i>)	Perry, Mary Bishop
Gerriets, Eva Alice	Platt, Genevieve Mary
Geoghegan, John Herbert (<i>magna cum laude</i>)	Pitmann, William H.
Gilbert, Guida Margaret	Pool, William F.
Gorman, Vinson Ellen	Remley, Miriam (<i>cum laude</i>)
Graham, Marie Edna	Richards, Bradford Alvin Ormsby

NOTE.—The persons whose names are followed by the superior figures 1 2 3, received their degrees in the quarters of 1921-1922 ending in August, December and March respectively; all others in June, 1922.

For degrees conferred at the end of the summer quarter, August 30, 1922, see page 296.

Rockwell, John Jr.	Towne, Arthur H. ²
Rogers, Lois Maybel	Towne, Mertice Claire ¹
Rogers, Margaret G.	Trawick, Margaret Phillips ¹
Schofield, Marguerite Catherine (<i>cum laude</i>)	Turner, Lucille Marie
Scott, Lydia Louise	Van, Tsee-chong ¹
Shaffer, Wilma Jennie	Van Duzee, Jeannette Elizabeth ²
Shidler, Edwin Williamson	Vogel, Catherine
Sims, Norma Josephine	Wakefield, Carol ¹
Smith, Herndon	Wakelee, Eva E.
Sorenson, Amelia	Wallin, Beulah Leon ²
Spear, Mildred Cushing	Warne, Ada Mary
Spiesecke, Alice Winifred (<i>cum laude</i>)	Welkel, Elizabeth Celestia
Springer, Irene Abigail	White, Frances Caroline
Starr, Alva Guy	Wilson, Frances Imogen ¹
Steelman, Eleanor Mae	Wienand, Carl Marcus
Stephenson, Edith Frances ¹	Willard, Dorothy E.
Swasey, Harriette Efrudel ²	Wise, Robert S. ²
Taylor, Henrietta E.	Woods, Ruth Elizabeth
Terry, Margaret Lois	Zimmerman, Mary Lucille ²
Thompson, Thelma Louise ²	

COLLEGE OF SCIENCE

BACHELOR OF SCIENCE

Bayley, Nancy	Latta, Susan Hyslop
Belstad, Walter Cyrus	LeRoy, Lois Freda
Bergman, Eugene Elroy ²	Little, Dorothy Vernon ¹
Bogardus, Helen Evelyn	Love, Elizabeth Jean
Bohart, Ruby M. ¹	Lucker, John T. Jr.
Calkins, Ione Janice	McConihe, Marguerite Charbonnel ¹
Champlin, Winfred E.	Miller, Elsie Myer
Clarke, Loretta Leslie	Nagler, Russell A.
Crowder, Harriett ¹	Neely, Suella Phillippa
Davis, Dorothy Carvel ¹	Oakes, Ruth E.
Doheny, Harriett Josephine	Ostensen, Floyd C. ²
Dunn, Helen Marjory	Peden, Barton Edward ¹
Francis, Byron F.	Pelz, Irma Margaret ²
Galligan, Glendon Edward	Rath, Martha Amelia ²
Graves, Lucile	Siler, Lillie May ¹
Gregg, Ralph ¹	Sister, Mary Leonella Bolt ²
Haley, Lonisa	Sivertz, Victorian
Hawley, Sidney James ¹	Stone, Caleb Smith, Jr.
Helmich, Leone	Tuba, Ray V. ²
Hoag, Ruth Gilberta ² (<i>cum laude</i>)	West, Cecil Rowland (<i>cum laude</i>)
James, Gordon Maxwell ²	Weste, Constance Mary (<i>cum laude</i>)
Jenkins, Margaret Atherton ²	Weythman, Ruth
Kelley, Jane Isabel	Wilson, William Gray (<i>magna cum laude</i>)
Kellogg, Howard Butters	Wohlraabe, Raymond Adolph
Knickrehn, Marie M.	

BACHELOR OF SCIENCE IN HOME ECONOMICS

Bowman, Beulah Marjorie ²	Kuebler, Dorothy A.
Brown, Edith Olivia ¹	La Bossier, Inez J. ²
Cochrane, Mavis Claire	Lance, Helen
Cole, Cleo Gennette ²	Larkin, Virginia Manny
Crosby, Sarah Miriam	Lorbeer, Norma E.
Currie, Mary E.	Ostrander, Ruth Elizabeth ¹
Davis, Mary Aleen	Pettyjohn, Carrie Margaret ²
Doyle, Edna May	Porter, Dott
Eckmann, Stella Rosenia ²	Reedy, Frances M.
Flanley, Mabel Gertrude	Richardson, Gertrude Helen
Flower, Alma J. (<i>cum laude</i>)	Rupp, Thelma M.
Hauck, Hazel Marie ¹ (<i>cum laude</i>)	Sartoris, Maddelena Veronica
Haworth, Elizabeth	Schulz, Gertrude Adams
Hendricks, Ruth Gladys	Stomner, Ida A. ²
Huelsdonk, Elizabeth ²	Winninghoff, Florence Louise
Hill, Helen Maxine	Young, Ecile Frances (<i>cum laude</i>)

BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

Warne, Alice M.

BACHELOR OF SCIENCE IN NURSING

Ayers, Pearl

SCHOOL OF EDUCATION

BACHELOR OF EDUCATION

Ahnquist, Martha Edith¹
 Apple, Alberta Dickey
 Bardarson, Otto Wathne
 Barnhisel, Kathryn²
 Beager, Irma F.
 Bennett, Marjorie²
 Bille, Margaret Jane²
 Bole, Mrs. Mildred Hill
 Bonner, Pearl Pauline
 Bowen, Frank Herbert
 Brokaw, Marion A.²
 Brotnov, Marguerite
 Buchanan, Sara Gene
 Bursell, Margaret A.
 Carlson, Hulda Margaret
 Chiu, Chun²
 Christianson, Luella Fern²
 Close, Ancita Lillian
 Cooney, Alta Carolyn² (*cum laude*)
 Cooper, Helen Sturtevant
 Dore, Esther Agnes
 Ector, Phebe Payne¹
 Estes, John F.
 Felitz, Vernita Caroline
 Foster, Charles Jacob²
 Foster, Frank K.²
 Fouts, Marie
 Gray, Josephine¹
 Greig, Elizabeth Holbrook

Guyet, Paul²
 Harris, Sarah Eleanor¹
 Herschberger, Emily Mae
 Holden, James Hector²
 Hoskins, Naomi Mildred²
 Instrella, Angel M.
 Kipp, Letha Julia²
 Kipp, Pearl Velma¹
 Kobler, Anna Helen²
 Lowe, Ben F.²
 McKim, Mrs. Margaret McLean¹
 McWatters, Dorothy
 Markham, Blanche Elaine²
 Miller, Elveta Leone¹
 Monteagle, Vera Marie²
 Morford, Helen Irene¹
 Nicholson, Margie C.²
 Olmstead, Marion C.¹
 Olson, Helen Frances
 Olson, Marguerite²
 Powell, Mary D.
 Robertson, Berdena Marion¹
 Roper, M. Wesley
 Sealls, Rachel Joyce
 Simas, Frances M.
 Stranack, Janet Katharine¹
 Stuart, Grace Margaret (*cum laude*)
 Tuttle, Marian Emma
 Williams, Ethel Marjorie (*cum laude*)

COLLEGE OF FINE ARTS

BACHELOR OF ARTS IN MUSIC

Burch, Clara Catherine¹
 Cole, Thelma Nadine¹
 Hogue, Helen²

Robinson, Katharine Una
 Wheaton, Marion Elizabeth¹

BACHELOR OF MUSIC

Anderson, Olga M.
 Canfield, Iris Fern (*cum laude*)
 Collins, Marie Anna
 Fisher, Joy Grace
 Hall, Dessie Alice
 Harman, Helen Amber
 Mason, Lela Ernestine²

Medin, Rita Belle
 Reed, Lucile Ida
 Tachell, Maud
 Thomas, Margaret Emma
 Vickers, Mildred Louise
 Weks, Mary Louise
 Wiley, Lois (*cum laude*)

BACHELOR OF FINE ARTS

Arnold, Ruth L.
 Cole, Gladys Genevieve
 Colton, Jeannette² (*cum laude*)
 Ely, John Carl¹ (*cum laude*)
 Fellers, Josephine Sanders¹
 Gould, Beatrice Avita

Morrison, Mary Marvin²
 Pattison, Evelyn¹
 Schrock, Ethel Grace²
 Schroder, Blanche M.
 Small, Mary Frances²

BACHELOR OF ARCHITECTURE

Chinn, Wing Sam

Corbett, Alexander Hazen²

BACHELOR OF ARTS IN DRAMATIC ART

Crawford, Wilhelmina Behrens (*cum laude*)

Teall, Mrs. Hazel Connell¹

COLLEGE OF ENGINEERING

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Black, Myron Watt
 Calvin, Samuel Everett
 Deming, George Morey
 Grant, Gary Gale¹
 Hall, Thomas Edward (*magna cum laude*)

Heintz, Wallace Paul
 Holt, Marvin G.
 Perkins, Melville Fletcher²
 Southard, John Henry

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Butler, M. Philbrick
 Friberg, Louis William²
 Gatewood, Joseph Strong²
 Hawkins, Harry Harlan²
 Hopson, Eric Ernest²
 Jacobsen, Paul Miller²

Large, George Elwyn (*magna cum laude*)
 Larsen, Walter Einar²
 Perlín, Solomon A.
 Slayden, Phillip Lee²
 Tusler, Charles Harold

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Adelson, Abraham Michael¹
 Allen, C. Edward²
 Axman, Bertram
 Brokaw, Charles Alfred
 Burrough, Edward Lewis²
 Conroy, Edward W.²
 Culliton, John G. Jr.
 Demuth, Orin Anton (*magna cum laude*)
 Eastman, Austin V.
 Gibney, Eugene Lucien²
 Gray, Max Leslie
 Haug, Andrew Johan²
 Hayden, Henry Tweed Jr.

Landsburg, Robert Archibald¹
 Lindblom, Roy E. (*cum laude*)
 Mackenzie, Robert Lennox
 Matson, Nels Emanuel¹
 Merriam, Clair V.
 Nygard, Erik
 Ostrom, Cyrus Warren
 Owsley, Joseph Hamilton
 Taylor, Collin A.
 Underwood, Hugh Coleman
 Walker, Myrell²
 Watson, Harold Harrison (*cum laude*)

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Aalto, Ilmi A.
 Algeo, Thomas Herbert
 Bolton, Edwin Latham²
 Dawe, Ernest Llewellyn²
 Elvidge, Earle Charles²
 Ford, Perry M.

Jacobs, Harold Arnott
 Lewis, Rubin²
 Pope, Augustus Russell²
 Potter, Claude A.
 Simson, Jerome
 Talmadge, Walter Heath

BACHELOR OF SCIENCE

Carroll, Frank Samuel
 Easterbrook, Wilfred George
 Flagg, Paul McLeod

Keyes, Harmon Edward¹
 Mulvey, Charles Reckner
 Patten, Maurice W.

COLLEGE OF MINES

BACHELOR OF SCIENCE IN MINING ENGINEERING

Harstad, Ingvald T.

Putnam, Lawrence E.

BACHELOR OF SCIENCE IN GEOLOGY AND MINING

Choy, Doo Whan
 Curzon, John James

Holzheimer, Frank Wimmer

BACHELOR OF SCIENCE IN METALLURGICAL ENGINEERING

Redmond, Harold Vincent

Woelber, Harry John²

BACHELOR OF SCIENCE IN COAL MINING ENGINEERING

McKim, James

COLLEGE OF FORESTRY

BACHELOR OF SCIENCE IN FORESTRY

Amos, Felipe Rodolfo
 Byerly, Oliver Finley²
 Dodge, Estella Grace
 Eades, Herbert W.
 McGaffey, Wesley Frederick
 Mills, Russell (*cum laude*)

Rogge, George Gustave
 Schwiesow, Will Herman (*cum laude*)
 Smith, J. H. Bronson
 Tamesis y Reveulta, Florencio
 Uphus, Ewan
 Wilson, George Dewey

COLLEGE OF FISHERIES

BACHELOR OF SCIENCE IN FISHERIES

Anderson, Andrew W.
 Dicks, Donald Clarence
 Melsnest, Frederick Holmes

Muckleston, Stanley Morton²
 Fugsley, Walter Herbert¹

COLLEGE OF PHARMACY

GRADUATE IN PHARMACY

Coleman, Clyde Ashley
 Edgell, Holden Hurst
 Ehelm, Helen A.
 Embree, Harold Benton
 Hahl, Lydia Augusta
 Haleston, Chris¹
 Halverson, Clarence Bernhart
 Henderson, Glenn W.
 Henderson, Ruby Alice
 Hogan, William Clarence²
 Janeck, Kenneth N.
 Johnson, Sylvia J.

Lampkin, Thomas Ethelbert
 McCartney, Jules Doran
 Nagle, Paul
 Nicholson, Lee Roy
 Phillips, John William
 Pochert, Arthur Dean
 Shaw, Homer Merrill
 Spence, Everett M.
 Stiles, Russell Millett
 Stooddy, Helen Mary
 Sullivan, John Kenneth
 Swift, Lester John

PHARMACEUTICAL CHEMIST

Curtis, Stanley Walter
 Davis, Ruth Magdaline¹
 Fisher, Frank Philip Jr.
 Malakoff, Abe

Needham, George Herbert
 Stalberg, Doris Ethel
 Turnacliif, Mary Lucille
 Warshall, Adolph

BACHELOR OF SCIENCE

Arkley, Helen Lothian²
 Biggs, Lodie Maurine
 Carr, Eva Sabine²

Cordero, Rosario Manala¹
 Davis, Ruth Magdaline¹
 Warshall, Adolph

COLLEGE OF BUSINESS ADMINISTRATION

BACHELOR OF BUSINESS ADMINISTRATION

Agulla, Jose Cortinas
 Aldwell, Norah E. (*magna cum laude*)
 Allen, Herbert Wilmoth Jr.
 Anderson, Arthur J.¹ (*cum laude*)
 Anderson, Margaret Gena
 Anderson, Ray Horace²
 Anderson, Robert Freeman³
 Baes, Florence A.
 Baker, Charity Foxwell
 Baker, Carl Oscar¹
 Bannwarth, Charles Gustave¹
 Bates, Kenneth Ogden¹ (*cum laude*)
 Beall, Harry Newell
 Beckwith, S. Vilas Jr.
 Bellingham, Norman Oliver¹
 Benson, Warren Bartlett²
 Berglund, Theos H.
 Bien, Henry Hyl-sung¹
 Bigelow, Edris
 Blaine, Edward Linn Jr.² (*magna cum laude*)
 Bole, John Clinton
 Brazier, John Mayfield²
 Brehm, Gretchen
 Brickell, Duncan Walker¹
 Burpee, Mary Margaret
 Butcher, Fred J.
 Campbell, Willis LeRoy
 Cheng, Chien-Feng¹
 Clark, Nelson Lee
 Cunningham, Rosamond Ransom
 Curtis, Frank Lewis³
 Dare, Willard Earl
 David, Emerson E.
 Davison, Elmer Edgar
 Dickerson, William Eugene¹
 Dingle, Helen M.
 Doremus, Della Ellen
 Douglas, Donald E.
 Dover, Leon David
 Dutton, Gladys S.
 Ellis, Marion Frances
 Elwick, Andrew¹
 Foo, Yao Cheng¹
 Fredrickson, Albert Phillips³
 Frem, Horace Henderson

Gittelsohn, Jacob (*cum laude*)
 Goldman, Jack¹
 Graves, Lucius Wallis
 Hagler, Lawrence E.²
 Hollowell, Lionel Ellsworth¹
 Hanson, Marlon Fay
 Harvey, John Hamilton¹
 Hermans, Wayland De Forrest²
 Herner, Pauline Eleanor²
 Herrick, Marlon H.
 Hessentile, Lee Frazelle
 Hill, Clarence E. Jr.
 Ellstrom, George D.
 Hodges, James Frederick
 Hoffman, Bessie
 Hoffman, Ruth Marlon
 Howe, Charles Bennett²
 Inouye, Chohel²
 Irwin, John Ivan¹
 Janeck, Louis Fechter
 Johnson, Victor Martin²
 Johnson, Walter Emmanuel
 Johnston, Hazel Blanche¹
 Kellner, Chester Rudolph
 Kellogg, Jesse I. (*magna cum laude*)
 Kellogg, Orson Chester²
 Knudson, Einar Mangnus¹
 Knudson, Roy J.
 Kongsle, Edward¹
 Kracover, Rose
 Krelgier, Joseph Edwin²
 Kwok, Ping-chiu²
 Lee, Juel Kuel Theodore¹
 Levin, Ben Zion²
 Lindberg, Ruby Charlotte
 Logg, Frank Stanley
 Ludwigs, Frank H.
 McCarthy, Charles Ashton
 McCredy, Noble Flower
 McCroskey, Robert Milton²
 McDonnell, Donald N.
 McGirr, Thelma (*cum laude*)
 McKissick, Joe Carson
 McLean, Winfield Angus²
 McLeod, Gladys Irene¹

MacMillan, Gregor MacLeod¹
 MacNaughton, Ellen¹
 Magnuson, Clarence Edwin
 Matheson, Roderick Grant
 Matson, Kleveda Oriflame
 Metlen, David Warner
 Middleton, Keith Cowper
 Miller, Charles John
 Miller, Ethel Adella¹
 Miller, Herman Erick
 Myers, Dicie Mildred¹
 Nelson, Leone Marie¹
 Nuelson, Harry Edward
 Pelz, Freda Elizabeth
 Perry, Gladys Henrietta (*cum laude*)
 Porop, Edward Walter²
 Pratt, Helen Van Ness¹
 Rogers, Edwin Lewis
 Rosen, Elsie Elise
 Ross, Gordon Burwell
 Sanborn, Frederick William
 Schmidt, Ronald Frederick
 Sigmond, Arthur Leonard²
 Sparks, Helen

Starin, Joseph¹
 Stewart, Glenn R.
 Swain, Kenneth Hudson²
 Sweet, Earl K.
 Tomas, Nicanor
 Tuck, Joseph²
 Turner, Herbert Clair¹
 Turner, Marston
 Turpin, Harold Lester¹
 Uddenberg, Alice
 Valentine, Albert Lorraine Jr.
 Vandercook, Jeannette Catherine
 Wallace, Allan Reese
 Ward, Victor
 Watkins, Inez
 Werner, Oscar B.
 Whaley, Frances Carlisle
 Whitelaw, Charles Hugh²
 Wood, Arthur Garde¹
 Wood, Oak D.
 Woodbridge, Frederick W.
 Yates, Dewey
 Young, Arthur B.
 Zee, Chung²

SCHOOL OF LAW

BACHELOR OF LAWS

Anderson, Edgar
 Bailey, William Locke
 Bell, John Karl
 Bollinger, John Clayton
 Campbell, Ernest William
 Clarke, George Edgar
 Coleman, Clarence Joseph
 Cornue, Don
 Dalley, Ervin F.
 Ellis, Leon Hubbard¹
 Furber, George Churchill²
 Grant, Thomas Selby
 Healy, Tim
 Hinman, Charles Lee
 Hover, Ernest John¹
 Hyndman, William L.¹
 Ivy, Eugene Dyke

Kincaid, Frederick Marshall²
 Macfarlane, Robert Stetson² (*magna cum laude*)
 Miller, Roy Charles¹
 Mines, Henry Walker
 Moran, Charles Gilbert
 Norton, Robert P. (*cum laude*)
 O'Brien, John Jennings
 Peyser, Ethan Allen²
 Roegner, Kenneth A.
 Schweitzer, Florence Ione
 Sprague, Hollister Thompson¹ (*magna cum laude*)
 Starr, Beatrice Evangeline (*cum laude*)
 Summersett, Peter
 Wilson, Glen Evans

LIBRARY SCHOOL

BACHELOR OF ARTS

Edwards, Thelma Lillian
 Goold, Clarissa Loveland (*cum laude*)
 Hansen, Viola

Lundell, Berger John Olof
 McDonald, Alice Gertrude

BACHELOR OF SCIENCE IN LIBRARY SCIENCE

Gill, Margaret Susannah¹
 Grant, Muriel¹
 Hansen, Viola²

More, Helen Gould
 Snider, Adda Latta²

SCHOOL OF JOURNALISM

BACHELOR OF ARTS IN JOURNALISM

Ainsworth, Ruth
 Harris, Donald Silver (*magna cum laude*)
 Hunt, Phebe Alberta
 Lindsay, Margery Alice
 Lockerby, Frank McCarthy

McClinton, Harold L.
 Marquis, Harold H.
 Milliman, Loren Holcombe
 Nelson, Minnie Marie
 Verran, William J. ¹ (*cum laude*)

GRADUATE DEGREES

GRADUATE SCHOOL

MASTER OF ARTS

Elias Thorleif Roud Arnesen (English)
A.B., University of Washington, 1921
Thesis: Knut Hamsun, Poet and Craftsman

Dean Stanley Bollman¹ (English)
A.B., University of Washington, 1918
Thesis: The Social and Political Philosophy of G. Lowes Dickinson

Ewan Clague¹ (Political Science)
A.B., University of Washington, 1917
Thesis: The Theory and Practice of Representation in the United States

Pearl Sibyl Coffinberry¹ (Education)
A.B., Fairmount College, 1907
Thesis: A Survey of Instruction in an Elementary School of Two Hundred Fifty Pupils

Manning William Cox (History)
B.L., Whitman College, 1910
Thesis: The Sockeye Salmon Controversy, an International Problem

Henry Cremer¹ (Education)
A.B., University of Washington, 1915
Thesis: Some Psychological Factors of Manual Arts

Ebba Dahlin (History)
A.B., University of Washington, 1919
Thesis: The Populist Party

Oscar Kern Glover¹ (Education)
A.B., University of Washington, 1915
Thesis: A Social and Educational Survey of School District No. 65 (Kapowsin)
Pierce County, Washington

Howard Ralph Goold (Education)
B.S., Northwestern University, 1908
Thesis: Some Correlations of General Intelligence with Reading Ability

Elmina Elizabeth Graham¹ (English)
B.L., Whitman College, 1908
Thesis: A Comparison of the Novels of Charles Brockden Brown with Godwin's
Caleb Williams

Agnes Elizabeth Hammarberg² (History)
A.B., University of Washington, 1920
Thesis: The Campaign of 1866

Harrison French Heath¹ (Education)
B.S., University of Washington, 1916
Thesis: A Short Course in Vocational Civics for High School Seniors

Henry T. Ines² (Education)
B.Ed., University of Washington, 1918
Thesis: Vocational Guidance Through Arithmetic

Thayne Miller Livesay¹ (Education)
A.B., Pacific University, 1917
Thesis: Administrative Plans for the Improvement of Retention and Promotion
of Public School Children

Gabriel Lofffield¹ (Education)
B.S., Valparaiso, 1893
A.B., University of Washington, 1918
Thesis: The Direct Principle in the Teaching of Modern Languages

Minerva Udell Loomis (Spanish)
A.B., University of Washington, 1920
Thesis: The Indebtedness of John Fletcher to Miguel de Cervantes Saavedra

Leonard Goroku Masui (Political Science)
A.B., University of Washington, 1920
Thesis: A Study of the Problem of Sovereignty of Japan

UNIVERSITY OF WASHINGTON

*Helen Scott Meldrum¹ (English)

A.B., Spokane University, 1919

Thesis: The Pastime of Pleasure by Stephen Hawes: a Probable Source of Spenser's Faerie Queene

Alexander Howard Meneely (History)

A.B., University of Washington, 1921

Thesis: The Anti-Chinese Movement in the Northwest

Goldie Platner Merrill (Education)

B.S., University of Washington, 1915

Thesis: An Analysis of High School Texts in Algebra

John D. Mayer¹ (Education)

Thesis: Results Obtained from the Otis Group Intelligence Scale Applied to School Grades Four to Twelve, Inclusive, of Harrington, Washington, and Some School Adjustments Based Thereon

Edeltrud Scholze Miller² (French)

A.B., Seattle Pacific College, 1920

Thesis: The Influence of Moliere on the Comedies of Piron, Gresset, Destouches, and Le Sage

Esther Mohr (English)

A.B., University of Washington, 1921

Thesis: The Development of Naturalism in American Fiction

Elvey Tillman Parsons¹ (Education)

B.Ed., University of Washington, 1920

Thesis: A Study of the Taxation of Timber Lands in the State of Washington as a Source of Revenue for School Purposes

Tillman Peterson¹ (Education)

A.B., Luther College, 1908

Thesis: Occupational Survey of the Hoquiam High Schools

Wesley Frederic Renne (English)

A.B., Hillsdale College, 1913

Thesis: The Social Theory of George Meredith: An Interpretation Based on His Poetry

Dio Richardson² (Education)

LL.B., Benton College of Law, 1907

A.B., University of Colorado, 1913

Thesis: Achievement in Silent Reading as an Index to General Intelligence

Katharine Constance Robertson¹ (English)

A.B., University of Washington, 1913

Thesis: A Critical Exposition of the Philosophy of Herbert G. Wells

Eleanor Maria Sickels¹ (English)

A.B., Whitman College, 1917

Thesis: Prophets of Man: A Study in the Religion of the Socially Conscious Poets of Contemporary America

Richard Francis Sullivan (English)

A.B., University of Washington, 1921

Thesis: Ibsen: The Individualist in Art

S. Bertta Wilson¹ (English)

A.B., University of Washington, 1917

Thesis: Notes on the Doctrines and Sources of Sir Thomas Browne's Religio Medicus

Wesley George Young¹ (Education)

A.B., University of Washington, 1917

Thesis: An Interpretation of Recent Tendencies in English Education

MASTER OF SCIENCE

Carl Zeno Draves (Chemistry)

B.S., University of Washington, 1917

Thesis: The Reaction Between Sulfur and the Hydroxides of Sodium and Barium; and the Preparation of Sodium Trisulfide and Potassium Pentasulfide

Helen Elizabeth Eagleson¹ (Psychology)

B.S., University of Washington, 1920

Thesis: The Effect of the Presence or Absence of an Accompanying Sound Stimulus in the Maze Learning of White Rats

*Died May 26, 1922.

Helen Louise Fulton (Bacteriology)
B.S., University of Washington, 1921
Thesis: The Bacteriology of Putrefaction in Meat

Sheldon Latta Glover (Geology)
B.S., University of Washington, 1919
Thesis: Clays and Shales of Washington

Lena Armstrong Hartge (Botany)
B.S., University of Washington, 1917
Thesis: A New Phytophthora Disease on the Tomato

Edith Morrison Johnson (Bacteriology)
B.S., Montana State College of Agriculture and Mechanic Arts, 1921
Thesis: Spore-bearing Aerobic Bacteria in Soils

Walter Eastby Lawson (Chemistry)
B.S., University of Washington, 1917
Thesis: The Absorption of Potassium from Solution

William Cavanaugh McIndoe (Chemistry)
B.S., Harvard University, 1918
Thesis: The Resin in Utah Coal

Roy Davison McLellan (Geology)
A.B., University of Washington, 1915
Thesis: A Study on the Properties of Crystal Detectors

Echo Dolores Pepper (Mathematics)
B.S., University of Washington, 1920
Thesis: On Multiplicative and Enumerative Properties of Numerical Functions
(To be published in the Tohoku Mathematical Journal, Sendai, Japan, under the Imperial College of Science)

Anthony Joseph Sells (Chemistry)
B.S., University of Washington, 1920
Thesis: Decomposition Products of Bacillus Botulinus

MASTER OF SCIENCE IN CHEMICAL ENGINEERING

Harmon Edward Keyes
B.S., University of Washington, 1921
Thesis: The Measurement of Overvoltage

MASTER OF SCIENCE IN CERAMICS

Albert Lee Bennett
B.S. in Ch.E., University of Washington, 1920
Thesis: A Study of the Preparation and Testing of Sillimanite Refractories

MASTER OF SCIENCE IN METALLURGICAL ENGINEERING

John Herbert Alden
El.Met., Lehigh University, 1921
Thesis: The Preparation of Sponge Iron

Bernard Marion Larsen
B.S. in Ch.E., University of Wisconsin, 1921
Thesis: Some Factors Affecting the Solution of Carbon in Iron

Lyall Westley Ziekrick
B.S. in Met.E., University of Washington, 1921
Thesis: Certain Effects of Small Percentages of Tin Upon Cast Iron

MASTER OF SCIENCE IN COAL MINING ENGINEERING

William Christopher McCulloch
B.S. in Min. E., University of North Dakota, 1921
Thesis: The Float-and-sink Test and Its Application to Froth Flotation of Coal

MASTER OF BUSINESS ADMINISTRATION

Robert Willard Bachelor³
B.B.A., University of Washington, 1921
Thesis: Some Phases of Commercial Competition in the Pacific

Lisette Emery Fast¹

A.B., Stanford University, 1919

Thesis: The Efficiency of Cargo Handling in Relation to the Decasualization of Longshore Labor on the Seattle Waterfront

Fred Donald Fellow

A.B., Friends University, 1918

Thesis: Small Fruits and Canning in the Northwest

Lorraine Frankenfield¹

A.B., Stanford University, 1919

Thesis: An Efficiency Rating for Departmental Managers in Department Stores

Horace Donald McGirr

B.B.A., University of Washington, 1920

Thesis: A System of Accounts for Retail Department Stores

DOCTOR OF PHILOSOPHY

Ray William Clough

A.B., Tufts College, 1908

A.M., Tufts College, 1909

Thesis: A Biochemical Study of Pacific Coast Salmon with Particular Reference to the Formation of Indol and Skatol during Decomposition

Olive Kuntz¹

A.B., University of California, 1916

M.A., University of California, 1918

Thesis: Tiberius Caesar and the Roman Constitution

Guy Hudson Van de Bogart

B.S., Fargo College, 1910

M.A., Fargo College, 1912

Thesis: Reactions of Certain Organic Compounds with Freshly Precipitated Ferrous Sulphide

HONORARY DEGREE

DOCTOR OF LAWS

Ferdinand Foch, Marshal of France

The Honorary Degree of Doctor of Laws conferred November 20, 1922

UNIVERSITY FIVE-YEAR NORMAL DIPLOMA

Abel, Helen Marian¹
 Ahnquist, Martha Edith¹
 Aitken, Florence Rose
 Aitkin, Victor Marshall¹
 Allen, Doris
 Allen, Glenna Alicia¹
 Anderson, Helen Ethelyn
 Anderson, Margaret Gena
 Anderson, Olga M.
 Anderson, Pearl Adella
 Ayers, Dorothy Adelaide
 Baker, Carl Oscar¹
 Barclay, Elizabeth
 Bartlett, Clara
 Barnhisel, Kathryn²
 Bayley, Nancy
 Beager, Irma F.
 Bennett, Marjorie²
 Berglund, Myrtle Ivana
 Bille, Margaret Jane²
 Billings, Rhea Ramona¹
 Bole, Mrs. Mildred Hill
 Bolton, Edwin Latham
 Bowen, Frank Herbert
 Bowman, Beulah Marjorie²
 Bringham, Alice Constance
 Brokaw, Marion¹
 Brotnov, Marguerite
 Brown, Edith Olivia¹
 Burpee, Mary Margaret
 Burrows, Eleanor W.
 Bursell, Margaret A.

Cage, Mary¹
 Campbell, Jean Allison¹
 Carlson, Hulda Margaret
 Cartwright, Laura Dorothy
 Chamberlain, Percy I.²
 Champlin, Winifred E.
 Christianson, Luella Fern²
 Clark, Elizabeth Roulston¹
 Clark, Loretta Leslie
 Clift, Inez Mildred
 Cole, Cleo Gennette
 Cole, Gladys Genevieve
 Cooney, Alta Carolyn¹
 Cooper, Helen Sturtevant
 Crane, Lillian Alice Dean²
 Crowder, Harriet¹
 Cunningham, Creigh James²
 Curtiss, Verne Elizabeth
 Cutts, Beatrice Tyler¹
 Dahlgren, Evelyn V.
 Damon, Verne La Due²
 Davis, Annie Gertrude
 Dingle, Helen M.
 Doheny, Harriett Josephine
 Dore, Esther Agnes
 Doyle, Edna May
 Dunn, Helen Marjory
 Eckmann, Stella Rosa²
 Ector, Phebe Payne¹
 Elwick, Andrew¹
 Enger, Olive M.
 Estes, John F.

Ewing, Lucile Elliott
 Fairbanks, Adelaide L.
 Feltz, Vernita Caroline
 Fleenor, Mrs. Mame¹
 Foster, Frank K.²
 Fouts, Marie
 Fox, Edna M.
 France, Alda May¹
 Frazier, Enid Adelaide
 Freeman, Vivian Claire
 French, Hazel Dungan
 Gellermann, Mrs. Mildred Prescott²
 Gellermann, William²
 Gerriets, Eva Alice
 Graham, Marie Edna
 Graves, Lucile
 Graves, Lucius Wallis
 Gray, Ruth Marie
 Grossen, Tilda F.
 Gunn, Elizabeth¹
 Guyet, Paul²
 Gyde, Sally Reeves
 Hall, Dessie Alice
 Hanson, Marion Fay
 Harris, Sarah Eleanor¹
 Hart, Artie-Lee
 Hauck, Hazel Marie¹
 Haynes, Charles Delano
 Hazen, Charis Madolyn
 Helmlich, Leone
 Hershberger, Emily Mae
 Heyes, Alice Dorothy
 Hill, Helen Maxine
 Hill, Leila Dunwoody
 Hjertoos, Gurina Oline¹
 Hoag, Ruth Gilberta²
 Holden, James Hector²
 Hughes, Cecil Leonard¹
 Jaadan, Nels¹
 Jenkins, Margaret Atherton²
 Johnson, Mrs. Leta E.¹
 Johnson, Ursula E.
 Johnson, Walter Emmanuel
 Jones, Margaret Bell
 Kangley, Lucy²
 Kellogg, Howard Butters
 Kipp, Pearl Velma¹
 Kirkham, Martha Bernice
 Knapp, Frances E.¹
 Knickrehm, Marie M.
 Kohler, Anna Helen²
 Kracower, Rose
 La Boosler, Inez J.²
 Lange, Dayma²
 Lark, Bert Webb²
 Larson, Victor, Byron¹
 Latta, Susan Hyslop
 Leonard, Annette¹
 Le Roy, Lois Freda
 Little, Dorothy Vernon
 Logg, David Gladstone
 Logg, Frank Stanley
 Lorah, James Richard
 Lorbeer, Norma E.
 Lowe, Ben F.²
 McCredy, Rosamond Pauline²
 McEuen, Marshall Lee²
 McKim, Mrs. Margaret McLean
 Mapes, Carl Herbert
 Mason, Irma Ruth¹
 Mason, Lela Ernestine²
 Medin, Rita Belle
 Meyer, May E.²
 Miller, Elsie Myer
 Miller, Elveta L.²
 Minton, Harriet L.
 Monteagle, Vera Marie²
 Moreland, Mildred¹
 Morford, Helen Irene¹
 Myers, Dicie Mildred¹
 Neely, Suella Philippa
 Neil, Delores Anne

Nelson, Leone Marie¹
 Nicholson, Margie C.²
 Nix, Martha Jeannette
 Nordholm, Olga Eleanora
 Nygard, Erik
 Oakes, Ruth Ella
 Olmsted, Marion C.¹
 Olson, Helen Frances
 Olson, Marguerite²
 Ostensen, Floyd C.²
 Ostrand, Hildur
 Ostrander, Ruth Elizabeth¹
 Packard, Augustus Henry¹
 Paddock, Faith Elisabeth
 Pattison, Evelyn¹
 Pelz, Irma Margaret²
 Perkins, Georgia Yost¹
 Pool, William F.
 Powell, Mary D.
 Reed, Lucile Ida
 Remley, Miriam
 Rich, Estelle May¹
 Richardson, Gertrude Helen
 Robertson, Berdena Marian¹
 Robinson, Katharine Una
 Rogers, Lois Maybel
 Rogers, Margaret Gross
 Rosen, Elsie Elise
 Sartoris, Maddalena Veronica
 Schofield, Marguerite Catherine
 Schrock, Ethel Grace²
 Scott, Lydia Louise
 Sealls, Rachel Joyce
 Shaffer, Wilma Jennie
 Shepard, Aileen Ordell²
 Shidler, Edwin Williamson
 Siler, Lillie May¹
 Simas, Frances M.
 Sims, Norma Josephine
 Slauson, Howard Brinkerhoff
 Smith, Elfreda Allen¹
 Smith, Herndon
 Sorenson, Amelia
 Spear, Mildred Cushing
 Springer, Irene Abigail
 Starr, Alva Guy
 Steelman, Eleanor Mae
 Stephenson, Edith Frances¹
 Stranack, Janet Katharine¹
 Stuart, Grace Margaretta
 Sullivan, John Daniel
 Swasey, Harriette Efrudel²
 Tachell, Maud
 Taylor, Henrietta E.
 Teall, Mrs. Hazel Connell¹
 Thompson, Aletha
 Towne, Arthur H.²
 Turner, Lloyd Edwin¹
 Turner, Lucille Marie
 Tuttle, Mariam Emma
 Van Duzee, Jeanette Elizabeth
 Vogel, Catherine
 Wakefield, Carol²
 Wakelee, Eva E.
 Warne, Ada Mary
 Warne, Alice M.
 Wassberg, Clarence Edward¹
 Watson, Anna Elizabeth¹
 Werby, Helen Johna
 Weythman, Ruth
 White, Marjorie
 Whitehead, Virgil¹
 Wiley, Lois
 Williams, Ethel Marjorie
 Wilson, Frances Imogen¹
 Wilson, William Gray
 Winningshoff, Florence Louise
 Wohlrahe, Raymond Adolph
 Woods, Ruth Elizabeth
 Young, Ecile Frances
 Zimmerman, Mary Lucille²

UNIVERSITY OF WASHINGTON

SPECIAL NORMAL DIPLOMA

Instrella, Angel M.

UNIVERSITY LIFE DIPLOMA

Anderson, John Franklin¹
 Andrews, Etta¹
 Arthur, Agnes¹
 Bardin, Galva Janet²
 Bell, Doris Lillian¹
 Binnings, Mildred Olive¹
 Bonell, Hannah Elizabeth¹
 Brethorst, Marie²
 Bursell, Blanche G.
 Bush, Florence Wright
 Carlson, Agnes Naomi
 Cary, Miles E.¹
 Chandler, Elsie¹
 Chapman, Grace Lillian
 Clarke, Florence Roberta²
 Close, Anelta Lillian¹
 Coffinberry, Pearl Sibil¹
 Craske, Frederick Holdaway¹
 Culver, Leda Gertrude
 Dickinson, Lois Atherton
 Doud, Helen Margaret
 Draper, Edgar Marian²
 Ellis, John Boyd¹
 Forbes, Edith¹
 Foster, Charles Jacob²
 Fox, Viva¹
 Friars, Lola E.²
 Gerriets, Anna¹
 Gilbert, Lois Marion
 Gilman, Bonnie Ruth
 Gleason, Dorothy
 Good, Jane¹
 Greene, Clyde Joseph¹
 Gresham, Marie Cole
 Hague, Martha Olive
 Hamm, Gladys¹
 Hartmann, Elsie A.¹
 Holman, Zelma Leone¹
 Hone, Marie Curran¹
 Hoover, Mrs. Alta Cooney
 Hoover, Ralph Leonard
 Hosner, Ruth R.²
 Houghton, Mrs. Florence Lewis
 Howes, Jessie
 Jackson, Edna Cosby
 Jeans, Mildred
 Jerbert, Arthur Rudolph¹
 Johnson, Mrs. Leta E.

Jones, Mary Elizabeth
 Kronschnable, Mercedes¹
 Larsen, Laura Melana¹
 Lewis, Helen Frater¹
 Lie, Borghild C.²
 MacPherson, Lexie¹
 Manson, Gladys²
 Marsh, Constance Ardena¹
 Martin, Lenore¹
 Melkild, Mildred Eunice¹
 Merrifield, Florine Virginia
 Miller, Mrs. Edeltrud
 Mitchell, Ruby
 Munger, Ruth Willard¹
 Myer, Edna Marguerite¹
 Myers, Margaret Esther
 *Nestor, Mrs. Adilene R.
 Norton, Mamie Belle¹
 Oakley, Eldora Viola
 Owen, Mrs. Elizabeth Hayden Pratt²
 Phipps, Beatrice Ertle
 Pool, Mrs. Ruth Hitchings²
 Pritchard, Joseph Gordon²
 Proctor, Muriel Esther¹
 Quast, Iola¹
 Rhoads, Mrs. Iolean Christensen¹
 Roberts, Sara A.¹
 Robinson, B. Veryl¹
 Sater, Gertrude P.¹
 Scheurer, Genevieve Birchard²
 Sheehan, Mary Madeline¹
 Shelton, Lucy Mather¹
 Shepard, Mabel
 Shidler, William Lawrence
 Simonds, Esther¹
 Smith, Margaret Wayland
 Stolp, Rose Marie²
 Swegle, Adele Mae¹
 Thwing, Clarence¹
 Tunander, Ruth Viola
 Van Horne, Esther G.
 Van Vleet, Cecil Spicer
 Wade, Dorothy²
 Watt, Mabel¹
 Willard, Dudley W.
 Willard, Mrs. Ella Baker²
 Wilson, Mrs. Florence Berg
 Xavier, Johan Ulrik¹

SENIOR SCHOLARS

SENIOR SCHOLARS OF THE CLASS OF 1922

Ainsworth, Ruth
 Hall, Thomas Edward
 Joy, Aryness
 Marchand, Leslie
 Smith, Herndon
 Welkel, Elizabeth¹
 West, Constance Mary
 Wiley, Lois
 Wilson, William Gray

Romantic Languages
 Chemistry
 Sociology
 English
 History
 English
 Chemistry
 Music
 Mathematics

UNDERGRADUATE SCHOLARSHIP HONORS

FIRST JUNIOR (SECOND YEAR) HONORS IN LAW

Crawford, William Randall

*Died, May 5, 1922.

SECOND JUNIOR (SECOND YEAR) HONORS IN LAW

Brown, Francis M.

Wiley, Alexander Charles

FIRST SOPHOMORE (FIRST YEAR) HONORS IN LAW

Jensen, Kai
Nievinski, Joseph

Wheelon, Burton Jones

SECOND SOPHOMORE (SECOND YEAR) HONORS IN LAW

Edberg, Wendell Earle
LaViolette, Doris Winden

Mifflin, Wesley John

FIRST JUNIOR HONORS

Amlot, Maurice (Jour.)
Astel, George B. (Jour.)
Baker, Samuel Garland (Engr.)
Baylis, Charles Augustus (Lib. Arts)
Bewley, Loyal Vivian (Engr.)
Bonnell, Jenness (Fine Arts)
Bryan, James Wesley, Jr. (Lib. Arts)
Bush, Marion Irene (Sci.)
Clark, Harold (Engr.)
Cohen, Philip (Engr.)
Cunningham, Allan Lester (Bus. Ad.)
Drew, Donald R. (Bus. Ad.)
Erwin, Susan (Lib. Arts)
Ewell, Mansfield Mac (Engr.)
Gose, Vera (Lib. Arts)

Hale, Ruth Elinor (Lib. Arts)
Holton, Karl William (Bus. Ad.)
Johnson, Philip (Sci.)
Klenck, Herman Adolph (Lib. Arts)
Kravik, Alfild Viola (Sci.)
Lundstrom, Allan Winston (Engr.)
McKay, Lorraine (Lib. Arts)
McKnight, Edwin L. Thomas (Sci.)
Pennell, Dorothy W. (Lib. Arts)
Raine, Margaret Muir (Lib. Arts)
Robertson, Howard Percy (Sci.)
Schmidtman, Edward H. (Engr.)
Southwick, Charles U. (Lib. Arts)
Wafer, Mary Barbara (Educ.)
Wood, Florence (Fine Arts)

SECOND JUNIOR HONORS

Bailey, Theodora Abbott (Sci.)
Berst, Charles A. (Jour.)
Brethorst, Alice (Educ.)
Browne, Charles Hamlin (Bus. Ad.)
Burgess, Madaline (Fine Arts)
Bursell, Frances (Lib. Arts)
Calhoun, Alma (Lib. Arts)
Case, Avenant Byron (Eng.)
Cave, Floyd (Lib. Arts)
Cochran, Lyall Baker (Engr.)
Colter, Mrs. Anita J. (Lib. Arts)
Coppage, Thomas (Bus. Ad.)
Dark, Kathryn (Sci.)
Dranga, Albert Edward (Bus. Ad.)
Ducasse, Mabel Lisle (Fine Arts)
Dunn, Margaret Carol (Educ.)
Eddy, Mrs. Erma Smith (Educ.)
Gallagher, James Oliver (Bus. Ad.)
Gaston, Dorothy Ruth (Phar.)
Gilbert, Horace Nathaniel (Lib. Arts)
Gilbert, Mary Margery (Lib. Arts)
Gowen, Felicia Joyce (Lib. Arts)
Green, Clarence Corieon (Lib. Arts)
Grimes, Margaret P. (Lib. Arts)
Groth, Joyce Irene (Lib. Arts)
Hanna, Mrs. Idella M. (Lib. Arts)
Heath, Dorothy Marion (Bus. Ad.)
Herrick, Ellen (Lib. Arts)
Hiatt, Amos (Bus. Ad.)
Hindle, Stuart James (Bus. Ad.)
Hougan, Edward Olson (Bus. Ad.)
Hughes, Edwin A. (Engr.)
Hutchinson, Ruby (Sci.)
Mason, Irwin (Engr.)

Jellison, Arthur James (Forestry)
Johnson, Anna E. (Lib. Arts)
Johnson, John Lawrence (Bus. Ad.)
Johnson, Martin Wiggs (Fisheries)
Johnson, Orscar Melvin (Bus. Ad.)
Johnson, Venus June (Sci.)
Kidder, Jay Douglas (Bus. Ad.)
Kinne, Frances E. (Fine Arts)
Kirkwood, John Erdmann (Bus. Ad.)
Kraft, Warren E. (Lib. Arts)
Lake, Florence Eunice (Bus. Ad.)
Larson, Edwin (Engr.)
Lawson, Thomas Strang (Lib. Arts)
Lind, Andrew (Lib. Arts)
Lundberg, Vivian M. (Lib. Arts)
McDonald, Lamora (Lib. Arts)
MacDonell, Vernon Eugene (Engr.)
Miller, Robert Earl (Engr.)
Minchall, Robert (Engr.)
Nyquist, Marie Beatrice (Phar.)
Farrington, Elizabeth (Lib. Arts)
Peterson, Richard F. (Bus. Ad.)
Platt, Ruth (Sci.)
Redmon, Dorothy B. (Fine Arts)
Richardson, Elizabeth (Lib. Arts)
Ross, Edward Allen, Jr. (Engr.)
Sather, Alene Mary (Lib. Arts)
Sisson, Howard Arthur (Mines)
Thayer, Jeanette Ellen (Lib. Arts)
Walkin, James Charles Edw. (For.)
West, Beth (Educ.)
Whitney, Albert Judson (Lib. Arts)
Williamson, Reba (Sci.)
Wright, Mrs. Helen E. (Lib. Arts)

FIRST SOPHOMORE HONORS

Bolsover, George (Bus. Ad.)
Brown, Minnie (Lib. Arts)
Brown, Sarah (Lib. Arts)
Carlson, Gladys May (Lib. Arts)
Cruzen, Edward A. (Bus. Ad.)
Cuttis, Cecelia (Lib. Arts)
Elliott, Maxine B. (Lib. Arts)

Estes, Fred J. (Engr.)
Forayth, Mrs. Frances W. (Lib. Arts)
Gottstein, Burton (Bus. Ad.)
Hendrickson, Harold Martin (Engr.)
Jones, Stephen Barr (Sci.)
King, Robert William (Bus. Ad.)
Lee, Mrs. Judith (Lib. Arts)

Loewer, Charles Hastings (Bus. Ad.)
 Newcomb, Muriel R. (Fine Arts)
 Peterson, Joren Allen (Bus. Ad.)

Pidduck, Marjorie K. (Fine Arts)
 Ritchie, Elizabeth (Lib. Arts)
 Woodward, Carolyn D. (Lib. Arts)

SECOND SOPHOMORE HONORS

Anderson, Mary Phyllena (Lib. Arts)
 Bingham, Blanche Irene (Lib. Arts)
 Boone, Julia (Bus. Ad.)
 Boyd, Robert Jesse (Mines)
 Burns, Barbara (Lib. Arts)
 Bush, Elizabeth Pauline (Fine Arts)
 Byers, Maryhelen (Fine Arts)
 Clark, Alta M. (Sci.)
 Clement, Andrew Werr (Engr.)
 Cole, Helene Adelaide (Lib. Arts)
 Cooke, Margaret Isabel (Lib. Arts)
 Davis, Vernon (Bus. Ad.)
 DeVine, Harry Edward (Lib. Arts)
 Dwyer, Kathryn R. (Lib. Arts)
 Eagleson, Margaret E. (Lib. Arts)
 Everett, Blanche (Lib. Arts)
 Faubert, Florentine V. (Lib. Arts)
 Finlay, Maxine (Jour.)
 Fitzgerald, Florence M. (Bus. Ad.)
 Fowler, Frederick C., Jr. (Lib. Arts)
 Gambee, Elizabeth (Fine Arts)
 Gingrich, Pearl (Lib. Arts)
 Gunlack, Ralph Harrelson (Lib. Arts)
 Greenleaf, Joseph T., Jr. (Bus. Ad.)
 Haggett, Dorothy Gene (Lib. Arts)
 Hansen, Hannah Amelia (Bus. Ad.)
 Harrison, Everett F. (Lib. Arts)
 Hoard, Bert Verne (Engr.)
 Hodges, Gilbert Phipps (Lib. Arts)
 Holmes, Vernon Payne (Engr.)
 Hoover, Henry Browne (Fine Arts)

Hopmann, Harry A. G. (Engr.)
 Hornberg, Jalmer T. (Bus. Ad.)
 Hunt, Lawrence W. (Bus. Ad.)
 Jenner, Cornelia Elizabeth (Bus. Ad.)
 Johnson, Fletcher A. (Bus. Ad.)
 Lamont, Ralph H. (Bus. Ad.)
 Langlow, Wesley Arnold (Lib. Arts)
 Lungreen, Rolfe Percy (Forestry)
 Lycette, John Phillip (Lib. Arts)
 MacDonald, Louise I. (Lib. Arts)
 Mayfield, Lola Myrtle (Bus. Ad.)
 McLeod, Jean Keith (Lib. Arts)
 McEachern, Gertrude E. (Lib. Arts)
 Middlebrook, Curtis L. (Bus. Ad.)
 Miller, Alfred Amasa (Lib. Arts)
 Mitchell, Verne Henry (Bus. Ad.)
 Murphy, Mary Ethel (Sci.)
 Nelson, Arthur Edward (Sci.)
 Nickel, Lucille F. (Lib. Arts)
 Nusbaum, Dean (Lib. Arts)
 Olsen, Esther Olinda (Lib. Arts)
 Pendleton, Helen E. (Lib. Arts)
 Ryder, Maude Alice (Lib. Arts)
 Sandusky, Oris Edward (Lib. Arts)
 Sather, Gertrude Bertha (Fine Arts)
 Scholl, Suzanne Elizabeth (Bus. Ad.)
 Snyder, Hart (Lib. Arts)
 Thomas, Irene (Lib. Arts)
 Watne, Edwin N. (Engr.)
 Wilson, Lucile Harlet (Sci.)
 Winter, Evelyn M. (Lib. Arts)

COMMISSIONS IN THE OFFICERS' RESERVE CORPS, UNITED STATES
 ARMY

SECOND LIEUTENANT, COAST ARTILLERY

Edward Lewis Burrough
 Austin V. Eastman
 Max Leslie Gray

Grant Duncan Ross
 Fred Albert Yeager

SECOND LIEUTENANT, INFANTRY

Alden Jackson Fischer
 Louis Fechter Janeck
 Earle Bagley Jenner

Kenneth Delong Otis
 Matthew Franklin Murphy
 Rubin Wolfe Raport

HONOR GRADUATE OF THE RESERVE OFFICERS' TRAINING CORPS

Edward Lewis Burrough

DEGREES CONFERRED AUGUST 30, 1922

BACHELORS DEGREES

COLLEGE OF LIBERAL ARTS

BACHELOR OF ARTS

Bailey, Myron Edwin
 Baker, Dorothy Ada
 Bates, John Montague
 Bennett, Richard Francis
 Bjorkquist, Enoch Joseph
 Bowman, Edna Elizabeth
 Bresslar, Margaret
 Brooks, Helen Louise

Broward, Ella Jeannette
 Bush, Lyle Kenneth
 Cathcart, Edith Eleanor
 Christensen, Clara Mabel
 Colner, Gladys Edna
 Condit, Charlotte Frances
 Dickson, Elizabeth
 Down, Andrew

Flaken, Marjorie Kerr
 Fleming, Bessie Jean
 Fletcher, Elizabeth Broadwater
 Flowers, Ruby Jane
 Gose, Vera
 Gray, Beatrice Wright
 Hunsaker, Herbert Cason
 Kangley, Helen
 Kelley, Martha Eugenie
 Lockerby, Deslah
 McCarthy, Clara Genevieve
 Minich, John McMillan
 Newlove, Gwendolyn George

Odegard, Peter H.
 Otis, Leota Beatrice
 Pannebaker, Myra Elizabeth
 Perry, Mary Agnes
 Powers, Anna Maria
 Price, Ruth Garland
 Shirkey, Emily Frances
 Tanner, Josephine Warren
 Trakositz, Elizabeth
 Ungersma, Bernadine
 von Eriksen, Lyle Gordon
 Wilson, Emma Jeannette

COLLEGE OF SCIENCE

BACHELOR OF SCIENCE

Corskie, Florence Beryl
 Hall, Vernon Knight
 Homan, Marlon
 Johnson, Florence Elizabeth
 Jurgensohn, Eva Ethel
 McDowell, John Watson
 McGill, Merrie P.
 Maus, Mildred Palmer

Meenach, Harrison William
 Meyer, Ambrose J.
 Murray, Charles Joseph
 Patterson, Bernice Lillian
 Rosen, Hilda Florence
 Ruzicki, Henry John
 Seelye, Walter Bale
 Small, Frank Llewellyn, Jr.

BACHELOR OF SCIENCE IN HOME ECONOMICS

Anderson, Louise Chandler
 Davidson, Beth

Holt, Lucy Minerva
 Judd, Elsie Gillis

COLLEGE OF EDUCATION

BACHELOR OF ARTS IN EDUCATION

Adams, Jeannette Adair
 Banker, Helen Doris
 Berg, Gunnar Hansen
 Bridston, Olga Albertine
 Fraser, William Maurice
 Graybeal, Mattie Floss
 Johnston, James Franklin
 Jones, David John
 Kautz, Beryl
 McLeod, Annabel Jean
 Mitchell, Lena Lillian

Malloy, Kathleen Jocelyn
 Mount, James Nathaniel
 Peterson, Ole Theodore
 Siemens, Lydia Jane
 Stone, Sally-Byrd
 Thune, Elmer Theron
 Vannoy, Louise Hynes
 Von Pressentin, Agnes Dorothea
 Williams, Mary Louise
 Wood, Muriel

COLLEGE OF FINE ARTS

BACHELOR OF FINE ARTS

Goodwin, Olive Irene

BACHELOR OF ARTS IN MUSIC

Marsh, Urna Lillian

BACHELOR OF MUSIC

Nelson, Irene M.

COLLEGE OF ENGINEERING

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Nelson, Ned Hillard
 Powell, Frederick, Jr.

Underwood, Robert C.

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Baker, Albert Lundy

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Edmonds, Robert Harold Gray (*Magna Cum Laude*)

UNIVERSITY OF WASHINGTON

COLLEGE OF FORESTRY

BACHELOR OF SCIENCE IN FORESTRY

Marling, Samuel Earle

Roberts, James Donald

COLLEGE OF PHARMACY

GRADUATE IN PHARMACY

Quass, Harry Peter

SCHOOL OF LAW

BACHELOR OF LAWS

Dunn, John Joseph
Hill, Cyril Dean

McClung, Ryland Eugene

LIBRARY SCHOOL

BACHELOR OF ARTS

Peterson, Agnes Christena

BACHELOR OF SCIENCE IN LIBRARY SCIENCE

Batcheller, Elva Lenore

COLLEGE OF BUSINESS ADMINISTRATION

BACHELOR OF BUSINESS ADMINISTRATION

Andrews, LaMar Bert
Ball, Rollyn J.
Byrd, Evelyn Lenore
Dose, Julia Louise
Eckhart, Robert Balser
Franklin, Shadrach Bector
Fry, Don William
Gleeson, Frank Patrick
Hart, Dean Brooks
Howard, Fred Albert
Lautz, Fritz ArthurLense, Howard Stites
Martin, Harold Morris
Myers, Donald F.
Owll, Eugene Edward
O'Neill, Larkin Alucious
Powers, Francis Joseph
Sayles, Frank Wells
Trevls, James
Wick, Sanford Adolph
Wilkinson, Jessie Townley
Zee, Ernest

FINE ARTS

CERTIFICATE OF TRAINING (PUBLIC SCHOOL MUSIC)

Kvindlog, Dorothy

SCIENCE

CERTIFICATE IN PUBLIC HEALTH NURSING

Davis, Inez Irene
Jones, Catherine Elizabeth

Rothwell, Martha D.

GRADUATE DEGREES

GRADUATE SCHOOL

MASTER OF ARTS

C. Floyd Appleton (Oriental Literature and Languages)
A.B., Seattle Pacific College, 1922
Thesis: International Relations in the Far EastStephen Marius Brinck (Education)
A.B., University of Washington, 1918
Thesis: A Study of Two Factors in School EliminationFrederick Holdaway Craske (Education)
B.Ed., University of Washington, 1920
Thesis: History of the Present Status of Educational Tests and Measurements
in the State of Washington

DEGREES

299

Verne LaDue Damon (Education)

A.B., Seattle Pacific College, 1918

Thesis: Protestant Schools in the Northwest: A Study of Their Organization, Administration and Advantages

Harry Stanley Ganders (Education)

B.Ed., University of Washington, 1920

Thesis: Theory and Practice in the Administration of Extra-Curricular Activities in Public Secondary Schools

Paul Guyet (German)

B.Ed., University of Washington, 1921

Thesis: Studien zu einer Untersuchung über den Einfluss von Schiller auf Hebbels "Demetrius" Fragment

Charles Ray Holbrook (Education)

B.Ed., University of Washington, 1919

Thesis: The Profession of High School Principal

Glenn Edwin Hoover (Sociology)

LL.B., University of Washington, 1912

A.B., University of Washington, 1919

Thesis: Rural Settlement in Western Washington

Alfred Pullman Johnson (Education)

A.B., University of Washington, 1917

Thesis: Duties, Powers, Preparation and Salaries of the Principals of the Accredited High Schools of Washington

Beatrice Mae McLeod (Education)

B.S., University of Oregon, 1920

Thesis: Education of Mental Defectives in Special Classes in Public Schools in the United States

Taiyu Mitsunaga (Oriental Languages and Literature)

A.B., Buddhist University, Japan, 1914

Thesis: The Shin Sect of Buddhism in Japan

Nels Arthur Bernhardsen Ness (Education)

B.Ed., University of Washington, 1919

Thesis: The Teaching of Grammar and its Results

John Augustine Osgulach (Philosophy)

A.B., University of Washington, 1922

Thesis: The Scholastic Interpretation of the Categories

Jennie Mabel Reed (Education)

B.Ed., University of Washington, 1920

Thesis: An Evaluation of the Socialized Method of Teaching English in Three Elementary Schools

Dudley Wilson Willard (Education)

B.Ed., University of Washington, 1917

Thesis: A Survey of Mental Ability With Some Educational Implications

MASTER OF SCIENCE

John Daniel Sullivan (Chemistry)

B.S., University of Washington, 1921

Thesis: The Role of Hydrogen Ion Concentration in the Precipitation of Colloidal Arsenious Sulfide

MASTER OF LAWS

Mary Gladys Hoard

A.B., University of Washington, 1914

LL.B., University of Washington, 1917

Thesis: Comparison of the American, France and Lawyers' Reports Annotated Digest Systems

NORMAL DIPLOMAS

UNIVERSITY FIVE-YEAR NORMAL DIPLOMA

August, 1922

Adams, Jeannette Adair
 Alway, Harrison Grant
 Anderson, Beatrice
 Arthun, Amber
 Baker, Charity Foxwell
 Banker, Helen Doris
 Bardarson, Otto Wathne
 Bell, Wyloha
 Bennett, Richard Francis
 Benthlen, Elsie Marie
 Berg, Gunnar Hansen
 Bjorkquist, Enoch Joseph
 Bonner, Pearl Pauline
 Bowman, Edna Elizabeth
 Bowman, Ward Simon
 Bridston, Olga Albertine
 Brooks, Helen Louise
 Byrd, Evelyn Lenore
 Carr, Howard Maynard
 Carroll, Geneva N.
 Carter, Mary Frances
 Chamberlain, Dorothy Rebekah
 Chambers, Edward Vincent
 Collins, Marie Anna
 Condit, Charlotte Frances
 Corskie, Florence B.
 Davidson, Beth
 Davis, Mary Aleen
 Delkin, Frederick Ladd
 Doremus, Della Ellen
 Erickson, Sylvia Patricia
 Fleming, Beattie Jean
 Fletcher, Elizabeth
 Foster, Olive Reeves
 Fry, Don William
 Galligan, Glendon Edward
 Gellermann, Louis Wanger
 Goodwin, Olive Irene
 Gray, Beatrice Wright
 Gray, Howard Burk
 Graybeal, Mattie Floss
 Henderson, Winfield Lester
 Hendricks, Ruth Gladys
 Hogue, Helen
 Hunsaker, Herbert C.
 Irwin, John Ivan

James, Marjorie
 Kangley, Helen
 Kautz, Beryl
 Kelley, Martha Eugenie
 Krogstad, Elva
 Legg, Emily
 McCarthy, Clara Genevieve
 McGill, Merrie F.
 McKibben, Wilbur Blaine
 Malloy, Kathleen Jocelyn
 Maus, Mildred Palmer
 Moore, Charles Alexander
 Moore, Gerald Edward
 Mount, James Nathaniel
 Mulhern, Frances Adele
 Nellson, Irene Margaret
 Newlove, Gwendolyn George
 Odegard, Peter H.
 Otis, Leota Beatrice
 Pannebaker, Myra Elizabeth
 Patterson, Bernice
 Pelz, Freda Elizabeth
 Peterson, Jennie
 Peterson, Ole Theodore
 Pittman, William H.
 Powers, Anna M.
 Richards, Bradford Alvin Ormsby
 Rosen, Hilda Florence
 Russell, Pearl Elizabeth
 Shirkey, Emily
 Siemens, Lydia Jane
 Stone, Sally-Byrd
 Sullivan, John Daniel
 Tanner, Josephine Warren
 Terry, Margaret Lois
 Thune, Elmer Theron
 von Ericksen, Lyle Gordon
 Von Presentin, Agnes Dorothea
 Wallace, Allan Reese
 Werner, Winnifred
 White, Frances Caroline
 Wienand, Carl Marcus
 Williams, Mary Louise
 Wilson, Emma Jeannette
 Wilson, Lena Eveline
 Wood, Muriel

UNIVERSITY LIFE DIPLOMA

August, 1922

Ahnquist, Martha Edith
 Aitken, Victor Marshall
 Allison, Weaver Judson
 Ashton, Fred W.
 Billings, Oscar Harold
 Birks, Margaret Elizabeth
 Bohn, Herman
 Brakel, Marguerite Bell
 Catton, Lois Jane
 Cole, Miriam Elizabeth
 Connell, Archie M.
 Craib, Margaret Cumming
 Cutter, Susan Ethel
 Dean, Mildred
 Dodge, Florence Frances
 Downjug, Mont Joseph
 Fleenor, Mame Stewart
 Gamwell, Barbara Greene
 Gardner, Jessie
 Gose, Gladys
 Grant, Harry M.
 Hallin, Ruth M.
 Hansen, Harry Parker
 Henderson, Ruby Jean
 Herner, Helen

Hutchinson, Pansy Ethlyn
 Hyde, Marguerite Roberta
 Jaadan, Neis
 Johnson, Alfred P.
 Jones, David John
 Kerrigan, Sylvia Finley
 Larson, Esther Mildred
 Legg, Lois Cornelia
 Lindblom, Florence Agnes
 Little, Edward Milton
 Meyer, Mabel June
 Mitchell, Lena Lillian
 Newman, Fern Burns
 Newton, Agnes Christensen
 Peterson, Gladys Loraine
 Phillips, Ruth Naomi
 Pitt, Mildred Esther
 Podmore, Virginia C.
 Poole, Jessie Lee
 Post, Harry Grant
 Prior, Pothena Rosemary
 Rich, Estelle May
 Robe, Dorothy C.
 Robertson, Berdena Marian
 Rohden, Elizabeth Helen

Rupert, Rhea
 Ruppenthal, Anna B.
 Scott, Jeanne B.
 Shaw, Fredericka Sully
 Schlauch, Gustav Herman
 Smithson, Emma Larson
 St. Clair, Esther Anna
 Sully, Helen Margaret
 Tack, Bernhard
 Teall, Hazel Connell
 Theilberg, Elizabeth Evelyn

Thomas, Ada
 Ulleland, Astris Olive
 Vannoy, Louise Hynes
 Wallace, Clara Louise
 Webster, Jessie Elizabeth
 Wharton, Florence Lillian
 Wilson, Doris Glasgow
 Wilson, Frances Imogene
 Wright, Ruth H.
 Zacharias, Rose Lydia
 Zickler, Irma Pauline

FELLOWSHIPS, SCHOLARSHIPS AND PRIZES, JUNE 20, 1922

†THE LORETTA DENNY FELLOWSHIPS

†THE ARTHUR A. DENNY FELLOWSHIPS

†FELLOWSHIPS IN THE COLLEGE OF MINES AND THE NORTHWEST EXPERIMENT
STATION UNITED STATES BUREAU OF MINES

†THE DUPONT FELLOWSHIP

THE BON MARCHE INDUSTRIAL FELLOWSHIP
Mary Aleen DavisCOLUMBIA UNIVERSITY FELLOWSHIP IN MINING ENGINEERING AND CHEMISTRY
(Not yet awarded)THE MARS FELLOWSHIP
(Not yet awarded)THE E. F. BLAINE ORATORICAL PRIZE OF \$100
Kai JensenTHE JUDGE KENNETH MACKINTOSH DEBATING PRIZE OF \$75
Jullan O. Matthews Herbert H. HielscherTHE ISABELLA AUSTIN MEMORIAL SCHOLARSHIP FOR A FRESHMAN WOMAN
Thelma WaltTHE UNIVERSITY STATE BANK PRIZE OF \$100
(Not yet awarded)THE JUDGE THOMAS BURKE PRIZES OF \$25 AND \$15 FOR EXCELLENCE
IN FRENCH
Marguerite Schofield
Charles D. HaynesTHE JUNIOR MILITARY PRIZE
Amos HlattTHE SAMUEL ROSENBERG SCHOLARSHIP OF \$200 IN FRENCH
Percy S. SparksTHE N. PAOLELLA GOLD MEDAL FOR EXCELLENCE IN ITALIAN
Vera GosaTHE FRANK BUTY PRIZE IN ITALIAN
(Not yet awarded)THE KELLOGG PRIZES OF \$35 IN ARCHITECTURE
Helen Gerl Harry B. Shoemaker Jeanness Bonnell

† See page 14.

UNIVERSITY OF WASHINGTON

THE GAMMA PHI BETA SCHOLARSHIP OF \$100

Anna M. Johnson

THE FREDERICK AND NELSON SCHOLARSHIPS OF \$500

Madeline Gordon

Carl Hubert Mahnker

THE BETA GAMMA SIGMA PRIZE OF \$75

Loren Allen Petersen

THE SIGMA DELTA CHI PRIZE OF \$100 IN JOURNALISM

Donald Harris

THE WASHINGTON ALUMNAE SCHOLARSHIP OF \$100

Ruth Ellnor Hale

THE VIMY RIDGE CHAPTER OF THE DAUGHTERS OF THE BRITISH EMPIRE PRIZE
OF \$100

(Not awarded)

THE THOMAS BURKE CHINA CLUB PRIZE OF \$25

(Not awarded)

THE KO LIANG YIH PRIZE OF \$25

(Not awarded)

THE VENINO SCHOLARSHIP IN MUSIC

Loma Roberts

THE JUDGE ALFRED BATTLE DEBATING PRIZE OF \$75

Eugene D. Ivy

Bartlett Rummel

THE FRATERNAL ORDER OF EAGLES ORATORICAL PRIZE OF \$100

Kai Jensen

THE CHARLES H. BEBB PRIZE OF \$100 IN ARCHITECTURE

Dwight Lopp

Verle L. Annis

John T. Jacobsen

REGISTER OF STUDENTS—1922-1923

*Year course in Public Health Nursing.

**U. S. Vocational Student.

Aagaard, Estella, LD, Bus.....Seattle
 Abakumoff, Konkordy V, Unc, EE...Siberia
 Abbott, Robert C, LD, CE...Anaconda, Mont
 Abbott, Susan, LD, LA.....Seattle
 Abel, Fred K, LD, LA.....Montesano
 Abel, William D, LD, For.....Montesano
 Abell, Charles H, LD, LA.....Seattle
 Abogadie, Maria, LD, Phar.....Philippines
 Abrahamson, Jacob, LD, Bus.....Seattle
 Abrams, Evelyn, LD, Bus.....Seattle
 Acacio, Tomas, LD, Eng.....Philippines
 Acena, Jacinta, LD, Sci.....Philippines
 Acklen, Joseph Warren, LD, LA.....Alaska
 Adams, Arlene, UD, FA.....Seattle
 Adams, Carlton F, UD, Eng.....Seattle
 Adams, Douglas, LD, Bus.....Seattle
 Adams, Eugene, Voc.....Seattle
 Adams, Evert G, LD, Bus.....Seattle
 Adams, James Hall, UD, Ed.....Touchet
 Adams, Howard W, LD, Bus.....Seattle
 Adams, John O, Voc.....Seattle
 Adams, John R, Unc, ME.....Seattle
 Adams, Leonard, LD, Eng.....Bellingham
 Adams, Robert R, LD, Bus.....Seattle
 Adams, Rosamond, LD, Sci.....Seattle
 Adamson, Louise, UD, Phar.....Seattle
 Adamson, Merritt, UD, Ed.....Seattle
 Addison, Dick M, LD, EE.....Seattle
 Adece, Wave M, Sp, FA.....Los Angeles, Cal
 Ademino, John, Unc, Bus.....Cla Elum
 Adkins, Helen E, LD, LA.....Seattle
 Adley, Alice, LD, LA.....Seattle
 Afrollan, Adriano, LD, CE.....Philippines
 Ageaoli, Andres G, LD, LA.....Philippines
 Aglazat, Fernando C, LD, Sci.....Philippines
 Agnew, Mertyl, LD, FA.....Centralla
 Agruda, Mariano, Unc, EE.....Philippines
 Aguinaldo, Pedro, LD, Min.....Philippines
 Aharan, Ada, LD, Bus.....Seattle
 Ahlblad, Gerda, LD, FA.....Seattle
 Ahrens, Russell F, UD, Bus...Farmington
 Aitchison, Edwin, LD, Bus.....Spokane
 Ajax, Ivor L, LD, Bus.....Wenatchee
 Alambra, Jose Z, LD, Sci.....Philippines
 Alambra, Rufo Z, UD, Bus.....Philippines
 Albaugh, Dorothy, LD, LA.....Spokane
 Albee, Archie V, Grad.....Seattle
 Alben, Edward A, LD, Eng...Vancouver, BC
 Alben, Nellie E, Grad.....Vancouver, BC
 Albertson, Lois, LD, LA.....Seattle
 Albin, Virginia, LD, LA.....Seattle
 Aldrich, Eric N, UD, Bus.....Walla Walla
 Aldwell, Doreen, LD, LA.....Port Angeles
 Alexander, Floyd M, LD, Phar...Mt Vernon
 Alexander, Roberta, Unc, Sci.....Wilbur
 Alexeevsky, Andrew, Unc, Sci.....Siberia
 Alger, Clere Sewell, LD, Eng.....Seattle
 Alinder, Elsie, UD, Sci.....Seattle
 Allan, Hazel, LD, LA.....Seattle
 Allan, Helen Q, LD, LA.....Seattle
 Allen, Albert A, LD, Bus.....Seattle
 Allen, Barbara, LD, LA.....Yakima
 Allen, Mrs Capitola P, LD, FA.....Seattle
 Allen, Clyde D, UD, ME.....Taholah
 Allen, Erdman J, UD, ChE.....Seattle
 Allen, George W, LD, FA.....Seattle
 Allen, Harry Warren, UD, Eng.....Seattle
 Allen, Lucena, LD, LA.....Seattle

Allen, Ruth F, UD, FA.....Toppeniah
 Allen, Stewart, Unc, Eng.....Rochester
 Allen, Thomas S, LD, Bus.....Seattle
 Allen, Vera, UD, LA.....Seattle
 Allen, Wayne, LD, LA.....Spokane
 Aller, Leon F, LD, LA.....Seattle
 Allison, Katherine M, LD, LA.....Seattle
 Alm, Reuben A, UD, Ed.....Nocksack
 Altman, Luther C, UD, Ed.....Bellingham
 Altman, Peter, Voc.....Spokane
 Alutin, Alexander N, LD, For.....China
 Amalleff, Sergius, UD, ME.....Seattle
 Ames, Fiorella, LD, LA.....Marysville
 Ames, Willis, LD, LA.....Seattle
 Amesbury, Jean, UD, Bus.....Seattle
 Amiot, Maurice, UD, LA.....Spokane
 Ammon, Lawrence, Sp, LA.....Seattle
 Amy, Winifred, LD, LA.....Seattle
 Anderberg, Marvin O, UD, ME.....Spokane
 Anders, Irene, LD, LA.....Seattle
 Andersen, Detmer, LD, Min.....Seattle
 Anderson, Adolph, UD, EE.....Vancouver
 Anderson, Alma, LD, LA.....Everett
 Anderson, Alma C, Grad.....Helena, Mont
 Anderson, Anton Lee, LD, LA.....Creston
 Anderson, Arthur A, 1st Law.....Seattle
 Anderson, Audrey Jean, LD, LA.....Seattle
 Anderson, Beatrice Lee, Unc, LA.....Seattle
 Anderson, Bernard, Unc, Bus.....Seattle
 Anderson, Charles N, LD, Bus.....Seattle
 Anderson, Claire L, LD, LA.....Seattle
 Anderson, Clarence E, LD, Bus.....Seattle
 Anderson, Clarence L, Grad.....Seattle
 Anderson, David G, UD, Eng.Vancouver, BC
 Anderson, Donald C, LD, Bus.....Aberdeen
 Anderson, Edith L, LD, LA.....Spokane
 Anderson, Edna M, UD, Ed.....Redmond
 Anderson, Edward, Unc, Bus.....Seattle
 Anderson, Edward Q, LD, LA.....Olympia
 Anderson, Edwin L, LD, Bus.....Chinook
 Anderson, Elizabeth, LD, LA.....Tacoma
 Anderson, Ella M, Grad.....Hibbing, Minn
 Anderson, Evelyn C, LD, EE.....Seattle
 Anderson, George A, LD, Bus.....Seattle
 Anderson, Helen D, Grad.....Mabana
 Anderson, Helen E, LD, LA...Emigrant, Mt
 Anderson, Helen G, LD, LA.....Seattle
 Anderson, Jessie J, Grad.....Vancouver, BC
 Anderson, Joe Wm, Unc, Bus...Kennewick
 Anderson, John A, UD, Bus.....Seattle
 Anderson, John Algot, LD, Eng.....Seattle
 Anderson, Joseph R, LD, Phar.....Enumelaw
 Anderson, Katherine, LD, Sci.....Anacortes
 Anderson, Lloyd A, LD, EE.....Roy
 Anderson, Logan, LD, Bus.....Edmonds
 Anderson, Mabel Felton, UD, LA.....Edmonds
 Anderson, Marjorie, LD, Bus.....Mt Vernon
 Anderson, Melvin G, UD, Sci.....Seattle
 Anderson, Niles M, LD, For.....Mabana
 Anderson, Norman, LD, Sci...Dawson, Minn
 Anderson, Philena, UD, LA.....Mt Vernon
 Anderson, F Raymond, LD, LA.....Tacoma
 Anderson, Stanley J, Unc, Bus.....Seattle
 Anderson, Sylvester, LD, Eng.....Everett
 Anderson, Valentine, LD, FA.....Seattle
 Anderson, Victoria, Grad.....Seattle
 Anderson, Walter, UD, Bus.Coeur d'Alene, Id
 Anderson, William M, LD, LA.....Vancouver

Andrews, Charles W, Unc, Bus...Marysville
 Andrews, Clarence, LD, Bus.....Seattle
 Andrews, Rita L, Grad.....Seattle
 Andrews, Roy Gardiner, LD, LA.....Seattle
 Angel, John P, Voc.....Seattle
 **Angervine, Roy Joseph, Sp, Bus.....Seattle
 Angst, Ernest C, UD, Sci.....Chehalis
 Anicich, James, LD, EE.....Enumclaw
 Annett, Kenneth, LD, Bus.....Hoquiam
 Ansoorge, Norman S, LD, LA.....Seattle
 Appleton, C Floyd, Grad.....Seattle
 Aquino, Juan, LD, Bus.....Philippines
 Arai, Allen K, UD, FA.....Seattle
 Arai, Clarence T, 2nd Law.....Seattle
 Archer, Glenwood E, LD, LA.....Seattle
 Archer, Helen R, UD, FA.....Seattle
 Arciaga, Moses, LD, LA.....Philippines
 Arend, Harry, LD, LA.....Spokane
 Argall, Margaret, LD, LA.....Spokane
 Arizumi, Kiyo, LD, Phar.....Seattle
 Arkley, Helen L, Grad.....Tacoma
 Armin, Julia E, LD, LA.....Seattle
 Armitage, Harry, LD, Bus.....Yakima
 Armstrong, Willmot, LD, LA.....Everett
 Arnesen, Elias T, Grad.....Seattle
 Arneson, Gus N, Unc, LA.....Puyallup
 Arnold, Harry A, LD, Bus.....Seattle
 Arnt, Tiller, LD, LA.....Seattle
 Arthur, Jenn W, LD, FA.....Seattle
 Arzaga, Flaviano, LD, ME.....Philippines
 Ash, Simon H, LD, Min.....Seattle
 Ashley, Paul P, LD, LA.....Seattle
 Ashton, Emmett R, UD, EE.....Seattle
 Asp, Florence E, LD, Bus.....Edmonds
 Astel, George B, UD, LA.....Stanwood
 Astrup, Mark H, LD, LA.....Seattle
 Atkins, Harry, Voc.....Chattanooga, Tenn
 Atwood, Cathryn, LD, Bus.....Seattle
 Atwood, Lucile, LD, FA.....Toppenish
 Audett, Theophilus B, LD, LA.....Seattle
 Augustine, J Webster, LD, LA.....Seattle
 Auld, Willis R, UD, Bus.....Yakima
 Aumann, Dorothy, LD, LA.....Port Angeles
 Austin, George R, Grad.....Seattle
 Austin, Grannis H, LD, LA.....Monroe
 Austin, Frances M, UD, Ed.....Seattle
 Austin, Russell A, UD, Bus.....Aberdeen
 Austin, V Thomas, LD, Sci.....Pasco
 Avey, Ralph D, LD, ME.....Kent
 Axe, Erwin Francis, LD, For.....Seattle
 Axtell, Frances L, UD, Sci.....Bellingham
 Ayers, Ethel F, LD, LA.....Olympia

Babbitt, Ardisley, LD, FA.....Seattle
 Babbitt, Frederic M, LD, EE.....Seattle
 Babcock, Jessie May, LD, Sci.....Port Angeles
 Bachelder, Robert C, LD, Bus.....Everett
 Bachman, Raymond L, LD, LA.....Spokane
 Backer, James, LD, EE.....Seattle
 Backland, John, Jr, LD, LA.....Seattle
 Bacon, Katharine R, LD, LA.....Seattle
 Badgley, Beulah M, LD, Bus.....Dayton
 Badgley, Charles H, LD, Bus.....Seattle
 Badgley, Elizabeth, LD, LA.....Seattle
 Bagwill, John, Unc, Bus.....Seattle
 Bahl, Albert J, LD, Bus.....Seattle
 Bahnsen, Maurice, LD, Bus.....Helena, Mont
 Bailey, Arthur E, LD, LA.....Seattle
 Bailey, Dorothy B, UD, Sci.....Seattle
 Bailey, Ellsworth B, UD, EE.....Tacoma
 Bailey, Frank H, Grad.....Seattle
 Bailey, James M, 3rd Law.....Seattle
 Bailey, Henrietta Ruth, LD, LA.....Seattle
 Bailey, Henry R, LD, Bus.....Seattle
 Bailey, Katharine A, LD, LA.....Seattle
 Bailey, Oscar H, Voc.....Seattle
 Bailey, Ruth L, LD, LA.....Seattle

Bailey, Thelma, LD, LA.....Seattle
 Bailey, Theodora A, UD, Sci.....Seattle
 Bailey, Warren, Grad.....Snyder, Okla
 Baillie, Provis M, UD, LA.....Seattle
 Bain, Grace I, Unc, FA.....Seattle
 Bain, Harry, UD, Bus.....Seattle
 Bain, Margaret D, LD, FA.....Seattle
 Baird, Charles Glenn, Grad.....Snohomish
 Baird, Jean, LD, LA.....Seattle
 Bakeman, Charles T, LD, EE.....Snohomish
 Bakeman, Frances, UD, LA.....Snohomish
 Baker, Allen, LD, Bus.....Everett
 Baker, Dorothy Ada, Grad.....Seattle
 Baker, Edward, LD, For.....Redmond
 Baker, Ella Louise, UD, Sci.....Puyallup
 Baker, Helen M, LD, LA.....Seattle
 Baker, Irene Louise, LD, LA.....Seattle
 Baker, Jane A, LD, LA.....Yakima
 Baker, Lillian W, LD, LA.....Seattle
 Baker, Mary F, LD, LA.....Hoquiam
 Baker, Mildred, LD, Phar.....Centralia
 Baker, Ruth E, UD, Sci.....Seattle
 Baker, Samuel G, Jr, UD, Eng.....Seattle
 Baker, Urel Lester, LD, Bus.....Centralia
 Baker, Warren B, LD, ME.....Seattle
 Bakke, F William, UD, Bus.....Spokane
 Balakshin, Nathaly, LD, Eng.....Shanghai, Chi
 Balch, Albert, Unc, Bus.....Blaine
 Baldacchino, Massimo, Unc, Sci.....Seattle
 Baldwin, Clarence E, UD, Bus.....Elma
 Bale, Ruth C, UD, Sci.....Seattle
 Ballard, Mary E, Grad.....Seattle
 Ballard, Myrtle W, Grad.....Seattle
 Balke, Alfred, Voc.....Seattle
 Baltazar, Emilio, LD, Bus.....Philippines
 Balzer, Norb, UD, Bus.....Seattle
 Balzer, Walter W, LD, Bus.....Spokane
 Bamford, Ruth, UD, FA.....Seattle
 Bancroft, Cecyl, LD, LA.....Everett
 Bangs, J Arthur, LD, Bus.....Underwood
 Banker, Gordon F, LD, Bus.....Winthrop
 Banks, William C Jr, Unc, LA.....Yakima
 Baptista, Nicolas, LD, CHE.....Seattle
 Barber, Helen Marguerite, LD, LA.....Kent
 Barclay, Maisie, LD, LA.....Ontario, Cal
 Bard, Burton E, LD, Min.....Seattle
 Bard, Mary Ten Byck, LD, FA.....Seattle
 Bardon, Gunbild, Unc, LA.....Seattle
 Bardon, Guy John, LD, LA.....Seattle
 Barker, Carl Vincent, Grad.....Seattle
 Barker, Robert Williams, LD, Eng.....Seattle
 Barkley, Catherine C, LD, LA.....Aberdeen
 Barlow, L Leland, UD, LA.....Seattle
 Barlow, Marie F, LD, LA.....Bellingham
 Barlow, Marie S, LD, Sci.....Isaquah
 Barlow, Mildred, LD, FA.....Tacoma
 Barnes, Beatrice, LD, Sci.....Seattle
 Barnes, Chester, Unc, LA.....Goldendale
 Barnes, Frances Jane, UD, LA.....Seattle
 Barnes, George H, LD, For.....Rossland, BC
 Barnes, Ruth M, LD, LA.....Salem, Or
 Barnes, P Tulloch, LD, LA.....Seattle
 Barnett, Mack F, LD, Sci.....Tacoma
 Barnhart, Florence J, LD, LA.....Ellensburg
 Barnhisel, Howard, UD, For.....Seattle
 Barr, Virginia, LD, LA.....Seattle
 Borrat, Boris, Unc, Mines.....Siberia
 Barrett, Richard, Sp, LA.....Seattle
 Barrett, Roy I, UD, Sci.....Easton
 Barron, Dale H, LD, Phar.....Seattle
 Barrow, Gwendolyn, Unc, Sci.....Machias
 Barry, Linda Dalzell, LD, Fish.....Seattle
 Barse, Lila B, Unc, LA.....Crystal Falls, Mich
 Bartell, Louise, LD, LA.....Chehalis
 Bartell, Virginia Z, LD, FA.....Seattle
 Bartels, Louise, LD, LA.....Seattle
 Barthelmy, Lillian, LD, FA.....Seattle
 Bartholomew, Wayne L, UD, Bus.....Seattle

Bartlett, Edward L, LD, LA.....	Alaska
Bartlett, Frederick A, UD, For.....	Seattle
Bartley, James Leland, LD, Eng.....	Zillah
Bartolome, Gregorio, LD, Fish.....	Philippines
Barwick, Archie George, LD, Phar.....	Seattle
Bascom, Hartsell W, LD, LA.....	Monroe
Bash, Francis C, LD, Min.....	Hanford
Bashy, Elmer, LD, ME.....	Tacoma
Basor, Thurston C, LD, LA.....	Kelso
Bassage, Harold E, LD, LA.....	Seattle
Basset, Samuel B, Unc, Law.....	Seattle
Bassford, Dorothy Fern, LD, LA.....	Seattle
Bassford, F Albert Jr, Unc, Bus.....	Seattle
Batchelder, George, LD, EE.....	Arlington
Bateson, Florence E, LD, LA.....	Olympia
Bateson, Mildred M, LD, Sci.....	Olympia
Batie, Carmen A, LD, LA.....	Twisp
Batie, Velma M, LD, LA.....	Twisp
Batson, Mabel A, UD, LA.....	Seattle
Baumgartner, Grace, UD, FA.....	Seattle
Bautista, Enrique, LD, CE.....	Philippines
Bayless, Marlon, LD, LA.....	Seattle
Bayley, Elizabeth, UD, LA.....	Seattle
Bayley, Madeline V, LD, FA.....	Seattle
Bayley, Mildred, Unc, FA.....	Seattle
Bayley, Nancy, Grad.....	The Dalles, Ore
Bayley, Nettie, LD, LA.....	Seattle
Baylis, Charles A, UD, LA.....	Spokane
Bazzett, Hamilton S, UD, Bus.....	Seattle
Bazzett, Marlon, UD, LA.....	Seattle
Beach, Leota M, UD, Sci.....	Seattle
Beager, Laura, LD, Bus.....	Seattle
Beal, Bernice, LD, LA.....	Seattle
Beamer, H Norland, LD, Bus.....	Tacoma
Bean, Leonard, Unc, Law.....	Walla Walla
Beardslee, Will G, Voc.....	Bothell
Beardsley, Arthur Sydney, Grad.....	Seattle
Beattie, Fred, LD, Bus.....	Seattle
Beaver, Gladys, LD, FA.....	Seattle
Becken, Helen, LD, FA.....	Seattle
*Bechtel, Albert Newton, Sp, Bus.....	Seattle
Beck, Agatha, Unc, FA.....	Chehalis
Beck, Harry G, LD, Sci.....	Seattle
Beck, Jean, LD, LA.....	Seattle
Beck, Nemias Bramlette, LD, LA.....	Seattle
Beck, William H, LD, Bus.....	Seattle
Beckerjerk, Rozella, UD, Phar.....	Seattle
Becket, Ethelyn May, LD, LA.....	Seattle
Becket, Hugh M, Unc, Bus.....	Seattle
Becket, Welton David, LD, FA.....	Seattle
Beckmann, Jewel, LD, FA.....	Asotin
Beckwith, Edris Lucile, UD, LA.....	Seattle
Beddow, Elizabeth, LD, FA.....	Seattle
Beebe, Marion, LD, FA.....	Seattle
Beede, Alan F, LD, Bus.....	Seattle
Beeler, Donald T, UD, Sci.....	Seattle
Berra, Norman A, LD, Bus.....	Seattle
Bezer, Arnold R, 2nd Law.....	Seattle
Begley, Marguerite, LD, FA.....	Raymond
Behrens, Eunice C, LD, LA.....	Seattle
Behswanger, C C, LD, Eng. Picture Butte, Alta	
Belatti, Victor, Unc, LA.....	Seattle
Bell, Carl S, Grad.....	Seattle
Bell, Mrs Fannye G, UD, Ed.....	Seattle
Bell, Frank N, LD, Bus.....	Seattle
Bell, James E, LD, Phar.....	Pt Townsend
Bell, James M, Voc.....	Seattle
Bell, Mildred, LD, Sci.....	Yacolt
Bell, Milo C, LD, Eng.....	Seattle
Bell, Milton E, LD, Bus.....	Seattle
Bell, Ward, Y UD, EE.....	Seattle
Bellazzi, Roberta A, LD, LA.....	Seattle
Bellis, Harold T, LD, FA.....	Roslyn
Bellman, Vernon, LD, Bus.....	Aberdeen
Belatti, Victor, Unc, LA.....	Seattle
Belden, Fannie Evelyn, Unc, LA.....	Seattle
Bemis, Harvey R, Unc, FA.....	Sumner
Bender, Edwin B, LD, Bus.....	Tacoma
Bender, Nathaniel B, LD, LA.....	Tacoma
Bendetson, Selma A, LD, LA.....	Aberdeen
Benedict, Viva Ella, LD, Sci.....	Bellingham
Benedum, Darwin Marx, LD, Sci. Greenacres	
Benham, Dorothy, LD, LA.....	Seattle
Benjamin, George T, UD, Min.....	Vancouver
Bennett, Constance, LD, Bus.....	Seattle
Bennett, Dudley, LD, Bus.....	Seattle
Bennett, Dwight G, LD, LA.....	Seattle
Bennett, Lawrence, LD, FA.....	Grandview
Bennett, Richard, Grad.....	Kirkland
Bennett, Sumner W, Unc, EE.....	Falls City
Bennett, Volney, LD, Bus.....	Seattle
Bennetts, Alice L, LD, LA.....	Tacoma
Bennie, Alice A, UD, LA.....	Stanwood
Benson, Clarence W, UD, Bus.....	Spokane
Bentley, Galen Willard, LD, FA.....	Seattle
Bentley, Helen, LD, Sci.....	Seattle
Bentley, Nora M, LD, Sci.....	Hoquiam
Bereiter, Marvel, LD, LA.....	Seattle
Berg, Lela Bernice, LD, LA.....	Seattle
Berg, Margaret, UD, Ed.....	Seattle
Berglund, N William, LD, ME.....	Newcastle
Bergman, Eunice M, LD, Sci.....	Seattle
Bergman, Harry, LD, LA.....	Seattle
Bergren, Evelyn, LD, Sci.....	Seattle
Bergstrom, Charlotte, LD, FA.....	Everett
Bergetrom, Conrad E, LD, FA.....	Hoquiam
Bergetrom, Theodore, LD, EE.....	Seattle
Bernal, Federico A, LD, Sci.....	Philippines
Berolski, Edward M, LD, LA.....	Bellingham
Berquist, Fred E, UD, LA.....	Spokane
Berry, Elsa, LD, LA.....	Seattle
Berry, Roy Nell, UD, Eng.....	Tacoma
Berst, Charles A, UD, LA.....	Portland, Or
Bertelson, E B, LD, LA.....	Albert Lee, Minn
Best, Elmyra Mary, LD, Sci.....	Yakima
Best, Erle C, Unc, Law.....	Grants Pass, Or
Best, Walter C, LD, Bus.....	Seattle
Bettinger, Dawn, LD, FA.....	Edmonds
Betts, Kennedy, LD, Bus.....	Seattle
Bentel, Margaret A, LD, LA.....	Tacoma
Beveridge, Alton V, Aud.....	Seattle
Bewley, Esther Gail, LD, LA.....	Seattle
Bewley, Loyal V, UD, EE.....	Seattle
Bewley, Ruth Gail, UD, Ed.....	Seattle
Beymer, Ralph, LD, LA.....	Seattle
Bibee, Georgia, LD, Sci.....	Seattle
Bibgy, Valley, UD, FA.....	Tacoma
Bigelow, Dwight B, LD, Bus.....	Seattle
Biggar, Edson, LD, LA.....	Seattle
Biggar, Harold W, LD, LA.....	Spokane
Biggers, Ruth C, Unc, LA.....	Seattle
Biggs, M Catherine, UD, FA.....	Seattle
Billebach, Martin M, LD, LA.....	Winlock
Billings, Charles N, UD, CE.....	Seattle
Bindon, Douglas, LD, LA.....	Bellingham
Bindon, Leonard W, LD, FA.....	Bellingham
Bingham, Irene B, UD, LA.....	Seattle
Bingham, Robin H, LD, Sci.....	Pt Angeles
Bircher, Donald O, Voc.....	Seattle
Bishop, Beulah Belle, Unc, Bus.....	Tacoma
Bishop, Theodore R, UD, LA.....	Clarkston
Bishop, Vivian, LD, Sci.....	Everett
Bissett, Clark P Jr, 2nd Law.....	Seattle
Bissett, Rudolph A, Grad.....	Seattle
Bitner, Ella, UD, Sci.....	Seattle
Bixler, Ralph S, Unc, Bus.....	Heyburn, Ida
Black, Elizabeth, UD, LA.....	Ellensburg
Black, John A, UD, Eng.....	Wenatchee
Black, Mary C, UD, Ed.....	Tacoma
Black, Ruth U, LD, Sci.....	Pt Angeles
Blackburn, Mildred, LD, LA.....	Camp Lewis
Blaine, James A, Unc, Law.....	Seattle
Blaine, Louise, LD, LA.....	Seattle
Blair, Birdie, LD, Sci.....	Spokane
Blake, Clare, Unc, LA.....	Powroy
Blake, Josephine, LD, LA.....	Seattle

Blakeslee, George H, LD, Bus.....	Spokane
Blanchard, Bess E, UD, LA.....	Pt Orchard
Blanchard, Fred C, LD, LA.....	Skagway, Aka
Blando, Patricio, LD, LA.....	Seattle
Blanks, Evangelina, LD, FA.....	Everett
Blatherwick, Leonard N, LD, FA.....	Bremerton
Blaxill, Verna H, Unc, Bus.....	England
Block, Josephine, LD, LA.....	Denver, Colo
Blogg, Ainsworth, UD, LA.....	Seattle
Blomquist, Louis, UD, Bus.....	Seattle
Blossom, Rosamond, LD, LA.....	Seattle
Blough, Allie, Grad.....	Seattle
Blowers, Francis E, LD, For.....	Visalia, Cal
Bloxham, Charles G, LD, EE.....	Oso
Bloxom, John M, LD, LA.....	Seattle
Blue, Eugenia, LD, LA.....	Seattle
Blue, Myriam, Unc, Sci.....	Seattle
Blum, John, LD, Bus.....	Seattle
Blunt, Gilbert M, LD, Eng.....	Bellingham
Boardman, Mary, LD, LA.....	Spokane
Bock, Helen, Unc, LA.....	Boise, Ida
Bogardus, E F, LD, Bus.....	Los Angeles, Cal
Bogdanoff, Mayme, UD, Ed.....	Seattle
Boggs, Thelma V, LD, LA.....	Seattle
Bogojavlensky, Boris, UD, CB.....	Seattle
Bogojavlensky, Gieb, Unc, Sci.....	Seattle
Bohn, Rachel, UD, Sci.....	Yakima
Bohn, J Reamer, UD, Sci.....	Yakima
Bolderston, Constance, UD, LA.....	Portland, Or
Boldman, Chester L, Voc.....	Seattle
Bolinger, Morris A, 2nd Law.....	Methow
Bollam, Darrell C, UD, Sci.....	Portland, Or
Bolles, Thomas D, LD, LA.....	Seattle
Bolman, James, UD, Ed.....	Seattle
Bolsover, G Stanford, LD, Bus.....	Seattle
Bolstad, Bernard, LD, Bus.....	Seattle
Bomar, Ralph L, Voc.....	Seattle
Bomstead, Edward S, UD, ME.....	Tacoma
Bond, Charles A, LD, ChE.....	Bellingham
Bond, Floyd K, LD, ChE.....	Bellingham
Bone, Marguerite, LD, FA.....	Juneau, Aka
Bonell, James Howell, LD, Bus.....	Fall City
Bonesteel, Kathryn, LD, FA.....	Seattle
Bonham, Mrs Almira K, Grad.....	Seattle
Boni, A John, LD, Min.....	Issaquah
Bonnefond, Raymond, Unc, LA.....	Hancock, NY
Bonner, Ida, LD, Sci.....	Seattle
Bonnett, Howbert B, UD, ME.....	Seattle
Bonzell, John, Sp, Bus.....	Sydney, Australia
Booker, Fay M, UD, Ed.....	Seattle
Booker, Paul E, LD, Eng.....	Seattle
Booman, Albert, UD, LA.....	Lynden
Boomer, Haven Merle, Unc, Bus.....	Kelso
Boone, Julia L, LD, Sci.....	Seattle
Booth, Mira E, UD, Ed.....	Washtucna
Booser, Marjorie C, LD, FA.....	Seattle
Borah, Mrs Juanita F, LD, LA.....	Spokane
Borland, Gretchen, LD, FA.....	Seattle
Borst, Joseph O, LD, Eng.....	Centralia
Bostwick, J Robert, LD, EE.....	Seattle
Botsford, Sherwood, LD, ChE.....	Seattle
Boudry, C Milburn, LD, LA.....	Seattle
Bourgault, Victoria, Unc, LA.....	Shelton
Bourns, Philip W, LD, For.....	Elk, Cal
Bouse, Earl Fred, LD, For.....	Seattle
Bousfield, Winifred, LD, Bus.....	Seattle
Boutelle, Virginia, LD, LA.....	Seattle
Bow, Kathleen, Unc, FA.....	Seattle
Bowen, Albert H, Voc.....	Seattle
Bowen, Mary Elizabeth, LD, LA.....	Seattle
Bowen, William E, LD, Bus.....	Spokane
Bower, Donald D, LD, Bus.....	Centralia
Bower, Phyllis M, UD, Ed.....	Seattle
Bower, Ruth A, LD, FA.....	Seattle
Bowker, Ronald H, LD, Bus.....	Sunnyside
Bowman, Donald, LD, For.....	Seattle
Bowman, William, LD, Bus.....	Mabton
Bowman, William C, LD, LA.....	Pt Orchard
Boxen, Mary Edith, LD, LA.....	Seattle
Boyce, Lenox, LD, Sci.....	Seattle
Boyd, Esther, LD, LA.....	Seattle
Boyden, Blaine M, LD, LA.....	Issaquah
Boyer, Edith A, LD, LA.....	Portland, Or
Boyer, Louis A, LD, Bus.....	Butte, Mont
Boyer, Margaret, UD, LA.....	Seattle
Boyer, Vera, UD, LA.....	Seattle
Boyeson, J Lucas, Voc.....	Seattle
Boyle, Gordon L, LD, Bus.....	Everett
Boynton, Fred R, Unc, Law.....	Seattle
Bracken, Harold, LD, Phar.....	Seattle
Brackett, Laurence, LD, LA.....	Seattle
Brackett, Leroy W, UD, Eng.....	Yakima
Bradford, Denman F, Voc.....	Yakima
Bradley, Lorene, LD, FA.....	Stellacoom
Bradley, Russell A, LD, LA.....	Ionla, Mich
Brady, Bryant, LD, LA.....	Seattle
Brady, Charles F, LD, For.....	National
Brady, Dorothy, Unc, FA.....	Spokane
Brady, Elizabeth C, Sp, Sci.....	Seattle
Braford, Caty J, LD, Phar.....	Seattle
Brngdon, Wynne, LD, Sci.....	Seattle
Bragg, George Tully, LD, Bus.....	Pullman
Brainard, Silas A, LD, Bus.....	Seattle
Bramhall, William C, Unc, Bus.....	Seattle
Brandebery, Elizabeth, Unc, FA.....	Seattle
Brannin, B Frances, LD, LA.....	Seattle
Brannen, Robert C, Voc.....	Seattle
Bras, Clarice C, LD, Sci.....	Seattle
Brassington, Dorothy, LD, LA.....	Seattle
Brattain, Betty, LD, LA.....	Seattle
Braun, Paul John, UD, ME.....	Edwall
Bravender, W Frederick, LD, LA.....	Seattle
Brawman, Abramam M, Unc, LA.....	Spokane
Bray, Frank N, UD, Bus.....	Sumner
Bray, Ruth, LD, FA.....	Seattle
Brazel, Charles C, Sp, Bus.....	Olympia
Brazier, Donald H, LD, Bus.....	Seattle
Breakay, Forrest, UD, Ed.....	Bellingham
Breckenridge, James T, LD, Bus.....	Seattle
Bregg, Dorsey A, UD, BE.....	Ellensburg
Breland, Rufus G, Grad.....	Seattle
Brengan, Samuel M, UD, ME.....	Seattle
Brennan, Robert A, UD, Bus.....	Seattle
Bresnahan, Myrtle, UD, Ed.....	Seattle
Bressler, Alice, LD, LA.....	Seattle
Brethorst, Alice B, UD, Ed.....	Seattle
Bretland, Charles L, Unc, Sci.....	Seattle
Brewer, Glenn E, LD, LA.....	Seattle
Brewer, R Kenneth, LD, Bus.....	Spokane
Bridges, Walter, LD, Sci.....	Orillia
Bridgman, Glen H, LD, Bus.....	Seattle
Bridgman, Alfred W, LD, Bus.....	Vashon
Brier, Howard, LD, Bus.....	Everett
Briggs, Clifford M, LD, EE.....	Bremerton
Briles, Gerald E, LD, Bus.....	Seattle
Brink, Herbert, LD, Bus.....	Kent
Briscoe, Jacob W, LD, Bus.....	Walla Walla
Britt, Harold, Unc, For.....	Everett
Britton, Louise, LD, LA.....	Dallas, Tex
Brix, Dale Russell, LD, Sci.....	Monroe
Brix, Egbert, LD, LA.....	Tacoma
Brobeck, Roy A, LD, FA.....	Seattle
Brockerman, George W, Voc.....	Seattle
Brockman, Blaine, Unc, Law.....	Seattle
Broder, Percy, UD, LA.....	Seattle
Broderick, Mary, Unc, LA.....	Cashmere
Brooks, Bernice Norma, UD, LA.....	Wapato
Brooks, Shelton, LD, ME.....	Seattle
Broom, Lylas, LD, LA.....	Seattle
Bronson, Donald, LD, LA.....	Seattle
Bronson, Philip, Unc, LA.....	Seattle
Brower, Ora, LD, FA.....	Seattle
Brown, Adelaide, UD, LA.....	Seattle
Brown, Barton W, UD, CE.....	Seattle
Brown, M Catherine, LD, LA.....	Selah

Brown, Cecil C, LD, Sci.....	Dayton
Brown, Charles, LD, Bus....	Great Falls, Mt
Brown, Davenport, LD, LA.....	Sumas
Brown, Dorothea M, LD, FA.....	Seattle
Brown, Edda V, UD, LA.....	Tacoma
Brown, Elizabeth, LD, LA.....	Seattle
Brown, Florinda, UD, Ed.....	Tacoma
Brown, Francis M, 3rd Law.....	Seattle
Brown, Gordon A, LD, Bus.....	Seattle
Brown, Grace Lucile, LD, Sci.....	Seattle
Brown, Harold R, LD, Eng.....	Seattle
Brown, Harry A D, LD, Bus.....	Tolt
Brown, Harry Henry, UD, Ed.....	Seattle
Brown, Henry James, UD, LA.....	Seattle
Brown, O Horace, Voc.....	Seattle
Brown, Hugh G, LD, FA.....	Wenatchee
Brown, Imogene, UD, Ed.....	Sumas
Brown, Joseph Luther, LD, LA.....	Elma
Brown, Katheryne C, LD, FA.....	Tacoma
Brown, Lois E, Grad.....	Seattle
Brown, Lorna B, UD, LA.....	Seattle
Brown, Marguerite L, UD, FA.....	Seattle
Brown, Martin, LD, ChE.....	Seattle
Brown, Mary C, LD, LA.....	Seattle
Brown, McDonald R, LD, Bus.....	Rubens, Ida
Brown, Minnie J, LD, LA.....	Seattle
Brown, Norman C, LD, LA.....	Everett
Brown, Robert J, Voc.....	Seattle
Brown, Robert W, LD, LA.....	Seattle
Brown, Sarah, UD, LA.....	Seattle
Brown, Stephen D, Voc.....	Seattle
Brown, Vera, LD, LA.....	Seattle
Brown, Warren Jr, LD, LA.....	Tacoma
Brown, William W, LD, Bus.....	Seattle
Browne, Clarence H, UD, Bus.....	Seattle
Browne, Marjory C, LD, LA.....	Wenatchee
Browning, George, LD, Bus.....	Seattle
Brunner, Elma, LD, FA.....	Seattle
Brunner, John F, LD, EE.....	Addy
Brunswick, Norman W, LD, Bus....	Chehalis
Bryan, Collis C, LD, Eng.....	Seattle
Bryan, James W Jr, UD, LA.....	Seattle
Bryan, Merlaine, LD, LA.....	Seattle
Eryant, Charles M, Voc.....	Yakima
Eryant, Mildred, LD, LA.....	Seattle
Bryce, Gertrude A, UD, LA.....	Victoria, BC
Buchanan, Lorna M, UD, LA.....	Clear Lake
Buckley, Daniel, LD, Sci.....	Seattle
Buckley, Harry B, LD, For.....	Seattle
Budd, Irene, UD, Phar.....	Seattle
Buerk, Arthur W, LD, Bus.....	Seattle
Buerk, Louise, UD, LA.....	Seattle
Buffalo, Paul, Unc, LA.....	Seattle
Bugge, Janice B, LD, Bus.....	Seattle
Buhl, Frances Helen, LD, LA.....	Seattle
Bullock, Cecil F, UD, Ed.....	Seattle
Bullock, Virgil Wm, UD, Eng.....	Seattle
Bundy, Margaret, LD, LA.....	Seattle
Bundy, Robert E, LD, For.....	Seattle
Bungay, Vaughn, LD, Bus.....	Spokane
Bunker, Stanley, LD, For.....	Seattle
Burbank, Myrtle, LD, LA.....	Seattle
Burd, Branson M, LD, Bus.....	Portland, Or
Burd, Dorothy, LD, LA.....	Browning, Mont
Burdick, Karl, LD, Bus.....	Seattle
Burgeson, Elma M, LD, LA.....	Seattle
Burgess, Carolyn, LD, FA.....	Seattle
Burglin, Clarence, LD, Eng....	Fairbanks, Aka
Burk, Clarence, LD, EE.....	Carson City, Nev
Burkett, Benjamin S, LD, LA.....	Seattle
Burkman, Joel A, UD, Ed.....	Seattle
Burkman, Orpha, LD, LA.....	Seattle
Burleigh, Bess M, UD, Ed.....	Seattle
Burlingham, Harry, Unc, Sci.....	Orting
Burmelster, Claudys S, LD, FA....	Seattle
Burmelster, Elizabeth, UD, FA.....	Seattle
Burnell, Louise, LD, Sci.....	Seattle
Burnett, Bert, LD, LA.....	Seattle
Burnett, Charles H, LD, LA.....	Hollywood
Burnett, John A, UD, CE.....	Seattle
Burnett, Norman, LD, Bus.....	Chehalis
Burnett, Thomas B, Unc, Bus.....	Pomeroy
Burnie, Donald A, UD, Bus.....	Yakima
Burns, Gordon, LD, For.....	Blairmore, Alta
Burns, Malcolm O, LD, Eng.....	Seattle
Burns, Merle W, LD, Bus.....	Seattle
Burns, Nina, LD, FA.....	Seattle
Burns, Wilma, LD, Bus.....	Seattle
Burpee, Frances, LD, LA.....	Bellingham
Burr, Wallace M, LD, Bus.....	Seattle
Burroughs, Muriel A, LD, Sci.....	Seattle
Burroughs, Walter L, UD, LA.....	Tacoma
Burrus, Adelyne, LD, LA.....	Pocatello, Ida
Burrus, Thurlow, LD, Sci.....	Spokane
Bursell, Frances I, UD, LA.....	Seattle
Burson, Norris R, Unc, Bus.....	Seattle
Burt, Effie, LD, LA.....	McCleary
Burton, Clara Belle, LD, Sci.....	Colby
Bush, Elizabeth P, UD, FA.....	Seattle
Bush, Irene M, UD, Sci.....	Vancouver
Bush, Lyle K, Grad.....	Bay Center
Bush, Marian, UD, Sci.....	Seattle
Bushee, Alice, LD, FA.....	Seattle
Bushell, Lydla, LD, Sci.....	Seattle
Buss, Loring A, UD, Sci.....	College Place
Butler, Judson Rea, UD, LA.....	Burton
Butler, Robert S, UD, CE.....	Seattle
Butler, Virginia, LD, LA.....	Seattle
Butler, William T, LD, Eng.....	Seattle
Butt, Ferdinand H, LD, LA.....	Seattle
Butt, F Mildred, LD, LA.....	Seattle
Butt, Richard V, LD, Sci.....	Seattle
Butt, William H, LD, Bus.....	Seattle
Butterbaugh, Grant I, Grad.....	Seattle
Butterfield, Henry Ward, LD, Bus.	Seattle
Butterworth, Harry C, LD, Eng....	Seattle
Bowman, Donald, LD, For.....	Seattle
Button, Ray E, LD, Bus.....	Duvall
Butts, Everett O, 1st Law.....	Everett
Byers, Dorothy O, LD, Sci.....	Seattle
Byers, John H, LD, Bus.....	Seattle
Byers, John R Jr, LD, Sci.....	Everett
Byers, Marshall S, UD, ChE.....	Seattle
Byers, Maryhelen, UD, FA.....	Seattle
Byers, Maurice T, LD, Bus.....	Everett
Byles, Chester, LD, LA.....	Melbourne
Byrkit, George LD, Bus.....	Palmer
Byrne, Harry, LD, Bus.....	Seattle
Byrne, Kathryn, LD, Sci.....	Seattle
Byrne, Marie, LD, Bus.....	Seattle
Byrne, William G, LD, Eng.....	Anchorage Alka
Byrnes, Robert E, Unc, Bus.....	Kalispell, Mont
Byron, Margaret, UD, LA.....	Seattle
Byron, Robert Lee, UD, Bus....	Bellingham
Caballero, S Salvador, LD, Bus....	Philippines
Cahill, Lillis E, LD, LA.....	Seattle
Cain, Mrs. Uettie E, LD, LA.....	Seattle
Cain, Riley Willis, UD, Ed.....	Seattle
Cain, Russell A, LD, Phar.....	Seattle
Calachan, Fructuosa, Unc, LA.....	Philippines
Calder, Lester E, UD, For.....	Montesano
Calder, Russell J, Unc, Bus.....	Montesano
Caldwell, Archie E, LD, Sci.....	Seattle
Caldwell, Charles, LD, Sci.....	Hogquiam
Caldwell, Derrald V, Unc, Bus.....	Seattle
Caldwell, Oliver J, LD, LA.....	China
Calhoun, Alma, UD, LA.....	Seattle
Callja, Rafael, Unc, ChE.....	Philippines
Calkin, Harriet, LD, LA.....	Seattle
Calkins, Norman, Unc, Bus.....	Seattle
Callahan, Arthur H, Unc, Law....	Seattle
Callender, James A, UD, OE.....	Seattle
Callison, Cecil F, LD, Bus.....	Aberdeen
Calvin, John T, UD, LA.....	Seattle

Cameron, Donald H, LD, For.....	Yakima
Cameron, Donald P, LD, Bus.....	Victoria, BC
Camp, Gertrude, LD, Bus.....	Seattle
Campbell, Alexander Jr, UD, Bus.....	Seattle
Campbell, Alice A, LD, LA.....	Seattle
Campbell, Charles J, LD, Bus.....	Spokane
Campbell, Clarence, LD, LA.....	Seattle
Campbell, Donald H, Unc, Phar.....	Blaine
Campbell, Donald, UD, EE.....	Spokane Bridge
Campbell, Edward L, UD, Bus.....	Seattle
Campbell, E John, LD, Bus.....	Seattle
Campbell, George A, LD, Bus.....	Aloha
Campbell, Helen Day, LD, LA.....	Seattle
Campbell, James A, LD, LA.....	Seattle
Campbell, Josephine, LD, LA.....	Rolling Bay
Campbell, Lorraine, LD, LA.....	Seattle
Campbell, Louis C N, Sp, LA.....	Seattle
Campbell, Mary Adrienne, LD, LA.....	Seattle
Campbell, Mildred M, LD, Phar.....	Colville
Campbell, Morrison, LD, LA.....	Seattle
Campbell, Myron M, LD, Sci.....	Waverly
Campbell, Robert A, UD, Sci.....	Waverly
Campfield, Ruby, LD, FA.....	Seattle
Capen, Donald F, LD, Bus.....	Yelm
Capen, Ellery, LD, Bus.....	Yelm
Caples, D Elwood, 1st Law.....	Vancouver
Carbajosa, Vincent, UD, Bus.....	Philippines
Carder, Ruth, LD, Sci.....	Seattle
Carey, Charles R, LD, LA.....	Colville
Carey, Ruth, UD, Bus.....	Seattle
Carlander, Gertrude, LD, FA.....	Seattle
Carlisle, Verona, M, LD, Sci.....	Vancouver, BC
Carlsen, Arthur G, UD, EE.....	Dockton
Carlsen, Carter J, LD, Min.....	Spokane
Carlson, Agnes N, Grad.....	Seattle
Carlson, Ben Arthur, LD, Bus.....	Bellevue
Carlson, Carl A, LD, ME.....	Wrangell, Aka
Carlson, Carl S, LD, Bus.....	Everett
Carlson, Ebba A, LD, LA.....	Tacoma
Carlson, Florence A, UD, Ed.....	Seattle
Carlson, George, LD, Bus.....	Independence
Carlson, Gladys May, LD, LA.....	Mt Vernon
Carlson, Helen M, Unc, FA.....	Spokane
Carlson, John Arvid, LD, Eng.....	Seattle
Carlson, Julia C, UD, LA.....	Everett
Carlston, Kenneth S, LD, Bus.....	Seattle
Carlson, L E, Unc, ME.....	Twin Falls, Ida
Carlson, Oscar C, LD, Phar.....	Wilkeson
Carlson, Oscar F, LD, ME.....	Seattle
Carlson, Theodore D, LD, LA.....	Everett
Carlson, Wilma A, LD, Bus.....	Fairbanks, Aka
Carman, Helen, LD, LA.....	Seattle
Carmichael, Ruth P, Mrs, UD, LA.....	Seattle
Carmody, Walter R, UD, ChE.....	Seattle
Carney, Elvin P, LD, LA.....	Seattle
Carpenter, Edward L, UD, CE.....	Seattle
Carpenter, Mary Jane, UD, FA.....	Seattle
Carr, Dugald M, UD, ChE.....	Seattle
Carr, George W, LD, Mines.....	Seattle
Carr, J R Cuthbert, LD, Phar.....	Seattle
Carroll, Emmett R, Grad.....	Seattle
Carroll, Frank M, LD, Bus.....	Seattle
Carroll, Frank S, Grad.....	Seattle
Carroll, Jack M, LD, Bus.....	Seattle
Carroll, Lois J, LD, Sci.....	Seattle
Carroll, Virginia W, UD, LA.....	Seattle
Carson, Catherine B, LD, Bus.....	Seattle
Carson, Emma L, LD, Sci.....	Seattle
Carstens, Clarence T, LD, EE.....	Seattle
Carstens, Ernest, LD, Bus.....	Seattle
Carstens, Lillian, LD, FA.....	Seattle
Carstens, Wanita, LD, LA.....	Seattle
Carswell, Donald W, Unc, Sci.....	Spokane
Carter, Agnes K, Unc, LA.....	Billings, Mt
Carter, Ben H, Unc, ME.....	Seattle
Carter, Burdette, LD, Bus.....	Centralia
Carter, Charles J, UD, Bus.....	Seattle
Carter, Cordella E, LD, FA.....	Seattle
Carter, Faith E, LD, Sci.....	Seattle
Carter, Frank W, LD, Bus.....	Medina
Carter, Lauron, UD, Eng.....	Friday Harbor
Carter, Stewart, LD, LA.....	Seattle
Carter, William L, LD, Bus.....	Kalama
Cartwright, Vance, LD, Sci.....	Seattle
Case, Austin F, UD, LA.....	Seattle
Case, Howard L, LD, LA.....	Juneau, Aka
Case, Katherine M, LD, LA.....	Seattle
Case, Margaret, LD, LA.....	Vashon
Casey, John Howard, LD, Bus.....	Colville
Cassey, Marguerite, LD, Sci.....	Seattle
Caskey, Ruth, LD, FA.....	Richmond Beach
Cassady, Eugene, LD, Bus.....	Ritzville
Cassels, Harry A, LD, Bus.....	Seattle
Cassill, C Harvey, UD, Bus.....	Seattle
Cassill, Lorraine, LD, LA.....	Spokane
Cattle, Edith, UD, Sci.....	Spokane
Caughlin, Rose M, LD, LA.....	Seattle
Caulkins, Alice, LD, LA.....	Everett
Cauvel, Orvel S, LD, ChE.....	Spokane
Cavanaugh, A B, Unc, Bus.....	Porterville, Cal
Cave, Clinton R, LD, Bus.....	Winslow
Cave, Floyd A, UD, LA.....	Seattle
Cave, Roy C, UD, LA.....	Seattle
Cayton, Madge R, LD, Bus.....	Seattle
Cekada, Emil B, UD, Sci.....	Tacoma
Cekada, Martha A, UD, Sci.....	Tacoma
Chadbourne, Charles, UD, LA.....	Cresote
Chaffee, Dorothy Lucile, Unc, LA.....	Seattle
Chalaire, Donald, UD, LA.....	New York City
Chamberlain, Elizabeth, Grad.....	Seattle
Chamberlain, Ewart H, UD, Bus.....	Seattle
Chamberlain, Virginia L, LD, LA.....	Seattle
Chamberlin, Waldo, LD, LA.....	Seattle
Chambers, Horace, UD, LA.....	Seattle
Champlain, Jack, LD, For.....	Seattle
Chapman, Aleta, UD, LA.....	Seattle
Chapman, Edith, UD, LA.....	Seattle
Chapman, Harold G, LD, LA.....	Tacoma
Chapman, Horace Holcomb, LD, LA.....	Seattle
Chapman, John C, LD, Bus.....	Seattle
Chapman, Marjorie, UD, Sci.....	Seattle
Chappel, Winifred, LD, LA.....	Seattle
Chapple, Guernsey, LD, ChE.....	Yakima
Charlesworth, Grace, LD, Sci.....	Bellingham
Chase, Dorothy, LD, LA.....	Alderwood Manor
Chase, Lester, LD, Bus.....	Des Moines
Cheal, Mary, LD, FA.....	Seattle
Cheim, Natalie, Unc, LA.....	Tacoma
Chen, Duang-Sing, Unc, Eng.....	China
Chen, Tung Pai, UD, Fish.....	China
Cheney, Pearl, Unc, Bus.....	Seattle
Cheng, Lah-Ling, Unc, Bus.....	China
Cheng, Pao Yuan, UD, Phar.....	China
Chess, Samuel T, LD, Phar.....	Seattle
Chilberg, Elmer N, UD, EE.....	Spokane
Chilberg, Ernest E, UD, Eng.....	Seattle
Child, Helen, UD, LA.....	Seattle
Childs, Dorothy, LD, FA.....	Seattle
Childs, Harry J, LD, LA.....	Tacoma
Chilton, Floyd D, Voc.....	Seattle
Chilton, Rex W, LD, Bus.....	Seattle
Chin, Y Han, Unc, Bus.....	Seattle
Chinn, Raleigh, LD, For.....	Seattle
Chisholm, Dorothy, UD, FA.....	Wrangell, Aka
Chittenden, T P, UD, Bus.....	Seattle
Chitty, Lyman M, UD, Eng.....	Everett
Choate, Elizabeth, LD, FA.....	Seattle
Christensen, Marie L, UD, Ed.....	Centralia
Christian, Byron H, Grad.....	Olympia
Christiansen, Ferdinand, Unc, Bus.....	Seattle
Christianson, Victor, UD, LA.....	Everett
Christie, Amos U, LD, Sci.....	Seattle
Christoffers, Ethel M, Grad.....	Seattle
Christoffersen, R H, LD, Sci.....	Tacoma
Christopher, Ian W, UD, Sci.....	Olympia
Christophersen, C F, 1st Law.....	Oakland, Cal
Christy, Bruce V, LD, CE.....	Seattle
Christy, Theodore, Unc, Bus.....	Seattle
Church, Anna E, UD, Sci.....	Tacoma

Church, Richard, LD, BE.....	Seattle	Colby, Caribel, LD, LA.....	Seattle
Churchill, Doris, LD, LA.....	Ellensburg	Colcock, Edward F, LD, Bus.....	Seattle
Churchill, Eunice, UD, FA.....	Ellensburg	Cole, David, LD, Sci.....	Seattle
Churchill, Verne, LD, Bus.....	Kirkland	Cole, Frances, LD, Sci.....	Everett
Churney, Otto L, LD, Sci.....	Deming	Cole, Gurth M, LD, LA.....	Vancouver
Chute, Gordon, 2nd Law.....	Two Rivers	Cole, Helene A, UD, LA.....	Seattle
Chute, Lionel H, LD, LA.....	Seattle	Cole, Janice, UD, Sci.....	Seattle
Claassen, Julius, Jr, LD, Eng.....	Seattle	Cole, Miriam, Grad.....	Seattle
Clancy, Alice, LD, LA.....	Frankfort, Ind	Cole, W John, LD, LA.....	Seattle
Clancy, Winifred, LD, FA.....	Medford, Ore	Coleman, Raymond W, UD, Bus.....	Renton
Clark, Alta M, UD, Sci.....	Seattle	Colman, Isabel Susan, LD, LA.....	Seattle
Clark, Arthur B, LD, LA.....	Seattle	Collard, William, Unc, LA.....	Palouse
Clark, Bruce D, LD, LA.....	Seattle	Collett, Arthur E, 1st Law.....	Seattle
Clark, Carroll C, UD, For.....	Kent	Collie, Ross F, LD, LA.....	Hood River, Ore
Clark, Clarence R, LD, Eng.....	Kent	Collins, Alton Laffey, Grad.....	Ostrander
Clark, Frank J, Grad.....	Seattle	Collins, Anna Mary, Grad.....	Seattle
Clark, Halbert H, LD, Sci.....	Seattle	Collins, A Norman, LD, Bus.....	Spokane
Clark, Helen D, LD, LA.....	Seattle	Collins, Cyril, LD, Eng.....	Santa Ana, Cal
Clark, Howard A, UD, Bus.....	Seattle	Collins, Hazel I, Unc, LA.....	Tacoma
Clark, Irl B, LD, Bus.....	Richmond, Cal	Collins, G Kenneth, LD, LA.....	Sheridan, Wyo
Clark, Marjorie, LD, LA.....	Seattle	Collins, Lee R, UD, Phar.....	Seattle
Clark, Newman H, 2nd Law.....	Everett	Collins, Parker, LD, LA.....	Seattle
Clark, Paul B, UD, ME.....	Bellingham	Colter, Josephine Mrs, UD, LA.....	Seattle
Clark, Stanley A, UD, BE.....	Centralia	Coman, Marjorie L, LD, LA.....	Houghton
Clark, Vernice, LD, FA.....	Seattle	Combes, Esther M, LD, Sci.....	Seattle
Clark, Wendell W, UD, Bus.....	Seattle	Combs, Dorothy, LD, LA.....	Seattle
Clark, Wesley M, LD, Sci.....	Spokane	Conings, Everett L, LD, BE.....	Bremerton
Clarke, Examella, LD, LA.....	Portland, Ore	Commeree, Clifford, Unc, LA.....	Rudyard, Mt
Clarke, George E, Unc, LA.....	Spokane	Compton, Harold, UD, Bus.....	Yakima
Clarke, George W, LD, LA.....	Seattle	Compton, Harry O, LD, BE.....	Seattle
Clarke, Harold, UD, CE.....	Seattle	Compton, Mary Button, Grad.....	Seattle
Clarke, Lillian, UD, LA.....	Seattle	Compton, Merrill E, LD, Bus.....	Seattle
Clarke, Mary L, LD, LA.....	Vancouver	Condon, Harold, LD, Bus.....	Seattle
Clarke, Richard K, UD, Bus.....	Seattle	Condy, Tom, LD, Eng.....	Sedro-Woolley
Clarke, Robert, LD, Bus.....	Olympia	Cone, Maurice H, LD, CE.....	Seattle
Clarke, Samuel J, LD, For.....	Seattle	Conger, Dorothy, LD, LA.....	Seattle
Clarke, Stanley J, LD, Bus.....	Vancouver, BC	Conger, John A, UD, Eng.....	Nez Perce, Ida
Classic, Ralph F, LD, Fish.....	Seattle	Conger, William M, LD, LA.....	Seattle
Claterbos, Ricka, LD, Bus.....	White Salmon	Connelly, Margaret, LD, LA.....	Spokane
Clausen, Chester K, UD, CE.....	Seattle	Conner, Albert J, Unc, Bus.....	Colville
Clausen, Myrtle, LD, LA.....	Seattle	Conner, Antoinette, LD, LA.....	Seattle
Clausen, Raymond, LD, For.....	Kent	Connolly, Zoa, LD, LA.....	Seattle
Clausen, Wendell, UD, Phar.....	Seattle	Connor, Aileen, LD, LA.....	Seattle
Clausen, Charlotte, UD, Sci.....	Rainier	Connor, Garland D, UD, Bus.....	Spokane
Cleaver, Gertrude, LD, LA.....	Everett	Conover, C Norman H, LD, LA.....	Seattle
Clein, Lillian, LD, Phar.....	Seattle	Conrad, Frank H, UD, ChE.....	Seattle
Clelland, Isabelle, LD, FA.....	Seattle	Conrad, Nettie, LD, Bus.....	Eatonville
Clemans, Vivian, UD, FA.....	Clarkston	Constable, Heywood, UD, LA.....	Gig Harbor
Clement, Andrew W, LD, BE.....	Seattle	Couvery, Frederick R, LD, Bus.....	Olympia
Clement, Frank M, LD, CE.....	Ontario, Ore	Conway, Norman, LD, Bus.....	Seattle
Clement, Robert A, LD, LA.....	Spokane	Cook, Chesley M, LD, Bus.....	Seattle
Cleveland, Carl, LD, Bus.....	Tacoma	Cook, R Hiram, LD, Sci.....	Bellingham
Clek, John Ernest, Voc.....	Seattle	Cook, Jo D, 1st Law.....	Tacoma
Clifton, Evelyn, UD, LA.....	Seattle	Cook, Richard H, LD, Phar.....	Seattle
Clinch, Vernon M, UD, Jour.....	Seattle	Cooke, Huldah, LD, Sci.....	Bellingham
Cline, Denzel C, UD, LA.....	Isabel, Kan	Cooke, J. Geraldine, UD, Ed.....	Seattle
Clingan, Helen, LD, LA.....	Seattle	**Cookerley, Wm N, 1st Law.....	S Milford, Ind
Clithera, Raymond, LD, Bus.....	Yakima	Cookingham, Merrill, LD, BE.....	Tacoma
Clossen, Louise, LD, LA.....	Seattle	Cooley, Mrs Alice R, UD, LA.....	Berkeley, Cal
Cloughley, Walter M, LD, Bus.....	Yakima	Cooley, Zoe L, UD, FA.....	Seattle
Clubb, Edmund O, Unc, Eng.....	Seattle	Coolidge, Alethea, LD, FA.....	Seattle
Coale, A D Jr, LD, LA.....	Tacoma	Coons, Helen E, LD, FA.....	Aberdeen
Coats, Florence, LD, Sci.....	Raymond	Cooper, Edwin V, LD, Sci.....	Seattle
Cobb, Genevieve, LD, Sci.....	Seattle	Cooper, John D, LD, Bus.....	Tacoma
Cobb, Maurice, UD, Bus.....	Wapato	Cooper, Rebecca, Grad.....	Seattle
**Coblentz, George W, Sp, Bus.....	Tacoma	Cooperman, M H, 1st Law.....	Brandon, Manitoba
Cochran, Clarence, UD, For.....	Seattle	Copeland, Harry E, UD, Bus.....	Houston, Tex
Cochran, Herbert W, LD, Eng.....	Tacoma	Copeland, Nena, LD, Sci.....	Seattle
Cochran, Lynn B, UD, BE.....	Snohomish	Coplen, Donald G, LD, CE.....	Seattle
Cochrane, Edward L, 1st Law.....	Seattle	Coppage, Thomas R, UD, Bus.....	Seattle
Coccrance, Roy, LD, LA.....	Seattle	Coppinger, Homer, Unc, LA.....	Seattle
Coe, Frank A, Voc.....	Seattle	Corbett, George T, Unc, Bus.....	Seattle
Coffee, W Glennon, LD, Bus.....	Tacoma	Corbett, Kathleen, UD, LA.....	Huntsville
Coffin, Arthur, LD, Bus.....	Seattle	Corbin, Katharine, LD, LA.....	Spokane
Coffin, Gwendola, LD, Bus.....	Seattle	Corlett, Mildred, LD, LA.....	Seattle
Coffin, Henry L, LD, Bus.....	Seattle	Corlett, Thirza Ester, UD, Bus.....	Seattle
Coghlan, Willard, LD, Bus.....	Seattle	Cornelius, Roland, LD, Bus.....	Seattle
Cohen, Fannie Mrs, UD, Ed.....	Seattle	Cornell, Dorothy, UD, Bus.....	Tacoma
Cohen, Philip, UD, ChE.....	Tacoma	Cornell, Elmore, LD, Eng.....	Seattle
Cohn, Lewis M, LD, Sci.....	Seattle	Corson, Kenneth P, LD, Min.....	Issaquah
Cohn, Maxine A, LD, LA.....	Spokane	Cortes, Rosario T, LD, For.....	Philippines
Coke, Martha, LD, LA.....	Seattle	Coryell, C Jack, Unc ME.....	Issaquah

Cosser, Harold, LD, Bus.....	Pt Angeles
Costner, Leslie, LD, Bus.....	Seattle
Coughlin, Lucinda, Unc, Sci.....	Seattle
Coughlin, Mary W, UD, LA.....	Seattle
Coughlin, Paul J, LD, LA.....	Spokane
Courtright, William, LD, LA.....	Seattle
Coventry, Edwin J, UD, Sci.....	Everett
Covington, Duane M, LD, BE.....	Seattle
Cowan, Carol, LD, LA.....	Medina
Cowan, James W, LD, LA.....	Puyallup
Cowie, Leland K, Grad.....	Seattle
Cowling, Merle, LD, LA.....	Pt Angeles
Cowling, Owen S, LD, LA.....	Spokane
Cox, Carl E, LD, Bus.....	Houquiam
Cox, Clivedon, LD, LA.....	Hot Springs, Ark
Coyne, Sophie, Unc, Bus.....	Wallace, Ida
Craft, Carroll M, LD, LA.....	McCleary
Craig, Miriam, UD, Sci.....	Seattle
Craft, Doris Thelma, LD, LA.....	McCleary
Craft, Lawrence, LD, Bus.....	Seattle
Cramer, Dorothy M, LD, LA.....	Bellevue
Cramer, Dwight L, LD, Phar.....	Centralia
Cramlet, Clyde M, Grad.....	Seattle
Crane, Lillian A D, Grad.....	Seattle
Crane, Marion A, LD, LA.....	Seattle
Craven, Dorothy, LD, Sci.....	Butte, Mnt
Crawford, Dorothy E, LD, Sci.....	Seattle
Crawford, Marion S, LD, Bus.....	Seattle
Crawford, William R, 2nd Law.....	Seattle
Crawshaw, Arthur C, LD, ChE.....	Seattle
Creamer, Evelyn, LD, LA.....	Ferndale
Creamer, Una L, UD, LA.....	Ferndale
Creech, Ruth Cavanaugh, UD, Sci.....	Seattle
Creitz, William B., Unc, Sci.....	Portland, Ore
Croque, Fred E, LD, Sci.....	Seattle
Criddle, Carol E, LD, LA.....	Seattle
Crim, Dorothy M, LD, LA.....	Seattle
Crim, Madison V, Voc.....	Seattle
Crim, Winnifred D, UD, LA.....	Seattle
Crisier, Ray H, UD, Bus.....	Spokane
Cristman, Martha, LD, Sci.....	Seattle
Crombie, F Walter, UD, For.....	Olympia
Croslin, Nona, UD, Bus.....	Butte, Mt
Crook, Hernold, Unc, Eng.....	Granite Falls
Cropp, Charlotte E, Unc, Sci.....	Seattle
Crosby, Forrest, LD, Bus.....	Seattle
Crosby, Harold W, UD, Bus.....	Seattle
Crosby, Roy Henry, LD, Eng.....	Seattle
*Crosley, M S, Sp, Min.....	Seattle
Crouch, Chas Richard, Unc, LA.....	Seattle
Crouch, Donna Leone, UD, Bus.....	Seattle
Crouley, Beatrice, LD, LA.....	Seattle
Crowe, F Malcolm, UD, Eng.....	Seattle
Crueger, Frank H, LD, Eng.....	Seattle
Crumb, Joseph A, UD, Bus.....	Morton
Crumley, Russell E, LD, Bus.....	Spokane
Crump, Leonard W, LD, EE.....	Tacoma
Cruzen, Edward A, LD, Bus.....	Seattle
Cullinan, Nicholas C, LD, LA.....	Seattle
Culliton, J Estelle, LD, LA.....	Seattle
Cultum, Gordon L, LD, EE.....	Tacoma
Culver, Carroll, LD, Bus.....	Bellingham
Culver, Edith, LD, FA.....	Spokane
Cumins, Clarence S, LD, Bus.....	Wenatchee
Cundiff, Velda P, LD, Sci.....	Wenatchee
Cunningham, Allan, UD, Bus.....	Seattle
Cunningham, Jack C, Unc, Sci.....	Seattle
Cunningham, Marvel, LD, Sci.....	Ellensburg
Curl, Clinton O, UD, Sci.....	Seattle
Currie, Allan M, LD, Sci.....	Seattle
Curry, Altha Perry, Grad.....	Seattle
Curry, Mildred, LD, FA.....	Seattle
Curry, W H Jr, LD, Min.....	Seattle
Curtis, Allan, LD, Bus.....	Seattle
Curtis, Elizabeth L, LD, LA.....	Seattle
Curtis, Eunice M, UD, Bus.....	Seattle
Curzon, John J, Grad.....	Seattle
Cushman, Edward H, UD, Min.....	Tacoma
Cushman, Willis E, LD, LA.....	Doty
Cussack, A C, LD, Bus.....	Issaquah
Cutler, Denzil A, LD, EE.....	Vashon
Cutting, Glenn P, LD, Sci.....	Welser, Ida
Cutting, Julia W, UD, LA.....	Seattle
Cutts, Cecilia, UD, LA.....	Seattle
Daggett, Annie R, UD, Sci.....	Port Ludlow
Dagg, Harold M, LD, Bus.....	Seattle
Dahl, Bernice I, UD, LA.....	Seattle
Dahl, Florence, UD, Educ.....	Seattle
Dahl, Helen E, LD, Bus.....	Seattle
Dahlberg, Edith, LD, Sci.....	Seattle
Daigh, Margaret, LD, LA.....	Kirkland
Dalley, Edith L, LD, LA.....	Seattle
Dalley, Grace O, 2nd Law.....	Seattle
Dalley, Manuel C, LD, ChE.....	Seattle
Dalley, Walter, Sp, Bus.....	Everett
Dalgity, Jean, UD, Ed.....	Seattle
Daling, Lena E, Unc, LA.....	Waterville
Dallas, James P, LD, ChE.....	Seattle
Dally, Harold N, LD, Min.....	Seattle
Daly, Milton J, UD, EE.....	Ketchikan, Alaska
Daly, William J Jr, 2nd Law.....	Pt Townsend
Dalziel, Margaret Irene, UD, Sci.....	Seattle
Damerell, Richard, LD, Sci.....	Earlington
Damon, Dorothy, LD, Bus.....	Seattle
Damon, Leland Frank, LD, Sci.....	Seattle
Danforth, Clason, Unc, FA.....	Puyallup
Daniel, Virginia L, LD, LA.....	Seattle
Daniels, Eve, UD, Sci.....	Puyallup
Daniels, William C, LD, Me.....	Puyallup
Danner, Earl Y, UD, EE.....	Seattle
Dant, Dorothy Mae, LD, LA.....	Portland
Dant, Thomas, Unc, Bus.....	Portland, Ore
Daquiloag, Sebastian, LD, LA.....	Philippines
Dark, Carleton W, Unc, Law.....	Seattle
Dark, Dorothy, LD, Sci.....	Seattle
Darling, Irene, UD, LA.....	South Bend
Daubenspeck, Margaret, Sp, Sci.....	Seattle
Daubenspeck, Marion, UD, LA.....	Seattle
Daugherty, A Iva, LD, LA.....	Seattle
Daugherty, Anna M, UD, Sci.....	Seattle
Daugherty, Bernice E, LD, FA.....	Seattle
Daum, Edna W, LD, FA.....	Fall City
Davenport, Howard F, LD, Bus.....	Wenatchee
Davidson, Barbara, LD, Sci.....	Seattle
Davidson, Leonora B, LD, Sci.....	Seattle
Davidson, Donald M, LD, Phar.....	Coulee
Davidson, Dorothy, LD, LA.....	Seattle
Davidson, Edward W, LD, Eng.....	Bremerton
Davidson, Grace, LD, LA.....	Tacoma
Davidson, Kenneth M, LD, Bus.....	Boise, Ida
Davies, Elizabeth, UD, LA.....	Opportunity
Davies, Thomas Dayton, LD, Bus.....	Seattle
Davis, Ansil A, Unc, FA.....	Medford, Ore
Davis, Ben S, LD, FA.....	Seattle
Davis, Benjamin F, LD, Bus.....	Seattle
Davis, Caleb F, UD, EE.....	Seattle
Davis, David M, Unc, ME.....	Goshen, Ind
Davis, Dwight E, UD, Min.....	Pt Orchard
Davis, Elbert, LD, EE.....	Tacoma
Davis, Florence, LD, LA.....	Seattle
Davis, Frank L, LD, LA.....	Seattle
Davis, Garnet M, UD, Bus.....	Donald
Davis, Kathryn S, LD, LA.....	Seattle
Davis, Lane M, LD, Phar.....	Everett
Davis, Lyle S, Voc.....	Seattle
Davis, Marcellus P, LD, EE.....	Ellensburg
Davis, Marjorie E, LD, LA.....	Portland, Ore
Davis, Mary Aleen, Grad.....	Bellingham
Davis, Merle I, LD, LA.....	Donald
Davis, Neill J, UD, Bus.....	Seattle
Davis, Norma, LD, LA.....	Renton
Davis, Oliver L, Unc, Bus.....	Wenatchee
Davis, Paul B, UD, EE.....	Endicott
Davis, Ralph J, UD, Bus.....	Seattle
Davis, Ray N, UD, Ed.....	Seattle
Davis, Ruth M, Grad.....	Bellingham
Davis, Vera, LD, LA.....	Renton
Davis, Vernon, LD, Bus.....	Walla Walla
Davis, Walter N, LD, LA.....	Endicott
Davis, Wilbur L, LD, Bus.....	Seattle
Daws, Leota, LD, LA.....	Kirkland
Dawson, Charles W, Grad.....	Seattle

Dawson, Chester R, LD, Bus.....	Seattle
Dawson, Terence T, LD, Sci.....	Seattle
Day, Juanita J, LD, LA.....	Everett
Day, Margaret B, Reg, Jour.....	Clarkston
Day, Margaret H, Unc, Bus.....	Seattle
Denderick, Kelly D, UD, LA.....	Baker, Ore
Dean, Edward S, LD, ME.....	Olympia
Dean, F, Merlin, UD, Sci.....	Bellingham
Dean, Helen, LD, Bus.....	Yakima
Dean, Paul, UD, Bus.....	Seattle
Deuringer, Helen, LD, FA.....	Snohomish
De Bruier, Olive, LD, Sci.....	Seattle
De Freest, Kathryn, LD, LA.....	Seattle
DeForce, Helen J, UD, LA.....	Spokane
De Grief, Leroy, Grad.....	Colville
De Groote, Lawrence W, LD, For.....	Auburn
De Grotte, Lloyd H, UD, For.....	Auburn
De Jacoby, Arthur D, Grad.....	Seattle
Dekker, Kate, UD, Sci.....	Seattle
de Lancey, Margaret, UD, Bus.....	Seattle
de la Pole, Dorothy, UD, LA.....	Seattle
de Leon, Esteban, LD, Sci.....	Philippines
Demar, Harold, LD, Bus.....	Seattle
De Mers, Gladys, LD, LA.....	Everett
Dempster, Dorothy, LD, FA.....	Granger
Denisy, Charles R, 3rd Law.....	Everett
Denning, Alice M, LD, Sci.....	Portage
Dennis, Margaret, UD, LA.....	Seattle
Denny, John, Sp, Sci.....	Seattle
Denny, Marlon K, LD, LA.....	Seattle
Denny, Victor W S, LD, LA.....	Seattle
Depyman, Ida, UD, Ed.....	Seattle
De Riemer, Robert, UD, Sci.....	Spokane
DeSerisy, Homer, Unc, Eng.....	Seattle
De Shazo, Melvin G, LD, LA.....	Seattle
de Soto, Alexander, LD, LA.....	Seattle
De Soucy, Allan C, LD, Min.....	Norman
Devera, Fernando, LD, Eng.....	Seattle
Devers, De Ette, UD, LA.....	Seattle
Devlin, Paul, LD, For.....	Seattle
Devlin, William F, 2nd Law.....	Seattle
De Voe, Betty, LD, LA.....	Seattle
Dewar, Fred Arthur, LD, Bus.....	Addy
Dewey, Bertha, LD, LA.....	Seattle
Dexter, Etta Frances, LD, LA.....	Winslow
Diaz, Arsenio E, LD, Sci.....	Philippines
Dibb, Harold J, Voc.....	Great Falls, Mont
Dick, Elma M, UD, FA.....	Lewiston, Ida
Dick, Rogers Sherman, LD, LA.....	Seattle
Dickerson, William E, Grad.....	Seattle
Dickey, Dorothy, LD, LA.....	Seattle
Dickey, Frank H, UD, Bus.....	Seattle
Dickinson, Charlotte, LD, LA.....	Dayton
Dickinson, Lawton W, Unc, CE.....	Seattle
Dickson, John C, Grad.....	Seattle
Dickson, Robert W, UD, LA.....	Portland, Ore
Dietderich, C E, LD, Min.....	Vancouver
Dietz, George, LD, Sci.....	Oso
Dillon, Roll N, UD, Sci.....	Seattle
Dimond, Lois Edith, UD, FA.....	Spokane
Dingle, Esther, UD, LA.....	Yakima
Dinsmore, Stephen S, Reg, Jour.....	Seattle
Dittmore, W Chester, LD, CE.....	Seattle
Dix, Marion, LD, LA.....	Seattle
Dix, Peres A, LA, Phar.....	Seattle
Dix, Ruth, UD, Sci.....	Seattle
Dixon, Barbara, LD, LA.....	Battle Ground
Dixon, Clarence J, Voc.....	Seattle
Dixon, Frank, LD, Bus, Sand Springs, Okla	
Doane, Albert H, LD, Sci.....	Seattle
Doane, Lucile, UD, LA.....	Sparta, Wis
Dobbs, Charlotte, LD, LA.....	Seattle
Dobbs, James S, LD, CE.....	Seattle
Dobrin, Bettina Mae, LD, FA.....	Zillah
Dobrin, Hilda, LD, FA.....	Zillah
Dobson, George R, LD, Eng.....	Renton
Dodd, Gregory E, LD, LA.....	White Swan
Dodd, Hamlet P, 1st Law.....	Wapato
Dodd, Joseph P, UD, ME.....	Seattle
Dodd, Martha, UD, Sci.....	Bellingham
Dodge, Florence P, LD, LA.....	Seattle
Dodge, Laurance I, LD, LA.....	Seattle
Dodge, William P, LD, Eng.....	Seattle
Dofsen, Gertrude L, LD, FA.....	Seattle
Doheny, Geraldine, LD, LA.....	Seattle
Doherty, Joseph C, LD, Bus.....	Seattle
Dolan, Irene, UD, LA.....	Kent
Dolan, Margaret M, UD, LA.....	Kent
Doll, Howard B, LD, ME.....	Seattle
Dolphin, Ruth G, LD, Bus.....	Seattle
Domalanta, F A, LD, Bus.....	Philippines
Donahoe, Agnes M, UD, Ed.....	Rosalia
Donahoe, Eugene, UD, Bus.....	Elma
Donley, Mabel Alice, UD, FA.....	Seattle
Donworth, Mary, Unc, LA.....	Seattle
Dorman, George R, LD, Eng.....	Seattle
Doscher, Anna, LD, LA.....	Boise, Ida
Doubravsky, Reva, UD, LA.....	Toppenish
Dougherty, Oille, LD, Bus.....	Seattle
Douglas, John F, LD, Bus.....	Earlington
Doutrich, Stephen, LD, Min.....	Spokane
Dowlug, Barbara, LD, Sci.....	Seattle
Downie, Ruth E, LD, Sci.....	Seattle
Doyle, James C, UD, Sci.....	Spokane
Doyle, Leo A, Sci.....	Spokane
Doyle, Leona M, UD, Bus.....	Seattle
Drager, Gertrude, LD, LA.....	Seattle
Drake, Edward F, UD, EE.....	Tacoma
Drake, Helen H, UD, Ed.....	Portland, Ore
Drake, Mildred E, UD, Ed.....	Portland, Ore
Dranga, Albert E, UD, Bus.....	Seattle
Draves, Carl Z, Grad.....	Seattle
Drever, Helen E, LD, LA.....	Seattle
Drew, David A, LD, LA.....	Centralia
Drew, Donald R, UD, Bus.....	Seattle
Drew, Laura, LD, Phar.....	Lake Stevens
Drew, Newton, UD, Bus.....	Portland, Ore
Driscoll, Edwin U, LD, Bus.....	Seattle
Driscoll, Eugene A, UD, LA.....	Renton
Drum, Guy, UD, LA.....	Seattle
Drumheller, Joseph, UD, ChE.....	Spokane
DuBois, Kinsley, LD, LA.....	Vancouver
DuBois, Richard, LD, For.....	Vancouver
Ducasse, Mrs Mabel, UD, FA.....	Seattle
Dugan, Helen, LD, Sci.....	Seattle
Dunbar, Clifford, LD, Bus.....	Shelton
Dunbar, Della, LD, LA.....	Yakima
Duncan, Kenneth, LD, FA.....	Seattle
Duncan, Margaret, UD, LA.....	Red Bluff, Cal
Duncan, Patricia P, UD, LA.....	Toppenish
Duncan, Preston, LD, Bus.....	Seattle
Duncanson, Harold, Unc, EE.....	Seattle
Dunham, Mrs Margery R, Unc, Law.....	Seattle
Dunker, Ralph, Unc, Bus.....	Seattle
Dunn, Arthur G, LD, LA.....	Seattle
Dunn, Charles S, UD, For.....	Seattle
Dunn, Edward A, UD, For.....	Seattle
Dunn, Frank, LD, For.....	Seattle
Dunn, Margaret C, UD, LA.....	Seattle
Dunn, Mrs Mary B, LD, LA.....	Seattle
DuPree, Ernest F, LD, Sci.....	Tacoma
Dupuis, Margaret, LD, LA.....	Seattle
DuRae, Berenice, LD, LA.....	Bellingham
Durand, Raynor, LD, LA.....	Everett
Durant, Reynolds, LD, Sci.....	Everett
Durgin, Carey L, LD, EE.....	Baumclaw
Durham, Mrs Irene S, UD, LA.....	Seattle
Durkee, Mary, UD, LA.....	Tacoma
Durrant, Dorothy A, LD, Sci.....	Seattle
Duryee, Schuyler L, LD, EE.....	Seattle
Dustan, Laura, UD, FA.....	Clarkston
Dutch, Dorothy, LD, Sci.....	North Bend, Ore
Dutton, Harry John, LD, Bus.....	Seattle
Dwyer, Kathryn, UD, LA.....	Rosalia
Dwyer, William, LD, Bus.....	Bellevue
Dyer, Douglass, LD, Sci.....	Seattle
Dyke, Joe, LD, Bus.....	Seattle
Dysart, Fern M, UD, LA.....	Toppenish
Eades, Glenn N, UD, Eng.....	Dayton
Eagleson, Margaret, LD, LA.....	Seattle
Earnest, Robert R, UD, Educ.....	Bothell
Easterbrook, W E, LD, Bus.....	Pt Townsend

Eastman, Fred S, LD, EE.....	Seattle	English, James D, LD, EE.....	Seattle
Eastmond, Elbert H, Unc, FA.....	Provo, Utah	Englund, Adolf B, LD, Bus.....	Enumclaw
Eaton, Dorothy, LD, LA.....	Seattle	Englund, Alvar, LD, Eng.....	Bellingham
Eaton, Jennie, Unc, Bus.....	Wallace, Ida	Engmann, Sirl, LD, FA.....	Seattle
Ebbelwhite, C Harry, LD, EE.....	Spokane	Enslow, Irene, LD, FA.....	Wenatchee
Ebeling, Walter W, UD, Sci.....	Burlington	Engstrom, Wallace R, LD, CE.....	Gt Falls, Mt
Eby, Roger I, LD, Eng.....	Spokane	Enloe, Keith, LD, Bus.....	Spokane
Eccles, Ruth, LD, LA.....	Seattle	Epperson, Grace, LD, LA.....	Seattle
Eckert, Viva, LD, LA.....	Seattle	Erickson, Alfred C, UD, Bus.....	Oak Harbor
Eckman, Richard, LD, LA.....	Seattle	Erickson, Alvyn J, Unc, ME.....	Seattle
Eckmann, Ray, UD, Bus.....	Seattle	Erickson, Clifford F, LD, Bus.....	Seattle
Eckrem, Dagrun, LD, FA.....	Seattle	Erickson, Elisabeth, LD, LA.....	Kent
Eckstein, Babette, LD, LA.....	Seattle	Ericksen, Lalla, UD, LA.....	Seattle
Eckstein, Howard, LD, Bus.....	Seattle	Erickson, Lloyd, LD, Bus.....	Seattle
Eckstein, Shirley, LD, LA, Mountain Home, Id		Erickson, Orin H, Voc.....	Pocatello, Ida
Edades, Victorio, UD, FA.....	Philippines	Erickson, Richard, LD, Bus.....	Edmonds
Edberg, Wendell E, 2nd Law.....	Bellingham	Erickson, Roy C, LD, Phar.....	Seattle
Eddy, Erma S, UD, Educ.....	Seattle	Erickson, Stella E, LD, LA.....	Seattle
Eddy, Richard, LD, For.....	Seattle	Erickson, Walden D, LD, Bus.....	Seattle
Edgell, Dwight, LD, Eng.....	Seattle	Erickson, William P, UD, Bus.....	Seattle
Edgell, Hurst, UD, Phar.....	Seattle	Ericson, Earl E, LD, For.....	Seattle
Edgers, Newton W, LD, EE.....	Seattle	Eriksen, Edward, LD, Bus.....	Seattle
Edgerton, Ernest, UD, Sci.....	Seattle	Eriksen, Louise, LD, LA.....	Seattle
Edgington, Lucile, LD, LA.....	Spokane	Eriksson, Archie, UD, Ed.....	Arlington
Edinger, Carter, LD, Bus.....	Seattle	Ervin, Winfield, LD, Bus.....	Anchorage, Aka
Edmonds, Frank Hall, LD, EE.....	Seattle	Erwin, C Lincoln, LD, LA.....	Seattle
Edmeades, Willard, LD, Sci.....	Seattle	Erwin, Susan, UD, LA.....	Seattle
Edris, Roy W, LD, Bus.....	De Land, Fla	Erz, Evelyn, LD, FA.....	Seattle
Edwards, Archie C, LD, Bus.....	Seattle	Espino, Felix Jr, LD, Eng.....	Philippines
Edwards, Artha, LD, Sci.....	Seattle	Estey, Charles A, LD, Bus.....	Seattle
Edwards, Dorothy L, LD, LA.....	Seattle	Estigoy, Pastor L, LD, Eng.....	Philippines
Edwards, Eleanor, LD, Sci.....	Seattle	Ethel, Garland, UD, LA.....	Oroville
Edwards, Elizabeth, UD, LA.....	Seattle	Etherington, Thomas J, LD, Sci.....	Elma
Edwards, Emerson R, LD, LA.....	Seattle	Eustaquo, M G, LD, Sci.....	Philippines
Edwards, Esther, LD, Sci.....	Seattle	Evans, Blodwen, LD, LA.....	Seattle
Edwards, Evangeline, LD, FA.....	Seattle	Evans, Catherine, LD, FA.....	Seattle
Edwards, George, UD, For.....	Seattle	Evans, Irene, LD, Bus.....	Bellingham
Edwards, John W, LD, FA.....	Seattle	Evans, Kenneth, LD, Sci.....	Chelan Falls
Edwards, Pauline, UD, Jour.....	Seattle	Evans, Lacey H, LD, Sci.....	Vancouver, BC
Edwards, Thelma Lillian, Grad.....	Seattle	Evans, Margery, LD, LA.....	Kapowsin
Egtvet, Percy, LD, Bus.....	Seattle	Evans, Marie J, UD, Sci.....	Seattle
Ehlers, Helen, UD, Phar.....	Seattle	Evans, Miller, LD, EE.....	Seattle
Ehrke, Ernest B, UD, EE.....	Seattle	Evatt, Stanley, LD, Bus.....	Bellingham
Ehrke, Herbert, LD, Bus.....	Seattle	Evenson, Mrs Hazel T, LD, LA.....	Seattle
Ehrlich, Barbara, LD, LA.....	Seattle	Evenson, Theo O, UD, Ed.....	Seattle
Elkenberry, Willa, LD, FA.....	Seattle	Evenson, W E Jr, LD, LA.....	Hobart
Elkarsen, Arthur S, UD, Educ.....	Stanwood	Everett, Donna A, UD, Bus.....	Seattle
Eisenhower, Earl D, UD, EE.....	Tacoma	Everitt, Walter Herbert, UD, ME.....	Seattle
Elberson, Ruth, LD, LA.....	Seattle	Evell, M Mac, UD, EE.....	Seattle
Elde, Dagny, LD, LA.....	Mt Vernon	Ewing, H Clarke, UD, Bus.....	Seattle
Eldridge, Eugene S, LD, LA.....	Seattle	Ewing, James B, LD, LA.....	Blaine
Eldridge, Wesley, LD, Bus.....	Seattle	Kyler, Marian, LD, LA.....	Seattle
Elford, Marian A, UD, LA.....	Seattle		
Elias, Frank B, LD, For.....	Seattle	Fabico, Emilio, LD, Bus.....	Seattle
Ellertson, Homer, LD, ME.....	Brush Prairie	Fairbanks, Adelaide L, Grad.....	Seattle
Elliot, Clarence R, UD, Bus.....	Kelso	Fairley, David B, LD, Bus.....	Seattle
Elliot, Jack M, Voc.....	Portland, Or	Fairservice, Harry C, UD, Bus.....	Seattle
Elliot, Louise M, UD, LA.....	Seattle	Fairservice, Hazel, LD, LA.....	Clallam Bay
Elliot, Maxine B, UD, LA.....	Seattle	Fairweather, Douglas, LD, LA.....	Seattle
Ellis, Coral, LD, FA.....	Seattle	Falconer, Thomas T, LD, Bus.....	Monroe
Ellis, Katherine, LD, FA.....	Waterville	Faler, Philip R, LD, For.....	Tacoma
Ellis, Overton G, UD, Bus.....	Tacoma	Falk, Winona, UD, LA.....	Seattle
Ellis, Rex L, LD, Bus.....	Centralla	Falkoff, Emma, LD, LA.....	Seattle
Ellis, Sam B, LD, ChE.....	Waterville	Falkoff, Ernest, LD, LA.....	Seattle
Elwell, Marion M, UD, FA.....	Seattle	Falkovich, Oleg C, Unc, Eng, Minsk, Russia	
Elwell, Talmage, F, LD, Bus.....	Seattle	Fall, James D, UD, EE.....	Portland, Or
Elyea, Winifred, UD, LA.....	Tacoma	Fall, Mart, LD, Bus.....	Seattle
Emanuel, Ellen M, UD, FA.....	Seattle	Farber, Lena, LD, LA.....	Tacoma
Emery, E Gifford Jr, LD, EE.....	Seattle	Farley, John M, LD, Bus.....	Seattle
Emme, Katherine V, Unc, Sci.....	Seattle	Farquharson, F Burt, UD, Eng.....	Seattle
Emmons, Harold W, UD, LA.....	Portland, Or	Farr, Forest W, LD, CE.....	Seattle
Encarnacion, Fidel, UD, ME.....	Philippines	Farrar, Earl L, Voc.....	Newark, SD
Encarnacion, Marcelino, Uns, Phar.....	Philipp	Farrar, Mayme, Grad.....	Seattle
Encarnacion, Marcelina, LD, LA, Philippines		Farrar, Robert W, UD, LA.....	Seattle
Eng, Jack, LD, Eng.....	Seattle	Farrell, Thomas E, LD, Bus.....	Ellensburg
Eng, Keys, LD, Bus.....	Seattle	Faubert, Florentine V, UD, LA.....	Shelton
Engberg, Paul K, LD, Sci.....	Seattle	Faulk, Glenn B, LD, LA, Stromsburg, Nebr	
Engdahl, Evelyn K, LD, LA.....	Spokane	Faulkner, Donald R, LD, Bus.....	Olympia
Enger, Bernice, LD, Sci.....	Tacoma	Faulkner, Jack Henry, Voc.....	Seattle
England, Olga, Sp, FA.....	Seattle	Felch, Baxter C, LD, Bus.....	Seattle
Engles, Robert, Unc, Bus.....	Seattle	Felch, Lewis D, UD, EE.....	Ellensburg
English, Alice, LD, FA.....	Seattle		

Felch, Margaret, LD, LA.....	Ellensburg	Foley, John R, LD, Bus.....	Seattle
Feldman, Jesse Hugo, Unc, LA.....	Seattle	Foley, Leonard S, LD, EE.....	Portland, Or
Fellers, G R, UD, EE.....	Spokane	Follanabee, Howard B, LD, Bus.....	Zillah
Fendel, Sam L, 3rd Lav.....	Spokane	Folwell, Ruth E, Unc, LA.....	Davenport, Ia
Ferguson, Edna L, LD, LA.....	Bellingham	Footte, J Herbert, LD, Bus.....	Seattle
Ferguson, Russell E, UD, For.....	Seattle	Footte, Luanda, LD, Ed.....	Seattle
Ferguson, Walter V, UD, Bus.....	Bremerton	Foott, William H, LD, ChE.....	Portland, Or
Feroe, Gladys, LD, Sci.....	Kirkland	Foran, Lester, LD, Bus.....	Seattle
Ferrara, Fernando, Sp, Sci.....	Philippines	Forbes, Helen E, LD, LA.....	Seattle
Ferrel, Gladys, LD, FA.....	Boise	Ford, Bruce, LD, Phar.....	Seattle
Ferry, Edward P, LD, LA.....	Seattle	Ford, Foster T, LD, Eng.....	Tacoma
Ferry, Kate, LD, LA.....	Seattle	Ford, Katherine, LD, LA.....	Seattle
Ferry, Mabel Frances, LD, FA.....	Seattle	Ford, Pendleton, LD, Eng.....	Seattle
Fey, Lester P, LD, FA.....	Seattle	Foreman, Iona, LD, Sci.....	Seattle
Ficks, Amanda, LD, Bus.....	Seattle	Forman, Fred, Unc, EE.....	Wapato
Fiedler, Charles A, LD, Bus.....	Newport	Foron, Ersel, Unc, Sci.....	Centralia
Field, Marguerite E, LD, LA.....	Seattle	Forrest, Jack, LD, For.....	Seattle
Field, William E, LD, Bus.....	Tacoma	Forrest, Stewart R, LD, LA.....	Rolling Bay
Field, William P, LD, CE.....	Seattle	Forster, Fred, Sp, Bus.....	Grand Haven, Mich
Fields, Earl Tom, UD, FA.....	Woodland	Forsythe, Corinne, LD, LA.....	Seattle
Fillon, Frances, LD, LA.....	Port Angeles	Foster, Charles G, LD, LA.....	Seattle
Fillon, Fred, UD, LA.....	Port Angeles	Foster, Margaret, Unc, Sci.....	Seattle
Fitz, Mildred E, Grad.....	Seattle	Forsyth, Mrs Frances, LD, LA.....	Seattle
Fine, Sam, LD, Bus.....	Seattle	Fortner, Hugh C, Voc.....	Portland, Or
Finke, Mabel, LD, LA.....	Seattle	Foss, Virginia R, LD, FA.....	Walla Walla
Finke, Ralph, LD, Eng.....	Seattle	Foster, Dorothy V, UD, LA.....	Boston, Mass
Finlay, Dreda D, UD, FA.....	Butte, Mt	Foster, Frank K, Grad.....	Seattle
Finlay, P Laird, UD, CE.....	Seattle	Foster, Fred S, UD, Bus.....	Hogium
Finlay, Maxine, LD, LA.....	Butte, Mt	Foster, Philip R, UD, Bus.....	Cowiche
Finlay, Marjorie H, LD, FA.....	Red Lodge, Mt	Fountain, Harold A, Unc, LA.....	Clarkston
Fin, Elmer G, LD, Eng.....	Frosser	Fowler, Edna, UD, FA.....	Seattle
*Finn, Louise, Sp, Sci.....	Seattle	Fowler, Helen E, LD, LA.....	Seattle
Finney, Ottmer T, UD, Eng.....	Issaquah	Fowler, Helen T, LD, FA.....	Everett
Finnegan, Patrick, LD, Bus.....	Anacortes	Fowler, Thomas N, Unc, Law.....	Ferdale
Finseth, Karen D, Unc, LA.....	Brush Prairie	Fox, Albert, Unc, Law.....	Ferdale
Fischer, Alden J, UD, Bus.....	Seattle	Fox, John E, LD, Eng.....	Elma
Fischer, Doris, LD, LA.....	Seattle	Fox, Orville, LD, Bus.....	Waitsburg
Fischer, Louis, LD, Eng.....	Seattle	Fox, Roswell M, Voc.....	Elma
Fish, Kenneth G, Voc.....	Seattle	Frahm, Lawrence W, UD, Eng.....	Seattle
Fisher, L Donald, LD, LA.....	Tacoma	Frame, Howard A, UD, Bus.....	Seattle
Fisher, Dorothy, LD, FA.....	Seattle	Frame, Angel D, LD, LA.....	Philippines
Fisher, Henry Clay, UD, Min.....	Orchards	France, Alda May, Grad.....	Montesano
Fisher, Lloyd, LD, Eng.....	Seattle	France, Madgil, LD, LA.....	Montesano
Fisher, Margaret, LD, Sci.....	Port Angeles	France, Rowland G, UD, Bus.....	Montesano
Fisher, Mary Alma, LD, LA.....	Seattle	Frank, Robert E, LD, Bus.....	Spokane
Fisher, William D, LD, LA.....	Napa, Cal	Frank, John A, Unc, Eng.....	Seattle
Fisk, G, Grace, Unc, FA.....	Frosser	Frankel, Lillian, LD, LA.....	Seattle
Fisk, Leah, LD, LA.....	Kelso	Frankland, Charles F, UD, Bus.....	Seattle
Fitch, Earlman W, LD, Sci.....	Tacoma	Frankland, Walter V, LD, Bus.....	Seattle
Fitch, Henry M, Voc.....	Seattle	Franklin, Alice V, Grad.....	Seattle
Fitch, John M, LD, ME.....	Seattle	Franklin, Charles H, LD, EE.....	Seattle
Fitterer, Helen M, UD, Ed.....	Ellensburg	Fraser, Edmund S, UD, Bus.....	Seattle
Fitzgerald, Florence, LD, Bus.....	Seattle	Fraser, Frank, LD, LA.....	Seattle
Fitzmaurice, Dorothy, LD, LA.....	Seattle	Fraser, James E, LD, Bus.....	Yakima
Fitzpatrick, Genevieve, UD, Ed.....	Spokane	Fraser, Whittier, LD, Bus.....	Burton
Fitzpatrick, George W, UD, EE.....	Seattle	Frayn, Richard L, LD, Bus.....	Seattle
Flack, Lena, UD, LA.....	Seattle	Frazier, George G, UD, ME.....	Seattle
Fladd, Everett J, LD, Bus.....	Buffalo, NY	Fredlund, Reynold, UD, Eng.....	Seattle
Flannigan, Fred L, LD, Eng.....	Eska, Alaska	Free, Alonzo K, UD, ME.....	Tacoma
Flannery, Marybeth, LD, LA.....	Seattle	Freeman, George W, Grad.....	Spokane
Fleming, Delbert B, Unc, Bus.....	Seattle	Freeman, Normal L, LD, Fis.....	Seattle
Fleming, James P, LD, Bus.....	Butte, Mt	Freeze, Hildegard, LD, LA.....	Seattle
Fletcher, George G, LD, Phar.....	Seattle	Frein, Alice, Grad.....	Seattle
Fletcher, Gerald R, UD, Eng.....	Seattle	French, Graham, LD, FA.....	Seattle
Fletcher, Ina, UD, Ed.....	Boise, Id	French, Jasper J, UD, For.....	Spokane
Fletcher, James D, Voc.....	Sheridan, Or	French, Jesse Ira, LD, Bus.....	Spokane
Fletcher, Rose J, LD, LA.....	Tacoma	French, Mabelle, UD, Bus.....	Seattle
Fletcher, Wilma, Unc, FA.....	Camas	French, Merle Carolyn, UD, LA.....	Vancouver
Flett, Margaret A, LD, Bus.....	Racine, Wis	Frem, Agnes A, UD, LA.....	Seattle
Flockol, George H, UD, LA.....	Ferdale	Freyd, Greta, UD, LA.....	Seattle
Flohr, E. Firmin, LD, CE.....	Seattle	Friday, Paul Douglas, LD, LA.....	Seattle
Flood, Catherine F, LD, FA.....	Tacoma	Friedman, Samuel, UD, Bus.....	Seattle
Flower, Alan, LD, Bus.....	Mabton	Friend, LeRoy F, LD, Sci.....	Tacoma
Flower, Alfred R, LD, Eng.....	Mabton	Friese, Bernice V, LD, FA.....	Edmonds
Flower, Camillus F, LD, Bus.....	Mabton	Frink, James H, LD, ME.....	Seattle
Flowers, Ruby Jane, Grad.....	Burton	Fritz, William H, LD, Eng.....	Pt Townsend
Floyd, Lucy, LD, Sci.....	Kittitas	Froloff, Serge I, Unc, Eng.....	Russia
Flury, Faustina, UD, LA.....	Seattle	Frost, Frank W, LD, Bus.....	Stanwood
Flynn, Madeline, LD, LA.....	Spokane	Frost, Leona K, LD, FA.....	Seattle
Flynn, Virginia, LD, LA.....	Spokane	Frost, Merton, LD, Bus.....	Seattle
Fogelquist, Floyd, LD, For.....	Selah	Frost, Vernon, LD, LA.....	Spokane
Foley, Hugh G, Unc, Bus.....	Manson	Froude, Chester W, UD, Bus.....	Seattle

Frudenfeld, Mildred L, LD, LA.....Tacoma
 Fry, Harry B, Sp, Min.....Seattle
 Fuller, Warner B, UD, Bus, Portland, Ore
 Fulton, Lois Mildred, UD, FA.....Asotin
 Fulton, Nina B, Grad.....Pullman
 Fulton, Rex H, LD, CE.....Centralia
 Fultz, Gerald B, LD, Sci.....Olympia
 Funakush, Frank Kinichi, UD, EE, Seattle
 Funkhouser, Myrtle, UD, LA.....Ridgefield
 Furey, Theta, LD, LA.....Seattle
 Furgeson, Paul, LD, LA.....Sumner
 Fursman, Oliver C, UD, Eng.....Seattle
 Fursay, William N, LD, Bus.....Seattle

Gaa, Jose M, LD, Bus.....Philippines
 Gabrielson, Carl, LD, Bus.....Puyallup
 Gaffney, John H, LD, Bus.....Seattle
 Gaislsick, Harold, UD, Bus.....Seattle
 Galbraith, Jane B, LD, Bus.....Seattle
 Galbraith, Mary, UD, Sci, N Westminster, BC
 Gale, Ralph E, UD, EE.....Seattle
 Galeno, Eugene, LD, Phar.....Seattle
 Galer, Vincent, Unc, Bus.....Seattle
 Gallagher, James Oliver, UD, Bus, Seattle
 Gallinger, Edythe, Unc, FA.....Seattle
 Galloway, Floyd L, Unc, For.....Seattle
 Galvez, Pedro R, LD, LA.....Philippines
 Gambee, Elizabeth, UD, FA.....Seattle
 Ganders, James J, UD, Sci.....Seattle
 Gannon, Edward, UD, LA.....Bellingham
 Gard, Mrs Clara A, LD, LA.....Seattle
 Gardineer, Marian, LD, LA.....Seattle
 Gardner, Albert W, LD, ME.....Tacoma
 Gardner, Harold A, LD, EE.....Seattle
 Gardner, Osborne, LD, Phar.....Nisqually
 Garin, Rene G, Voc.....Seattle
 Garland, Cathran, LD, FA.....Seattle
 Garner, Helen, LD, Sci.....Omak
 Garretson, Helen, LD, LA.....Yakima
 Garrett, Hal, LD, LA.....Seattle
 Garthley, Margaret, LD, LA.....Seattle
 Garver, Robert W, Grad.....Seattle
 Gaston, Dorothy, UD, Phar.....Seattle
 Gates, Paul J, Unc, LA.....Seattle
 Gauger, Herbert A, LD, Bus.....Edwall
 Gaul, Leona L, LD, FA.....Everett
 Gavin, Thomas Jay, LD, Bus.....Seattle
 Geer, Bernice, UD, Sci.....Seattle
 Geer, Willard, LD, FA.....Attalla
 Geisendorffer, Helene, LD, Sci.....Seattle
 Geist, Marian, LD, LA.....Walla Walla
 Gelatly, Bernice, UD, FA.....Wenatchee
 Gemmel, Genevieve, LD, LA.....Seattle
 Gemmel, Winifred, UD, LA.....Seattle
 Gentle, Ottolene, Unc, LA.....Centralia
 Geoghegan, J Herbert, Grad.....Seattle
 George, Jeremiah, LD, Sci.....Sunnyside
 George, Robert L, LD, For.....Yakima
 Gerbel, Arthur Jr, LD, LA.....Seattle
 Gerbel, Maribeth, LD, LA.....Seattle
 Gerber, Leonard, LD, Bus.....Seattle
 Gerber, Sidney, LD, Eng.....Seattle
 Gerl, Helen, UD, FA.....Bellingham
 German, Cornelio, UD, EE.....Philippines
 Gernsey, Louise, UD, LA.....Seattle
 Gerow, Douglas R, LD, LA.....Chinook
 Gervais, Louis, LD, For.....Seattle
 Getchell, Asher F, LD, LA, Silver City, Id
 Getchell, Eleanor A, LD, LA.....Seattle
 Ghisell, Alexander, LD, Sci.....Spokane
 Gibbon, Chester, LD, LA.....Maplevalley
 Gibney, Margaret I, LD, FA.....Seattle
 Gibson, Burke, LD, Bus.....Seattle
 Gibson, Fred O, LD, Sci.....Davenport
 Gibson, Robert S, Unc, LA.....Seattle
 Gibson, Russell G, UD, Bus.....Westwood
 Gierin, Russell, LD, LA.....Seattle
 Giesy, Huldamay, LD, LA.....Menlo
 Gilbert, Harold S, LD, Bus.....Seattle
 Gilbert, Horace N, UD, LA.....Yakima
 Gilbert, Margery, UD, LA.....Astoria, Or

Gilbert, William N, LD, LA.....Zillah
 Gilbertson, Violet, LD, Sci.....Aberdeen
 Giles, James E, LD, LA.....Pt Angeles
 Gillien, LaVerne W, LD, Bus, Bellingham
 Gilhams, Helen, LD, LA.....Sturgis, Mich
 Gill, Kenneth Hugh, Unc, Bus, Snohomish
 Gillespie, Elmer, LD, Sci.....Seattle
 Gillespie, James D, UD, Bus, Missoula, Mt
 Gillett, Erma, LD, Sci.....Cle Elum
 Gillette, Cora M, LD, Sci.....Seattle
 Gillman, Ethel, UD, LA.....Spokane
 Gilmore, Constance, LD, LA.....Seattle
 Gilmore, Dorothy B, LD, LA.....Seattle
 Gilmore, Hortense, LD, LA.....Seattle
 Gilmore, John W, LD, LA.....Seattle
 Giner, F S, LD, ME.....Philippines
 Gingrich, Pearl, LD, LA.....Olympia
 Ginsberg, Isadore, LD, Phar.....Seattle
 Gipson, Margaret E, UD, LA.....Seattle
 Gisselberg, Victor E, LD, Min, Mist, Ore
 Gist, Arthur Stanley, Grad.....Seattle
 Gitzen, Walter H, UD, ChE.....Seattle
 Gius, Herman, UD, Bus.....Seattle
 Givens, Arden, LD, Bus.....Chehalis
 Glaeser, Oscar, UD, Min.....Seattle
 Glass, Frank, LD, Sci.....Seattle
 Glaze, Nina M, LD, LA.....Seattle
 Gleason, Marian C, LD, Sci.....Seattle
 Glen, Juliet K, LD, FA.....Seattle
 Glen, Philip, LD, LA.....Seattle
 Glenn, Harry C, LD, LA.....Elma
 Glenn, Madelon, LD, LA.....Seattle
 Glenn, Wesley, LD, LA.....Seattle
 Glover, Allen R, LD, LA.....Union City, Pa
 Glynn, William B, UD, FA.....Seattle
 Gnagey, Marguerite, LD, LA.....Seattle
 Godfroy, William, UD, Sci.....Spokane
 Goerhling, Viola Elsie, Unc, Bus.....Seattle
 Goetz, Jacob Jr, Unc, Bus.....Spokane
 Goff, B Neville, LD, Bus.....Seattle
 Goldman, Erwin F, UD, Bus, Missoula, Mont
 Good, Harold E, LD, Bus.....Mt Vernon
 Good, Ireta May, LD, Bus.....Seattle
 Goodier, Leslie, LD, Bus.....Silverton, Or
 Goodlander, Millicent, UD, Sci, Parkdale, Or
 Goodlick, Samson, LD, Sci.....Seattle
 Goodrich, Forrest J, Grad.....Seattle
 Goodrich, Robert R, LD, Min, Pt Townsend
 Goodsell, Julia, LD, LA.....Chelan
 Goodwin, Frank S, LD, LA.....Seattle
 Goodwin, Kathryn, LD, LA.....Seattle
 Goodwin, Lang M, LD, Bus, Freewater, Or
 Goodwin, Louise, LD, LA.....Seattle
 Goon, Henry F, LD, Bus.....Seattle
 Goon, John L, LD, Bus.....Seattle
 Goon, Lillian, Unc, FA.....Seattle
 Goofee, J Milton, LD, Bus.....Seattle
 Gorbavitzy, Maurice, UD, Eng.....Seattle
 Gorbavitzy, Max, LD, LA.....Seattle
 Gordon, Claire I, LD, For.....Seattle
 Gordon, David L, UD, ChE.....Seattle
 Gordon, Gwendolyn, LD, LA.....Spokane
 Gordon, Johanna, UD, LA.....Seattle
 Gordon, Madeleine, LD, Bus.....Seattle
 Gordon, Walter S, LD, EE.....Seattle
 Gottstein, Burton, UD, Bus.....Seattle
 Gottstein, Pauline F, LD, LA.....Seattle
 Gowen, Joyce, UD, LA.....Seattle
 Grace, B, Elizabeth, LD, LA.....Seattle
 Grace, Robert H, LD, LA.....Seattle
 Graefe, Margaret, LD, LA.....Seattle
 Graff, Elsie, UD, LA.....Seattle
 Graff, John Paul, LD, LA.....Tacoma
 Grafft, George, LD, LA.....Everett
 Grafton, Arthur, LD, Bus.....Tacoma
 Graham, Albert E, LD, LA.....Tacoma
 Graham, Carroll E, UD, ME.....Seattle
 Graham, Donald, LD, ChE.....Seattle
 Graham, Edmond E, Voc.....Seattle
 Graham, Fred O, LD, Bus.....Wenatchee
 Graham, Helen, LD, FA.....Seattle
 Graham, Molly, LD, FA.....Spokane

Graham, Roy H, Unc, Bus.....	Pasco
Grandey, Howard, LD, CE.....	Southbridge, Mass
Grant, Allan G, LD, Bus.....	Seattle
Grant, Allan G, LD, Bus.....	Seattle
Grant, Clare G, UD, FA.....	Seattle
Grant, Donald F, UD, CE.....	Seattle
Grant, Helen L, LD, LA.....	Seattle
Grant, Ruth A, LD, Bus.....	Seattle
Grant, Vernon H, LD, CE.....	Seattle
Grant, Wells, LD, Fish.....	Seattle
Graves, Helen Ida, LD, LA.....	Seattle
Graves, Marjorie, Unc, LA.....	Edmonds
Graves, Ralph, 2nd Law.....	Seattle
Gray, Emanuel A, LD, LA.....	Seattle
Gray, Helen F, UD, LA.....	Seattle
Graybill, Anita, LD, LA.....	Tacoma
Graves, Katherine H, LD, LA.....	Seattle
Graves, Florence, LD, Sci.....	Bothell
Grebe, Louisa, UD, LA.....	Spokane
Greely, Gilbert F, LD, Bus.....	Gt Falls, Mont
Green, Clarence C, UD, LA.....	Seattle
Green, Clifton D, LD, Bus.....	Seattle
Green, Clyde J, Grad.....	Seattle
Green, Floyd C, LD, LA.....	Tolt
Green, Mamie J, LD, LA.....	Seattle
Green, Margaret B, LD, LA.....	Seattle
Green, Stella I, LD, LA.....	Carnation
Greenbank, Herbert A, LD, LA.....	Seattle
Greene, Elizabeth, LD, LA.....	Seattle
Greene, Gaylord W, Grad.....	Buckley
Greene, Hamilton L, UD, LA.....	Seattle
Greene, J, UD, Bus.....	New Westminster, BC
Greene, John W, LD, CE.....	Seattle
Greene, Lorenzo W, LD, Bus.....	Vancouver, BC
Greenleaf, Joseph T, UD, Bus.....	Seattle
Greenlee, John F, UD, Bus.....	Seattle
Greenough, Roger W, UD, Bus.....	Spokane
Greenwood, Kathleen, LD, LA.....	Victoria, BC
Gregory, L Catherine, LD, LA.....	Seattle
Gregory, William N, LD, Bus.....	Seattle
Greguson, Judith, Grad.....	Seattle
Griffin, DeWitt C, Unc, FA.....	Seattle
Griffin, Earle D, LD, Eng.....	Sedro Woolley
Griffin, Frederic P, LD, LA.....	Tacoma
Griffin, Lois, LD, LA.....	The Dalles, Or
Griffin, Marie, LD, LA.....	The Dalles, Or
Griffin, Quenna J, LD, LA.....	Seattle
Griffin, Thomas, Unc, Bus.....	Seattle
Griffith, Charles H, Voc.....	Seattle
Griffith, Frank R, LD, Bus.....	Chehalis
Griffith, William, Grad.....	Seattle
Griffiths, Lois Wilfred, Grad.....	Seattle
Grimes, Margaret, UD, LA.....	Tacoma
Grimm, William H, 1st Law.....	Centralia
Grindell, Virginia, LD, LA.....	Seattle
Grisim, Elizabeth, UD, LA.....	Seattle
Groat, Elva Belle, Grad.....	Seattle
Grondal, Florence E, LD, Sci.....	Seattle
Gross, Katherine, LD, Ed.....	Seattle
Gross, William C, LD, For.....	Newark, NJ
Groth, Joyce, UD, LA.....	Seattle
Grotle, Clara, LD, FA.....	Seattle
Grunbaum, Henry, LD, Bus.....	Seattle
Grunbaum, Richard, Unc, BE.....	Piedmont, Cal
Gruenberg, Fred P, LD, Bus.....	Wenatchee
Guerin, Harriet, UD, Sci.....	Seattle
Gulang, Pedro G, LD, LA.....	Philippines
Guild Gertrude Mae, LD, FA.....	Agassiz, BC
Guliford, Madeline, UD, LA.....	Westport
Gullien, Filmon, Unc, LA.....	Philippines
Gulliksen, Harold, LD, LA.....	Seattle
Gullikson, Albert C, UD, Eng.....	Seattle
Gulliver, Ida Mae, LD, Sci.....	Seattle
Gundlach, Ralph H, UD, LA.....	Wallace, Id
Gundlach, Wilford R, Grad.....	Wallace, Id
Gunning, Alice, UD, LA.....	Spokane
Gurewitz, M, Grad.....	Telaviv, Palestine
Gustafson, Marie, LD, Phar.....	Cosmopolis
Gustafson, Walter T, UD, EE.....	Seattle
Gustafson, Emil, UD, Bus.....	Seattle
Gustafson, Katherine, LD, Sci.....	Seattle
Guthrie, Catherine, LD, LA.....	Yakima
Guthrie, Iris, UD, LA.....	Tacoma
Guttormsen, George, LD, LA.....	Everett
Gwilym, Herald, UD, EE.....	Seattle
Gwinn, Ernest, LD, CE.....	Seattle
Haack, David, UD, Bus.....	Seattle
Haake, Elizabeth, LD, LA.....	Seattle
Haase, Edna L, LD, Sci.....	Seattle
Habicht, Helen, LD, LA.....	Seattle
Hagen, Richard O, LD, Bus.....	Seattle
Hager, Dorothy, LD, Sci.....	Vancouver, BC
Hagerman, Marie, LD, FA.....	Grandview
Hagerty, Frank W, LD, LA.....	Seattle
Hagerty, Nellie, UD, FA.....	Seattle
Haggard, Henry, LD, Bus.....	Maple Falls
Haggett, Dorothy, LD, LA.....	Seattle
Hagist, Alfred C, LD, Min.....	Seattle
Hahn, Carl A, UD, ME.....	Seattle
Hahn, Cathryn L, LD, LA.....	Seattle
Haimo, Myron B, LD, LA.....	Seattle
Haines, Fred S, UD, ME.....	Seattle
Halberg, Evar A, Unc, Bus.....	Pt Angeles
Halberstadt, Elizabeth, LD, LA.....	Seattle
Hale, Florence, LD, LA.....	Seattle
Hale, Gratian, LD, Bus.....	Butte, Mont
Hale, Oron J, LD, LA.....	Bickleton
Hale, Ruth E, UD, LA.....	Seattle
Hall, Carroll, LD, Bus.....	Seattle
Hall, Edward B, LD, Bus.....	Seattle
Hall, Esther, LD, LA.....	Kitsap
Hall, Ingalls, LD, CE.....	Seattle
Hall, Marjorie, UD, Ed.....	Fairfax
Hall, Ralph D, LD, Bus.....	Little Falls, NY
Hall, Robert C, LD, LA.....	Montesano
Hall, Russell, LD, LA.....	Seattle
Hall, Vesper, UD, Ed.....	Seattle
Hall, Wayne Lee, UD, Bus.....	Spokane
Haller, Constance Reed.....	Seattle
Halls, Violet, Grad.....	Vancouver, BC
Halliday, Robert, Voc.....	Seattle
Hallstrom, Irving T, LD, CE.....	Seattle
Halpern, Nathan, Unc, Eng.....	Russia
Haltem, Errol, LD, Bus.....	Tillamook, Or
Halverson, Edwin O, UD, Bus.....	Custer
Halvorson, Florence, UD, Sci.....	Seattle
Halvorson, Helmer, UD, Bus.....	Custer
Hamada, Fred, Unc, Bus.....	Seattle
Hambert, Rhea E, UD, Ed.....	Cheney
Hambleton, Edith, LD, LA.....	Seattle
Hamerly, Merle, LD, Bus.....	State, SD
Hamilton, Dorothy, LD, Bus.....	Seattle
Hamilton, James B, UD, Eng.....	Seattle
Hamilton, Tallmadge, Grad.....	Seattle
Hamm, Charles H, UD, FA.....	Seattle
Hamm, George, LD, Bus.....	Puyallup
Hammack, James R, LD, LA.....	Mt Vernon
Hammer, Joyce, UD, LA.....	Sedro Woolley
Hammer, Karl E, LD, EE.....	Seattle
Hammerlin, Roy Nels, UD, Bus.....	Tacoma
Hammond, Marguerite, LD, Phar.....	Seattle
Hampson, Floyd F, Unc, Bus.....	Seattle
Hampson, Fred E, LD, LA.....	Tacoma
Hanagata, Shozo, LD, EE.....	Seattle
Handy, John W, LD, Bus.....	Noodsack
Haner, Norman W, LD, EE.....	Wickersham
Haner, Victor C, LD, Eng.....	Wickersham
Hankinson, Helen, UD, LA.....	Seattle
Hanley, Edward Burnette, LD, LA.....	Seattle
Hanley, Myron, LD, Bus.....	Spokane
Hanna, Helen, LD, Bus.....	Seattle
Hannah, Fred C, LD, Phar.....	Friday Harbor
Hannum, Clair A, UD, Sci.....	Seattle
Hanson, Alice, LD, LA.....	Seattle
Hansen, Bert B, Grad.....	Seattle
Hanson, Bonnie, LD, Bus.....	Seattle
Hansen, Doris, LD, LA.....	Seattle
Hansen, Mrs Elizabeth H, Grad.....	Seattle
Hansen, Esther A, UD, LA.....	Sumner
Hansen, Hannah A, UD, Bus.....	Tacoma
Hanson, Harold W, LD, For.....	Enumclaw
Hanson, Harry A, LD, ME.....	Mt Iron, Minn

Hansen, Harry F, UD, Bus.....	Seattle
Hanson, Henry E, LD, Eng.....	Seattle
Hansen, Herman, Unc, Law.....	Spokane
Hanson, Ida Elizabeth, LD, FA.....	Seattle
Hanson, Mildred, LD, Bus.....	Seattle
Hanson, Rainhardt, UD, Bus.....	Bellingham
Hansen, Reese D, UD, ME.....	Seattle
Hansen, Ted A, LD, Eng.....	Seattle
Hansen, Thorwald A, LD, CE.....	Snohomish
Haraden, Josephine, LD, Bus.....	Seattle
Harbaugh, Edward C, Voc.....	Seattle
Harbor, Marie, LD, Bus.....	Tacoma
Harcus, Frances I, LD, Sci.....	Everett
Hardeman, Russell, UD, Lib.....	Seattle
Harden, Donald, LD, Bus.....	Mt Vernon
Hardie, William L, Unc, Bus.....	Spokane
Harding, Bessie I, UD, FA.....	Seattle
Hardinger, Annette, LD, Phar.....	Seattle
Hardwick, C Emerson, LD, Sci.....	Everett
Hardwick, Donald G, Unc, Bus.....	Everett
Hardwick, Francis T, Grad.....	Everett
*Harcus, Frances L, LD, Sci.....	Everett
Harkema, Henry W, Unc, Bus.....	Seattle
Harkness, A E, UD, Bus.....	Grandview
Harlan, Mrs Ruth H, LD, FA.....	Seattle
Harley, C Frederick, LD, Bus.....	Seattle
Harlow, F. H, LD, Eng.....	Seattle
Harlow, Max B, LD, ME.....	Seattle
Harn, Frank D, LD, Phar.....	Centralia
Harns, James D, LD, Bus.....	Seattle
Harman, Robert, LD, LA.....	Spokane
Harned, Worth, Unc, Bus.....	Seattle
Harold, Pearl B, LD, FA.....	Seattle
Harper, Clarence P, LD, Bus.....	Clarkston
Harper, Elbert, LD, Bus.....	Seattle
Harper, Horace R, LD, Phar.....	Seattle
Harper, Paul A, UD, OE.....	Seattle
Harrington, Bernard, UD, Bus.....	Seattle
Harris, B F, LD, Sci.....	Fruitland, Ida
Harris, Cornelius H, LD, Bus.....	Seattle
Harris, Edna, UD, Bus.....	Seattle
Harris, Florence, UD, Ed.....	Seattle
Harris, Fred O, UD, LA.....	Seattle
Harris, Harry H, LD, ME.....	Seattle
Harris, John D, Unc, Min.....	Issaquah
Harris, Leland S, LD, Sci.....	Seattle
Harris, Lena, LD, Bus.....	Seattle
Harris, Mary, UD, LA.....	Seattle
Harris, Parker E, UD, Bus.....	Seattle
Harris, Ralph H, LD, For.....	Seattle
Harris, Robert G, LD, ME.....	Spokane
Harris, Violet E, LD, LA.....	Seattle
Harris, Virginia B, Grad.....	Seattle
Harrison, Everett F, UD, LA.....	Seattle
Harrison, Frances, UD, LA.....	Seattle
Harrison, May, LD, LA.....	Richmond Beach
Harrison, Mrs Roneta O, UD, LA.....	Seattle
Harron, James A, LD, LA.....	Seattle
Harshberger, Robert P, UD, Min.....	Seattle
Hart, Emma C, UD, LA.....	Seattle
Hart, Ernestine C, Unc, LA.....	Vancouver
Hart, Harold, LD, EE.....	Issaquah
Hart, Harold S, LD, Eng.....	Walla Walla
Hart, Helen R, LD, Sci.....	Issaquah
Hart, Katharine, LD, LA.....	Blaine
Hart, Lou Ella, UD, LA.....	Olympia
Hart, Mildred S, LD, Sci.....	Seattle
Hart, Ruth, UD, LA.....	Tacoma
Hartelius, H F H, Grad.....	Seattle
Harter, Genevieve, LD, FA.....	Bellingham
Hartge, Mrs Lena, Grad.....	Seattle
Harting, Raymond D, LD, LA.....	Seattle
Hartinger, Jack R, Voc.....	Seattle
Hartle, George, LD, For.....	Seattle
Hartley, Florence, LD, Phar.....	Seattle
Hartman, Jonathon E, LD, Eng.....	Kirkland
Hartnagel, Nelson, LD, Bus.....	Seattle
Hartung, Olive M, LD, FA.....	Seattle
Hartwig, Floyd C, Unc, Bus.....	Seattle
Harvey, Bessie E, LD, LA.....	Seattle
Harvey, Earle A, LD, Sci.....	Arlington
Harvey, Elizabeth, LD, LA.....	Walla Walla
Harvey, Lora, LD, LA.....	Seattle
Harvey, Margaret, UD, Ed.....	Medford, Ore
Harvey, Walter M, LD, LA.....	Seattle
Haskell, Oliver H, LD, LA.....	Tacoma
Haskin, Cosae M, Sp, Sci.....	Vancouver, B C
Hassenmiller, K Lyndon, UD, Ed.....	Seattle
Hatch, Hazel E, LD, LA.....	Colby
Hatch, Orville C, LD, LA.....	Seattle
Hatch, Sam, LD, LA.....	Pasco
Hatfield, Olive, LD, Sci.....	Tacoma
Hatheway, Ernest R, UD, Sci.....	Seattle
Hatien, Charles B, LD, LA.....	Everett
Hatierstad, Elmer, UD, ME.....	Seattle
Hatley, Mrs Mamie C, UD, Ed.....	Colfax
Hatton, Ruth G, LD, LA.....	Seattle
Hauan, Merlin, LD, Eng.....	Kingston
Haudt, Harold A, LD, Eng.....	Seattle
Haug, Andrew J, Grad.....	Seattle
Hauge, Phillip, Grad.....	Parkland
Haury, Clinton Xavier, LD, LA.....	Seattle
Hauschel, Robert, LD, Sci.....	Bremerton
Hauschildt, Frank W, LD, Bus.....	Seattle
Hausdorf, Ruth, LD, FA.....	Seattle
Haven, George Jr, LD, For.....	Seattle
Haverkamp, Delmar, UD, Bus.....	Tacoma
Havlik, Mary G, Unc, FA.....	Scappoose, Ore
Hawker, Cecil, LD, Phar.....	Pasco
Hawkins, Hazel G, LD, LA.....	Seattle
Hawkins, Hazel M, LD, LA.....	Seattle
Hawkins, Helen, LD, LA.....	Portland, Ore
Hawkins, Lewis, Reg, Jour.....	Bellingham
Hawkins, Russell Jr, UD, For.....	Idaville, Ore
Hawkins, Walter, UD, EE.....	Mt Vernon
Hawley, Clarence B, UD, ChE.....	Seattle
Howley, Mary, UD, LA.....	Seattle
Hay, Larry, UD, Bus.....	Sunnyside
Hay, Marjorie, UD, Sci.....	Seattle
Hay, Muriel, LD, LA.....	Seattle
Hayden, George B, LD, For.....	Tacoma
Hayden, Mary D, LD, LA.....	Seattle
Hayes, Mary E, LD, LA.....	Seattle
Haynes, Lila, Unc, LA.....	Black Diamond
Haynes, C Hanford, UD, Eng.....	Seattle
Haynes, Robert, LD, Bus.....	Seattle
Hazelton, Olga, UD, Sci.....	Spokane
Hazen, Kathryn, LD, LA.....	Seattle
Hazzard, Marion, LD, LA.....	Pasco
Healy, Warren C, LD, Sci.....	Seattle
Heath, Dorothy, UD, Bus.....	Yakima
Heath, Howard Davis, LD, Bus.....	Seattle
Heaton, William D, LD, Bus.....	Spokane
Hebb, Paul H, Unc, LA.....	Tacoma
Hecht, Ruth, LD, LA.....	Seattle
Hedrick, Frieda, Unc, FA.....	Seattle
Heffernan, John T, LD, Eng.....	Seattle
Hegewold, Wilhelmina, LD, LA.....	Mt Vernon
Helly, Raymond C, LD, Bus.....	Spokane
Helman, Jeffrey, LD, LA.....	Seattle
Heimer, Eva, UD, LA.....	Seattle
Heinz, Winfield B, LD, EE.....	Beebe
Heitzman, John H, Voc.....	Seattle
Held, Jane, LD, LA.....	Seattle
Helder, Vanessa, Unc, FA.....	Bellingham
Hellar, W Grant, LD, Eng.....	Tacoma
Hellens, Glory, LD, Sci.....	Seattle
Helstrom, Gordon L, LD, Sci.....	Willapa
Hemphill, Elizabeth, UD, Ed.....	Seattle
Hemphill, Harriet, UD, FA.....	Seattle
Hendershot, Helen, LD, LA.....	Seattle
Henderson, Helen, LD, LA.....	Hoquiam
Henderson, Walter L, LD, Sci.....	Seattle
Hendricks, Mabel Hope, LD, LA.....	Tacoma
Hendricks, Olive Mae, Unc, FA.....	Seattle
Hendrickson, Agnes C, Unc, FA.....	Cathlamet
Hendrickson, Harold M, LD, Eng.....	Seattle
Hendrickson, Harvey F, UD, Sci.....	Seattle
Hendrickson, Ruth, LD, Sci.....	Seattle
Henke, Harry Jr, LD, LA.....	Seattle
Henricksen, Fred S, 1st Law.....	Tacoma
Henricksen, H Otto, UD, Bus.....	Seattle
Henricksen, Thorwald, LD, Bus.....	Tacoma
Henry, Anna Ruth, UD, FA.....	Yakima

Henry, Frank R, LD, For.....	Tacoma
Henry, Gorman, LD, Bus.....	Seattle
Henry, Hylas E, Unc, Law.....	Seattle
Henry, Ruth H, UD, LA.....	Tacoma
Hensel, Pauline, LD, FA.....	Seattle
Helper, Carroll, LD, Eng.....	Seattle
Helper, Helen, UD, FA.....	Seattle
Herb, Elmer, Unc, Bus.....	Spokane
Herbert, Willis N, LD, Bus.....	Tacoma
Herman, Saul, LD, LA.....	Seattle
Hermans, Thomas G, UD, Sci.....	Seattle
Hermanson, Stanley, LD, Phar.....	Seattle
Hernandez, S C, LD, Bus.....	Philippines
Heron, Herbert A, UD, For.....	Seattle
Heron, Nellie, LD, Sci.....	Seattle
Herr, Jewel, LD, LA.....	Seattle
Herre, Kirk, LD, LA.....	Bellingham
Herren, Esther M, LD, Bus.....	Havre, Mont
Herren, William A, Unc, Law.....	Seattle
Herren, Willow, LD, LA.....	Seattle
Herrett, Clarence H, UD, Bus.....	Seattle
Herrick, Ellen, UD, LA.....	Seattle
Herrick, John S, Grad.....	Seattle
Herrick, Winifred, LD, LA.....	Seattle
Hershberger, Gladys, LD, FA.....	Lewiston, Ida
Herzig, Mrs Fannie, Sp, Sci.....	Seattle
Hesketh, Bruce R, LD, Eng.....	Seattle
Hesse, Bertha A, UD, LA.....	Seattle
Hesse, Victor O, UD, Bus.....	Walla Walla
Heyes, Katherine, LD, LA.....	Seattle
Hiatt, Amos, UD, Bus.....	Seattle
Hickenbottom, Walter E, LD, Bus.....	Seattle
Hicker, Eugene, LD, LA.....	Seattle
Hidalgo, Miguel, LD, Bus.....	Philippines
Hielscher, Herbert H, LD, Bus.....	Seattle
Hiersch, Wilhelmina, LD, LA.....	Burton
Higgins, Wilma R, LD, Bus.....	Seattle
Highland, Herman A, Unc, Phar.....	Seattle
Hildreth, Howard R, LD, Sci.....	Seattle
Hilen, Ellen, V, UD, Bus.....	Seattle
Hilen, Ethel J, UD, Sci.....	Seattle
Hill, Alfred O, LD, Phar.....	Vancouver
Hill, Chester, UD, Bus.....	Richmond Beach
Hill, Cyril D, Grad.....	Seattle
Hill, Fancel E, UD, Bus.....	Pt Townsend
Hill, John E, LD, EE.....	Seattle
Hill, Marie, LD, FA.....	Seattle
Hill, Ray H, LD, LA.....	Bellingham
Hill, Reuben Dwight, LD, Bus.....	Seattle
Hillard, Thelma, UD, Ed.....	Seattle
Hilliard, Alma, LD, FA.....	Aberdeen
Hillman, Kenneth G, LD, Eng.....	Seattle
Hillman, R Kline, 3rd Law.....	Seattle
Hills, Autumn, LD, FA.....	Seattle
Hills, Carlotta, LD, LA.....	Seattle
Hillsdon, Charles E, LD, For.....	Seattle
Hillyard, Carlton, LD, LA.....	Seattle
Hilstrom, John, LD, Bus.....	Vancouver
Hilton, Eleanor C, UD, FA.....	Seattle
Hilton, Ian S, LD, Phar.....	Marysville
Himes, Hazel, LD, Sci.....	Hoquiam
Himes, Roy C, Unc, Bus.....	Elma
Himmelsbach, Dora M, Grad.....	Yakima
Hinckley, Elizabeth, LD, Sci.....	Seattle
Hind, Cecil Martel, LD, LA.....	Seattle
Hindle, Stuart J, UD, Bus.....	Seattle
Hindley, Philip M, LD, LA.....	Seattle
Hindmarsh, A E T, LD, Eng.....	Nanaimo, BC
Hines, Mrs Ruth, Sp, FA.....	Seattle
Hines, Ruth Ann, Sp, FA.....	Seattle
Hinman, Chester A, LD, Bus.....	Lewiston, Ida
Hinman, Grace, LD, LA.....	Seattle
Hinsdale, Helen, LD, FA.....	Seattle
Hinsley, William B, Voc.....	Tacoma
Hirai, Takanaga, LD, Bus.....	Seattle
Hirata, Harry M, UD, Bus.....	Seattle
Hirose, Ruby, Unc, Phar.....	Auburn
Hitchings, Esther, UD, LA.....	Seattle
Hitchcock, Richard A, Grad.....	Ceylon
Hoag, Clarice, LD, LA.....	Seattle
Hoard, Bert V, UD, Eng.....	Seattle
Hoard, George L, Grad.....	Seattle
Hoard, Lynn, LD, Eng.....	Seattle
Hobl, Helen, LD, LA.....	Aberdeen
Hoblitzell, Austin B, LD, EE.....	Seattle
Hocking, Lillian, LD, Sci.....	Seattle
Hodges, F C, LD, EE.....	Hurley, N Mex
Hodges, John S, Voc.....	Seattle
Hodges, Robert Karl, LD, Bus.....	Seattle
Hodler, Joseph, Unc, LA.....	Portland, Ore
Hoefler, Herman S, LD, ME.....	Seattle
Hoffer, John C, UD, Fish.....	Seattle
Hoffman, Dorothy, LD, LA.....	Seattle
Hoffman, Ruth M, Grad.....	Olympia
Hofmeister, Alma C, Unc, LD.....	Seattle
Hofsto, Glen E, LD, FA.....	Seattle
Hogan, Louis B, UD, For.....	Cosmopolis
Hoggatt, Floyd L, LD, LA.....	Seattle
Hoggatt, Mrs Ruth, LD, Sci.....	Seattle
Hohenberg, Jack S, Eng.....	Seattle
Holbrook, Richard, LD, Bus.....	Seattle
Holden, Blanch L, LD, Bus.....	Lebam
Holt, Florence C, LD, FA.....	Seattle
Hollan, Emma M, UD, LA.....	Seattle
Holland, Alfred M, LD, Sci.....	Aberdeen
Holland, Helengrant, LD, LA.....	Seattle
Hollenbeck, Dale G, UD, Bus.....	Seattle
Hollingshead, Laura, Grad.....	Seattle
Hollomon, J Paul, LD, Phar.....	Olympia
Holloway, A Cecil, LD, LA.....	Seattle
Holloway, Lucille, LD, LA.....	Seattle
Holman, Franklin J, LD, Bus.....	Elma
Holman, Harold E, LD, For.....	Seattle
Holman, Roswell M, UD, Bus.....	Seattle
Holman, Walter E, Unc, Bus.....	Seattle
Holmes, Henrietta, UD, Sci.....	Seattle
Holmes, Joseph D, LD, LA.....	Seattle
Holmes, Vernon P, LD, CE.....	Idaho Falls, Id
Holmes, Willard L, LD, CE.....	Idaho Falls, Id
Holmstad, Myrtle, LD, LA.....	Seattle
Holz, Eva L, LD, LA.....	Kapowsin
Hooper, Eugene F, Unc, Law.....	Seattle
Hooper, Louise, LD, LA.....	Seattle
Hoover, Henry B, LD, FA.....	Bremerton
Hoover, Lewis F, Voc.....	Seattle
Hopf, Eliza May, LD, Sci.....	Pt Angeles
Hopkins, Eugenia, LD, FA.....	Seattle
Hopkins, F Herman, LD, Bus.....	Seattle
Hopmann, Harry A, UD, ChE.....	Puyallup
Hopper, Charles M, UD, Bus.....	Spokane
Hopper, Clarence G, LD, LA.....	Seattle
Hopper, Edna L, LD, LA.....	Seattle
Horlike, Koji, LD, Bus.....	Seattle
Horn, Fay O, Grad.....	Auburn
Hornbeck, Helen M, LD, LA.....	Seattle
Hornberg, Jalmer T, UD, Bus.....	Newcastle
Horne, Harold H, LD, Bus.....	Seattle
Horning, Harold F, LD, Bus.....	Seattle
Hornstra, Fred Harry, UD, Eng.....	Auburn
Horowitz, Charles, LD, LA.....	Seattle
Horsley, Sears, LD, Bus.....	Seattle
Horst, Cecil A, UD, ME.....	Seattle
Horst, Claude W, UD, LA.....	Seattle
Hoskins, Marion, UD, Ed.....	Redmond, Ore
Hosner, Reba, LD, FA.....	Seattle
Hotsen, Jessie M, Grad.....	Seattle
Hoogan, Edward O, UD, Bus.....	Seattle
Houssier, Julia, Sp, Sci.....	N Westminster, BC
Houston, Leroy W, Unc, Bus.....	Sumner
Houston, Rhea Grace, LD, FA.....	Seattle
Houston, Ruth, LD, FA.....	Seattle
Hovey, Anne, LD, LA.....	Olympia
Howard, Catherine F, LD, LA.....	Seattle
Howard, Doris, UD, LA.....	Everett
Howard, Florence A, LD, FA.....	Seattle
Howard, Frances H, LD, LA.....	Seattle
Howard, Helen E, LD, LA.....	Stanwood
Howard, Louise, UD, Sci.....	Seattle
Howard, Rodney J, LD, Bus.....	Seattle
Howard, Walter J, Unc, EE.....	Seattle
Howard, C Wesley, LD, EE.....	Lyman
Howarth, Marie, UD, LA.....	Seattle
Howat, John Taylor, LD, Bus.....	Seattle

Howe, Kendall L, UD, EE.....Seattle
 Howe, Ruth A, LD, LA.....Seattle
 Howe, Wilbur A, LD, EE.....Seattle
 Howell, Ellene, UD, LA.....Seattle
 Howell, Emma L, UD, Bus.....Seattle
 Hower, Melba, LD, LA.....Friday Harbor
 Howland, Earl A, Unc, Bus.....Kirkland
 Hoxsey, George E, LD, Sci.....Leavenworth
 Hoyt, Donald R, LD, LA.....Seattle
 Hoyt, Dorothy, LD, Sci.....Woodinville
 Hoyt, Gordon, LD, Sci.....Seattle Heights
 Hoyt, Joseph B, LD, ME.....Emmett
 Hoyt, Marguerite, LD, LA.....Seattle Heights
 Huang, Hua Plao, UD, LA.....China
 Hubbard, Proctor, LD, LA.....Seattle
 Huckins, Dwight, LD, For.....Seattle
 Hudson, Augustus, UD, CHE.....Bremerton
 Hudson, Dorothy W, LD, Sci.....Seattle
 Hudson, George E, Unc, Law.....Seattle
 Hudson, Mabel C, UD, Bus.....Everett
 Huf, Philip R, Unc, Sci.....Tacoma
 Huggett, Ralph A, Grad.....Seattle
 Hughes, Anne Burke, UD, LA.....Seattle
 Hughes, Arthur T, LD, Min.....Seattle
 Hughes, Cecil L, Grad.....Seattle
 Hughes, Edwin A, UD, CE.....Olympia
 Hughes, Henry H, UD, Bus.....Yakima
 Hughes, Honoria, LD, LA.....Seattle
 Hughes, Joseph L, Unc, LA.....Wenatchee
 Hughes, Millicent, LD, Bus.....Seattle
 Hughes, Victor A, LD, Bus.....Bellingham
 Huguelet, Zellene, LD, LA.....Seattle
 Hulshouser, Ruth, UD, LA.....Selah
 Humes, Edmond T, Voc.....Seattle
 *Humm, Hazel F, Sp, Sci, Hastings, Minn
 Hummel, Bertha R, Grad.....Seattle
 Humphrey, Viola, LD, FA.....Seattle
 Hundal, Ikbail S, LD, ME.....Vancouver, BC
 Hunsaker, James W, LD, Sci.....Seattle
 Hunt, Beatrice, LD, LA.....Kennydale
 Hunt, Ernest R, UD, LA.....Seattle
 Hunt, Lyman Laurel, LD, Sci.....Chelan
 Hunt, Norma E, LD, LA.....Seattle
 Hunt, Thomas A, LD, CE.....Seattle
 Hunter, Herschel, Unc, LA.....Seattle
 Huntington, Lloyd Elmo, UD, ME, Bellingham
 Huntington, Helen, LD, Bus.....Seattle
 Huntington, LeRoy, LD, For.....Hoquiam
 Huntington, Ronald M, LD, For.....Seattle
 Huntington, Walter L, LD, For.....Hoquiam
 Huntley, Ralph, LD, Bus.....Spokane
 Huntworth, John W, UD, Bus.....Seattle
 Hurlbut, Wendell F, LD, Bus.....Seattle
 Hurlburt, B, UD, Ed., Thompson Falls, Mt
 Hurlburt, C M, UD, Min, Thompson Falls, Mt
 Hurley, G Victor, UD, Bus.....Seattle
 Hurlspool, Evelyn, UD, LA.....Walla Walla
 Hurst, Myrtle F, LD, LA.....Spokane
 Hurwitz, Minnie, LD, FA.....Seattle
 Huseon, Wing, LD, Bus.....Seattle
 Hurspool, Constance C, LD, LA, Walla Walla
 Huss, Herbert P, LD, Bus.....Seattle
 Hutcheson, Austin, LD, LA.....Montesano
 Hutcheson, Elwood, 2nd Law.....Montesano
 Hutchinson, Alva T, LD, Eng.....Vashon
 Hutchinson, Forrest S, Sp, Bus.....Seattle
 Hutchinson, W Harold, 3rd Law.....Seattle
 Hutchinson, Mary Joy, LD, FA.....Seattle
 Hutchinson, R F, LD, Eng, Hood River, Ore
 Hutchinson, Ruby, UD, Sci.....Mt Vernon
 Hutchinson, C Howard, LD, Eng.....Seattle
 Hutchinson, Pauline A, LD, FA.....Seattle
 Hutton, Agatha Sonna, Grad.....Seattle
 Hutton, Grace, LD, LA.....Yakima
 Hwang, Thomas S, UD, LA.....China
 Hyde, Claire V, UD, LA.....Seattle
 Hyland, Edward H, LD, LA.....Seattle
 Hyland, Katherine, LD, LA.....Seattle
 Hyllegren, Henry, LD, Bus.....Seattle
 Hyman, Norton Beebe, UD, Bus.....Seattle
 Hynes, Frank W, Voc.....Seattle
 Ibach, Horace, LD, Min.....Seattle

Ikeda, Jubel, LD, Bus.....Seattle
 Inches, Leona, LD, LA.....Seattle
 Indridson, Herman, Unc, Fsh.....Seattle
 Ines, Narciso, Unc, LA.....Seattle
 Ingham, Caroline, LD, LA.....Olympia
 Ingham, Hepburn, Unc, Law.....Des Moines, Ia
 Ingram, Robert M, UD, Bus.....Hoquiam
 Inkster, Harry, UD, Sci.....Winston
 Irving, Helen C, LD, LA.....Seattle
 Irwin, Mason, UD, EE.....Montesano
 Isenberg, Ben, LD, Bus.....Seattle
 Islander, Ida, LD, LA.....Seattle
 Isom, Mrs Marie P, LD, FA.....Seattle
 Israel, Eli, UD, Bus.....Seattle
 Isted, Frances, LD, LA.....Seattle
 Itkin, Mildred, LD, LA.....Seattle
 Ivanooff, Michael, Unc, Min.....Siberia
 Ives, Byron G, UD, Bus.....Seattle
 Ives, Waldo C, LD, LA.....Seattle

Jabbora, Chas E, Unc Bus.....Moscow, Ida
 Jaccard, Paul A, LD, Eng.....Malaga
 Jacinto, Flaviano, LD, Bus.....Philippines
 Jacinto, Victorino, LD, LA.....Philippines
 Jackson, Alice, UD, LA.....Seattle
 Jackson, Betty, LD, LA.....Seattle
 Jackson, Clarence, LD, EE.....Castle Rock
 Jackson, Delfer, LD, Bus.....Poulsbo
 Jackson, George B, Grad.....Seattle
 Jackson, Harold O, LD, Bus.....Seattle
 Jackson, Irene N, LD, LA.....Seattle
 Jackson, Jesse M, LD, Bus.....Boise, Ida
 Jackson, Lillian, LD, LA.....Black Diamond
 Jackson, Roy E, LD, LA.....Seattle
 Jackson, Russell C, LD, Fsh.....Montesano
 Jacobl, Miller F, LD, Sci.....Seattle
 Jacobs, Ellen T, LD, FA.....Shell Lake, Wis
 Jacobs, Josephine J, LD, LA.....Seattle
 Jacobs, Maxwell Bryan, UD, Eng.....Seattle
 Jacobs, Townsend H, LD, Bus.....Seattle
 Jacobson, Byron, LD, FA.....Tacoma
 Jacobson, Duncan, LD, Eng.....Everett
 Jacobson, Hans W, LD, Bus.....Idaho Falls, Id
 Jacobson, John T, UD, FA.....Des Moines
 Jacobson, Olga, LD, LA.....Seattle
 Jacobson, Philip A, LD, EE.....Seattle
 Jaggur, R K, LD, Bus.....San Francisco, Cal
 James, Charles, Unc, LA.....Arlington, Mass
 James, Dorothy, LD, Sci.....Tacoma
 James, Frank E, LD, Bus.....Seattle
 James, Helen, LD, LA.....Seattle
 James, Milton C, UD, Fsh.....Augusta, Me
 James, Thurston, UD, Bus.....Seattle
 Janeck, Marlon D, UD, LA.....Yakima
 Janeway, Harold L, UD, Bus.....Seattle
 Jaques, Guy E, LD, Bus.....Pullman
 Jardine, Nan T, LD, LA.....Seattle
 Jarvis, David H, Unc, Law.....Seattle
 Jarvis, Norman D, UD, Fsh.....Pt Townsend
 Jasper, Martin W, LD, Min.....Spokane
 Jeffery, Harold B, LD, Eng.....Seattle
 Jeffries, Wendell, LD, Bus.....Seattle
 Jenkins, Helena, UD, Ed.....Puyallup
 Jenner, Cornelia, UD, Bus.....Seattle
 Jenner, Earle B, UD, ME.....Seattle
 Jenner, Evalene, LD, LA.....Oso
 Jenner, Horace L, LD, Eng.....Seattle
 Jenness, John C, UD, Bus.....Seattle
 Jensen, Alfred, UD, CE.....Seattle
 Jensen, George G, LD, Eng.....Bellevue
 Jensen, George L, LD, Eng.....Ellensburg
 Jensen, Helen, LD, FA.....Seattle
 Jensen, Leo C, UD, CE.....Black Diamond
 Jensen, Marian, LD, LA.....Yakima
 Jensen, Marian G, UD, Sci.....Everett
 Jerome, Vincent B, UD, Ed.....Cashmere
 Jessup, Clara B, LD, LA.....Bremerton
 Jewell, Mildred, LD, LA.....Seattle
 Jewell, Paul M, Voc.....Seattle
 Jewett, Velma, LD, LA.....Seattle
 Johanson, Nels, LD, Min.....Seattle

Johanson, Martha W, Unc, Ed.....Winlock
 Johnson, Anna E, UD, LA.....Seattle
 Johnson, Arthur F, Unc, Sci.....Blaine
 Johnson, Benjamin, LD, Bus.....Aberdeen
 Johnson, Bertil E, Unc, Law.....Tacoma
 Johnson, Carl B, LD, Bus.....Seattle
 Johnson, Dorothea, LD, Bus.....Seattle
 Johnson, Edith Marian, Unc, Bus.....Seattle
 Johnson, Edward L, LD, Bus.....Bellingham
 Johnson, Eva Jane, LD, LA.....Seattle
 Johnson, Fletcher B, LD, Bus.....Seattle
 Johnson, Fletcher O, UD, Bus.....Seattle
 Johnson, Florence, UD, LA.....Seattle
 Johnson, Francis L, LD, Bus.....Everett
 Johnson, Genevieve, UD, LA.....Medina
 Johnson, Gladys I, LD, Sci.....Tacoma
 Johnson, Harvey A, LD, Bus.....Ceres
 Johnson, Herbert L, Unc, LA.....Winslow
 Johnson, Herbert W, LD, Sci.....Everett
 Johnson, Hilding E, UD, ChE.....Seattle
 Johnson, Howard A, UD, ME.....Tacoma
 Johnson, Isyl F, LD, LA.....Tacoma
 Johnson, Jeanette E, LD, LA.....Everett
 Johnson, John L, UD, Bus.....Coeur d'Alene, Id
 Johnson, Katherine, UD, LA.....Seattle
 Johnson, Kenneth A, UD, Sci.....Seattle
 Johnson, Kenneth, LD, Eng.....Seattle
 Johnson, Lois A, LD, Sci.....Pittsburg, Pa
 Johnson, Lester F, Sp, Sci.....Seattle
 Johnson, Lorenz C, LD, Bus.....Seattle
 Johnson, Marion, LD, FA.....Sacramento, Cal
 Johnson, Martin W, UD, Sci.....Silvana
 Johnson, Melvin E, LD, EE.....Spokane
 Johnson, Milton S, LD, LA.....Seattle
 Johnson, O Morrison, UD, Eng.....Tacoma
 Johnson, Nora H, LD, Sci.....Cle Elum
 Johnson, Norman G, UD, Sci.....Seattle
 Johnson, Oliver, LD, ChE.....Seattle
 Johnson, Oscar M, UD, Bus.....Redmond
 Johnson, Paul W, LD, Phar.....Spokane
 Johnson, Pauline, LD, Bus.....Clayton
 Johnson, Phillip, UD, Sci.....Selah
 Johnson, Raymond A, LD, Bus.....Hoquiam
 Johnson, Raymond L, UD, LA.....Juneau, Aka
 Johnson, Rudolph E, LD, Sci.....Seattle
 Johnson, Sylvia, UD, Phar.....Ilwaco
 Johnson, Venus June, UD, Sci.....Seattle
 Johnson, Vernon B, UD, Sci.....Everett
 Johnson, Victor, LD, Sci.....Chester
 Johnson, Victor H, LD, Eng.....Olympia
 Johnson, Walter W, UD, Min.....Spokane
 Johnston, Clarence, LD, Phar.....Seattle
 Johnston, Daniel H, UD, Ed.....Hobart
 Johnston, Fayetta, UD, Ed.....Seattle
 Johnston, B Helen, LD, LA.....Victoria, BC
 Johnston, Ida, LD, Sci.....Coupeville
 Johnston, Rae L, UD, Min.....Seattle
 Johnstone, Robert V, Unc, Bus.....Arlington
 Jolliffe, Eleanor, LD, Bus.....Wallace, Ida
 Jolliffe, John P, LD, EE.....Tacoma
 Jolliffe, Margaret, UD, LA.....Tacoma
 Jolly, E Nydia, UD, LA.....Seattle
 Jonason, Raynor, Unc, Law.....Almira
 Jones, Dorothy M, LD, LA.....Tacoma
 Jones, Elbert C, LD, Eng.....Seattle
 Jones, Eleanor F, LD, Bus.....Seattle
 Jones, Ervin M, Voc.....Seattle
 Jones, Essie E, Unc, LA.....Wenatchee
 Jones, Florence E, LD, FA.....Seattle
 Jones, G Frank, LD, Min.....Seattle
 Jones, Howard R, UD, CE.....Missoula, Mt
 Jones, Ione L, LD, LA.....Hoquiam
 Jones, Ivan L, LD, Sci.....Seattle
 Jones, Lincoln, Unc, LA.....Seattle
 Jones, Luella E, LD, LA.....Seattle
 Jones, Marian E, UD, Bus.....Hartline
 Jones, Mary E, Grad.....Walla Walla
 Jones, Mary Gwendolen, UD, Ed.....Seattle
 Jones, Stanley E, LD, Bus.....Spokane
 Jones, Stephen B, LD, Sci.....Seattle
 Jones, Tracy, LD, LA.....Seattle
 Jones, N Victor, UD, FA.....Seattle

Jones, Walter R, UD, Eng.....Seattle
 Jones, William K, LD, Bus.....Seattle
 Jones, Winston J, LD, Bus.....Tacoma
 Jones, Worth, UD, LA.....Spokane
 Jordan, C Paul, LD, LA.....Roseville
 Jordan, Ruth, UD, LA.....Maryhill
 Jordan, Devant L, LD, Bus.....Seattle
 Jordan, Paul, LD, LA.....Roseville, Cal
 Jorgensen, George H, UD, Bus.....Seattle
 Jorgensen, Harold M, LD, ME.....Seattle
 Jower, Joseph A, Unc, Eng.....Seattle
 Joy, Laura F, UD, LA.....Seattle
 Judd, Marie Florence, UD, FA.....Seattle
 Judges, Fred B, UD, LA.....Spokane
 Jule, Swanhild, C, LD, FA.....Seattle
 Jule, Walter, Unc, LA.....Seattle

Kaiser, Fred H, Voc.....Rolling Bay
 Kaiser, Gladys G, UD, Sci.....Seattle
 Kalez, Marion M, LD, Sci.....Spokane
 Knik, Mary D, LD, FA.....Seattle
 Knilgren, Philip, UD, EE.....Hall
 Kamb, Walter, LD, LA.....Mt Vernon
 Kamel, Shueichiro, LD, LA.....Seattle
 Kamenoff, George, Unc, Eng.....China
 Kambholz, Elmer, UD, EE.....Centerville
 Kamps, Margaret E, LD, LA.....Seattle
 Kamusher, Marion, LD, LA.....Portland, Or
 Kan, Yun, Unc, LA.....China
 Kane, Arthur T, UD, Eng.....Edison
 Kane, Kathleen, LD, FA.....Okanogan
 Kane, Margaret, Sp, LA.....Bremerton
 Kantner, Jean, LD, LA.....Seattle
 Kanwar, Mohan Lal, Unc, Min.....India
 Karr, Herbert, LD, Eng.....Seattle
 Karr, Olive, LD, LA.....Hoquiam
 Karrer, Lawrence, LD, Eng.....Seattle
 Kauser, Monica, UD, Ed.....Seattle
 Kaufman, Elsa, LD, FA.....Tacoma
 Kaul, Sheo Nath, LD, For.....India
 Kaye, Emelle L, LD, FA.....Bakersfield, Cal
 Kearns, Marcus, Unc, Bus.....Vancouver, BC
 Keck, Helen, LD, FA.....Seattle
 Kee, Sing-Tah, UD, LA.....China
 Keefe, Robert, LD, Bus.....Snohomish
 Keeler, George H, UD, Bus.....Sequim
 Keelling, Robert, UD, Bus.....Seattle
 Keen, Ruth May, LD, LA.....Seattle
 Keene, Elmer L, UD, EE.....Yakima
 Keeney, Leo D, LD, Fsh.....Bothell
 Kelfer, Beecher, UD, FA.....Winesap
 Kellholtz, Ralph, LD, Eng.....Seattle
 Kellholtz, Ruth, LD, FA.....Seattle
 Kelth, Allie H, LD, FA.....Spokane
 Kelleher, John E, Unc, Law.....Renton
 Keller, Bertha, LD, Sci.....Spokane
 Keller, Earl W, LD, LA.....Seattle
 Kelley, Barbara, UD, Bus.....Seattle
 Kelley, Cecil, UD, ME.....Seattle
 Kelley, Eugene, Voc.....Seattle
 Kelley, Lewis P, LD, Bus.....Walla Walla
 Kellner, Chester, Grad.....Hamilton
 Kellogg, George A, UD, Ed.....Seattle
 Kellogg, Marion, LD, FA.....Seattle
 Kellogg, Orlo B, LD, LA.....Seattle
 Kelly, Kathryn, LD, Sci.....Seattle
 Kelly, Norman, LD, LA.....Walla Walla
 Kelsey, Henry G, UD, EE.....Hoquiam
 Kelso, Kenneth K, LD, LA.....Seattle
 Kemp, Fred D, LD, LA.....Seattle
 Kemper, Phyllis, LD, LA.....Seattle
 Kenin, Harry Marvin, Grad.....Seattle
 Kenin, Mrs Lena N, Grad.....Seattle
 Kennedy, Bernice, LD, LA.....Seattle
 Kennedy, Lottie Ann, LD, LA.....Union
 Kennedy, Margaret, LD, Bus.....Seattle
 Kennedy, Ruth, LD, FA.....Tacoma
 Kennedy, Wesley, Unc, Eng.....Seattle
 Kennett, John J, Unc, Law.....Seattle
 Kenney, F D, LD, Bus.....Portland, Ore
 Kenney, Helen Ann, LD, Sci.....Olympia

Kenyon, George D, LD, Bus.....Seattle
 Kenyon, Hazel M, LD, LA.....Seattle
 Keog, Ruby, LD, Sci.....Seattle
 Repp, Karl, UD, CE.....Seattle
 Kern, Charlotte, LD, FA.....Seattle
 Kernighan, Edith C, LD, LA.....Buckley
 Kerns, Homer, LD, ME.....Seattle
 Kerr, Cary A, LD, LA.....Seattle
 Kerr, Elizabeth C, LD, LA.....Seattle
 Kerr, John Leeds, LD, LA.....Seattle
 Kerry, Albert S, LD, LA.....Seattle
 Kersten, Clinton W, LD, Bus.....Seattle
 Kerwin, Mary C, LD, FA.....Seattle
 Ketcham, Laura, UD, LA.....Seattle
 Ketchum, Leland, LD, LA.....Seattle
 Ketchum, Mary V, LD, LA.....Seattle
 Ketchum, William, UD, Bus.....Seattle
 Kettnering, Elizabeth, LD, Bus.....Vancouver
 Kettnering, Grace K, LD, LA.....Vancouver
 Kettlestrings, Joseph, LD, Bus.....Seattle
 Keyes, Chauncey, LD, Bus.....Anacortes
 Keyes, Donald C, LD, Sci.....Bellingham
 Keyes, Howard C, LD, Sci.....Bellingham
 Keys, Anna, LD, LA.....Seattle
 Kidder, Jay D, UD, Bus.....Seattle
 Kidder, Perry E, LD, Phar.....Seattle
 Kieburz, G Harold, UD, Eng.....Seattle
 Kief, Caswell W, UD, Eng.....Seattle
 Kiehl, Clarence L, LD, Bus.....Livingston, Mt
 Kienholz, Leon E, UD, Sci.....Spokane
 Kienholz, Mabel, LD, LA.....Spokane
 Kilgore, Carleton, LD, LA.....Seattle
 *Kilgore, Katherine, Sp, Sci.....Tacoma
 Kilworth, Wesley, LD, FA.....Seattle
 Kimball, Jessie, LD, FA.....Seattle
 Kimball, William A, LD, LA.....Tacoma
 Kimball, William B, LD, Bus.....Seattle
 Kimura, Koreaki, LD, LA.....Seattle
 King, Malle Alice, UD, Ed.....Seattle
 King, Margaret E, UD, LA.....Seattle
 King, Mervil W, Unc, Bus.....Reardon
 King, Robert W, UD, Bus.....Seattle
 King, William C, LD, Phar.....Seattle
 King, Winchester, LD, Eng.....Seattle
 Kingman, Kenneth, LD, LA.....Chelan
 Kingsbury, Evelyn P, LD, Sci.....Seattle
 Kinkade, Lucille, UD, LA.....Howard, Mt
 Kinkade, Russell W, LD, Bus.....Howard, Mt
 Kinleyside, Antoinette, UD, Ed.....Seattle
 Kinne, Frances E, UD, FA.....Seattle
 Kinney, Eleanor, LD, LA.....Vancouver
 Kinsey, Isabelle, LD, Sci.....Seattle
 Kinsey, Ronald, LD, Bus.....Seattle
 Kippen, Lorine, LD, Bus.....Spokane
 Kirby, Cleo L, LD, Bus.....Kahlotus
 Kirby, Ruth, LD, LA.....Seattle
 Kirk, Douglas, LD, Bus.....Everett
 Kirk, Leonard, LD, Eng.....Seattle
 Kitamura, Morimitsu, Grad.....Seattle
 Kittrell, Jack W, LD, Bus.....Everett
 Kitzinger, Beatrice, LD, LA.....Aberdeen
 Klaus, Charles E, LD, EE.....Seattle
 Kleber, Narcissa E, UD, LA.....Seattle
 Klein, Lillian R, LD, FA.....Seattle
 Kleinberg, Lena, LD, LA.....Seattle
 Kleinberg, Lester, UD, Bus.....Seattle
 Kline, Austin D, LD, FA.....Edmonds
 Klock, Lois Adele, LD, LA.....Seattle
 Klotz, Frank, LD, FA.....Seattle
 King, Vivian C, LD, Bus.....Seattle
 Knapp, E Bradford, LD, Bus.....Lynden
 Knapp, Eugene H, Unc, Law.....Davenport
 Knapp, Frank Roy, Grad.....Seattle
 Knapp, Frederick B, Voc.....Bellevue
 Knapp, Joseph A, UD, LA.....Vancouver
 Knickerbocker, Floyd, LD, LA.....Seattle
 Knievel, Anton John, Unc, Bus.....Butte, Mt
 Knight, Charles W, LD, Bus.....Spokane
 Knight, Sarah, LD, LA.....Seattle
 Knight, T Spencer, UD, Bus.....Spokane
 Knighton, Blanche, Unc, LA.....Omak
 Kniseley, John M, LD, ChE.....Seattle

Knott, Mrs Emma L, UD, FA.....Seattle
 Knowles, Horace, LD, Sci.....Seattle
 Knox, Esther, UD, Ed.....Cashmere
 Knox, Marian M, LD, FA.....Seattle
 Knox, Robert W, UD, CE.....Portland, Or
 Knox, Rozella, UD, FA.....Portland, Or
 Knudsen, Brede, Unc, Min.....Kennecott, Aka
 Knudson, Oscar M, Grad.....Sherwood, ND
 Knull, Clarence W, Voc.....Seattle
 Knuppe, Lyman, UD, Min.....Fairbanks, Aka
 Kobbervig, Theodore, LD, Sci.....Everett
 Koch, Fred C, LD, LA.....Ritzville
 Kocher, Virgil, UD, Bus.....Porter
 Koenig, John, UD, LA.....Nisqually
 Koepfli, C Albert, LD, Bus.....Seattle
 Koepfli, Karl K, LD, Bus.....Seattle
 Koepke, Carolyn, UD, Sci.....Seattle
 Koester, Anthony C, LD, LA.....Seattle
 Koga, Ryukun, Grad.....Japan
 Kohagen, Walter M, LD, Bus.....Yakima
 Kohne, Elliott, LD, LA.....Everett
 Kohne, Russell A, LD, Bus.....Everett
 Koltabashi, Yoshitane, LD, Sci.....Seattle
 Kolvula, Elmer, LD, Min.....Seattle
 Kondo, Paul T, LD, EE.....Seattle
 Konstantinoff, Nicolas I, Unc, Eng.....China
 Koppe, Clifford, LD, LA.....Vancouver
 Koppel, Simon S, LD, Bus.....Boise, Ida
 Kotick, Ottmar, LD, Sci.....Olympia
 Krabbe, Hans M, LD, Eng.....Bellingham
 Kraft, Edwin A, UD, EE.....Seattle
 Kraft, Warren E, UD, LA.....Seattle
 Kramer, Karl W, UD, ME.....Seattle
 Kranklis, Mildred, LD, LA.....Seattle
 Krause, Rudolph E, Grad.....Lake Charles, La
 Krauter, Orlo, LD, Eng.....Newport
 Kravik, Viola, UD, Sci.....Everett
 Kreisher, Harold C, UD, Bus.....Seattle
 Kreischer, Wendel, LD, Eng.....Seattle
 Krenzel, Walter F, LD, LA.....Seattle
 Kretschmann, Herbert, LD, LA.....Seattle
 Kretsinger, Helen M, LD, LA.....Seattle
 Krieger, George Edward, UD, EE.....Seattle
 Krogstad, Elva, Grad.....Seattle
 Krogstad, Gladys, LD, Sci.....Seattle
 Krom, Minna, LD, FA.....Aberdeen
 Kromer, Sydney H, LD, Bus.....Seattle
 Krull, Louis Jr, LD, Eng.....Tacoma
 Krull, Walter, LD, Sci.....Tacoma
 Kruse, Henry R, UD, EE.....Seattle
 Kucera, John Paul, UD, FA.....Lacey
 Kuhfuss, Mildred, LD, Bus.....Wenatchee
 Kuhn, Edwin E, LD, Bus.....Spokane
 Kunz, Eugene L, LD, Bus.....Seattle
 Kuppler, Virginia, LD, LA.....Pt Angeles
 Kurita, Tamesaburo, Unc, Bus.....Japan
 Kuykendall, Lenore, UD, LA.....Olympia
 Kwapii, Dorothy, LD, LA.....Seattle
 Kwapii, Richard, LD, Bus.....Seattle
 Kylstra, John, UD, CE.....Portland, Or
 Kynell, Hildur M, LD, Bus.....Anacortes

LaFollette, Marion B, LD, EE.....Seattle
 LaFrance, A Claude, UD, Bus.....Hamilton, Mt
 Lafromboise, Clarence B, LD, Sci.....Enunclaw
 Laherty, George H, Voc.....Seattle
 Laigo, Pablo H, UD, Sci.....Philippines
 Laing, Edward, Unc, EE.....Anacortes
 Laing, John R, LD, FA.....Earlington
 Laird, Thelma, UD, LA.....Seattle
 Lake, Florence, UD, Bus.....Pt Townsend
 Lambert, Mrs Rebecca, UD, LA.....Seattle
 Lamborn, Morris, LD, Bus.....Olympia
 Lammers, Frieda, UD, Sci.....Pt Townsend
 Lamont, Ralph H, UD, Bus.....Seattle
 Lamp, Wallace, Voc.....Seattle
 Lampkin, Thomas, UD, Phar.....Seattle
 Lamson, Joseph V, LD, EE.....Seattle
 Landaal, Lester H, LD, FA.....Lynden
 Landeen, Herbert A, LD, Bus.....Seattle
 Lane, Glen L, LD, EE.....Boys

Lane, Kathryn, LD, LA.....	Seattle
Lane, Ralph Byron, UD, EE.....	Bellingham
Lange, Margaret, LD, Bus.....	Okanogan
Lange, Theodore W, LD, Bus.....	Wenatchee
Langhorne, Clifford, Unc, Law.....	Tacoma
Langlie, Arthur B, 1st Law.....	Seattle
Langlie, J W, LD, Bus.....	Seattle
Langlow, Wesley A, LD, LA.....	Tacoma
Langoey, Alejandro, LD, LA.....	Philippines
Lanigan, Edward J, LD, Eng.....	Roslyn
Lanning, Oscar D, LD, EE.....	McCleary
Lansdowne, Elizabeth, UD, FA.....	Everett
Lauser, Martin M, LD, Bus.....	Seattle
Lapham, Mar. A, UD, Ed. Indianapolis, Ind	
La Plant, Mary, LD, LA.....	Sedro Woolley
Large, Joseph G, LD, CE.....	Seattle
Lark, Bert Webb, Grad.....	Seattle
Larkin, Frances, UD, LA.....	Seattle
Larkin, Lucretia, LD, FA.....	Seattle
Larkin, Mrs. Virginia M, Grad.....	Seattle
LaRocque, Rene, LD, For.....	Kellogg
Larson, Carl V, Unc, Bus.....	Seattle
Larson, Chris O, LD, Bus.....	Lawrence
Larson, Gus, LD, LA.....	Seattle
Larson, Lou Clair, UD, LA.....	Seattle
LaRue, Pearl, UD, LA.....	Seattle
Lasley, Alleen M, LD, Bus.....	Seattle
Lathers, Gladys Olive, Grad.....	Seattle
Latimer, Vernon G, LD, LA.....	Seattle
Latimer, Walter B, UD, Bus.....	Seattle
Leub, Gaston V, Voc.....	Seattle
Lauber, Albert Jr, UD, For.....	Seattle
Lauderback, Cosby, Unc, Phar.....	Puyallup
Laue, Ewart S, UD, Bus.....	Wapato
Lavery, Earl J, LD, Phar.....	Seattle
La Vigne, J Leon, Unc, Law.....	Chewelah
La Vigne, Naomi, LD, LA.....	Seattle
Lavroff, Laura, LD, LA.....	Tacoma
Lavroff, Lillian, LD, LA.....	Tacoma
Law, Charles H, Unc, Law.....	Seattle
Lawrence, Henry, LD, Phar.....	Seattle
Lawson, Earl, LD, Bus.....	Weiser, Id
Lawson, Gay, UD, Ed.....	Seattle
Lawson, Thomas, UD, LA.....	Spokane
Lawton, Muriel, LD, LA.....	Cheney
Lawton, Winona, LD, Bus.....	Seattle
Lawwill, Adniram L, Unc, Phar.....	Montesano
Law-Yow, Rose, UD, FA.....	Seattle
Lea, Charles W, LD, Bus.....	Seattle
Lea, Dorothy M, LD, LA.....	Spokane
Leaf, Helen V, LD, FA.....	Seattle
Leamon, D Thomas, Unc, LA.....	Pennville, Ind
Leathers, Arthur, LD, LA.....	Seattle
Leatherwood, William, LD, LA.....	Burlington
Leavers, Luke L, LD, FA.....	Wenatchee
Leavitt, Darrell G, UD, Sci.....	Japan
Lebedeff, Yuri, LD, Eng.....	Japan
Leckenby, Jim, Unc, Bus.....	Seattle
*Lee, Alf Edwin, LD, Bus.....	Seattle
Lee, Darrell, LD, Bus.....	Seattle
Lee, Frank A, UD, Sci.....	Seattle
Lee, Mrs. Judith, LD, LA.....	Seattle
Leeper, Helen G, UD, LA.....	Seattle
Levy, H Drelle, LD, Bus.....	Seattle
Legg, Emmett J, UD, CE.....	Seattle
Legg, Herschel D, Voc.....	Four Lakes
Lehde, Raymond C, LD, EE.....	Seattle
Lehman, Arnold J, LD, Phar.....	Seattle
Leighton, Harriet Mae, LD, LA.....	Seattle
Leise, John Frederic, UD, Sci.....	Seattle
Leili, Seraphina, LD, Bus.....	Edgewood
Lemon, Gertrude H, Unc, Bus.....	Seattle
Lemon, Harry E, UD, For.....	Tolt
Lennon, Archie G, Unc, EE.....	Elma
Leonard, A Ralph, UD, Bus.....	Seattle
Leong, Kingfrankton, LD, MB.....	Vancouver, BC
LeRoy, H Wade, LD, For.....	Seattle
Levenson, Sam, Unc, Bus.....	Seattle
Levin, Myer, LD, Phar.....	Spokane
Levinson, Herbert, LD, Bus.....	Seattle
Levinson, Jack, LD, LA.....	Seattle
Levinson, Oscar, UD, Bus.....	Seattle
Levinson, Sam L, 1st Law.....	Tacoma
Levis, Edith H, UD, Bus.....	Seattle
Levitin, Isaac, LD, EE.....	Seattle
Levy, David P, 1st Law.....	Seattle
Levy, James Maxwell, LD, Bus.....	Seattle
Levy, Lucille, LD, LA.....	Seattle
Levy, Melvin P, UD, LA.....	Seattle
Lewarch, Alma, LD, LA.....	Seattle
Lewis, Alice M, Grad.....	Seattle
Lewis, Clara M, UD, Ed. San Antonio, Tex	
Lewis, Edward D, Unc, LA.....	Vancouver, BC
Lewis, Eileen, UD, Sci.....	Pt Townsend
Lewis, Elizabeth, LD, LA.....	East Seattle
Lewis, Evan L, LD, For.....	Seattle
Lewis, Fred A, LD, Bus.....	Ritzville
Lewis, Hubert P, LD, Bus.....	Aberdeen
Lewis, James W, LD, EE.....	Seattle
Lewis, John, LD, Bus.....	Coulee
Lewis, Josephine, LD, LA.....	Seattle
Lewis, Leon, LD, LA.....	Seattle
Lewis, Merle, LD, LA.....	Pasco
Lewis, Sara, LD, LA.....	Coulee
Leymon, Garnett, LD, FA.....	Seattle
Licorenko, Abraham, LD, Eng.....	China
Lien, E Laura, UD, Bus.....	Bremerton
Lightheart, Henry A, LD, Bus.....	Seattle
Lightheart, Margaret, LD, LA.....	Seattle
Likes, Myrton D, UD, Sci.....	Orting
Lillian, Z Ashod, LD, EE.....	Seattle
Lillis, Dan C, LD, Eng.....	Tacoma
Lillis, Jack, LD, LA.....	Wenatchee
Lim, James K, LD, Bus.....	China
Limbach, Dorothy LD, LA.....	Seattle
Lincoln, Zaida, LD, Sci.....	Seattle
Lind, Andrew, UD, LA.....	Seattle
Lindaas, Anna, Grad.....	Tacoma
Lindberg, Martha, UD, LA.....	Tacoma
Lindblad, Ellen R, Voc.....	Seattle
Lindgren, Irene, LD, Sci.....	Spokane
Lindholdt, Alfred, Unc, LA.....	Denmark
Lindner, Isabel, UD, LA.....	Seattle
Lindquist, Irene, UD, LA.....	Seattle
Lindsay, Maxie, UD, Bus.....	Seattle
Lindsay, Ralph, LD, For.....	Olympia
Lindsay, W K, UD, For.....	Idaho Falls, Ida
Lindsey, C Abbott, Unc, Law.....	Seattle
Linge, George A, LD, Eng.....	Seattle
Linn, Harold A, LD, LA.....	Seattle
Linn, Robert D, LD, Bus.....	Aberdeen
Linton, Clarence O, LD, Bus.....	Seattle
Lippy, John Emmett, LD, Eng.....	Harper
Lipsky, Beth, LD, LA.....	Seattle
Liston, Edward J, UD, LA.....	Orillia
Liston, James G, Grad.....	Orillia
Littell, Max E, LD, Bus.....	Spokane
Little, Herbert S, 3rd Law.....	Seattle
Little, Jane, LD, FA.....	Tacoma
Little, Marjorie, LD, LA.....	Seattle
Littlefield, Lena, Unc, FA.....	Seattle
Lively, James W, UD, MB.....	Seattle
Livengood, Joe, LD, LA.....	Seattle
Lloyd, Helen A, LD, FA.....	Seattle
Lloyd, Katherine, UD, CHB.....	Seattle
Lloyd, Percy, LD, Bus.....	Everett
Loacker, Waldemar, LD, LA.....	Seattle
Lochow, William, LD, EE.....	Kent
Lochte, William A, LD, Eng.....	Seattle
Lockerby, Deslah, UD, LA.....	Seattle
Lockhart, Bert, UD, Bus.....	Seattle
Lockhart, Lois E, LD, FA.....	Tacoma
Lockwood, Edna M, UD, Ed.....	Seattle
Loe, Olive Gerline, Unc, LA.....	Seattle
Loer, Lawrence P, UD, Bus.....	Seattle
Loewer, Charles H, UD, Bus.....	Seattle
Lofgren, Frederick V, UD, Phar.....	Seattle
Lohrer, George Hartman, LD, Eng.....	Seattle
Loken, Leo W, UD, Bus.....	Everett
Long, Glenn J, LD, CHB.....	Seattle
Long, Louise L, LD, Bus.....	Seattle
Long, Bill H, Voc.....	Montpelier, Ida
Lonseth, Herbert C, UD, Sci.....	Seattle

Lookin, Innokenty, LD, ME.....	China
Loomis, Glee A, UD, Bus.....	Spokane
**Loop, Harrison Ulysses, LD, Bus.....	Bow
Lorenz, Crescent, UD, LA.....	Tacoma
Lorenzo, Luis, Unc, Bus.....	Philippines
Loudenback, Mildred, LD, LA.....	Wenatchee
Louden, Richard, Unc, Sci.....	Chopaka
Loughary, Jack B Jr, UD, Bus.....	Seattle
Loughhead, Eleanor, LD, LA.....	Seattle
Loughlen, Paul B, UD, Bus.....	Puyallup
Loutzenhiser, Minnie D, UD, LA.....	Yelm
Lovejoy, Eugene O, LD, Bus.....	Seattle
Lovejoy, Warren E, UD, Bus.....	Coupeville
Loving, Thad B, LD, Sci.....	Seattle
Loving, Winnie, Unc, Bus.....	Seattle
Low, Josephine, LD, Sci.....	Seattle
Low, Nellie, UD, LA.....	Seattle
Lucas, Eustaquio, LD, BE.....	Philippines
Lucas, Marian, LD, LA.....	Seattle
Lucas, Martha, UD, LA.....	Seattle
Luccock, Harriett O, Grad.....	Seattle
Luce, Erma, LD, LA.....	San Francisco, Cal
Lucus, Helen M, LD, LA.....	Bremerton
Ludwig, Eugene, LD, BE.....	Seattle
Luft, Max, LD, Eng.....	Bremerton
Lukens, Fred M, LD, Eng.....	Seattle
Lund, John V, LD, LA.....	Seattle
Lund, Walter, UD, FA.....	Seattle
Lundberg, Vivian, UD, LA.....	North Bend
Lundell, Berger J O, Grad.....	Issaquah
Lundstrum, Allan W, UD, BE.....	Yakima
Lumgreen, Rolfe P, UD, For.....	Seattle
Lunnum, Anna Joan, Unc, LA.....	Silvana
Lurie, David, LD, ChE.....	Seattle
Lurie, Elise, LD, LA.....	Seattle
Lurie, Manuel, LD, LA.....	Seattle
Luthy, Marion, LD, LA.....	Seattle
Lutin, Miriam, UD, Sci.....	Seattle
Lutz, Edna M, LD, FA.....	Pt Townsend
Lycette, John P, Unc, Law.....	Seattle
Lycette, Mrs Julia L, Unc, Law.....	Seattle
Lyman, John, Unc, Bus.....	Olympia
Lynch, Allen T, Unc, Law.....	Centralia
Lynch, Isabelle R, UD, Sci.....	Yakima
Lynch, Joseph, LD, Bus.....	Bonners Ferry, Ida
Lynch, L James, Unc, Bus.....	Seattle
Lynch, Rose, UD, Sci.....	Seattle
Lynn, Mrs Irma Tuell, LD, LA.....	Seattle
Lyon, Henry A, UD, ChE.....	Hyattsville
Lyons, Harry, UD, ChE.....	Seattle
Lyons, James F, LD, Bus.....	Seattle
McAbee, Grace, LD, LA.....	Seattle
MacAdams, William, LD, Bus.....	Seattle
McAllister, H. Edgerton, LD, LA.....	Spokane
McAllister, Geraldine, LD, LA.....	Seattle
McAllister, Parker S, Unc, FA.....	Spokane
McAnally, Bonnie, UD, Bus.....	Yakima
McAniff, Francis W, LD, LA.....	Seattle
McArthur, Archibald A, UD, LA.....	Seattle
McAssey, Dollie, LD, Sci.....	Seattle
McAtee, Frayne L, LD, Eng.....	Seattle
MacAulay, George B, Unc, Bus.....	Seattle
MacAulay, Verna, LD, LA.....	Seattle
MacAusland, Orpha M, LD, LA.....	Seattle
McBee, Alfred, 1st Law.....	Seattle
McBee, Marian, LD, LA.....	Seattle
McBride, Kathleen, Unc, Sci.....	Seattle
McBride, Martha, Sp, Sci.....	Chemainus, BC
McBride, Matthew B, LD, LA.....	Seattle
McCabe, Clair, UD, Bus.....	Seattle
McCabe, Helen D, LD, Bus.....	Seattle
McCaig, Grace R, UD, LA.....	Seattle
McCane, Ames, LD, BE.....	Anacortes
McCann, George, LD, CE.....	Seattle
McCann, Gertrude, LD, LA.....	Everett
McCann, Helen R, LD, LA.....	Edmonds
McCannel, Kenneth, LD, BE.....	Seattle
McCarney, Margaret, Grad.....	Seattle
McCart, Ethel Mae, LD, LA.....	Pt Angeles
McCarthy, Donal F, UD, Eng.....	Seattle
McCarthy, Edmund, Grad.....	Kelso
McCarthy, Francis, LD, Bus.....	Seattle
McCarthy, Joseph L, UD, Bus.....	Seattle
McCarthy, Margaret, LD, LA.....	Seattle
McCarthy, Mary O, LD, Bus.....	Beaver
McCartney, John, LD, Phar.....	Seattle
McCarty, Frances, LD, LA.....	Seattle
McCarty, Marguerite, UD, LA.....	Seattle
McCarty, Ruth E, LD, LA.....	Seattle
McCaughy, Douglas A, LD, Bus.....	Seattle
Macanlay, George B, Unc, Bus.....	Newark, NJ
McClain, A Lewis, Grad.....	Seattle
McClarren, Arthur B, LD, Eng.....	Seattle
**McClellan, Jerome W, Sp, Bus.....	N Bend
McClintock, Sarah, UD, Sci.....	Spokane
McCloud, Walter E, LD, Bus.....	Seattle
McClung, Olney, UD, Sci.....	Seattle
McClung, James Carl, UD, Eng.....	Seattle
McClure, Charles W, UD, LA.....	Yakima
McClure, Frank B, UD, Bus.....	Seattle
McColloch, Elizabeth, Grad.....	Seattle
McComas, Stanley, LD, For.....	Anacortes
McConihe, Ruth N, UD, Sci.....	Seattle
McConnell, Avis J, LD, LA.....	Seattle
McConnell, Eva H, Unc, LA.....	Spokane
McCord, Evan S, Grad.....	Seattle
McCormack, Howard, LD, LA.....	Tacoma
McCormick, George P, UD, Min.....	Portage
McCormick, Lewis M, LD, Sci.....	Seattle
McCormick, William, LD, Bus.....	Seattle
McCormick, William Earl, LD, Sci.....	Seattle
McCoy, Elizabeth P, LD, LA.....	Seattle
McCoy, Fred B, UD, For.....	Seattle
McCoy, George Jr, LD, LA.....	Vancouver
McCoy, John W, LD, Phar.....	Seattle
McCoy, Newton C, Unc, Law.....	Castle Rock
McCracken, Mida, Unc, LA.....	Pt Townsend
McCracken, Willis F, UD, BE.....	Seattle
McCrory, Alfred, LD, Bus.....	Seattle
McCrea, Harry Helen, Grad.....	Spokane
McCreary, Howard J, LD, Bus.....	Mt Vernon
McCredy, Rosamond, Grad.....	Seattle
McCroskey, Jean, LD, LA.....	Colfax
McCroskey, Mary Lee, LD, LA.....	Colfax
McCroskey, Wendell, LD, Bus.....	Seattle
McCulloch, Flora, UD, LA.....	Darrington
McCullom, Lloyd, LD, ChE.....	Everett
McCullough, Charles J, Voc.....	Spokane
McCush, George W, UD, LA.....	Bellingham
McDermid, Don C, LD, Bus.....	Vancouver, BC
McDonagh, William J, UD, Bus.....	Seattle
McDonald, Albert F, Voc.....	Seattle
MacDonald, Archibald, Unc, Law.....	Seattle
McDonald, Darrel W, UD, LA.....	Seattle
McDonald, Donald T, LD, ME.....	Seattle
McDonald, Geo C, LD, Bus.....	E Liverpool, O
McDonald, Gordon W, UD, LA.....	Hoquiam
McDonald, Willard, LD, Bus.....	Buckley
Macdonald, Elizabeth, LD, FA.....	Seattle
MacDonald, Bora, LD, Bus.....	Seattle
Macdonald, Gordon, UD, LA.....	Hoquiam
McDonald, John, LD, For.....	Clipper
McDonald, Lamora, UD, LA.....	Spokane
MacDonald, Louise, UD, LA.....	Seattle
Macdonald, A Lyall, UD, Sci.....	Tieton
McDonald, Mary K, UD, Bus.....	Seattle
MacDonald, Rachel, LD, LA.....	Kent
McDonald, Ruby A, LD, LA.....	Seattle
MacDonald, M Ruth, LD, LA.....	Seattle
MacDonald, Sadie, UD, Sci.....	Seattle
MacDonald, Thomas G, Sp, Min.....	Juneau, Ala
MacDonald, Willard, LD, Bus.....	Buckley
MacDonell, Ruby C, LD, LA.....	Vancouver
McDonnell, Marion E, LD, LA.....	Seattle
McDonough, Otto G, UD, LA.....	Seattle
McDonough, Raphael, LD, Sci.....	Everett
MacDougall, Edgar C, Unc, LA.....	Seattle
MacDougall, Maude, LD, FA.....	Seattle
MacDowell, Frances, LD, FA.....	Seattle
MacDowell, Ruth J, UD, LA.....	Seattle
McEachern, Gertrude, LD, LA.....	Seattle
McElroy, Catherine, LD, Phar.....	Skykomish

McElroy, Elizabeth, LD, Sci.....	Olympia
MacEwan, John D, LD, LA.....	Seattle
McFadden, David J, LD, LA.....	Bremerton
McFall, Clifford B, LD, Sci.....	Everett
McFarlane, Doris, LD, LA.....	Seattle
Macfarlane, Lorna, LD, LA.....	Caldwell, Ida
Macfarlane, Margaret, LD, LA.....	Seattle
McFee, Bertha L, LD, Phar.....	Winlock
McFee, Louisa C, LD, LA.....	Seattle
McGary, Robert E, LD, Min.....	Seattle
McGee, Albert, Unc, Eng.....	Seattle
McGibbon, Donald, LD, Eng.....	Seattle
McGill, Edwin, LD, Bus.....	Seattle
McGill, Merrie F, Grad.....	Seattle
McGinnis, Mary, LD, FA.....	Seattle
McGoldrick, Jack H, LD, Bus.....	Vancouver
McGowan, John H, Unc, Law.....	Boise, Ida
McGrath, Doris, LD, FA.....	Pomeroy
MacGregor, Ellen, LD, LA.....	Kent
McGuffey, Jennie G, Grad.....	Seattle
McGuire, Louis H, UD, Min.....	Seattle
McHugh, John C, LD, Bus.....	Spokane
McIlvain, Dorothy, LD, FA.....	Seattle
McInroe, Lloyd L, UD, Bus.....	Walla Walla
McIntosh, Elizabeth, Sp, LA.....	Seattle
McIntyre, Harry J, Grad.....	Seattle
McKay, Annie Laurie, LD, LA.....	Seattle
McKay, Bessie J, Unc, LA.....	Seattle
McKay, Helen, LD, LA.....	Seattle
McKay, Lorraine, UD, LA.....	Seattle
McKechnie, Grace L, Unc, Sci.....	Seattle
McKeever, Robert L, LD, LA.....	Aberdeen
McKenney, Ruth E, LD, Bus.....	Hoquiam
MacKenzie, Donald H, UD, Bus, Rossland, BC	
MacKenzie, Harold A, UD, EE.....	Hoquiam
MacKenzie, Helen, LD, LA.....	Colfax
MacKenzie, Robert G, LD, CE.....	Everett
McKenzie, William A, LD, ME.....	Seattle
McKenzy, Edward G, UD, Ed.....	Seattle
McKinney, Clifford T, 1st Law.....	Wawawai
McKinney, Jessie, Sp, FA.....	Seattle
McKinstry, Cecil Hardy, LD, Bus.....	Seattle
MacKinnon, Anabel M, LD, FA.....	Spokane
MacKinnon, Donald L, LD, CE.....	Juneau, Aka
McKnight, Edwin Thor, UD, Sci.....	Seattle
McKnight, John T, UD, Sci.....	Seattle
McLaren, Arnold, LD, Bus.....	Seattle
MacLaughlin, Gay E, UD, Ed.....	Seattle
MacLaughlin, Margaret, LD, Sci.....	Seattle
McLean, Allan G, UD, LA.....	Seattle
McLean, Duncan G, LD, Eng.....	Seattle
McLean, Kenneth D, Voc.....	Boise, Id
McLean, W, Unc, Eng, N Westminster, BC	
McLellan, Margaret, LD, LA.....	Seattle
McLellan, Maxine K, UD, FA.....	Seattle
McLellan, Roy D, Grad.....	Tacoma
McLeod, Cleo Ruth, Unc, FA.....	Everett
McLeod, Donald LD, Min.....	Calgary, Can
McLeod, Horace, LD, LA.....	Seattle
McLeod, Jean K, UD, LA.....	Portland, Or
MacLeod, Raymond, LD, Phar.....	Seattle
McMahon, Genevieve, LD, LA.....	Seattle
McMeekin, Florence A, LD, LA.....	Seattle
McMeen, Ruth F, UD, Ed.....	Bellingham
McMillan, Jean C, LD, LA.....	Seattle
McMillin, Frederick A, Grad.....	Seattle
McMillin, Harvey C, UD, Fsh.....	Seattle
McMonagle, Alberta V, LD, LA.....	Seattle
McMullen, Joseph E, LD, Bus.....	Seattle
McMullen, Robert B, LD, EE.....	Seattle
McMurphy, Susannah J, Grad.....	Tacoma
McNair, Ben, Unc, Bus.....	Great Falls, Mont
McNally, Vincent, UD, LA.....	Seattle
McNamara, Harold W, Unc, Bus.....	Olympia
McNamara, H W, Unc, Bus.....	Seattle
McNamara, Robert, Unc, Phar.....	Seattle
McNaughton, Edwin L, UD, Sci.....	Seattle
McNaughton, James W, LD, LA.....	Juneau, Aka
McNeil, Ellen, Sp, Sci.....	Tacoma
McNeill, Harold E, UD, EE.....	Tacoma
MacNicol, Anna E, UD, LA.....	Seattle
MacNicol, Jane, LD, Phar.....	Seattle
McPhee, Alex S, LD, FA.....	Auburn
McPherson, Allen, LD, Bus.....	Seattle
McPherson, Dorothy C, LD, FA.....	Seattle
McPherson, Dorothy V, UD, FA.....	Seattle
McPherson, Lenore, Unc, FA.....	Seattle
McQuaid, Alice E, UD, LA.....	Seattle
McQuaid, Thelma, LD, FA.....	Seattle
McRae, Isabel, LD, FA.....	Seattle
McRae, Ruth, LD, LA.....	Seattle
McRayde, Wilbur F, Voc.....	Dayton
McVay, John P, LD, Sci.....	Seattle
Machin, George L, Voc.....	Bellingham
Madden, Ned D, LD, CE.....	Caldwell, Id
Mades, Allen, LD, Bus.....	Seattle
Mage, Jack D, LD, Eng.....	Seattle
Magee, J Homer, LD, LA.....	Seattle
Maginnis, Marie, LD, FA.....	Seattle
Maginnis, William J, LD, Bus.....	Seattle
Magnuson, Freeman, LD, Bus.....	Seattle
Magsombol, Norberto, LD, Sci.....	Philippines
Mahaffey, Audley F, UD, LA.....	Seattle
Mahl, Alvina M, LD, Bus.....	Seattle
Mahnken, Carl, LD, Bus.....	Seattle
Mahone, Lena L, Unc, LA.....	Seattle
Mahoney, Katharine, LD, LA.....	Seattle
Malakoff, Freda, Unc, LA.....	Seattle
Mallis, June B, Grad.....	Seattle
Malone, A P, LD, Bus.....	Portland, Ore
Malone, Walter W, 1st Law.....	Tacoma
Maloney, Edward, LD, LA.....	Skykomish
Maloney, Gilbert, UD, Sci.....	Everett
Maloney, Percy, LD, Phar.....	Everett
Manard, Lucille A, LD, LA.....	Seattle
Manca, Milo J, LD, LA.....	Seattle
Manchester, Arlo R, LD, For.....	Almira
Mandanas, Francisco Y, LD, Sci.....	Philippines
Manlon, W Harold, LD, Bus.....	Seattle
Manlucu, Alfonso, LD, EE.....	Philippines
Mann, Harold N, LD, LA.....	Concordia, Kans
Manning, Clare C, LD, FA.....	Seattle
Manning, Edward, LD, Bus.....	Everett
Manning, Harold C, LD, EE.....	Seattle
Mansfield, Allan H, LD, Sci.....	Everett
Mansur, Howard H, LD, ChE.....	Ellensburg
Mantor, G Crosby, LD, Bus.....	Seattle
Mapleton, Frank H, Voc.....	Seattle
Marchand, Ernest, LD, LA.....	Seattle
Marchand, Morgan, LD, Sci.....	Seattle
Mardon, T Allen, UD, EE.....	Seattle
Mardon, Hazel, Unc, Ed.....	Seattle
Maring, Helen E, LD, LA.....	Seattle
Marino, Frank, LD, Fsh.....	Seattle
Marion, Armand, LD, Bus.....	Seattle
Maris, Dorothy, LD, LA.....	Seattle
Markewitz, Ernest, LD, LA.....	Portland, Or
Markham, Blanche E, Grad.....	Seattle
Markham, William C, LD, Bus.....	Seattle
Markusen, Grace K, UD, LA.....	Seattle
Marland, Frances, LD, LA.....	Seattle
Marmont, Helen, Prov, Bus.....	Seattle
Marple, Warren H, LD, LA.....	Seattle
Marquinez, Juanito, LD, LA.....	Philippines
Marquis, Ralph, UD, LA.....	Seattle
Marquis, William J, UD, LA.....	Seattle
Marriott, Ethel B, LD, Sci.....	Bremerton
Marriott, George, UD, Bus.....	Seattle
Marsh, Earl R, LD, LA.....	Vancouver
Marsh, Eugene E, 3rd Law.....	Seattle
Marsh, Francis E, 2nd Law.....	Seattle
Marsh, Gordon W, UD, For.....	Dryad
Marshall, Charles C, LD, Eng.....	Seattle
Marshall, Harry L, LD, EE.....	Seattle
Marshall, Roy S, LD, Bus.....	Seattle
Marshall, Thomas, Unc, Law.....	Kirkland
Martens, Aleda, LD, Phar.....	Seattle
Martin, Albert W, LD, Eng.....	Portland, Or
Or Martin, Alfred E, Unc, Sci.....	Bothell
Martin, G Emily, UD, LA.....	Minot, ND
Martin, Ernest S, LD, LA.....	Seattle
Martin, Eugene, LD, Eng.....	Seattle
Martin, O Harry, LD, LA.....	Seattle

Martin, John F, LD, Sci.....	Arlington
Martin, Leota, LD, FA.....	Newport
Martin, Morris A, Voc.....	Wilder, Id
Martin, Paul M, UD, ME.....	Puyallup
Martin, Rowland J, Voc.....	Seattle
Martin, Trula, LD, FA.....	Seattle
Martina, John Dewey, LD, EE.....	Centralia
Mason, Earl C, UD, EE.....	Seattle
Mason, Muriel, UD, LA.....	Seattle
Masters, Raymond W, Uns, Bus.....	Seattle
Masuda, Thomas, LD, LA.....	Ellensburg
Mathett, Nicholas B, LD, Bus.....	Spokane
Mathers, Lloyd, LD, Bus.....	Zillah
Matheson, Marjorie, Unc, LA.....	Seattle
Mathews, Elizabeth, UD, Sci.....	Seattle
Mathewson, Doris L, LD, Phar..	Pt Angeles
Mathis, Hortense, LD, LA.....	Seattle
Mathis, Madge, UD, LA.....	Seattle
Matlock, Orin, LD, Bus.....	Spokane
Matson, Helen R, LD, Sci.....	Mt Vernon
Matson, Hortense I, LD, LA.....	Selah
Matsen, Roy, LD, Sci.....	Seattle
Matsumura, Shigeo, LD, Bus.....	Seattle
Matthes, William E, UD, Bus.....	Bellingham
Matthews, Charles W, LD, Eng.....	Seattle
Matthews, Corwin D, LD, Bus.....	Spokane
Matthews, Dorothy, UD, FA.....	Seattle
Matthews, Gwladys, LD, LA.....	Seattle
Matthews, James B, LD, Bus.....	Seattle
Matthews, John G, Jr, LD, LA.....	Seattle
Matthews, Julian O, 2nd Law.....	Seattle
Matthews, Paul R, LD, Bus.....	Seattle
Matthews, Stewart, LD, LA.....	Seattle
Mattox, Clifford J, UD, Ed.....	Ellensburg
Mattson, John I, LD, FA.....	Hoquiam
Mattson, Raynold, LD, Sci.....	Portage
Maughan, Maxey, LD, Bus.....	Spokane
Maulsby, Dent, LD, For.....	Everett
Mauren, Signe, LD, LA.....	Seattle
Maurier, David A, Voc.....	Seattle
Maurischat, Arthur, LD, EE.....	Seattle
Maxson, Ruth, LD, Sci.....	Seattle
Maxwell, James W, LD, Bus.....	Seattle
May, Daphne Phyllis, LD, LA.....	Seattle
Mayer, Herbert E, LD, ME.....	Seattle
Mayes, Evelyn, UD, Sci.....	Seattle
Mayfield, Lola, LD, Bus.....	Portland, Or
Mayhew, Lewis L, LD, LA.....	Bremerton
Mayne, Catherine, UD, Ed.....	Seattle
Maxna, George J, UD, Bus.....	Spokane
Mead, Lawrence, UD, Bus.....	Wenatchee
Meadows, Dorothy, LD, FA.....	Maple Creek, Sask
Meagher, Vivian A, LD, Bus.....	Seattle
Meaker, Marian E, UD, Sci.....	Seattle
Medby, Maber Roy, LD, LA.....	Seattle
Medica, Walter L, LD, ME.....	Seattle
Medica, Louisa A, LD, Bus.....	Seattle
Meekoff, Mynerd, LD, LA.....	Everett
Meerscheldt, Ilma, LD, LA.....	Seattle
Megordon, Seth, LD, For.....	Yakima
Mehan, McCormick, LD, Sci.....	Roy
Mehner, Margaret, UD, Ed.....	Bremerton
Meler, Elsie Anna, Grad.....	Seattle
Meinich, Fern M, LD, Sci.....	Seattle
Melnsnest, Kenneth R, LD, Bus.....	Seattle
Meland, Bjorn, LD, Eng.....	Seattle
Melby, Howard, LD, Bus.....	Seattle
Melby, Mildred, LD, LA.....	Seattle
Melder, F Eugene, LD, Bus.....	Seattle
Melson, Ray C, LD, Bus.....	Bowden, Alta
Mentzer, Cyrus J, 1st Law.....	Tacoma
Mercer, Beryl, Unc, Bus.....	Kallispell, Mt
Mercier, Germaine, Grad.....	France
Mercy, Fred, LD, Bus.....	Yakima
Meris, Francisco, LD, ME.....	Philippines
Mero, Ralph M, LD, ME.....	Seattle
Merrifield, Caroline, Sp, Bus.....	Seattle
Merrifield, Lee, LD, LA.....	Kent
Merrill, Elliott, LD, Eng.....	Seattle
Merrill, Mrs Gladys, UD, Ed.....	Seattle
Merrill, Grant W, UD, FA.....	Seattle
Merrill, John, LD, LA.....	Seattle
Merritt, Fred S, 1st Law.....	Seattle
Merritt, Marjorie, LD, FA.....	Seattle
Merritt, William H, LD, Sci.....	Seattle
Messerve, Kenneth A, UD, Bus.....	Grays River
**Messer, LaVerne, Sp, FA.....	Dixon, Ill
Messmore, Harold, Grad.....	Morrill, Kans
Metcalf, Berniece, LD, LA.....	Yakima
Metcalf, Kathryn, LD, LA.....	Yakima
Metcalfe, Gordon B, LD, LA.....	Seattle
Metsker, Edith, LD, FA.....	Seattle
Metz, J Ernest, UD, Bus.....	Post Falls
Metz, Reas, LD, LA.....	Hatton
Metz, Willard, LD, Bus.....	Hatton
Metzger, Frank D, LD, CE.....	Wenatchee
Meyer, Flora, UD, LA.....	Seattle
Meyer, Herman H, UD, LA.....	Seattle
Meyer, Ivan W, LD, FA.....	Walla Walla
Meyer, Walter C, UD, Bus.....	Seattle
Meyer, Thos E, LD, LA.....	Seattle
Meyer, Warren, Unc, Bus.....	Orting
Meyers, Leo E, UD, Bus.....	Yakima
Meyers, Morris, LD, LA.....	Seattle
Meyers, Shelton, LD, Phar.....	Seattle
Meyring, Eugene A, LD, Eng.....	Seattle
Michael, Gladys, UD, Ed.....	Tacoma
Michaelsen, Helen M, LD, Sci.....	Odesa
Miehl, Ethel, LD, LA.....	Seattle
Mickelson, Paul, LD, Bus.....	Camas
Middlebrook, Curtis, LD, Bus.....	Seattle
Middleton, Campbell, LD, Sci.....	Seattle
Middleton, Howard, UD, Bus.....	Seattle
Middleton, Hugh M, UD, Bus.....	Seattle
Middleton, Maurine, LD, LA.....	Seattle
Mielke, Clara, LD, LA.....	Seattle
Mielke, Helen E, LD, FA.....	Spokane
Mielke, Marie, LD, Bus.....	Spokane
Miescke, Paul, UD, Bus.....	Seattle
Mifflin, Wesley J, 3rd Law.....	Seattle
Millar, George M, LD, Eng.....	Seattle
Miller, Alfred A, 1st Law.....	Seattle
Miller, Beatrice K, LD, LA.....	Yakima
Miller, Bernice, LD, LA.....	Seattle
Miller, Cecil M, Voc.....	Seattle
Miller, Charles, LD, Min.....	Renton
Miller, Charlotte, LD, LA.....	Seattle
Miller, Clarice D, LD, Sci.....	Tacoma
Miller, Eloise S, LD, LA.....	Seattle
Miller, Ernest, LD, Eng.....	Seattle
Miller, Fred Allen, LD, Eng.....	Seattle
Miller, S Ernest, LD, LA.....	Cle Elum
Miller, Ethel M, UD, LA.....	Winslow
Miller, Ethel T, UD, FA.....	Cle Elum
Miller, Eugene, UD, Bus.....	Seattle
Miller, Frederick B, Voc.....	Pomeroy
Miller, Gilbert A, UD, For.....	Seattle
Miller, Gladys N, LD, LA.....	Portland, Or
Miller, Isidor, LD, Bus.....	Seattle
Miller, John K, UD, ME.....	Seattle
Miller, Keith, LD, Bus.....	Seattle
Miller, Laura A, LD, LA.....	Seattle
Miller, Lecl C, LD, Sci.....	Seattle
Miller, Marie, LD, LA.....	Seattle
Miller, Marie M, LD, FA.....	Snohomish
Miller, Marienne, UD, LA.....	Tacoma
Miller, Marion William, LD, CE.....	Renton
Miller, Martha E, Unc, LA.....	Seattle
Miller, Max C, Reg, Jour.....	Everett
Miller, Mervyn B, LD, LA.....	Seattle
Miller, Paul L, LD, LA.....	Seattle
Miller, Posey, Unc, LA.....	Alderwood Manor
Miller, Raymond S, UD, Bus.....	Tacoma
Miller, Robert E, UD, ME.....	Puyallup
Miller, Vera W, UD, LA.....	Seattle
Miller, Zelma, UD, LA.....	Goldendale
Miller, Zephorina, LD, LA.....	Seattle
Miles, Beryl S, LD, LA.....	Olympia
Miles, J George, LD, LA.....	Seattle
Miles, John Hunter, UD, For.....	Seattle
Miles, Norris A, LD, LA.....	Seattle
Miley, Louise, LD, LA.....	Everett
Milligan, Donald, LD, Bus.....	Seattle
Millman, Leonard G, LD, LA.....	Seattle

Milliman, Wendell A, LD, Bus.....Seattle
 Million, Carroll, LD, Bus.....Seattle
 Mills, Archibald, LD, Bus.....Curtis
 Mills, Elizabeth M, UD, LA.....Seattle
 Mills, Gertrude, LD, LA.....Seattle
 Mills, Hayden, LD, Bus.....Curtis
 Mills, Merritt G, LD, LA.....Olympia
 Mills, Paul A, LD, ChE.....Vashon
 Mills, Victor, Unc, Eng.....San Jose, Cal
 Milne, Donald, UD, Bus.....Seattle
 Milot, John A, 1st Law.....Stockett, Mt
 Minard, George, LD, Sci.....Elma
 Mineta, Mokichi, UD, LA.....Japan
 Miner, Eva Lee, LD, Sci.....Seattle
 Mineta, Mokichi, UD, LA.....Japan
 Minnis, Marjorie E, Grad.....Seattle
 Mino, Joseph, LD, ChE.....Sumner
 Minshall, Robert J, UD, Eng.....Seattle
 Minter, Donald, Unc, Bus.....Tacoma
 Minter, Laurabelle, LD, LA.....Tacoma
 Mischler, James J, LD, LA.....Georgetown, O
 Misener, Louis A, LD, EE.....Tacoma
 Misra, Ben, LD, LA.....India
 Mitchell, Caroline, LD, FA.....Seattle
 Mitchell, Dorothy, LD, Sci.....Seattle
 Mitchell, Lynnwood G, LD, Bus.....Seattle
 Mitchell, Mary, LD, LA.....Seattle
 Mitchell, Verne H, LD, Bus.....Kennewick
 Mitthoug, Otis J, UD, EE.....Rockford
 Mittelberger, Marion, Reg, Jour.....Seattle
 Mitton, Leslie, LD, Eng.....Pt Townsend
 Miyashita, Yasuo, Grad.....Japan
 Moavvad, George M, LD, Bus.....Kalama
 Mock, Jessie, Unc, FA.....Juneau, Aka
 Moe, Grace Helen, Unc, LA.....Havre, Mt
 Moen, Oley James, Sp, Bus.....Bellingham
 Mohler, Burns C, Unc, LA.....Seattle
 Mohler, L Ingomar, LD, LA.....Cashmere
 Mojonner, Harold, LD, Bus.....Walla Walla
 Moldstad, Harold A, 2nd Law.....Mt Vernon
 Moll, Celeste, UD, LA.....Arlington
 Moll, Phyllis, LD, Bus.....South Bend
 Mollstad, Marie, LD, LA.....Seattle
 Moncrief, Lester, LD, For, Indianapolis, Ind
 Monroe, George H, UD, LA.....Ferndale
 Monroe, Paul A, LD, Phar.....Seattle
 Monson, George M, LD, Bus.....Greenacres
 Montgomery, Earl F, LD, FA.....Scottsburg
 Montgomery, Lois, LD, FA.....Seattle
 Montilla, Francisco, LD, Bus.....Philippines
 Montilla, Jose, LD, Fah.....Philippines
 Moody, Clark W, UD, Bus.....Vancouver
 Moore, Berna F, Unc, Sci.....Liberty, NY
 Moore, Charles S, Unc, ME.....Seattle
 Moore, Harold W, LD, Bus.....Seattle
 Moore, Knox D, LD, Bus.....Billings, Mt
 Moore, Marguerite E, LD, LA.....Seattle
 Moore, Rollo C, LD, ME.....Seattle
 Moran, Charlotte, LD, LA.....Kirkland
 Moran, S Halbert, LD, Bus.....Seattle
 Moran, Helen, LD, LA.....Seattle
 Moran, Wendell, LD, Eng.....Seattle
 Morcom, Herbert T, LD, Eng.....Seattle
 Morford, S Harold, LD, LA.....Seattle
 Morgan, A Ethel, UD, Sci.....Yakima
 Morgan, Alvin J, UD, For.....Seattle
 Morgan, Frances, UD, Sci.....Hoquiam
 Morgan, Jewell A, LD, LA.....Seattle
 Morgan, Lella Fay, LD, LA.....Seattle
 Morgan, Mary I, UD, LA.....Seattle
 Morgan, M Evan, Grad.....Seattle
 Morgan, Ruth E, LD, Sci.....Seattle
 Morgan, Verona, UD, Bus.....Seattle
 Morgan, Walter T, LD, LA.....Seattle
 Morhous, Delbert M, UD, EE.....Seattle
 Moriarty, Vance, LD, Phar.....Seattle
 Morimoto, Takiji, Grad.....Seattle
 Moritz, Mrs Harold, Grad.....Seattle
 Moriwake, Ernest K, LD, LA.....Hawaii
 Morrill, Andrew J, LD, Bus.....Coupeville
 Morris, Anita, LD, FA.....Butte, Mt
 Morris, David Norton, LD, Eng.....Buckley

Morris, Edna Mae, UD, Sci.....Kettle Falls
 Morris, John H, LD, Bus.....Seattle
 Morris, Joseph, LD, For.....Seattle
 Morris, Katherine, LD, LA.....Seattle
 Morris, Nellie, LD, LA.....Kettle Falls
 Morris, Ruby A, LD, Sci.....Seattle
 Morrison, Arnold, LD, LA.....Birmingham
 Morrison, J Alene, LD, FA.....Anacortes
 Morrison, Marion E, LD, Sci.....Seattle
 Morrison, Millar, LD, Bus.....Spokane
 Morrison, Robert D, LD, Sci.....Libby
 Morrow, Leona M, 3rd Law.....Seattle
 Morrow, Ralph, UD, Bus.....Asotin
 Morrow, Velda, Unc, Law.....Seattle
 Morse, Laura J, UD, LA.....Seattle
 Moseley, Evelyn A, LD, Phar.....Seattle
 Moseley, Maud L, LD, LA.....Seattle
 Moseley, Robert D, LD, Bus.....Seattle
 Moses, Curtiss J, LD, Eng.....Langley
 Mosher, Robert L, LD, LA.....Spokane
 Mosler, Muriel L, LD, FA.....Seattle
 Mott, Francelle, UD, LA.....St John
 Motteler, Deryl L, UD, Bus.....Leavenworth
 Mottelson, Alice Ruth, LD, LA.....Seattle
 Moulton, Morris E, LD, Bus.....Seattle
 Mount, Charles Wm Jr, LD, Bus.....Spokane
 Mowan, George W, LD, LA.....Corvallis, Ore
 Muckler, Charlotte B, LD, FA.....Tacoma
 Mudge, John S, UD, Bus.....Boring, Or
 Mueller, John A, LD, ChE.....Tacoma
 Mueller, Marguerite, UD, Sci.....Seattle
 Mullan, James R, LD, Bus.....Seattle
 Mullen, Doris, UD, Sci.....Seattle
 Mullen, James T, Voc.....Seattle
 Mullin, Sam, LD, LA.....Bellingham
 Munn, Bertha, Unc, Bus.....Spokane
 Munro, Kathleen, LD, FA.....Seattle
 Munson, James E, UD, Fah.....Seattle
 Munson, Richard, LD, LA.....Seattle
 Murphine, Gael, LD, LA.....Seattle
 Murphine, Thomas C, LD, LA.....Seattle
 Murphy, Harold M, UD, Bus.....Arlington
 Murphy, Mary E, LD, Sci.....Philippines
 Murphy, Matthew F, UD, EE.....Seattle
 Murphy, Robert G, Unc, Bus.....Olympia
 Murphy, Virgil A, LD, LA.....Black Diamond
 Murphy, Wilfrid R, LD, Eng.....Seattle
 Murray, Clarence M, LD, Eng.....Seattle
 Murray, James B, LD, Bus.....Seattle
 Murray, Valois A, UD, Bus.....Seattle
 Murton, Clarence C, LD, LA.....Seattle
 Musgrave, Dorothy, LD, LA.....Seattle
 Muth, Lawrence R, LD, EE.....Seattle
 Muyakens, Henry, UD, Sci.....Pt Orchard
 Meyers, Carlyle G, LD, Sci.....Seattle
 Myers, Abe, LD, Eng.....Seattle
 Myers, Dicie M, Grad.....Everson
 Myers, Jean, LD, FA.....Seattle
 Myers, Percy L, LD, Bus.....Seattle
 Myers, Philip, LD, Phar.....Seattle
 Myers, Thomas F, LD, LA.....Outlook
 Myhre, Edna T, UD, Sci.....Seattle

Nachant, Virginia, LD, LA.....Seattle
 Nadeau, Flora L, Grad.....Seattle
 Nadeau, George F, UD, Bus.....Seattle
 Naden, Edwin T, UD, EE.....Olympia
 Nagamatsu, G R, LD, Eng.....Snoqualmie Falls
 Nagamine, Frank N, LD, FA.....Seattle
 Nagley, Berton B, Unc, Bus.....Seattle
 Nagley, Lois, LD, LA.....Seattle
 Nagtalon, Melcher, LD, Fah.....Philippines
 Nahhas, Emmeleine, LD, LA.....Seattle
 Nakagawa, Tanji N, LD, FA.....Pt Blakeley
 Nakao, Yone, LD, FA.....Pt Blakeley
 Nanney, Albert M, LD, LA.....Vancouver
 Nashem, Norman, Unc, Eng.....Seattle
 Naughten, Beatrice, UD, LA.....Wenatchee
 Neal, H Albert, Unc, Bus.....Seattle
 Neal, Richard K, LD, LA.....Ocean Park
 Neal, Walter J, LD, LA.....Seattle

Nealond, Minor I, LD, LA.....	Portland, Or
Neaville, John G, LD, LA.....	Seattle
Needham, George E, UD, Phar.....	Seattle
Neely, Charles B Jr, UD, LA.....	Spokane
Neely, J Ralph, LD, LA.....	Spokane
Neer, Harry, LD, ME.....	Seattle
Neerland, Ruth, LD, LA.....	Seattle
Neft, Anna, LD, Bus.....	Seattle
Neft, Rebecca, LD, Bus.....	Seattle
Neft, Tillie, LD, Bus.....	Seattle
Nelson, G Arnold, Unc, Law.....	Seattle
Nelson, Adelaide K, LD, Sci.....	Seattle
Nelson, Arvid J, UD, For.....	Montborne
Nelson, Carl Victor, UD, For.....	Winslow
Nelson, Clifford F, LD, LA.....	Spokane
Nelson, Esther, UD, Sci.....	Mt Vernon
Nelson, Everett J, UD, LA.....	Rolling Bay
Nelson, Gertrude C, Grad.....	Montesano
Nelson, Hilding, UD, Bus.....	Seattle
Nelson, James B, LD, Min.....	Seattle
Nelson, Josephine, LD, LA.....	Seattle
Nelson, Lloyd E, LD, Bus.....	Seattle
**Nelson, N F, Sp, Bus.....	Everett
Nelson, Norman M, LD, Bus.....	Pt Angeles
Nelson, Walter A, UD, EE.....	Seattle
Nerland, Arthur Leslie, UD, Bus.....	Seattle
Nettleton, Alice Marie, UD, LA.....	Tacoma
Neubauer, Herbert F, UD, Phar.....	Tacoma
Neumann, Russell A, UD, ME.....	Seattle
Neville, Betty, LD, LA.....	Seattle
Neville, Laura M, LD, LA.....	Seattle
Newbern, Richard L, Voc.....	Charleston
Newberry, Amelia E, LD, LA.....	Kirkland
Newbeury, Earl P, LD, FA.....	Portland, Or
Newbury, Carl, Unc, Bus, Klamath Falls, Or	Newbury
Newbury, Mrs. Kirsten, Grad.....	Seattle
Newbury, Violette A, Unc, LA.....	Seattle
Newcomb, Muriel R, UD, FA.....	Olympia
Newdall, Clifford, UD, FA.....	Leavenworth
Newdall, Merritt M, LD, Bus.....	Leavenworth
Newell, Aaron, Grad.....	Seattle
Newell, Laura E, UD, Sci.....	Everett
Newman, Andrew W, Unc, Law.....	Elma
Newman, Anne, UD, LA.....	Everett
Newman, Mrs Rose C, LD, LA.....	Spokane
Newton, Charles A, LD, For.....	Auburn
Newton, Mary H, UD, LA.....	Seattle
Neylan, Margaret C, UD, FA.....	Elkader, Ia
Ng, Chiu, Kwong, LD, LA.....	China
Ng, In Tseug, LD, Bus.....	China
Ng, Kai Sul, LD, Bus.....	China
Niblock, Rachel, LD, LA.....	Seattle
Nichols, Jane, LD, LA.....	Seattle
Nichols, Laure (Mrs), Grad.....	Seattle
Nichols, Robert, LD, FA.....	Seattle
**Nichols, Roy E, Sp, Bus.....	Seattle
Nichols, Mary, LD, LA.....	Seattle
Nicholson, Georgia, UD, Ed.....	Seattle
Nicholson, Leo S, 1st Law.....	Yakima
Nicholson, Sinclair, UD, Bus.....	Seattle
Nicholson, Thomas E, LD, For.....	Anacortes
Nickel, Lucille F, UD, LA.....	Monroe
Nickola, Juanita, LD, FA.....	Seattle
Nicolai, Florice, UD, Bus.....	Sunnyside
Nielsen, Jorgen, LD, LA.....	Nelson, Minn
Nielsen, William A, UD, Bus.....	Spokane
Niemela, Lores, UD, LA.....	Centerville
Niemeyer, Harold E, LD, Bus.....	Seattle
Nievinski, Joseph, 1st Law.....	Seattle
Nims, Fred D, LD, Eng.....	Seattle
Nims, Helen B, LD, Sci.....	Seattle
Nishinori, John I, LD, LA.....	Japan
Nishio, Frank, UD, Eng.....	Seattle
Nitschke, Paul, UD, Sci.....	The Dalles, Or
Nixon, Clayton F, Unc, LA.....	Seattle
Noble, Alvord D, LD, CE.....	Seattle
Noble, Joy, LD, Sci.....	Snohomish
Noble, Mildred A, LD, FA.....	Seattle
Noel, Lionel S, UD, EE.....	Snohomish
Noland, Frank H, Voc.....	Bremerton
Noland, Oen, Unc, Bus.....	Nancoa, Colo
Noll, Mark D, UD, Bus.....	Seattle
Noll, Pauline, UD, Sci.....	Seattle
Norberg, Clarence, LD, Eng.....	Seattle
Nordale, Alton G, LD, Bus.....	Fairbanks, Aka
Nordale, Anita M, LD, LA.....	Fairbanks, Aka
Nordlie, Glenn J, UD, EE.....	Seattle
Nordstrom, Elmer J, LD, Bus.....	Seattle
Nordstrom, Esther, LD, FA.....	Seattle
Nordstrom, Everett, UD, Bus.....	Seattle
Norfolk, Genevieve F, LD, FA.....	Seattle
Norie, Mary E, LD, LA.....	Seattle
Norquist, Robert W, LD, CE.....	Seattle
Norris, Ralph H, UD, Bus.....	Seattle
Norton, Edward J, Sp, Sci.....	Butte, Mt
Norton, Theodore B, UD, LA.....	Tacoma
Norway, Charis J, LD, FA.....	Seattle
Notkin, James B, LD, Eng.....	Seattle
Nourse, Salem A, Unc, Bus.....	Tacoma
Nowak, Helen M, UD, LA.....	Seattle
Nowell, Frances, LD, LA.....	Seattle
Nuguid, Alfonso, LD, ME.....	Philippines
Null, John E, Jr, 1st Law.....	Seattle
Numoto, Minoru, LD, EE.....	Bellevue
Nusbaum, Dean E, LD, LA.....	Seattle
Nyquist, Marie, UD, Phar.....	Seattle
Oakes, Eleanor A, LD, Bus.....	Seattle
Oates, Eulalie, UD, LA.....	Bellingham
Oblen, Mauro G, LD, Eng.....	Philippines
O'Brien, Edith, LD, LA.....	Seattle
O'Brien, John, Unc, Law.....	Tacoma
O'Brien, M, UD, Ed, Black River Falls, Wis	O'Brien
Ocampo, Pedro, LD, Bus.....	Philippines
Ocha, Clyde, LD, Bus.....	Seattle
O'Connell, Charles W, UD, Bus.....	Seattle
O'Connor, Walter B, LD, Bus.....	Seattle
Odegard, Paul N, UD, Eng.....	Seattle
Odegard, Peter H, Grad.....	Seattle
Odgers, George Allen, Grad.....	Davenport
O'Donnell, Helen, LD, Bus.....	Pt Angeles
O'Donnell, Margaret H, LD, LA.....	Butte, Mt
Oertel, Anna Mary, LD, FA.....	Seattle
O'Farrell, Norman R, LD, Bus.....	Orting
Okajima, Thelma S, LD, FA.....	Seattle
O'Keefe, John B, Voc.....	Boise, Id
Okerlund, G M, UD, Ed.....	Los Angeles, Cal
Olberg, Leon, LD, Eng.....	Pt Townsend
Olcott, Virginia, LD, Sci.....	Seattle
Oldfield, Willis, LD, LA.....	Everett
O'Leary, Kathleen J, LD, FA.....	Seattle
O'Leary, Kathleen L, LD, FA.....	Gt Falls, Mt
Oleson, Thomas R, LD, LA.....	Seattle
Olin, William C, LD, Bus.....	Seattle
Oliphant, Bernice M, LD, Bus.....	Roy
Oliver, Orno, LD, Bus.....	Alderton
Olmsted, Essie, UD, FA.....	Seattle
Olsen, Alfred E, LD, Bus.....	Seattle
Olsen, Amos F, UD, Bus.....	Davenport
Olsen, Blanche, LD, Bus.....	Seattle
Olsen, Carl M, UD, CE.....	Stanwood
Olsen, Esther O, UD, LA.....	La Center
Olsen, Franklin E, LD, Bus.....	Tacoma
Olsen, Frederick C, LD, LA.....	Zillah
Olsen, Genevieve, LD, LA.....	Raymond
Olsen, Helen M, LD, LA.....	Seattle
Olsen, Alice W, LD, LA.....	Seattle
Olsen, Alvin C, LD, LA.....	Tulalip
Olsen, Asbjorne B, LD, EE.....	Elma
Olsen, Beatrice M, UD, Sci.....	Madras, Or
Olsen, Carl, LD, Bus.....	Seattle
Olsen, Earl Stanley, LD, Eng.....	Seattle
Olsen, Hjalmar, Grad.....	Seattle
Olsen, Jenny E, UD, LA.....	Monroe
Olsen, Judith, LD, Bus.....	Sandpoint, Id
Olsen, Marie, Unc, Sci.....	Walla Walla
Olsen, Olga C, UD, LA.....	Madras, Or
Olsen, Ronald L, Voc.....	Seattle
Olsen, Warren E, LD, Min.....	Tacoma
Oits, Donald G, Unc, Eng.....	Seattle
Oiwell, Kathleen, LD, LA.....	Seattle
Oiwell, Murray, LD, Bus.....	Seattle
O'Neel, Albert B, UD, Min.....	Seattle

O'Neil, Henry C, LD, CE.....Portland
 O'Neil, Arthur W, Voc.....Seattle
 O'Neil, Muriel R, LD, LA.....Spokane
 O'Neill, Mary C, LD, LA.....Seattle
 O'Neill, W T, LD, Bus.....Mountain Home, Id
 Opsvig, Louis P, LD, Eng.....Seattle
 Ordal, Ola J, Grad.....Parkland
 Orkney, James W, LD, Bus.....Hoquiam
 Orkney, R Woolston, LD, Bus.....Hoquiam
 Ornduff, Robert B, Unc, Bus.....Seattle
 Orne, Stanley, UD, LA.....Seattle
 Orosa, Jose Y, UD, Bus.....Philippines
 Orr, A Dwight, LD, Bus.....Tacoma
 Orr, Gilbert M, UD, For.....Brownsville, Pa
 Orr, Robert L, Voc.....Seattle
 Orth, Maurice W, 1st Law.....Seattle
 Orton, Helen C, LD, LA.....Aberdeen
 Orvis, John M, LD, Bus.....Seattle
 Osa, Lorents A, UD, Sci.....Tacoma
 Ossa, Haru, LD, LA.....Seattle
 Oscar, Orland, LD, Bus.....Seattle
 Osgood, Ernest W, UD, FA.....Seattle
 O'Shea, Eleanor, LD, Sci.....Spokane
 Osten, Winifred, UD, Ed.....Seattle
 Ostrom, Eleanor, LD, FA.....Medina
 Otis, Kenneth D, UD, Bus.....Seattle
 Otto, Robert, Unc, Bus.....Everett
 Ough, Gracia B, LD, LA.....Washougal
 Ouren, Marion, LD, LA.....Leavenworth
 Overguard, Julia O, UD, Sci.....Seattle
 Owens, George, LD, ME.....Seattle
 Owens, Marjorie E, LD, FA.....Wenatchee
 Owings, Mary M, LD, LA.....Olympia
 Oxman, J Donald, Unc, Law.....Seattle
 Oyen, Penelope, LD, LA.....Everett

Pace, Roy W, LD, EE.....Seattle
 Pacey, John, Unc, Law.....Seattle
 Packard, Dexter, UD, Eng.....LaConnor
 Packard, Edmund, LD, LA.....Seattle
 Packer, Florence, UD, Ed.....Seattle
 Packwood, Elvern N, LD, LA.....Roslyn
 Paddelford, Morgan, LD, LA.....Seattle
 Page, Harold, LD, Bus.....Seattle
 Palacoi, Augustine F, UD, LA.....Philippines
 Palmer, Burton E, UD, Min.....Portland, Or
 Palmer, O A, Sp, Min.....Grinnell, Iowa
 Palmer, Carolyn, UD, LA.....Tacoma
 Palmer, Cecil, Unc, Bus.....Rosalia
 Palmer, Delight, LD, LA.....Chehalis
 Palmer, James H, Unc, Law.....Seattle
 Palmer, Margaret, LD, Sci.....Tacoma
 Palpallatoc, O V, LD, Eng.....Philippines
 Palpallatoc, Paul, LD, Sci.....Philippines
 Pampel, George, LD, LA.....Livingston, Mt
 Panchot, Dwight H, UD, Bus.....Seattle
 Paradis, Ernest J, LD, EE.....Seattle
 Parchen, Juanito, LD, LA.....Grandview
 Pardo, Jess, UD, ME.....Seattle
 Parent, Amand, LD, Eng.....Tacoma
 Parrish, Herbert I, UD, Bus.....Seattle
 Park, Madge, UD, Ed.....Seattle
 Park, Walter L, LD, ChE.....Seattle
 Parke, Charles G, LD, Sci.....Seattle
 Parker, Agnes F, Unc, Ed.....Seattle
 Parker, Arline, LD, Bus.....Seattle
 Parker, David L, LD, Bus.....Seattle
 Parker, Helen M, LD, LA.....Portland, Ore
 Parker, Janice L, LD, LA.....Portland, Or
 Parker, Lester T, 2nd Law.....Elma
 *Parker, Perry, Sp, Bus.....Mt Vernon
 Parkhouse, Russell K, UD, Bus.....Tacoma
 Parkins, Wright A, UD, Eng.....Seattle
 Parks, Clarence T, UD, Fsh.....Pt Angeles
 Parks, Mrs Clemence E, UD, LA.....Tacoma
 Parks, Dorris B, LD, LA.....Seattle
 Parmeter, Eugene S, LD, LA.....Spokane
 Parmley, Henry R, LD, FA.....Salt Lake City
 Parr, James F, UD, EE.....Seattle
 Farrington, Elizabeth, UD, LA.....Seattle
 Parrish, Augustus R, LD, LA.....Chehalis

Parrish, Frank Jr, UD, Bus.....Seattle
 Parrish, Karl B, LD, Bus.....Seattle
 Parry, George S, Unc, Law.....Coulee City
 Parry, Jane, LD, LA.....Seattle
 Parshall, Kathleen E, LD, LA.....Seattle
 Parson, Maude, LD, Sci.....Colfax
 Parsons, William B, LD, LA.....Seattle
 Farlee, Raymond A, Unc, LA.....Seattle
 Pascual, Edwards F, LD, LA.....Philippines
 Pascual, Felix F, LD, LA.....Philippines
 Pashley, Harry B, LD, ME.....Seattle
 Patch, Della J, UD, Ed.....Pullman
 Paterson, Gordon B, Unc, Bus.....Victoria, BC
 Patric, John, LD, LA.....Seattle
 Patrick, Harry, LD, Bus.....Seattle
 Patrick, William A, Bus.....Seattle
 Pattee, Helen R, LD, LA.....Spokane
 Patten, William T, LD, For.....Seattle
 Patterson, Bert, LD, LA.....Bellingham
 Patterson, Ira F, LD, CE.....Seattle
 Patton, H Allen, LD, FA.....Seattle
 Patton, Ciotilde, LD, LA.....Seattle
 Pattullo, David S, UD, LA.....Seattle
 Pattullo, Stuart G, LD, Bus.....Spokane
 Paulson, Olive, LD, Bus.....Seattle
 Paulsen, Pauline A, LD, Sci.....Seattle
 Paulson, Stina, Unc, LA.....Edmonds
 Paup, Everett, LD, Bus.....Kotichikan, Ala
 Paxton, Mrs Vera, UD, FA.....Seattle
 Payne, Julian M, LD, Eng.....Seattle
 Payne, M Caroline, LD, LA.....Seattle
 Paysse, Sylvan, Unc, Bus.....Seattle
 Peabody, Emery F, LD, Bus.....Seattle
 Peabody, Harry Nelson, LD, Bus.....Tacoma
 Peach, Helen A, LD, Sci.....Pt Townsend
 Pearce, Marion E, LD, LA.....Seattle
 Pearce, Richard J, LD, FA.....Seattle
 Pearl, Charles J, LD, LA.....Frosser
 Pearson, George, Unc, LA.....Spokane
 Pearson, E Holger, LD, EE.....Oak Point
 Pearson, Merrill, LD, LA.....Richmond Beach
 Pearson, R James, UD, LA.....Seattle
 Pease, Katharine, UD, FA.....Langley
 Pease, Myrle B, LD, EE.....Marysville
 Pease, Robert, LD, Bus.....Seattle
 Peaslee, G Monroe, LD, Eng.....Seattle
 Peck, Hazel K, LD, LA.....Seattle
 Peck, Ruth C, Unc, LA.....Challis, Ida
 Peebles, Orville, 1st Law.....Hoquiam
 Peel, Marion, LD, LA.....Seattle
 Peers, Rose F, LD, Sci.....Wenatchee
 Peets, George H, LD, Bus.....McKale, Miss
 Peick, Clyde F, UD, For.....Seattle
 Peirce, Frances, Unc, Sci.....Seattle
 Pelham, Mrs. Irene, Sp, LA.....Seattle
 Pellegrini, Angelo M, LD, LA.....McCleary
 Pellegrini, Frank, LD, Bus.....Seattle
 Peltz, Walter E, LD, For.....Tieton
 Pelz, Freda, Grad.....Seattle
 Pelz, Gladys, LD, LA.....Seattle
 Penas, Nazario, UD, For.....Philippines
 Pendleton, Francis, LD, Bus.....Everett
 Pendleton, Lois, LD, Sci.....Seattle
 Penewell, Marion F, UD, Sci.....Seattle
 Penland, E R, 1st Law.....Franklin, NC
 Penn, Joe H, LD, Bus.....Seattle
 Penn, Sarah, LD, LA.....Seattle
 Pennell, Dorothy W, UD, LA.....Seattle
 Pennell, Geneva B, UD, LA.....Seattle
 Pentzer, Kathryn, UD, FA.....Seattle
 Peplow, Marion L, UD, LA.....Seattle
 Perdue, Edgar A, LD, LA.....Seattle
 Perfield, John A, Unc, FA.....Seattle
 Perine, Jack C, LD, LA.....Seattle
 Perkins, Dorris E, LD, FA.....Seattle
 Perkins, Julian F, UD, Bus.....Tacoma
 Perkins, Melville F, Grad.....Tacoma
 Perkins, Sam H, LD, Bus.....Montesano
 Perrenoud, Willy P, LD, Eng.....Seattle
 Ferrine, Charles S, LD, LA.....Twin Falls, Ida
 Perry, Frank W, Voc.....Seattle
 Perry, Geneva, LD, FA.....Seattle

Perry, Warren L, UD, LA.....Tacoma	Pochert, Arthur D, UD, Phar.....Tacoma
Personens, Lewis H, LD, CE.....Seattle	Poeth, F John, LD, Bus.....Kalama
Persons, George A, UD, Eng.....Clarkston	Polacheck, Edna G, LD, LA.....Yakima
Peters, Albert J, LD, Bus.....Seattle	Pole, Gordon R, UD, Eng.....Tacoma
Peters, Corbin, Unc, LA.....Portland, Ore	**Polkinghorn, L M, LD, For.Storm Inke, Ia
Peters, Evan R, LD, LA.....Zillah	Pollard, Jean, LD, LA.....Seattle
Peters, Gertrude, Unc, Sci.....Seattle	Pollock, Barbara, UD, LA.....Seattle
Peters, Henry W, LD, LA.....Tanasket	Pollock, Dorothea, LD, LA.....Seattle
Peters, Jennings D, UD, ME.....Spokane	Pollom, Arta Rae, LD, LA.....Seattle
Peters, Laura B, LD, FA.....Seattle	Pollom, DeVere, LD, LA.....Chehalis
Peters, Louis C, LD, Bus.....Seattle	Pollom, Lois, LD, FA.....Chehalis
Petersen, Irene, LD, LA.....Seattle	Polton, W Dean, LD, Bus.....Seattle
Petersen, John H, LD, Bus.....Seattle	Pond, Elizabeth B, UD, LA.....Seattle
Peterson, Alvin A, LD, Phar.....Seattle	Ponder, Russell L, Unc, Law.....Chehalis
Peterson, Amy, Unc, LA.....Monroe	Poole, Bonnie, UD, LA.....Seattle
Peterson, Clarence C, LD, CE.....Hoquiam	Poole, Florence, UD, Ed.....Seattle
Peterson, Estella C, Unc, Sci.....Seattle	Pooley, Frank B, Voc.....Spokane
Peterson, Frank W, Grad.....Seattle	Poolton, Frederick A, UD, Ed.....Seattle
Peterson, Grace H, Sp, LA.....Seattle	Poplack, Essie, Unc, Sci.....Bellingham
Peterson, Howard H, LD, EE.....Walla Walla	Porep, Helen C, LD, LA.....Seattle
Peterson, Hugo A, LD, Bus.....Tacoma	Porsch, Rhyhart A, UD, Bus.....Roy
Peterson, Inez H, UD, LA.....Seattle	Porter, Barton F, UD, Bus.....Thorp
Peterson, Jennings, 1st Law.....Seattle	Porter, Charles A, LD, ChE.....Wenatchee
Peterson, Katherine W, UD, FA.....Spokane	Porter, Dorothy, LD, FA.....Wenatchee
Peterson, LaVerne R, LD, Bus.....Seattle	Porter, Edith M, UD, FA.....Seattle
Peterson, Loren Allen, UD, Bus.....Seattle	Porter, John C, LD, ChE.....Seattle
Peterson, Marjorie W, Grad.....Seattle	Porter, Mary E, UD, FA.....Seattle
Peterson, Richard F, UD, Bus.....Tacoma	Posadas, Saturnino B, LD, Phar.Philippines
Peterson, Thelma, LD, FA.....Granger	Post, John Phillips, 2nd Law.....Spokane
Peterson, Violet M, LD, LA.....Seattle	Potter, Alden L, LD, Bus.....Ridgefield
Peterson, Wendell F, LD, Bus.....Seattle	Potter, Paul S, UD, Mines.....Ovington
Peterson, A William, UD, Bus.....Clarkston	Potter, Ruth A, LD, Sci.....Seattle
Petrie, Roy A, LD, Bus.....Seattle	Potter, Willis, LD, LA.....Kalama
Petrie, James, LD, Eng.....Seattle	Poulson, Dorothy E, LD, LA.....Seattle
Pettengill, Floyd G, LD, Phar.....Auburn	Powell, Achsa Louise, Unc, LA.....Seattle
Pettitt, Ruth, UD, LA.....Kent	Powell, Alexander S, LD, ME.....Seattle
Pettitt, Mildred, Unc, Bus.....Seattle	Powell, Charles E, LD, Sci.....Bellingham
Pettit, Helen, UD, Sci.....Seattle	Powell, Charles L, 1st Law.....Selah
Pettit, Henry, LD, EE.....Seattle	Powers, Anna M, Grad.....Seattle
Pfeiffer, June, LD, LA.....Seattle	Powers, Marie K, UD, LA.....Seattle
Pfeuffer, Philip P, UD, Sci.....Seattle	Powley, Louise W, UD, Sci.....Seattle
Phelps, Ellen, LD, LA.....Seattle	Powley, Verna M, UD, Ed.....Seattle
Phelps, Howard R, UD, ME.....Tacoma	Poyneer, Almeda M, LD, LA.....Everett
Phillips, John O, LD, Bus.....Seattle	Pozzie, Jerry V, Voc.....Seattle
Phillips, Earl August, Sp, LA.....Seattle	Prager, William A, UD, LA.....Seattle
Phillips, Harry J, LD, Min.....Seattle	Pratt, Frances, Unc, FA.....Seattle
Phillips, Herbert, LD, Eng.....Seattle	Pratt, Helen, Grad.....Seattle
Phillips, Julius B, LD, Fsh.....Fairfax	Pratt, Reginald, UD, MB.....Spokane
Phillips, Julius C, 1st Law.....Almira	Predmore, Alice E, LD, LA.....Seattle
Phillips, May, Unc, LA.....Seattle	Preiss, Julia E, UD, Ed.....Spokane
Phillips, Olive E, LD, LA.....Seattle	Prentice, Dudley R, LD, Bus.....Auburn
Phillips, Phyllis, UD, FA.....Seattle	Prescott, John E, LD, EE.....Seattle
Phillips, Walter T, LD, LA.....Tacoma	Prescott, Jonathan E, LD, Eng.....Seattle
Phippe, Guy F, LD, Bus.....Four Lakes	Prescott, Maurine, LD, LA.....Seattle
Pickard, Jerome, LD, LA.....Seattle	Presley, Grace, UD, FA.....Newport, Ore
Pickering, Orr, LD, FA.....Seattle	Preston, Rachel, LD, FA.....Seattle
Pickett, May B, UD, LA.....Mt Vernon	Price, Arthur F, UD, For.....Duncan, BO
Pidduck, Marjorie K, LD, FA.....Seattle	Price, Faye, LD, Bus.....Milton, Ore
Pierce, Alene, UD, Ed.....Seattle	Price, Harry J, LD, EE.....Seattle
Pierce, Clarence W, 1st Law.....Seattle	Price, Hobart M, Unc, Phar.....Seattle
Pierce, Dorothy A, LD, LA.....Seattle	Price, Mary Josephine, LD, FA.....Seattle
Pierce, Florence B, LD, Sci.....Seattle	Price, Russell Orione, Unc, EE.....Outlook
Pierce, Gerald W, LD, Eng.....Lyndon, Vt	Price, Zetta, Unc, LA.....Govan
Pierce, Robert O, LD, Bus.....Seattle	Priebe, Lloyd H, LD, Eng.....Renton
Pierson, Helen G, LD, LA.....Billings, Mont	Priest, Constance, UD, LA.....Seattle
Pierson, Richard H, LD, Bus.....Seattle	Pritchard, Stanley J, LD, Bus, Bryn Mawr
Pigott, Valeria, UD, LA.....Seattle	Prim, John E, LD, LA.....Seattle
Pinkerton, Lloyd, LD, EE, Fairbanks, Aka	Proelss, Maurine E, LD, LA.....Seattle
Pingham, Mrs Ada D, LD, LA.....Seattle	Prowell, Fern V, LD, FA.....Wenatchee
Pinney, William G, UD, LA.....Seattle	Pruessman, Margaret, LD, Bus.....Seattle
Pitcher, Helen D, LD, FA.....Pt Madison	Pruessman, Will, LD, EE.....Seattle
Pitlack, Arthur H, LD, Bus.....Bremerton	Puette, Raymond V, LD, LA.....Seattle
Pitts, Edna C, LD, LA.....Seattle	Pugh, Venetia, LD, FA.....Juneau Aka
Pitzer, Carl A, UD, FA.....Tacoma	Purcell, J William, UD, Sci.....Seattle
Place, L Howard, LD, For.....Tacoma	Purdy, Eugene H, LD, Eng.....Seattle
Plank, Ellis W, LD, Sci.....Pierce, Ida	Purkey, John Bates, LD, Bus.....Tacoma
Plank, Faye Marie, Unc, LA.....Seattle	Purvis, Ruth W, Unc, LA.....Sumner
Platt, Ruth E, UD, Sci.....Seattle	Pymbroock, Lena, UD, FA.....Oswego, Ore
Playter, C Gray, LD, Bus.....Seattle	Pyle, Mark, UD, Eng.....Wenatchee
Plechner, Dabette, LD, LA.....Seattle	
Plemon, Gladys M, LD, LA.....Wallula	Quanstrom, Ellen M, LD, Bus.....Seattle
Plummer, Morris, UD, Bus.....Pt Townsend	Quarry, Ruth M, Unc, LA.....Spokane

Quevill, Kathryn, LD, Sci.....Tacoma
 Quesenberry, Marion, LD, LA.....Seattle
 Qulgle, Helen, UD, LA.....Seattle
 Qulpley, J Helen, UD, LA.....Seattle
 Quilliam, Harold J, LD, Bus.....Seattle
 Quimosing, Dio, LD, CB.....Philippines
 Quindroy, Francisco, LD, Eng.....Philippines
 Quinlivan, Quentin L, LD, Sci.....Everett
 Quist, Mildred G, LD, LA.....Seattle

Rabel, Leigh, W, LD, Bus.....Seattle
 Rademaker, Lee A, UD, Sci.....Tacoma
 Rader, Bernard H, UD, Bus.....Ontario, Ore
 Rader, Martha, UD, Sci.....Walla Walla
 Rader, Melvin, LD, LA.....Walla Walla
 Rafferty, Wilma, LD, LA.....Seattle
 Raftish, Yetta, LD, Sci.....Butte, Mont
 Rafn, Harold, LD, Eng.....Puyallup
 Raine, Margaret M, UD, LA.....Seattle
 Ramm, Aubrey G, UD, EE.....Seattle
 Ramquist, Reuel T, LD, Sci.....Vashon
 Ramos, Manuel S, LD, LA.....Seattle
 Ramsay, John F, LD, Sci.....Vernon, BC
 Ramsden, Raymond W, LD, Bus.....Pacific Bch
 Ramsey, Edward C, Voc.....Boise, Ida
 Ramshead, Alvin C, UD, Bus.....Everett
 Randall, Harold W, UD, EE.....Ritzville
 Randolph, Sarah, LD, LA.....Seattle
 Randt, Margaret, LD, LA.....Winlock
 Rang, Carroll P, UD, Bus.....Cashmere
 Rankin, James H, LD, Bus.....Seattle
 Ranley, Edna, LD, Bus.....Seattle
 Raport, Rubin W, UD, Eng.....El Paso, Tex
 Rasmussen, Charles A, LD, Eng.....Tacoma
 Rasmussen, Fred N, LD, EE.....Seattle
 Rasmussen, George V, UD, Ed.....Chewelah
 Rasmussen, Irving, LD, FA.....Prosser
 Ratcliffe, Vernon E, Unc, Bus.....Seattle
 Rathbun, John H, UD, EE.....Seattle
 Ravelli, Henri, UD, Eng.....Seattle
 Raven, Ruth, LD, FA.....Monroe
 Raymond, Elizabeth, LD, Sci.....Hannibal
 Raymond, Esther B, LD, LA.....Hannibal
 Raymond, Harold E, LD, Sci.....Bellingham
 Rea, Russell M, Unc, ChE.....Bellingham
 Read, Edsall, LD, Eng.....Hoquiam
 Read, Leo P, LD, Bus.....Shelton
 Readman, Flora, LD, LA.....Seattle
 Reap, Genevieve, UD, LA.....Tacoma
 Recart, Enrique, LD, Bus.....Chile
 Recart, Horacio, UD, For.....Chile
 Records, Lola E, Unc, Ed.....Wesler, Ida
 Redfield, Ben, UD, Bus.....Spokane
 Redfield, Irene Jane, LD, LA.....Spokane
 Redlick, Harry H, Voc.....Seattle
 Redington, Bernice, LD, LA.....Seattle
 Redmon, Dorothy B, UD, FA.....Yakima
 Redpath, Harry S, 1st Law.....Seattle
 Reed, Clyde L, UD, Ed.....Seattle
 Reed, Constance, Aud.....Juneau, Alaska
 Reed, Donald L, LD, ChE.....Centralia
 Reed, Genevieve, LD, LA.....Redmond
 Reed, Jennie M, Grad.....Tacoma
 Reed, Marjorie, LD, Sci.....Seattle
 Reed, Russell, LD, Bus.....Tacoma
 Reed, Sol S, LD, For.....Shelton
 Reeder, Ardis H, LD, Bus.....Tacoma
 Reeder, Buren, Sp, Eng.....Seattle
 Reekie, Richard, LD, Phar.....Seattle
 Reekie, William C, LD Phar.....Seattle
 Reese, Mary E, LD, Phar.....Cle Elum
 Reese, Richard H, Voc.....Concrete
 Reeve, Stanley, LD, Bus.....Chico
 Reffling, Arnold, LD, LA.....Snohomish
 Regan, Frank T, UD, For.....Boise, Ida
 Regan, Willard P, LD, Bus.....Boise, Ida
 Reichert, Carlton, UD, Bus.....Seattle
 Reid, Beatrice, LD, LA.....Seattle
 Reid, Crawford, LD, EE.....Seattle
 Reid, Elizabeth J, UD, LA.....Tacoma
 Reid, Florence E, UD, Bus.....Seattle

Reid, Frances, LD, LA.....Seattle
 Reid, John V, LD, Eng.....Spokane
 Reid, Roma P, LD, LA.....Seattle
 Reilly, John E, LD, LA.....Milwaukee, Wis
 Reinelt, Herbert R, LD, LA.....Seattle
 Reisig, Rhea, Unc, FA.....Seattle
 Reiter, Bernard, LD, LA.....Seattle
 Helf, Eugenia, LD, FA.....Seattle
 Remington, Arthur E, UD, EE.....Seattle
 Remy, Frances, Unc, LA.....Seattle
 Rennie, Wesley F, Grad.....Seattle
 Renshaw, Harold B, LD, Bus.....Spokane
 Requa, Lulu M, LD, FA.....Edmonds
 Resos, Eugene P, UD, CE.....Philippines
 Retzer, Lawrence, Unc, Bus.....Seattle
 Reuter, Alexia, Grad.....Seattle
 Revelle, Helen, LD, LA.....Seattle
 Revelle, Margaret, LD, LA.....Seattle
 Reyes, Benigo, LD, FA.....Philippines
 Reyes, Vincent, LD, Eng.....Philippines
 Reynolds, Alice, UD, FA.....Portland, Ore
 Reynolds, Burton M, UD, Min.....Seattle
 **Reynolds, Chas W, Sp, Bus.....North Bend
 Reynolds, Elliott, 2nd Law.....Seattle
 Reynolds, Myron E, LD, Sci.....Seattle
 Reynolds, Pearle J, Unc, FA.....Pasco
 Rhebeck, Milton, LD, ME.....Seattle
 Rhinesmith, Orra L, UD, Ed.....Seattle
 Rhodes, Gertrude, LD, Bus.....Yakima
 Rhodes, Leonard, LD, Phar.....Seattle
 Rhodes, Ruth, UD, Sci.....Seattle
 Rice, Dorothy, LD, FA.....Seattle
 Rice, Earl, LD, Sci.....Spokane
 Rice, Enos Roy, LD, LA.....Colville
 Rice, Garnet, LD, LA.....Long Beach, Cal
 Rice, Mary B, UD, Sci.....Prosser
 Rice, Miriam E, Unc, Sci.....Seattle
 Rice, Philip R, Unc, LA.....Seattle
 Rice, Raymond A, LD, LA.....Finley
 Richards, Catherine, UD, LA.....Spokane
 Richards, Edgar G, LD, Bus.....Tacoma
 Richards, Eugene, Unc, Sci.....Seattle
 Richards, Frederick B, LD, LA.....Seattle
 Richards, W Gordon, LD, Bus.....Seattle
 Richards, John S, LD, EE.....Spokane
 Richards, Leon W, LD, Phar.....Seattle
 Richards, Robert E, LD, Bus.....Tacoma
 Richardson, Dallas, Unc, LA.....Seattle
 Richardson, Dio, Grad.....Seattle
 Richardson, Edwin R, LD, Eng.....Marysville
 Richardson, Elizabeth C, UD, LA.....Yakima
 Richardson, Jennie, UD, Ed.....Seattle
 Richardson, Lyle H, Sp, Eng.....Harbin, Mont
 Richardt, Preciosa, LD, LA.....Seattle
 Riches, Marjorie, LD, LA.....Silverton, Ore
 Richford, Maurice A, LD, ChE.....Seattle
 Richmond, Mabel, LD, LA.....Seattle
 Richmond, Roy S, LD, LA.....Walla Walla
 Richter, Franklin, UD, Bus.....Seattle
 Ricker, Raymond C, Grad.....Seattle
 Rickles, Dave N, UD, Eng.....Seattle
 Rickles, Nathan, LD, Sci.....Seattle
 Rider, Nellie, UD, LA.....Seattle
 Riden, Elsie V, UD, Sci.....Seattle
 Rieben, Samuel E, 1st Law.....Seattle
 Rieger, Erwin, LD, LA.....Seattle
 Rigg, Margaret, UD, LA.....Seattle
 Riggs, Katherine, LD, LA.....Seattle
 Riley, Helen, UD, Ed.....Everett
 Rinehart, Valdimir G, UD, OE.....Seattle
 Ringler, Robert L, LD, Bus.....Seattle
 Ringstad, Emery T, UD, Bus.....Seattle
 Rininger, Helen D, UD, LA.....Bellevue
 Ripley, Julia, LD, FA.....Seattle
 Risley, Dudley B, UD, Bus.....Seattle
 Riste, Clara E, LD, LA.....Seattle
 Riste, Ida G, LD, LA.....Seattle
 Riste, Victor C, LD, Sci.....Seattle
 Ritchie, Clarence E, LD, Bus.....Seattle
 Ritchie, Claude, LD, LA.....Seattle
 Ritchie, Elisabeth, LD, LA.....Salt Lake City U

Ritter, John Edward, LD, For.....	Republic
Ritz, Ruthleanor, LD, Sci.....	Tacoma
Rivers, Andrea D, LD, ChE.....	Philippines
Rivers, Simeon, LD, Sci.....	Philippines
Roach, Robert R, Unc, LA.....	Seattle
Roach, Russell, LD, Bus.....	Yakima
Robb, Marian, LD, LA.....	Seattle
Robbins, Floyd D, UD, EE.....	Olympia
Roberson, Ray, LD, Eng.....	Seattle
Roberts, Elizabeth B, LD, LA.....	Portland, Ore
Roberts, Gertrude, LD, LA.....	Montesano
Roberts, Helen, LD, LA.....	Seattle
Roberts, John Terry, UD, ChE.....	Seattle
Roberts, Katherine, UD, LA.....	Seattle
Roberts, Kenneth B, LD, Min.....	Lowell, Mass
Roberts, Loma, LD, FA.....	Yakima
Roberts, Margaret, LD, LA.....	Seattle
Roberts, Virginia, LD, Phar.....	Seattle
Robertson, Howard P, UD, Sci.....	Montesano
**Robertson, James C, Unc, Fish.....	Spokane
Robertson, James Jr, Voc.....	Seattle
Roble, Fred E, LD, Eng.....	Seattle
Robinson, Carrol, LD, LA.....	Seattle
Robinson, Charles H, LD, Bus.....	Seattle
Robinson, Clyde A, LD, LA.....	Everett
Robinson, H Gerald, LD, EE.....	Seattle
Robinson, Helen R, Unc, FA.....	Edmonds
Robinson, Margaret, LD, Bus.....	Centralia
Robinson, M Minor, Unc, Sci.....	Sumner
Robinson, Morton J, Unc, Bus.....	Seattle
Robinson, G Nelson, LD, LA.....	Seattle
Robinson, Rose, LD, LA.....	Centralia
Robinson, Ruth Mary, UD, Lib.....	Seattle
Robinson, Ted R, UD, Bus.....	Everett
Rockwitz, Alice, LD, LA.....	Seattle
Rodman, Emmet A, UD, Bus.....	Seattle
Roe, Arthur O, UD, ME.....	Everett
Roe, Merle John, LD, Bus.....	Seattle
Roehr, Dorothy E, LD, Sci.....	Seattle
Roehr, Martha, LD, Sci.....	Seattle
Roemer, Albert J, LD, Bus.....	Seattle
Roen, Martha E, Unc, Bus.....	Vashon
Rogers, Agnes, LD, FA.....	Anacortes
Rogers, Blith, LD, LA.....	Bellingham
Rogers, Julia W, LD, FA.....	Auburn
Rogers, Martha, LD, LA.....	Seattle
Rognan, Esther, LD, LA.....	Tacoma
Rognon, Norma Nelle, UD, LA.....	Seattle
Rohden, Elizabeth, Grad.....	Bellevue
Rohovits, Edythe K, LD, LA.....	Seattle
Rohowitz, Gerald M, LD, LA.....	Seattle
Rohrbacher, Mrs Charles A, Sp, FA.....	Seattle
Rohrer, Elizabeth, LD, Sci.....	Spokane
Rohrer, Harvey V, LD, Bus.....	Seattle
**Rollins, Jesse L, Sp, Bus.....	Bremerton
Rollins, Paul R, LD, Sci.....	Bremerton
Romischer, William, UD, Min.....	Seattle
Rood, Sidney, LD, LA.....	Seattle
Rooney, Joseph B, LD, Bus.....	Seattle
Roop, Clara M, LD, Sci.....	Benton City
Roop, Daisy, Unc, Sci.....	Benton City
Roop, Milford W, UD, LA.....	Seattle
Roose, Clarence, Unc, LA.....	Arlington
Roper, M Wesley, Grad.....	Seattle
Roscoe, R Theodore, LD, EE.....	Edmonds
Rose, Dorothy, LD, FA.....	Olympia
Rose, Edith, LD, Bus.....	Prosser
Rose, Marvel, LD, FA.....	Seattle
Rosebough, Theodore W, LD, ME.....	Seattle
Rosenberg, Anita, LD, Bus.....	Seattle
Rosendahl, Ily S, LD, LA.....	Seattle
Rosene, Hilda F, Grad.....	Monroe
Rosene, Johanna, LD, Sci.....	Monroe
Ross, Donald L, LD, ChE.....	Bellingham
Ross, Doreen F, LD, Bus.....	Seattle
Ross, Earl R, LD, EE.....	Monroe
Ross, Edward A, UD, EE.....	Seattle
Ross, Evelyn, P, LD, Sci.....	Seattle
Ross, Grant D, UD, CE.....	Edmonds
Ross, Harry L, LD, EE.....	Hawaii
Ross, Lemuel, LD, Bus.....	Woodland
Ross, Margaret, LD, LA.....	Seattle
Ross, Robert B, LD, For.....	Edmonds
Ross, G William, UD, LA.....	Spokane
Ross, William J, LD, Bus.....	Seattle
Rossell, Franklin, Unc, LA.....	Mt Vernon
Roth, Robert, LD, Sci.....	Seattle
Rothwell, Cyrrila, LD, Phar.....	Seattle
Rouner, Thomas J, UD, Eng.....	Kelso
Rourke, Rupert Karl, UD, ChE.....	Seattle
Rowe, Dorothy, Unc, Bus.....	Seattle
Rowe, John L, LD, Bus.....	Seattle
Rowlands, Thomas M, LD, Eng.....	Seattle
Rowntree, R Henry, LD, Bus.....	Seattle
Rowse, William, LD, For.....	Seattle
Royal, Charles, LD, Eng.....	Seattle
Royce, Roberta, LD, Sci.....	Seattle
Royce, Ruby, LD, LA.....	Seattle
Royer, Catherine, UD, Sci.....	Seattle
Royster, Helen, LD, LA.....	Seattle
Royster, Frank F, UD, LA.....	Oakland, Cal
Rucker, Gladys, LD, Sci.....	Seattle
Rudolph, Evangeline, UD, Sci.....	Seattle
Rueger, Clarence, LD, For.....	Birdsview
Ruel, James W, UD, Bus.....	Sedro-Woolley
Ruetenik, Norman N, LD, LA.....	Sunnyside
Rugg, John C, UD, Phar.....	Arlington
Rumberger, George H, UD, Min.....	Seattle
Rummel, Bartlett, 1st Law.....	Tacoma
Rummel, Edith E, UD, LA.....	Tacoma
Runciman, George, LD, CE.....	Seattle
Runnings, Gladys, UD, Sci.....	Spanaway
Rupe, Elizabeth, UD, Ed.....	Seattle
Russell, Beulah H, Grad.....	Seattle
Russell, Dorothy, LD, LA.....	Seattle
Russell, Florence M, UD, LA.....	Seattle
Russell, Josephine, Unc, FA.....	Seattle
Russell, Ruth, UD, LA.....	Seattle
Rust, Caramel, UD, Sci.....	Yakima
Rutherford, Trammell, LD, LA.....	Seattle
Rutschow, Florence E, LD, LA.....	Aberdeen
Rutschow, E Minnie, LD, Bus.....	Aberdeen
Ryan, Arline, LD, Bus.....	Seattle
Ryan, Ben, LD, Bus.....	Mukilteo
Ryan, Carol Ross, LD, Sci.....	Bryn Mawr
Ryan, Florence, LD, LA.....	Seattle
Ryan, Frederick A, LD, Bus.....	Seattle
Ryan, John B, Law.....	Seattle
Ryan, Helen, LD, Sci.....	Seattle
Ryan, Homer N, 1st Law.....	Seattle
Ryer, Grant H, LD, Eng.....	Seattle
Ryder, Maude, UD, LA.....	Auburn
Rygg, John C, UD, Phar.....	Seattle
Sadler, Mrs Estella J, UD, LA.....	Tacoma
Sadler, Gladys, LD, Phar.....	Newport
Sailor, Lois, Unc, FA.....	Marblemount
Sakuma, Yasuharu, UD, LA.....	Japan
Salazar, Felino Orosco, LD, Sci.....	Philippines
Salladay, Ruth, UD, FA.....	Seattle
Sammis, Lowden, 1st Law.....	Seattle
Samsel, Howard, LD, Bus.....	Idaho Falls, Ida
Samuelson, Byron A, UD, Ed.....	Point Roberts
Samuelson, Wallace E, LD, Bus.....	Pt Angeles
Sanchez, Isabelo, LD, Sci.....	Philippines
Sandaas, Albert K, LD, FA.....	Brockway, Mont
**Sandborg, Harold, LD, Sci.....	Seattle
Sanders, Carrie, UD, LA.....	Tukwila
Sanders, Elva, LD, Bus.....	Seattle
Sanders, John C, LD, EE.....	Seattle
Sanders, John B, Unc, Law.....	Seattle
Sanders, Leslie, LD, EE.....	Seattle
Sanders, Wilbur A, LD, Bus.....	Spokane
Sanderson, Doris, LD, LA.....	Wenatchee
Sandusky, Lawrence, UD, LA.....	Spokane
Sandusky, Oris Edward, UD, LA.....	Spokane
**Sandvig, Arnold C, Sp, Bus.....	Seattle
Sandvigen, Emma, UD, Bus.....	Seattle
Sanford, David J, LD, Bus.....	Seattle
Sanford, Edward A, LD, LA.....	Seattle
Sanford, Henry S, LD, Bus.....	Seattle
Sanford, Harrison, LD, Bus.....	Seattle
Santee, Eva, UD, LA.....	Vancouver

Sargent, Ohas, LD, LA.....Seattle
 Sarro, Nicholas, LD, Sci.....Seattle
 Sather, Edgar W, LD, Bus.....Seattle
 Sather, Gertrude B, LD, FA.....Hoquiam
 Sather, Olene, UD, LA.....Hoquiam
 Sato, Teizo, LD, Bus.....Japan
 Satoris, Fred P, LD, Bus.....Payette, Ida
 Satow, Nobutoshi, UD, Bus.....Japan
 Sauers, John C, UD, Fsh.....Seattle
 Saunders, Mary, LD, LA.....Wenatchee
 Saunders, Richard, LD, LA.....Seattle
 Savage, Joseph E, UD, Bus.....Seattle
 Savery, William Jr, LD, LA.....Seattle
 Saxon, Herschel, Sp, Phar.....Spokane
 Sayre, Harrold, LD, For.....Clarksburg, W Va
 Scarff, Cora, LD, LA.....East Seattle
 Schacht, Ronald, LD, Bus.....Burlington
 Schade, Elizabeth, Unc, Sci.....Seattle
 Schadt, Raymond J, UD ChE.....Seattle
 Schaefer, Ethelyn, UD, Sci.....Seattle
 Schaefer, Isadore, LD, LA.....Seattle
 Schaefer, Leonard J, UD, Sci.....Seattle
 Schaeffer, C E, LD, For.....Cincinnati, O
 Schall, M Clayton, LD, LA.....Pt Angeles
 Schaller, Gilbert S, Grad.....Seattle
 Schaller, Marie, LD, FA.....Okanogan
 Scharr, Freeman C, LD, LA.....Seattle
 Schachtman, Lazar, LD, Sci.....Dayton, O
 Scheffer, Theodore, LD, For.....Puyallup
 Schenk, Edward R, LD, Sci.....South Bend
 Schenk, Ernest J, LD, Eng.....Seattle
 Schenkar, Joseph, LD, Sci.....Seattle
 Schenken, Robert O, LD, LA.....Seattle
 Schermer, Jack M, LD, LA.....Seattle
 Schertel, Max, UD, Ed.....Seattle
 Scheuerman, Ruby, LD, LA.....Seattle
 Schindler, Ruth, LD, LA.....Pt Gamble
 Schlageter, Harold J, LD, Eng.....Bremerton
 Schlarb, Elizabeth, LD, LA.....Tacoma
 Schlarb, Jack, LD, LA.....Tacoma
 Schleier, Louis M, Grad.....Opportunity
 Schmid, Byron C, UD, Eng.....Seattle
 Schmid, Calvin F, LD, LA.....Seattle
 Schmidt, Mrs E Z, Unc, LA.....Pt Blakeley
 Schmidt, Tessie M, 2nd Law.....Seattle
 Schmidt, Val H, LD, Bus.....Seattle
 Schmidtman, Edward H, UD, CE.....Auburn
 Schmitt, Margaret F, LD, LA.....Seattle
 Schmitt, Mildred, LD, LA.....Seattle
 Schmitt, Tessie M, 1st Law.....Seattle
 Schmitz, Ferdinand, Unc, Bus.....Seattle
 Schneider, Casper A, LD, LA.....Aberdeen
 Schneider, George M, LD, EE.....Rossland, BC
 Schneider, Vivian M, LD, Bus.....Billings, Mt
 Schnitzlein, Anita, UD, Sci.....Long Beach, Cal
 Schoenfeld, Berman, LD, LA.....Seattle
 Schofield, Gwendolyn, LD, LA.....Seattle
 Schofield, Robert, LD, LA.....Seattle
 Scholen, Hanna, Unc, LA.....Seattle
 Scholl, Suzanne B, UD, Bus.....Seattle
 Scholtes, M Geraldine, UD, Bus.....Seattle
 Schooley, John Marshall, UD, Bus.....Zillah
 Schram, Alberta, UD, LA.....Seattle
 Schrelber, Paul R, LD, LA.....Colville
 Schreuder, Ludwig, LD, LA.....Seattle
 Schrock, Doris, UD, Sci.....Okanogan
 Schrock, Mary, LD, LA.....Seattle
 Schroeder, Fred W, Grad.....Warrenton, Mo
 Schubert, Helen, LD, LA.....Seattle
 Schudt, Henry R, UD, Bus.....Moscow, Ida
 Schultz, William, LD, Fsh.....Seattle
 Schultze, William E, UD, For.....Seattle
 Schulz, Gertrude A, Grad.....Seattle
 Schulz, Katherine, LD, LA.....Seattle
 Schumacher, Walter C, LD, FA.....Shelton
 Schuman, Ethel, LD, FA.....Bellingham
 Schumer, Anne, LD, Bus.....Seattle
 Schwachheim, Franklin, LD, LA Cascade, Mt
 Schwager, Helen, LD, FA.....Seattle
 Schwartz, Gene, UD, LA.....Seattle
 Schwartz, Bertha, Sp, Sci.....Seattle
 *Schwarz, Bertha, Sp, Sci.....Seattle

Scofield, Susan Ada, LD, FA.....Tacoma
 Scordian, Louise M, 2nd Law.....Seattle
 Scott, Barbara H, LD, Sci.....Seattle
 Scott, Byron D, Unc, Law.....Tacoma
 Scott, Clayton A, LD, LA.....Ashland, Ky
 Scott, David F, Unc, LA.....Grandview
 Scott, Frances, LD, LA.....Seattle
 Scott, Frank W, UD, Bus.....Seattle
 Scott, Harlan M, LD, LA.....Spokane
 Scott, Hilda I, LD, LA.....Seattle
 Scott, James G, UD, CE.....Seattle
 Scott, Jens T, LD, ME.....Seattle
 Scott, Jessie W, UD, LA.....Seattle
 Scott, Marlon S, UD, LA.....Mukilteo
 Scott, Marjorie, LD, Sci.....Roslyn
 Scott, Morris R, UD, Bus.....Twisp
 Scott, Myron A, LD, EE.....Mukilteo
 Scott, Nell D, LD, Bus.....Wenatchee
 Scott, Robert W, LD, LA.....Woodland
 Scott, Thomas E, LD, Bus.....Seattle
 Scott, Wallace W, LD, LA.....Tacoma
 Scriven, Lewis E, LD, Sci.....Spokane
 Scurry, Jack S, LD, LA.....Seattle
 Sczuck, Evelyn, UD, FA.....Seattle
 Seabury, Esther, UD, FA.....Seattle
 Seagraves, Hal E, LD, Eng Coeur d'Alene, Id
 Sealls, Margaret C, LD, LA.....Seattle
 Seamons, Joe, LD, CE.....Tacoma
 Sears, Katherine, LD, Sci.....Granite Falls
 Sears, Mildred T, LD, Phar.....Centralia
 Seawell, Mary, LD, LA.....Kansas City, Mo
 Secord, Isabel, LD, LA.....Seattle
 Secrest, Ruth V, LD, FA.....Seattle
 Seddon, Stanley, 2nd Law.....Roslyn
 Seecamp, John F, LD, Eng.....Seattle
 Seeley, Mildred L, LD, FA.....Seattle
 Seeley, M Horace, LD, Eng.....Maquoketa, Ia
 Seeley, Paul W, LD, Bus.....Seattle
 Seeley, Selby, LD, FA.....Anchorage, Aka
 Seely, Edwin, UD, LA.....Seattle
 Seelye, Helen L, LD, LA.....Seattle
 Selbert, Doris A, UD, FA.....Seattle
 Selbert, Marjorie, Grad.....Seattle
 Selbert, Phillip J, LD, Bus.....Seattle
 Seidell, S A, Unc, Bus.....Sedro-Woolley
 Seitzick, Ida, LD, LA.....Seattle
 Seitzick, Jerome K, LD, LA.....Seattle
 Selby, Harold K, UD, Bus.....Seattle
 Selby, Howard P, UD, For.....Pt Townsend
 Selgellid, Orrville J, LD, Bus.....Burlington
 Sellers, Ulrich R, UD, Bus.....Seattle
 Sells, John, LD, Sci.....Bellingham
 Seltzer, Alvin J, Grad.....Seattle
 Seltzer, Harry D, UD, LA.....Seattle
 Seltzer, Lawrence, LD, LA.....Spokane
 Seltzer, Oscar, LD, Bus.....Seattle
 Selvidge, George, Sp, Law.....Seattle
 Serrano, Bartolome, LD, Sci.....Philippines
 Sessions, Arthur, LD, EE.....Anchorage, Aka
 Settem, Clara O, UD, LA.....Seattle
 Setzer, George F, UD, Eng.....Daisy
 Sexsmith, Hazel, UD, LA.....Spokane
 Shafer, Herbert, LD, LA.....Tacoma
 Shaffner, Mary M, LD, Sci.....Tacoma
 Shager, Grant H, LD, Sci.....Seattle
 Shah, Aurang, Sp, Sci.....Manki, India
 Shain, Julius, LD, LA.....Tacoma
 Shank, Charles H, UD, Sci.....Seattle
 Shank, Jack O, UD, For.....Alton, Ill
 Shanklin, Lawrence G, UD, Jour.....Hoquiam
 Shanks, Clyde W, LD, Bus.....Seattle
 Shannon, Margaret J, UD, Sci.....Ancoret
 Sharnbroich, Loraine, LD, Phar.....Pt Angeles
 Sharp, Mrs Mary Corts, Sp, Ed.....Seattle
 *Shaver, Merle T, LD, Eng.....Seattle
 Shaw, Anna Belle, UD, Sci.....Seattle
 Shaw, Clayton B, LD, LA.....Spokane
 Shaw, Gretchen, UD, FA.....Seattle
 Shaw, Harry A, LD, LA.....Seattle
 Shaw, H Merrill, UD, Phar.....Seattle
 Shaw, Richard, LD, Bus.....San Francisco, Cal
 Shaw, Samuel E, LD, LA.....Walla Walla

Shawler, Grace, UD, LA.....	Seattle	Sisley, Mrs Blanche H, LD, LA.....	Seattle
Shea, Ruth, LD, Sci.....	Seattle	Sisler, Sara E, UD, LA.....	Seattle
Sheahan, George C, Unc, Bus.....	Seattle	Sisson, Howard A, UD, Min.....	Allyn
Sheehan, Myrtle, UD, LA.....	Seattle	Sister Elizabeth Clare, UD, Ed.....	Seattle
Sheehan, Paul V, LD, Bus.....	Everett	Sister, Leonella Bolt, Grad.....	Seattle
Sheets, Hilma, LD, FA.....	Yakima	Sister M Hyacintha Caron, Unc, LA, Seattle	
Shelley, Betty, LD, FA.....	East Seattle	Sister M Vincentia, UD, LA.....	Tacoma
Shellum, Adelbert J, LD, ME.....	Seattle	Sister Mary Alicia, UD, LA.....	Seattle
Shepardson, Albert F, LD, Bus.....	Seattle	Sister Mary Estelle, Grad.....	Seattle
Shephard, Esther, Grad.....	Seattle	Sister Pancratius Kearney, Grad.....	Seattle
Shephard, Kathryn, LD, LA.....	Seattle	Sitjar, Guadalupe, LD, Sci.....	Philippines
Shepherd, Percy N, LD, EE.....	Olympia	Skartvedt, Agnes, UD, FA.....	LaCenter
Shera, Brian L, LD, Min.....	Tacoma	Skeith, Anastasia B, LD, LA.....	Seattle
Sheridan, Mary A, LD, LA.....	Seattle	Skewis, Mary, LD, FA.....	Tacoma
**Sheriff, Arza E, Sp, Bus.....	Seattle	Skinner, Elzey, UD, LA.....	Seattle
Sheriff, Joseph M, UD, ME.....	Seattle	Skippin, Robert E, Voc.....	Seattle
Sherman, Leslie A, LD, Bus.....	Everett	Slade, Douglas H, LD, Bus.....	Lynden
Sherrer, Vena M, Sp, Sci.....	Lacomb	Slade, Elizabeth, LD, Bus.....	Husum
Sherrill, Harold D, LD, ChE.....	Tacoma	Slade, Ilce C, LD, LA.....	Juneau, Alaska
Shidler, Harold, LD, Bus.....	Seattle	Slade, Elizabeth, LD, Bus.....	Hosum
Shidler, Roger L, 1st Law.....	Seattle	Slade, Janet S, LD, FA.....	Husum
Shields, George W, LD, Eng.....	Seattle	Slane, Harold A, LD, LA.....	Seattle
Shields, Josephine E, UD, LA.....	Seattle	Slater, Verla M, UD, LA.....	Ferdale
Shigaki, George M, LD, FA.....	Seattle	Slauson, Margaret A, UD, LA.....	Seattle
Shigemaru, Chieko, LD, Bus.....	Pt Blakeley	Slawson, Charles S, LD, Bus.....	Spokane
Shillock, Harold E, UD, Bus.....	Seattle	Slawson, Maude M, LD, FA.....	Plainview
Shimizu, Frank, LD, Bus.....	Seattle	Sletmo, Albert M, UD, Eng.....	Seattle
Shinabargar, Jean, LD, Sci.....	Vancouver	Sliffe, Edith M, UD, FA.....	John Day, Or
Shinkai, Tsunguo, LD, Eng.....	Seattle	Slipper, Marianne, LD, LA.....	Hamilton
Shinn, Duane, Unc, Law.....	Spokane	Slipper, Thomas A, LD, Bus.....	Hamilton
Shlomi, Roy Y, LD, EE.....	Seattle	Sloan, Roy H, Voc.....	Seattle
Shipman, Herman A, UD, FA.....	Seattle	Sloum, Esther, UD, Phar.....	Seattle
Shippey, Helen H, LD, LA, Saguache, Colo		Slusher, Charlotte B, LD, LA.....	Seattle
Shipton, Mildred J, LD, LA.....	Chelan	Smaulding, Owen, LD, LA.....	Seattle
Shirkey, Emily F, Grad.....	Norborne, Mo	Smith, Abigail Jean, Unc, Sci.....	Seattle
Shively, Mrs. Gretchen, LD, LA.....	Seattle	Smith, Albert F, Voc.....	Seattle
Shoemaker, Harry, UD, FA.....	Seattle	Smith, Bernice C, LD, Sci.....	Enumclaw
Shollenberger, J Wayne, LD, Bus.....	Seattle	Smith, Carolyn E, LD, La.....	Portland, Ore
Shone, Bessie, UD, Phar.....	South Bend	Smith, Charles J, UD, Bus.....	Seattle
Shorett, John B, LD, Bus.....	Seattle	Smith, Mrs. Christina D, Grad.....	Seattle
Shorrock, Paul, LD, Bus.....	Seattle	Smith, Doris Lucile, LD, FA.....	Atia, Can
Short, Katharine, UD, Ed.....	Ellensburg	Smith, Dorothy A, LD, LA.....	Chewelah
Short, Spencer D, LD, LA.....	Ellensburg	Smith, Dorothy C, UD, Bus.....	Tacoma
Shotwell, Margaret, UD, LA.....	Seattle	Smith, Doyle, LD, Bus.....	Tacoma
Showell, Philip S, LD, Sci.....	Bryn Mawr	Smith, Ethel Beryl, UD, LA.....	Vancouver
Shrewsbury, H, LD, Bus.....	Sedro-Woolley	Smith, Ethel E, UD, Ed.....	Seattle
Shryock, Antoinette, LD, LA.....	Seattle	Smith, Frederic C, Voc.....	Seattle
Shuler, Beryl, LD, Sci.....	Seattle	Smith, George E, UD, Bus.....	Seattle
Shultz, Cella B, UD, LA.....	Cosmopolis	Smith, George S, Grad.....	Centralia
Shumate, Helen, LD, LA.....	Seattle	Smith, D Gerald, LD, LA.....	Miller River
Shure, Sallo L, LA, Phar.....	Bellingham	Smith, Gertrude B, UD, LA.....	Seattle
Sielk, Henry, UD, Bus.....	Spangle	Smith, Gibbons Taylor, LD, Eng.....	Tacoma
Siemens, Ruth, LD, FA.....	Fullman	Smith, Guy W, 2nd Law.....	Okanogan
Sievers, Harold E, LD, Bus.....	Everett	Smith, Harold A, LD, LA.....	Seattle
Sievers, Roy, LD, Bus.....	Everett	Smith, Harry Jr, LD, Bus.....	Seattle
Silke, Harold W, LD, Phar.....	Colville	Smith, Hjordis, LD, FA.....	Seattle
Sill, Charles F, LD, LA.....	Seattle	Smith, Ilce Violet, LD, FA.....	Seattle
Silliman, Hugh G, LD, Eng.....	Seattle	Smith, James G, Unc, Law.....	Seattle
Silliman, Marietta, UD, Bus.....	Seattle	Smith, Janet Sarah, UD, Sci.....	Auburn
Sillman, Grace E, UD, Sci.....	Spokane	Smith, Lloyd B, LD, Bus.....	Seattle
Silseth, Margrette, UD, Sci.....	Seattle	Smith, Luella, UD, Ed.....	Brewster
Silva, Julio W, LD, Bus.....	Kent	Smith, Jessie E, LD, LA.....	Seattle
Silverstone, Eugene, LD, Phar.....	Seattle	Smith, Jack C, LD, CE.....	Bellingham
Sim, Ida Grace, LD, Sci.....	Wilkeson	Smith, Joseph B, Unc, Law.....	Seattle
Simmonds, Dorothy P, LD, FA.....	Seattle	Smith, Quentin S, LD, LA.....	Puyallup
Simon, Alfred A, Unc, Bus.....	Portland, Or	Smith, Mrs. Margaret, Sp, LA.....	Seattle
Simon, Dorothy, UD, LA.....	Portland, Or	Smith, Mildred, LD, LA.....	Seattle
Simon, Sylvia, Unc, Sci.....	Seattle	Smith, Murray C, LD, Eng.....	Golden, Colo
Simonson, R, LD, LA.....	Anchorage, Alaska	Smith, Ralph L, UD, Sci.....	Miller River
Simonton, Elcesta, Unc, FA.....	Seattle	Smith, Ralph M, UD, Bus, Livingston, Mont	
Simpson, Anne, UD, Sci.....	Seattle	Smith, Ralph Rice, UD, LA.....	Seattle
Simpson, Donald, LD, LA.....	Seattle	Smith, Raymond C, LD, ChE.....	Merritt
Simpson, Ellene, LD, FA.....	Spokane	Smith, Raymond F, LD, LA.....	Spokane
Simpson, Lurline V, Grad.....	Seattle	Smith, Robert K, LD, LA.....	Seattle
Siba, Mrs. Corine, UD, FA.....	Seattle	Smith, R A, LD, Bus, Mountain Home, Ida	
Simson, George, LD, Bus.....	Vancouver, B C	Smith, M Roy, LD, EE.....	Spokane
Simson, Louis, LD, Bus.....	Seattle	Smith, Stanley L, UD, Bus.....	Seattle
Sinclair, Helen, LD, LA.....	Seattle	Smith, Thad O, LD, Min.....	Grandview
Sinclair, Robert L, Unc, Bus.....	Snohomish	Smith, Truman T, UD, EE.....	Seattle
Sinclair, Robert W, LD, Bus.....	Vancouver	Smith, Vernetta T, UD, LA.....	Hoquiam
Sirjord, Mea F, LD, LA.....	Fertile, Minn	Smith, W Virgil, Grad.....	Seattle
Sisler, Roland, UD, Eng.....	Seattle		

Smith, Walter A, LD, Bus....	Bismarck, ND
Smith, William E, LD, Bus.....	Seattle
Snapp, Mrs. Elizabeth S, UD, LA.....	Seattle
Sneed, Marie F, UD, LA.....	Halsey, Ore
Snellenberg, W Morris, Unc, Eng....	Seattle
Snelnikoff, Amelia, Sp, LA.....	Russia
Snider, Claude, Unc, Eng.....	Kent
Snodgrass, Ansel N, Unc, Bus.....	Wenatchee
Snow, Gretchen A, UD, Bus.....	Blaine
Snow, Myra L, LD, LA.....	Seattle
Snyder, Hart, UD, LA.....	Seattle
Snyder, Loyal T R, LD, LA.....	Seattle
Soderback, Florence, LD, LA.....	Seattle
Soderman, Helga, LD, FA.....	Seattle
Soderstrom, Harry T, UD, Sci.....	Spokane
Soderquist, A A, LD, Eng....	Kearney, Nebr
Soles, Geraldine, LD, FA.....	Seattle
Sollven, Donato D, Unc, ME.....	Philippines
Soller, Telesforo, LD, Sci.....	Philippines
Solomon, Abe H, LD, LA.....	Seattle
Solomon, Gus J, Unc, LA.....	Portland, Ore
Solomon, Hyman O, Unc, LA.....	Seattle
Sommers, Buford F, Unc, Bus.....	Spokane
Sorber, Gladys D, LD, FA.....	Seattle
Sorber, A Paul, LD, EE.....	Seattle
Sorensen, Andrew, LD, Bus.....	Ellensburg
Sorensen, Esther A, LD, LA.....	Seattle
Sorensen, Gladys M, LD, FA.....	Medina
Soth, J Tom, LD, LA.....	Kennewick
Southard, Lloyd C, LD, LA.....	Seattle
Southern, Vinton, LD, LA.....	Seattle
Southwick, Charles, UD, LA.....	Chelan
Southwick, Vera, LD, Bus.....	Chelan
Sower, Granten E, UD, Ed.....	Elma
Spaeth, Alleen, LD, Sci.....	Ketchikan, Aka
Sparks, Harold B, LD, Eng.....	Seattle
Sparks, Percy S, Grad.....	Lake Bay
Sparling, George W, LD, CE.....	Seattle
Sparling, Margaret, UD, Bus.....	Hoquiam
Spaulding, David L, LD, Bus.....	Seattle
Speir, Elizabeth, LD, Sci.....	Seattle
Spencer, Ralph W, UD, CE.....	Seattle
Spencer, Vivian M, LD, FA.....	Seattle
Sperling, Otto F, UD, Sci.....	Spokane
Spickard, Helen F, UD, Sci.....	Seattle
Spiesekke, Winnie, Grad.....	Seattle
Sporseen, E Dagny, LD, LA.....	Sequim
Sprague, Joan H, LD, FA.....	Seattle
Sprague, A Milton, LD, ChE.....	Seattle
Spratlin, Allen, Unc, Law.....	Seattle
Spriesterbach, Alice, UD, FA.....	Everett
Springer, Alice J, LD, LA.....	Olympia
Springer, Hestell, LD, Sci.....	Seattle
Springer, Maurice, UD, Bus.....	Olympia
Spuhn, Fred W, LD, For.....	Medford, Ore
Spurgeon, Mrs Elizabeth, UD, Ed....	Seattle
Stacy, Virginia, LD, FA.....	Clarkston
Staege, D A, Grad.....	Seattle
Stafford, Alice, LD, LA.....	Seattle
Stallard, Tully, UD, Bus.....	Greenacres
Stallings, Adeline M, UD, LA.....	Seattle
Stancilife, Imogene, UD, LA.....	Seattle
Standard, Alta O, LD, FA.....	Seattle
Standeford, William F, Grad.....	Seattle
Standing, Frank H, UD, Bus.....	Seattle
Stanfield, Ralph B, LD, Bus.....	Seattle
Stanley, Emery R, LD, For.....	Seattle
Stanley, Evelyn M, LD, LA.....	Great Falls, Mt
Stansbery, Douglas, LD, Bus.....	Seattle
Stanton, Margaret, UD, LA.....	Seattle
Stapleton, Margaret L, UD, LA.....	Bellingham
Starin, Erward, 1st Law.....	Seattle
Stark, Eugene Edward, UD, LA.....	Seattle
Stark, Jeannette, LD, LA.....	Seattle
Starkey, William E, LD, Bus.....	Prosser
Starr, Geraldine, LD, LA.....	Seattle
Staton, Francis A, LD, Bus.....	Seattle
Staton, Mildred, LD, Bus.....	Seattle
Stedman, Lewis L, Unc, Law.....	Seattle
Stedman, Vera, LD, Sci.....	Seattle
Steele, Charles Egbert, Sp, LA.....	Seattle
Steele, Helen D, LD, LA.....	Seattle
Steele, Kathryn J, LD, FA.....	Seattle
Steele, Susie, UD, Sci.....	Seattle
Steelman, Elizabeth, LD, LA.....	Seattle
Stehling, Hazel, LD, LA.....	Seattle
Stein, Ben L, LD, Eng.....	Russia
Steinberg, Amy J, UD, LA.....	Monmouth, Or
Stendal, Orville L, LD, LA.....	Sedro-Woolley
Stephens, Inga A, LD, Sci.....	Seattle
Stephens, Loren E, LD, Bus.....	Centralia
Stephens, Mildred, LD, LA.....	Seattle
Stephenson, J Ross, LD, Phar.....	Centralia
Stern, Edward F, LD, Bus.....	Seattle
Stevens, George, LD, Eng.....	Everett
Stevens, George, Unc, Bus.....	Puyallup
Stevens, Richard F, UD, EE.....	Seattle
Stevens, Robert R, LD, Bus.....	Seattle
Stevens, Theodore G, LD, LA.....	Bridgeport
Stevenson, Robert John, LD, LA.....	Seattle
Stevenson, Robt R, LD, Bus.....	The Dalles, Or
Stewart, Beatrice, LD, FA.....	Seattle
Stewart, Chester F, LD, Min.....	Seattle
Stewart, Edgar J, UD, Ed.....	Granite Falls
Stewart, Harold A, LD, Min.....	Seattle
Stewart, Oliver, UD, EE.....	Seattle
Stewart, Paul R, LD, LA.....	New York, N Y
Stewart, Phil H, LD, Eng.....	Prosser
Stewart, Ralph B, UD, Sci.....	Seattle
Stewart, Richard H, Unc, LA.....	Seattle
St Germain, Garnette, UD, FA.....	Seattle
Stickney, Amy E, LD, LA.....	Bothell
Stickney, Guy C, Voc.....	Bothell
Stigenwalt, Alpha L, UD, Eng.....	Puyallup
Stiles, Jean, LD, Bus.....	Yakima
Stillman, Allyn P, LD, For.....	Spokane
Stinson, Geraldine, LD, LA.....	Gig Harbor
Stirling, Thomas B, LD, LA.....	Walla Walla
Stirrat, James R, LD, Bus.....	Seattle
Stith, Kathryn, LD, LA.....	Seattle
Stixrud, Louise, LD, LA.....	Litchville, N D
Stixrud, Lydia E, LD, LA.....	Litchville, N D
St John, C Harold, LD, Bus.....	Chehalis
Stockwell, Richard P, LD, Bus.....	Aberdeen
Stoddard, John M, LD, LA.....	Seattle
Stone, Corliss, LD, LA.....	Seattle
Stone, Emma D, LD, LA.....	Seattle
Stone, Helen B, LD, LA.....	Cosmopolis
Stone, Howard C, LD, Eng.....	Seattle
Stone, Martha E, UD, LA.....	Thornton
Stone, Samuel, Voc.....	Seattle
Stone, Sylvan R, LD, LA.....	Seattle
Stoneman, Argus V, Unc, LA.....	Seattle
Stoody, Helen Mary, UD, Phar.....	Seattle
Storey, M Eugenia, UD, Ed.....	Kirkland
Storey, Eunice, LD, LA.....	Seattle
Storey, Guinevere, LD, LA.....	Kirkland
Storey, Ralph E, Grad.....	Kirkland
Storm, Mrs. Charlotte, UD, FA.....	Seattle
Storm, Kathleen, LD, LA.....	Seattle
Storms, Walter Rex, UD, Min.....	Camas
Stout, Maxine, Unc, LA.....	Vancouver
Stover, Leona, LD, LA.....	Seattle
Stover, Merrill, UD, EE.....	Seattle
Stover, Miriam C, LD, LA.....	Seattle
Stoves, Margaret L, LD, LA.....	Roslyn
Stowasser, Frances, UD, LA.....	Tomah, Wis
St Peter, Marcelle N, LD, LA.....	Hoquiam
Strachan, Gertrude, LD, FA.....	Kent
Strand, Erling, UD, LA.....	Petersburg, Alas
Strand, Robert, LD, Bus.....	Great Falls, Mont
Stratton, Harold M, LD, CE.....	Seattle
Stratton, Irving R, LD, LA.....	Seattle
Street, Merl Sidney, LD, LA.....	Omak
Strens, Nadine, LD, LA.....	Seattle
Strickland, N R, UD, Sci.....	Middlesex, N C
Stringer, Marian, LD, FA.....	Seattle
Strite, Daniel D, LD, For.....	New York, N Y
Strohn, L Nell, LD, FA.....	Crescent City, Cal
Strong, Gladys D, UD, LA.....	Seattle
Strong, James H, LD, CE.....	Seattle
Strong, Richard S, LD, LA.....	Seattle
Stroud, Rollin C, LD, For.....	Seattle
Stroud, Ruth, LD, Sci.....	Sheridan, Wyo

Stroud, Warren, LD, Phar.....	Olympia
Struthers, Florence B, Sp, Sci.....	Seattle
Stryker, Gretchen, LD, FA.....	Everett
Stucky, Lena, Unc, Bus.....	Monroe
Studdert, Ruth, LD, Fsh.....	Seattle
Studer, Frank, John, Grad.....	Seattle
Stumfall, Sylvester, LD, LA.....	Everett
Stunkard, Isabel, LD, Sci.....	Seattle
Sturgis, Alice, LD, LA.....	Sturgis, Mich
Sturtevant, Gertrude, Unc, LA.....	Seattle
*Stussy, Lloyd S, Sp, Bus.....	Yakima
Styer, Cornelius, LD, LA.....	Seattle
Suess, J Walter, LD, Bus.....	Seattle
Sugimachi, Yaemitsu, LD, LA.....	Japan
Sullivan, Marie, LD, Bus.....	Seattle
Sullivan, Ora, LD, LA.....	Seattle
Sullivan, Robert B, UD, Ed.....	Willapa
Sumner, Earl J, Voc.....	Hillsboro, Ore
Sundling, Doris Mae, UD, Bus.....	Seattle
Sundquist, Leona, Grad.....	Mt Vernon
Sundstrom, William, LD, Bus.....	Dupont
Suomela, Arnie J, LD, Fsh.....	Iiwaco
Sutherland, Alice, LD, LA.....	Sheridan, Mont
Sutter, C Fain, LD, Bus.....	Seattle
Sutter, Vance F, LD, Bus.....	Seattle
Sutton, Alice D, LD, LA.....	Seattle
Sutton, Elizabeth, LD, LA.....	Seattle
Sutton, Phoebe Jane, UD, Sci.....	Seattle
Swalle, George, LD, Bus.....	Seattle
Swale, Douglas G, LD, Sci.....	Seattle
Swan, Helen L, LD, LA.....	Seattle
Swan, John W, LD, Bus.....	Seattle
Swanberg, Amy, LD, Bus.....	Seattle
Swauberg, Arthur, LD, Fsh.....	Seattle
Swanberg, Roy, UD, Min.....	Seattle
Swanberg, Ruby, LD, LA.....	Seattle
Swanson, Clarence W, LD, Bus.....	Seattle
Swanson, Florence L, UD, Sci.....	Troy, Mont
Swanson, Gustave, LD, Phar.....	Edmonds
Swanson, Myrtle L, LD, Bus.....	Troy, Mont
Swanson, Ruby, UD, LA.....	Troy, Mont
Swanson, Ruth, UD, Jour.....	Eatonville
Swanson, Verne J, UD, EE.....	Seattle
Swanson, Walter V, LD, Bus.....	Seattle
Swart, Gilbert, LD, CE.....	Seattle
Swartz, Marie, LD, FA.....	Yakima
Swearengen, Francis, LD, Bus.....	Seattle
Sweeney, Frank B, Unc, Law.....	Seattle
Sweeney, Frank M, Unc, LA.....	Seattle
Sweet, Earl K, LD, Bus.....	Seattle
Sweet, Marie, LD, LA.....	Seattle
Sweet, Marion L, LD, FA.....	Okanogan
Swegle, Walter H, UD, ME.....	Renton
Swenson, Elaine, UD, FA.....	Seattle
Swezey, Mildred L, UD, LA.....	Sumner
Swigert, Elma, Unc, Sci.....	Mossy Rock
Swinehart, Olivia, LD, LA.....	Seattle
Sycour, Charles O, Unc, Sci.....	Seattle
Sykes, Iris H, LD, FA.....	Tacoma
Szymkowiak, Edmund, Voc.....	Milwaukee, Wis
Tadije, Emiliano, LD, Eng.....	Seattle
Taft, Alice L, UD, LA.....	Seattle
Taft, Frances L, Unc, Sci.....	Hogulam
Taggart, George M, LD, Bus.....	Seattle
Takabe, Susumu, UD, Bus.....	Seattle
Takahashi, Miyo, Unc, LA.....	Seattle
Takahashi, Theodore, LD, Bus.....	Seattle
Takayoshi, Tomeo, LD, Bus.....	Pt Blakely
Talbot, Everett C, Voc.....	Lowell
Talbot, Katherine, LD, LA.....	Seattle
Talbot, Mira, UD, LA.....	Seattle
Talbot, Reeve, LD, Bus.....	Seattle
Talbot, Mary, LD, LA.....	Seattle
Tallman, Lenore, Unc, FA.....	Seattle
Tamesis, Florencio, Grad.....	Philippines
Tanabe, George B, UD, CE.....	Spokane
Tangney, Emmett, LD, EE.....	Seattle
Tanner, Benjamin F, LD, Bus.....	Seattle
Tanner, Frances J, Sp, FA.....	Seattle
Tanner, Mary C, UD, Ed.....	Seattle
Tanzer, Max, LD, Bus.....	Seattle
Tappe, Kenneth H, LD, For.....	Bremerton
Tappe, Lee, LD, Phar.....	Bremerton
Tapping, Margaret, LD, LA.....	Bellingham
Tarter, Clyde S, UD, Sci.....	Seattle
Tashima, Hideo, LD, Sci.....	Los Angeles, Cal
Tatum, Fernley A, Grad.....	Tacoma
Taylor, Bertrand, UD, LA.....	Sumner
Taylor, Elizabeth, LD, For.....	Seattle
Taylor, Helen L, LD, LA.....	National
Taylor, Irene, LD, Bus.....	Seattle
Taylor, Jeannette, LD, Bus.....	Seattle
Taylor, Lucile, LD, LA.....	Seattle
Taylor, Margaret S, Grad.....	Seattle
Taylor, Martha A, LD, LA.....	Seattle
Taylor, Mildred, LD, FA.....	Spokane
Taylor, Raymond F, LD, For.....	Seattle
Taylor, Robert W, LD, Bus.....	Seattle
Taylor, Susan E, UD, Sci.....	Tacoma
Taylor, William, LD, LA.....	Spokane
Teed, Howard M, LD, Bus.....	Seattle
Tee-Garden, Chester, UD, LA.....	Seattle
Tegland, Nellie M, UD, Ed.....	Littlerock
Telg, Ralph, LD, Eng.....	Seattle
Tejada, Emiliano A, 2nd Law.....	Philippines
Temple, Mrs, Mary.....	Tacoma
Tennant, Hugh, LD, Phar.....	Pasco
Tenneson, Gladys R, LD, LA.....	Seattle
Tenney, Elmer Paul, LD, Sci.....	Seattle
Terhune, George W, LD, Sci.....	Bryn Mawr
Terrell, Agnes N, LD, LA.....	Billings, Mont
Terry, Mrs, Jessie O, Grad.....	Seattle
Terry, Miriam, LD, FA.....	Seattle
Tershin, John, LD, Eng.....	Seattle
Terstick, Peter E, LD, Bus.....	Rosslund, BO
Tesreau, Elmer Lee, Unc, Bus.....	Chehalis
Teutsch, John M, UD, Bus.....	Seattle
Tewell, Mrs Lois C, Unc, LA.....	Gilman, Mont
Thayer, Jeannette, UD, LA.....	Everett
Thayer, John M, UD, Bus.....	New York, N Y
Thiry, Paul, LD, Sci.....	Seattle
Thode, Elizabeth, LD, LA.....	Boise, Ida
Thole, Marjorie F, Unc, LA.....	Seattle
Thomas, Ira, LD, Fsh.....	Cle Elum
*Thomas, DeWitt, Sp, LA.....	Hartford, Ala
Thomas, Dwight, LD, Bus.....	Seattle
Thomas, Frank E, LD, LA.....	Ellensburg
Thomas, Jack R, LD, Bus.....	Sumas
Thomas, Lee B, UD, Bus.....	Sumas
Thomas, Margaret C, UD, Sci.....	Bellingham
Thomas, Roscoe G, LD, LA.....	Seattle
Thome, Helen, Unc, LA.....	Granger
Thome, Joseph M, Unc, Law.....	Granger
Thompson, Adelle, LD, LA.....	Enumclaw
Thompson, Alfred, LD, LA.....	Raymond
Thompson, Allen, UD, For.....	Seattle
Thompson, Aurora M, LD, Sci.....	Kingston
Thompson, Beth, Grad.....	Winfield, Kans
Thompson, Browder, LD, EE.....	Seattle
Thompson, Browder J, LD, Eng.....	Seattle
Thompson, Constance, LD, LA.....	Tacoma
Thompson, Doris W, LD, LA.....	Portland, Ore
Thompson, Dorothy E, LD, LA.....	Aberdeen
Thompson, Earl G, LD, Eng.....	Seattle
Thompson, Gordon W, LD, Bus.....	Centralia
Thompson, Harold A, UD, Sci.....	Seattle
Thompson, Harriet G, UD, Sci.....	Seattle
Thompson, Helen, LD, Sci.....	Sunnydale
Thompson, Helen M, UD, LA.....	Seattle
Thompson, Henry E, LD, LA.....	Seattle
Thompson, Irene, UD, LA.....	Everett
Thompson, Jane E, LD, LA.....	Seattle
Thompson, Laura B, LD, LA.....	Olympia
Thompson, Lois, UD, LA.....	Seattle
Thompson, Marguerite, LD, LA.....	Seattle
Thompson, Nathan P, UD, Bus.....	Everett
Thompson, Suzanne, LD, FA.....	Seattle
Thomson, Ernest D, LD, LA.....	Seattle
Thomsen, Esther, LD, LA.....	Sedro-Woolley
Thoreson, Wallace, UD, Eng.....	Seattle
Thornton, Mary F, LD, LA.....	Seattle
Thornton, Ross, UD, Sci.....	Seattle

Thorpe, Clarence S, UD, ME.....	Seattle
Thorstenson, Skuld, LD, LA.....	Seattle
Thune, Elmer T, Grad.....	Edmonds
Thwing, Clayton, LD, Bus.....	Puyallup
Thwing, Samuel F, UD, Bus.....	Seattle
Tibbitts, Erva, UD, Sci.....	Cashmere
Tidmarsh, Patrick M, UD, LA.....	Seattle
Tiffany, Clara L, UD, Lib.....	Seattle
Tilbury, Percy, LD, Bus.....	Nooksack
Till, Hildegard, Unc, Bus.....	Seattle
Tiller, Arnt, LD, LA.....	Seattle
Tilton, K Edwood, LD, Eng.....	Seattle
Tinkom, Lucile, LD, FA.....	Seattle
Tinling, Norman, UD, Bus.....	Seattle
Todd, Daphne, UD, LA.....	Tacoma
Todd, James C, LD, LA.....	Tacoma
Todsen, Paul, LD, Bus.....	Seattle
Tokabe, Susumu, UD, Bus.....	Seattle
Toles, Martha, LD, Bus.....	Centralia
Tollaksen, Leslie, LD, EE.....	Seattle
Townaga, Sakaye, LD, LA.....	Bellevue
Thomle, Randi, LD, FA.....	Seattle
Tomlinson, Mervyn W, Unc, Bus.....	Seattle
Tompkins, Chester E, LD, Bus.....	Kirkland
Tompkins, Wesley D, Sp, Bus.....	Boise, Ida
Toner, George, LD, Bus.....	Sunnyside
Topping, Willard F, UD, LA.....	Seattle
Torrance, Roscoe E, UD, Bus.....	Spokane
Totman, Corliss M, LD, Sci.....	Edmonds
Totten, Morrell, 2nd Law.....	Seattle
Tower, Leslie R, LD, Eng.....	Polson, Mont
Towey, Orul M, LD, Sci.....	Olympia
Townsend, Howard G, LD, Bus.....	Seattle
Townsend, James R, LD, Phar.Victoria, BC	Seattle
Townsend, Lucile E, LD, LA.....	Seattle
Tozier, Payson V, LD, CE.....	Seattle
Travis, Beverly A, UD, EE.....	Pinehurst
Treasher, Ray C, LD, Min.....	Sunnyside
Troeh, Sylvia, LD, FA.....	Vancouver
Troitzky, Semen, Unc, EE.....	China
Trotman, Frank E, LD, Sci.....	Woodinville
Trowbridge, K S, LD, For.....	Augusta, Ga
Troy, Harold P, LD, Bus.....	Olympia
Truesdon, Esther, LD, LA.....	Gresham, Ore
Trullinger, Jesse T, LD, Bus.....	Olympia
Trumbull J, Jonathan, LD, LA.....	Chile
Trumbull, John T, LD, LA.....	Pt Angeles
Tschudin, Ethel A, LD, Phar.....	Seattle
Tsui, Naai-Shing, UD, Bus.....	China
Tsui, Tit Shaan, LD, Bus.....	China
Tucker, Alice N, UD, FA.....	Seattle
Tucker, Ellen, LD, Bus.....	Seattle
Tucker, A Gordon, LD, Bus.....	Coulce
Tucker, Marynn A, LD, LA.....	Toppenish
Tucker, A Nesbit, UD, ME.....	Seattle
Tucker, Roy F, LD, ME.....	Seattle
Tucker, Wilmon S, LD, LA.....	Seattle
Tuell, J Irving, LD, Eng.....	Tacoma
Tuesley, G Prescott, LD, Bus.....	Yakima
Tupper, Cecil C, LD, Bus.....	Spokane
Turinsky, Angelina, UD, Sci.....	Seattle
Turnacliff, M Lucille, UD, Phar.....	Seattle
Turnacliff, William D, LD, Bus.....	Seattle
Turublad, Harold, UD, LA.....	Seattle
Turnbull, Don M, LD, Bus.....	Seattle
Turner, Alice G, LD, LA.....	Seattle
Turner, Arthur F, LD, EE.....	Seattle
Turner, Cecilla, LD, LA.....	Everett
Turner, Chas M, UD, EE.....	Seattle
Turner, Gaius S, LD, Bus.....	Mt Vernon
Turner, Leon, Unc, LA.....	Seattle
Turner, Marjorie, Unc, Bus.....	Seattle
Turner, Mary, LD, LA.....	Woodinville
Turner, Mary B, LD, FA.....	Spokane
Turner, Otis, L, LD, LA.....	Seattle
Turner, Robert E, UD, LA.....	Seattle
Turner, Roy P, UD, LA.....	Seattle
Turner, Theodore S, 2nd Law.....	Seattle
Turner, Wendell W, UD, Bus.....	Seattle
Turtle, Alice, UD, FA.....	Spokane
Turtle, Hazel J, UD, FA.....	Seattle
Tuttle, Mrs. Birdeena L, UD, LA.....	Tacoma
Tyler, Charles, UD, LA.....	Olympia
Tyner, Linn Malon, UD, Bus.....	Spokane
Tyndall, F B, Unc, Eng.....	Palm Beach, Fla
Ubungen, Sabas, LD, Sci.....	Philippines
Udden, Esther D, LD, FA.....	Seattle
Uhlmann, Martha M, LD, LA.....	Centralia
Uhlmann, W Paul, LD, LA.....	Centralia
Uhrich, Helen G B, LD, LA.....	Seattle
Ulbrickson, Alvin, LD, FA.....	Seattle
Umbdenstock, Virginia, LD, LA.....	Seattle
Underhill, Mrs Julia A, Sp, LA.....	Seattle
Underhill, Walter M, Voc.....	Comanche, Mont
Upton, Charles M, LD, LA.....	Seattle
Upton, Marietta, UD, LA.....	Seattle
Urbanek, Eugene R, UD, EE.....	Des Moines
Ure, Lawrence, LD, Eng.....	Seattle
Urquhart, Irene, LD, LA.....	Seattle
Urquhart, Karl A, LD, LA.....	Chehalis
Utley, Willa, LD, FA.....	Seattle
Uyesawa, Kenji, Aud.....	Japan
Valentine, Haddon P, UD, EE.....	Tacoma
Vallean, Verna, UD, LA.....	Deer Park
Van Arsdal, Maurice D, Voc.....	Clarkston
Van, Eric Preston, LD, Bus.....	Seattle
Van Buskirk, Adelbert, LD, Sci.....	Edmonds
Van de Walker, Dale H, LD, Bus.....	Seattle
Van de Water, Marlon G, Unc, FA.....	Spokane
Van Duzen, Bess, UD, Sci.....	Tacoma
Van Gilder, Florence, LD, LA.....	St Helens, Ore
Van Gilder, John F, LD, FA.....	Centralia
Van Keuren, Bernice, LD, LA.....	Seattle
Van Winkle, Barak, LD, LA.....	Alderton
*Van Winkle, Helena, Sp, Sci.....	Seattle
Vannoy, Louise, Grad.....	Seattle
Van Orsdal, Otie Pearl, LD, LA.....	Seattle
Van Tilborg, Laurence, LD, Bus.....	Seattle
Van Vliet, Carolyn, LD, LA.....	Yakima
Van Voris, Cecil S, LD, Bus.....	Seattle
Van Water, Gaston, Unc, LD.....	Spokane
Van Wie, Florence, LD, Phar.....	Seattle
Vassar, Arthur, LD, Bus.....	Seattle
Veak, Margaret T, LD, FA.....	Seattle
Veitch, Albert H, LD, CE.....	Seattle
Vord, Wesley B, LD, LA.....	Seattle
Vorhamme, Evelyn, LD, LA.....	Seattle
Verrinder, Ford, LD, EE.....	Seattle
Vetter, George B, Grad.....	Machias
Foysey, Mary, UD, LA.....	Montesano
Vick, Josephine, LD, Bus.....	Seattle
Vick, Marie, LD, LA.....	Seattle
Victor, Frank J, Unc, Bus.....	Seattle
Vidgoff, I Jack, UD, Sci.....	Seattle
Viers, Florence, LD, LA.....	Seattle
Villamin, Mannel, LD, Bus.....	Seattle
Villegas, Andres P, LD, CE.....	Philippines
Villesvick, Ida Stommer, Grad.....	Seattle
Vincent, Chester, UD, Bus.....	Seattle
Vincent, John C, LD, Bus.....	Puyallup
Vincent, Will F, LD, Min.....	Puyallup
Vining, Genevieve, UD, Ed.....	Seattle
Vining, Maurice N, LD, Bus.....	Seattle
Vining, Orrin, 2nd Law.....	Seattle
Vinson, Carol J, LD, LA.....	Seattle
Visser, William R, LD, Eng.....	Seattle
Vlasof, Vasily, LD, Min.....	China
Voelker, Claude B, LD, Bus.....	Spokane
Volchok, Simon, LD, LA.....	Seattle
Yoerge, Julius E, Unc, LA.....	Seattle
Vogel, John F, LD, Sci.....	Tacoma
Vofin, Morris, Unc, Eng.....	Seattle
Von Babo, Max, UD, EE.....	Seattle
von Pressentin, Alice, LD, Sci.Sedro-Woolley	Seattle
von Pressentin, Ruth, LD, Bus.Marblemount	Seattle
Voorhees, Melvin B, LD, LA.....	Seattle
Voyer, Margaret E, LD, Sci.....	Seattle
Vredenberg, Dor A, LD, Sci.....	Shepherd, Mich

Wabrushek, Doris, Unc, LA.....	Seattle
Waechter, Florence, LD, LA.....	Seattle
Waechter, Hazel, LD, FA.....	Seattle
Wafer, Barbara, UD, Ed.....	Seattle
Wagstaff, Helen, LD, Sci.....	Seattle
Wahl, Bertena, UD, LA.....	Seattle
Wahl, Evelyn A, UD, LA.....	Bellingham
Wahl, Leonore M, UD, LA.....	Seattle
Wahlstrom, Nelson A, LD, Bus.....	Seattle
Wainwright, Ernest G, Voc.....	Seattle
Wait, Thelma, LD, LA.....	Seattle
Wakefield, Claude E, 1st Law.....	Tacoma
Walby, Eugene V, LD, Bus.....	Seattle
Waldo, Arthur, LD, FA.....	Raymond
Waldo, Cornelius, LD, LA.....	Pasadena, Cal
Walker, Charles W, LD, ME.....	Everett
Walker, Donald, LD, Bus.....	Seattle
Walker, Gile H, LD, For.....	Tacoma
Walker, James C E, UD, For.....	Seattle
Walker, F D Lanier, UD, LA.....	Bremerton
Walker, Margery K, LD, LA.....	Shelton
Walker, Nina R, UD, Bus.....	Seattle
Walker, Norman E, LD, LA.....	Seattle
Walker, Ona B, UD, Bus.....	Seattle
Walker, Phyllis, Mrs, UD, Bus.....	Seattle
Walker, Richard, UD, Eng.....	Seattle
Walker, Roger A, UD, EE.....	Tacoma
Walker, Ronald P, UD, Bus.....	Seattle
Walker, William B, UD, LA.....	Seattle
Wallace, Genelle, LD, Sci.....	Seattle
Wallace, Roderick A, UD, Ed.....	Seattle
Wallace, William A, LD, ME.....	Seattle
Waller, Lillian, LD, LA.....	Seattle
Waller, Vera, LD, Sci.....	Seattle
Wallgren, Lloyd, LD, EE.....	Everett
Walling, Dow, LD, LA.....	Bellingham
Wallis, Opha, LD, FA.....	Boulder, Colo
Walsh, Bernice, LD, FA.....	Everett
Walsh, Everett L, Unc, CE.....	Seattle
Walsh, William R, Voc.....	Seattle
Walters, Chalmer, Unc, Law.....	Everett
Walters, Earl Cecil, UD, Bus.....	Everett
Waltersdorph, Frances, LD, FA.....	Seattle
Walthew, John F, LD, LA.....	Seattle
Walthew, Margaret, LD, LA.....	Seattle
Walton, Genevieve, LD, FA.....	Everett
Wang, Fuchow, UD, LA.....	China
Wang, Jen-Ling, LD, LA.....	China
Wann, Arva W, LD, Bus.....	Walla Walla
Wannamaker, Dr F H, LD, Sci.....	Olympia
Wannamaker, Joyce K, LD, LA.....	Spokane
Waples, Mildred, LD, Sci.....	Lynden
Ward, Alfred H, UD, Sci.....	Seattle
Ward, Alma M, UD, LA.....	Seattle
Ward, Cell M, UD, ME.....	Seattle
Ward, Francis J, LD, LA.....	St Paul, Minn
Ward, George F, Unc, Law.....	Seattle
Ward, Marguerite, LD, Bus.....	Seattle
Ward, Merrill H, LD, Sci.....	Vashon
Ward, Paul R, Unc, LA.....	Seattle
Warde, Walter H, LD, ME.....	Seattle
Ware, Janet, UD, Ed.....	Kirkland
Warner, Betty, LD, FA.....	Seattle
Warner, Genevieve, UD, Ed.....	Medical Lake
Warner, Marylols, UD, Sci.....	Seattle
Warner, N E, UD, Phar.....	Traverse City, Mich
Warren, Cecil C, UD, EE.....	Seattle
Warren, John E, UD, Sci.....	Bremerton
Wartes, Lloyd, LD, Eng.....	Seattle
Wascher, Spriggs, LD, For.....	Seattle
Wasem, Weldon B, LD, Bus.....	Clarkston
Washburn, Charlotte, LD, LA.....	Seattle
Washington, Lillian, LD, FA.....	Seattle
Watanabe, Iwao, LD, Sci.....	Seattle
Waters, Aaron Pearle, LD, LA.....	Sultan
Watkins, Dorothy, LD, FA.....	Seattle
Watne, Edwin M, LD, ME.....	Seattle
Watson, Dorothy, UD, LA.....	Seattle
Watson, Elizabeth D, LD, Sci.....	Seattle
Watson, Eugenia, UD, Ed.....	Paul, Ida
Watson, Gwen Allen, LD, Bus.....	Seattle
Watson, Percy H, Unc, Bus.....	Seattle
Watt, Elsie, UD, Bus.....	Seattle
Watt, George S, Unc, Bus.....	Seattle
Watt, Harold B, UD, Bus.....	Yakima
Watt, J Graham, UD, ME.....	Seattle
Watts, Archie L, UD, LA.....	Billings, Mont
Watts, Carl W, LD, Bus.....	Seattle
Waugh, Robert, LD, Eng.....	Seattle
Wayborn, Ada, LD, LA.....	Seattle
Wayland, C Varrell, LD, FA.....	Tacoma
Wayland, Elizabeth, Unc, FA.....	Seattle
Weage, Avery D, Grad.....	Seattle
Weage, Mary D, UD, Ed.....	Seattle
Weage, Ruth, LD, LA.....	Seattle
Weatherly, Clayton W, UD, Sci.....	Portland, Or
**Weaver, Charles N, Sp, Bus.....	Seattle
Weaver, Donald, LD, LA.....	Seattle
Weaver, Howard, LD, LA.....	Tacoma
Weaver, Newton C, Voc.....	Metropolis, Ill
Weaver, Stanley R, LD, Bus.....	Elkhart, Ind
Weaver, William H, LD, Sci.....	Seattle
Webb, Vernon H, LD, LA.....	Medford, Ore
Weber, George, LD, Bus.....	Ritzville
Weber, Lloyd, Unc, Phar.....	Seattle
Wedeberg, Sivert M, LD, Bus.....	Tacoma
Weeks, Patricia, Unc, Bus.....	Minneapolis, Minn
Wegner, Johanna, LD, Bus.....	Seattle
Wehe, Albert F, Unc, EE.....	Pasco
Weiermuller, Louise H, UD, LA.....	Seattle
Well, Charles, LD, Eng.....	Seattle
Weinhart, George, Unc, Phar.....	Tacoma
Weinstein, Harry H, Unc, Bus.....	Seattle
Weinstein, Arthur, Unc, Bus.....	Portland, Ore
Weinstein, Hazel, Unc, FA.....	Portland
Weir, Gladys, UD, LA.....	Bellingham
Weir, John M, LD, EE.....	Tacoma
Weiser, John H, LD, ChE.....	Bellingham
Weiss, Mildred, LD, FA.....	Seattle
Weiss, Phil J, 2nd Law.....	Seattle
Weissenborn, Howard, UD, Bus.....	Seattle
Welch, Roy, Unc, Bus.....	Spokane
Weld, Alice C, LD, LA.....	Rolling Bay
Wells, Dorothy B, LD, LA.....	Mt Vernon
Welsh, Gertrude, UD, LA.....	Seattle
Welsh, Helen E, LD, LA.....	Raymond
Welsh, Raechel, LD, Phar.....	N Westminster, BC
Welsh, Wm J, LD, EE.....	Tacoma
Welts, Edith, LD, LA.....	Mt Vernon
Welts, Richard, LD, LA.....	Mt Vernon
Wetty, John L, LD, ChE.....	Decatur, Ill
Werba, Peter C, UD, Phar.....	Seattle
Werttemberger, Richard, LD, Phar.....	Ritzville
West, Beth, UD, Ed.....	Sumas
West, Cecil, Grad.....	Seattle
West, Constance, Grad.....	Seattle
West, Gertrude, Unc, FA.....	Salem
West, John T, LD, Bus.....	Leavenworth
West, Lucile, LD, Sci.....	Seattle
West, Marie, LD, FA.....	Wenatchee
Westberg, Alfred J, LD, LA.....	Seattle
Westberg, Alma E, Grad.....	Kensington, Minn
Westerman, Wilbur, LD, Bus.....	Seattle
Westfall, Virginia, LD, LA.....	Seattle
Westgreen, Amy, UD, Ed.....	Seattle
Westland, Jack, LD, LA.....	Everett
Westlund, Elmer B, LD, Bus.....	Bellingham
Westphalen, William, LD, Bus.....	Seattle
Westrom, Fred, LD, Bus.....	Everett
Weymouth, Allen Andrew, LD, Min.....	Seattle
Weythman, Ida May, LD, LA.....	Cashmere
Whaley, Frances, Grad.....	Chelan
Wheaton, Alma, UD, Bus.....	South Bend
Wheaton, Harry J, LD, Bus.....	Seattle
Wheaton, Ralph, Unc, Eng.....	Vancouver
Wheeler, Beulah O, LD, Bus.....	Seattle
Wheeler, Charles, LD, Bus.....	Seattle
Wheeler, Edward B, LD, Bus.....	Seattle
Wheeler, Mabel, Grad.....	Seattle
Wheeler, Marshall E, Voc.....	Seattle
Wheeler, Robert F, LD, LA.....	Montesano
Wheldon, Burton J, 2nd Law.....	Seattle
Whipple, A Paul, 1st Law.....	Rochester, N Y
Whipple, Charles R, LD, For.....	Seattle

Whitacre, Paul, UD, Bus.....Seattle
 White, Dorothy, LD, LA.....Renton
 White, Dykeman, UD, Bus.....Seattle
 White, Elmer J, UD, ME.....Seattle
 White, Esther B, Sp, Sci.....Seattle
 White, Frances, UD, LA.....Yakima
 White, Helen K, Unc, LA.....Seattle
 White, Leslie A, LD, Sci.....Seattle
 White, Mrs Lyda A, LD, LA.....Seattle
 White, Mabel N, UD, Ed.....Everett
 White, Marie, UD, LA.....Seattle
 White, Myrtis, LD, LA.....Sedro-Woolley
 White, Myrtle P, UD, Sci.....Seattle
 White, Philip R, Grad.....Victor, Mont
 White, Rosalind F, LD, LA.....Seattle
 White, Ross S, LD, Bus.....Seattle
 White, Wynne, LD, FA.....Tacoma
 Whiteley, Ernest D, LD, Phar.....Seattle
 Whitesides, Norma LD, FA.....Seattle
 Whitlock, Victor, Unc, Bus.....Havre, Mont
 Whitman, Daniel S, UD, LA.....Seattle
 Whitmore, Alfred A, LD, Bus.....Bothell
 Whitmore, Doris, UD, Sci.....Buckley
 Whitner, George, LD, Bus.....Seattle
 Whitney, Albert J, UD, LA.....Yakima
 Whittier, Lyman K, UD, Bus.....Seattle
 Whittle, William B, LD, Bus.....Seattle
 Wick, Guy, LD, Bus.....Arlington
 Wicker, Agnes M, LD, LA.....Sedro-Woolley
 Widrig, Thomas M, UD, EE.....Seattle
 Wieden, Hazel H, UD, Bus.....Seattle
 Wiedler, Irving I, LD, LA.....Portland, Ore
 Wiegell, Dorothy, LD, Bus.....Tacoma
 Wiel, Helge, LD, Bus.....Seattle
 Wiel, Kurt, LD, For.....Seattle
 Wienand, C Marcus, Grad.....Seattle
 Wiens, Israel T, Grad.....Seattle
 Wilcox, Claressa, LD, FA.....Seattle
 Wilcox, Milo F, UD, Bus.....Seattle
 Wilder, Ronald, LD, CE.....Olympia
 Wiley, Alexander, 3rd Law.....Seattle
 Wilhelm, Ralph A, LD, Bus.....Seattle
 Wilke, Shirley A, Unc FA.....Spokane
 Wilkes, Maxine, UD, Sci.....Seattle
 Wilkins, Earle A, Voc.....Seattle
 Wilkins, Emilton L, UD, Bus.....Seattle
 Wilkinson, Madge, Grad.....Seattle
 Willard, Dudley W, Grad.....Seattle
 Willard, Harrison E, LD, EE, Roundup, Mt
 Williams, Angus D, LD, Phar.....Seattle
 Williams, Arthur W, Unc, EE.....Snohomish
 Williams, Berwyn R, LD, Bus.....Chinook
 Williams, Caroline, LD, FA.....Centralia
 Williams, David J, Unc, Law.....Tyler
 Williams, Edith, UD, LA.....Blaine
 Williams, Eleanor, LD, LA.....Yakima
 Williams, Evelyn, LD, LA.....Seattle
 Williams, Frances, LD, FA.....Yakima
 Williams, George W, LD, Bus.....Seattle
 Williams, Harold G, LD, LA.....Seattle
 Williams, Harold L, UD, Bus.....Seattle
 Williams, Helen C, LD, LA.....Seattle
 Williams, Hermon P, Grad.....Seattle
 Williams, Hugh P, LD, Eng.....Seattle
 Williams, James J, LD, Eng.....Seattle
 Williams, Kenneth G, Voc.....Spokane
 Williams, Mentor L, LD, LA, Miles City, Mt
 Williams, Ronald C, LD, Bus.....Sprague
 Williams, Ruth Helen, LD, LA.....Seattle
 Williams, Ruth Jane, LD, LA.....Kirkland
 Williams, Thomas A, 2nd Law.....Seattle
 Williams, William O, UD, Bus.....Seattle
 Williams, Winifred, UD, Sci.....Seattle
 Williamson, James T, Unc, LA.....Tacoma
 Williamson, Julia, UD, Ed.....Seattle
 Williamson, Leale, Unc, LA.....Seattle
 Williamson, Ralph K, LD, LA.....Seattle
 Williamson, Reba, UD, Sci, Greybull, Wyo
 Williamson, Rupert W, Unc, Law, Filer, Id
 Willaston, Frank G, Grad.....Buckley
 Willoughby, Beryl, UD, Sci.....Seattle
 Willoughby, Elizabeth, LD, Sci.....Grandview

Wills, Henry V, LD, Phar..Friday Harbor
 Wilson, Abe, LD, Bus.....Everett
 Wilson, Albert W, LD, LA.....Seattle
 Wilson, Alice, UD, Bus.....Seattle
 Wilson, Alma, LD, LA.....Seattle
 Wilson, Bolland, LD, LA.....Seattle
 Wilson, Burdette G, LD, Bus, Portland, Or
 Wilson, David W, Unc, Eng, Whitehorse, Alas
 Wilson, Faye A, UD, Ed.....Bellingham
 Wilson, Gale E, LD, Sci.....Seattle
 Wilson, George, LD, Bus.....Everett
 Wilson, Grace, UD, LA.....Seattle
 Wilson, Harry K, LD, CE.....Bellingham
 Wilson, Howard, LD, Bus.....Portland, Ore
 Wilson, Irma, LD, LA.....Seattle
 Wilson, James V, UD, EE.....Tacoma
 Wilson, John G, UD, Bus.....Seattle
 Wilson, Lucile H, UD, Sci.....Hoquiam
 Wilson, May Cyr, LD, Bus.....Spokane
 Wilson, Paul E, UD, Sci.....Spokane
 Wilson, Thelma, LD, LA.....Seattle
 Wilson, Thomas H, LD, For.....Seattle
 Wilson, Viola, LD, LA.....Kent
 Wilson, William G, Grad.....Spokane
 Windhusen, Anne E, UD, LA, Medical Lake
 Winn, Burdett A, UD, Min..Juneau, Alaska
 Winn, T Wayne, LD, Bus..Kalamazoo, Mich
 Winston, Carey, LD, LA.....Seattle
 Winston, J Carey, UD, Bus.....Seattle
 Winter, Bryan O, LD, Bus.....Seattle
 Winter, Evelyn M, LD, LA.....Portland, Or
 Winter, Marion, LD, FA..Los Angeles, Cal
 Winters, Dale B, Unc, Bus.....Elma
 Winther, Sophus K, Grad.....Seattle
 Wirt, William H, UD, For.....Yakima
 Wise, Esther, LD, LA.....Seattle
 Wise, Joseph W, UD, Bus.....Vancouver
 Wise, Leslie V, UD, Bus.....Vancouver
 Wise, M Violet, LD, Phar.....Tacoma
 Wise, Rosa, LD, LA.....Seattle
 Wiseman, B Evangeline, UD, Sci.....Asotin
 Wiseman, George A, LD, EE.....Denver, Colo
 Wiseman, Lillian W, UD, FA.....Seattle
 Wiseman, Orville R, LD, LA.....Prescott
 Wisen, Byron F, 2nd Law.....Seattle
 Witcomb, Douglas A, Unc, LA.....England
 Witham, Florence, Unc, Bus.....Everett
 Witham, Ray, LD, Bus.....Seattle
 Withspoon, Margaret, LD, LA.....Spokane
 Withrow, Faye, LD, LA.....Seattle
 Wittenberg, Eva, LD, Phar.....Seattle
 Witting, Arthur F, Unc, Eng.....Tacoma
 Wojack, Frank, LD, Eng.....Enumclaw
 Wolfe, Chia Chin, Sp, Bus.....China
 Wolfe, Joe J, LD, Bus.....Seattle
 Wolfe, John B, UD, Bus.....Tacoma
 Wolfe, Merle, LD, Bus.....Seattle
 Wolkowicz, Wanda H, LD, Bus.....Aberdeen
 Wolner, Clarence J, LD, EE.....Tacoma
 Wolthausen, Raymond, LD, Sci.....Buena
 Wong, Elsie, UD, Sci.....Hawaii
 Wong, Frank S, UD, Bus.....Seattle
 Wong, Fred C, LD, Sci.....China
 Wong, Sam Herbert, UD, Eng.....Seattle
 Wong, Walter, UD, Bus.....Seattle
 Wood, A E, Nav.....Seattle
 Wood, Carl E, UD, CE.....Seattle
 Wood, Everett P, UD, Bus.....Seattle
 Wood, Florence, UD, FA.....Seattle
 Wood, Harold, UD, Bus.....Seattle
 Wood, Harold S, UD, Bus.....Sunnyside
 Wood, Hazel E, LD, LA.....Seattle
 Wood, Joseph S, UD, LA.....Seattle
 Wood, Lewis C, LD, Eng.....Seattle
 Wood, Merna E, LD, FA.....Shelton
 Wood, Robert Edwin, LD, Bus.....Seattle
 Wood, Varian G, UD, Sci.....Granite Falls
 Wood, William D, LD, Bus..Vancouver, BC
 Wood, William R, UD, For.....Seattle
 Woodall, Otis, LD, EE.....Seattle
 Woodard, Edith, Unc, LA.....Millwood
 Woodbridge, Alice, LD, LA.....Seattle

Woodbridge, Mrs Florence, UD, Bus.	Seattle
Woodbridge, F W, Grad.	Seattle
Woodcock, Lou A, LD, Sci.	Dungeness
Woodmansee, Jack T, LD, LA.	Mesa, Id
Woods, Ione, UD, FA.	Ellisport
Woods, Lorin E, LD, LA.	Spokane
Woods, Rachel A, UD, LA.	Everett
Woods, Richard, LD, Bus.	Seattle
Woodside, James, LD, Bus.	Seattle
Woodward, Mrs Carrie, LD, LA.	Seattle
Woodworth, Claude, 2nd Law.	East Sound
Woodworth, Earl G, UD, Bus.	Vancouver, BC
Woodridge, Edgar R, LD, Eng.	Seattle
Woolston, Katherine D, Grad.	Seattle
Word, William F, LD, Min.	Helena, Mt
Workman, Nadine, LD, Bus.	Seattle
Worswick, Luella, LD, Bus.	Seattle
Worthington, Harold, UD, CE.	Quilcene
Worthington, Norman P, LD, Bus.	Quilcene
Worthington, Robert E, UD, For.	Quilcene
Wotherspoon, Gavin C, LD, FA.	Seattle
Wotherspoon, Gordon, LD, Sci.	Seattle
Wray, Francis, Unc, For.	Seattle
Wren, Harper, LD, LA.	Seattle
Wright, Frank H, LD, ME.	Kent
Wright, George F, LD, Bus.	Tacoma
Wright, Guy S, UD, Eng.	Seattle
Wright, Howard H, UD, Bus.	Everett
Wright, Jack A, Unc, LA.	White Salmon
Wright, Jack W, LD, LA.	Seattle
Wright, Leota S, UD, Ed.	Camas
Wright, Lorine J, LD, Sci.	Kent
Wright, Mae R, Unc, FA.	Winthrop
Wright, Robert, LD, Bus.	Seattle
Wright, Thelma A, Unc, Bus.	Great Falls
Wright, William, Unc, FA.	Seattle
Wright, Willma, UD, LA.	Tacoma
Wu, Andrew Y, LD, Bus.	Seattle
Wu, C K Wm, LD, LA.	Seattle
Wurdeman, Walter C, LD, FA.	Bremerton
Wuthenow, Arthur Jr, LD, Bus.	Seattle
Wyckoff, Walter L, LD, Bus.	Seattle
Wyers, Marie, UD, Sci.	White Salmon
Wyers, Teunis, 1st Law.	White Salmon
Wyman, Thornton D, Unc, Law.	Seattle
Wysocki, Raymond, Voc.	Everett
Yabroff, Elias, LD, Eng.	China
Yamaoka, George, LD, LA.	Seattle
Ybojos, Marcelino, UD, Bus.	Philippines
Yeager, Fred A, UD, ME.	Spokane
Yeon, S, Gladys, Unc, LA.	Seattle
Yingst, William J, Voc.	Seattle
Yoshimura, Tamekichi, UD, Bus.	Japan
Yoshioka, Jesse, LD, Sci.	Tacoma
Yovell, Thomas H, LD, LA.	Seattle
Youlden, Charles S, LD, Bus.	Butte, Mt
Youlden, Martha, LD, LA.	Butte, Mt
Youle, Gretchen, LD, LA.	Seattle
Young, Elisabeth, LD, LA.	Seattle
Young, G A, LD, Min.	Lethbridge, Can
Young, G E, LD, Sci.	San Francisco, Cal
Young, Karl E, LD, LA.	Seattle
Young, Mae A, LD, FA.	Charleston
Young, Mrs Viva E, LD, LA.	Seattle
Young, Wayne L, LD, Bus.	Spokane
Young, Wendell, LD, LA.	Stanwood
Ystrom, John B, LD, ME.	Seattle
Zabel, Mary Wilhelmina, UD, LA.	Spokane
Zakalinsky, Vladimir P, Unc, Eng.	Russia
Zamora, Lorenzo L, LD, LA.	Philippines
Zander, Marcellus, LD, Bus.	Seattle
Zane, Simon L, LD, LA.	Seattle
Zelher, Honora S, LD, LA.	Seattle
Zeldenrust, Richard, LD, Bus.	Seattle
Zeller, William B, LD, LA.	Walla Walla
Zener, Carlos R, UD, Bus.	White Salmon
Zener, Galen, Unc, FA.	White Salmon
Zener, Robert G, LD, ME.	White Salmon
Ziebarth, Julia L, LD, LA.	Chinook
Ziel, Frederick L, UD, Eng.	Pt Townsend
Zimmerman, Chloe A, Grad.	Seattle
Zimmerman, Philo R, LD, Bus.	Seattle
Zintheo, Clarence J, LD, ChE.	Seattle
Zobrist, Herbert E, LD, Eng.	Acme
Zunwalt, Homer O, UD, Phar.	Yakima
Zurbrick, John W, LD, Bus.	Vancouver, BC
Zurri, Vivian, Unc, LA.	Seattle
Zwicky, Everett E, UD, Min.	Kaslo, BC

SUMMER QUARTER STUDENTS—1922

Aarnes, Alvilde, Ed. Portland, Ore
 Abbott, Leo L, Sp, Law. Brownling, Mo
 Abogadie, Maria A, Uncl LA.
 Abrahamson, Paul K, Grad. The Dalles, Ore
 Adams, Geo B, UD, BA.
 Adams, Jeannette, UD, Ed.
 Adamson, Merritt C, UD, Ed. Seattle
 Akin, Cecilia, UD, LA. Seattle
 Akin, Margaret, UD, LA. Superior, Mo
 Akland, Alma, UD, Ed. Bellingham
 Albee, Archie Verul, Grad. Seaside
 Alexander, Florence M, LD, Sci. Chehal's
 Alexander, Frank E, UD Ed. Lynden
 Alfonso, Mrs Marie, Grad. Seattle
 Allen, George W, LD, FA. Spokane
 Allen, Wm Drury, Ed. Spokane
 Alm, Reuben A, UD, Ed. Nooksack
 Alway, Harrison G, Unc, Ed. Turner
 Amundson, Lavina, Unc, FA. Bottineau, ND
 Anderson, Anna L, Unc, Ed. Hibbing, Minn
 Anderson, Arthur A, LD, LA. Seattle
 Anderson, Clara I, UD Ed. Sandpoint, Ida
 Anderson, Ella Mary, Grad. Hibbing, Minn
 Anderson, Esther, Ed. Dupont
 Anderson, Grace M, UD Ed. Selah
 Anderson, Isabelle J, Grad. Oroville
 Anderson, Jessie J, Grad. Vancouver, BC
 Anderson, Mrs L O, Grad. Wenatchee
 Anderson, Mrs Louise, UD Sci. Spokane
 Anderson, Mabel F, UD, LA. Creston
 Anderson, Ragma A, UD, Ed. Creston
 Anderson, Rena, LD, UD, Ed. Portland, Ore
 Anderson, Walter J, UD, BA. Seattle
 Andrews, LaMar B, UD, BA. Spokane
 Andrews, Rita L, Grad. Portland, Ore
 Angst, Ernest C, UD, Sci. Chehal's
 Angst, Laura, Grad. Chehal's
 Appleton, C F, Grad. Seattle
 Arant, Bernadine, Unc, Ed. Mansfield
 Archey, Howard D, UD, BA. Seattle
 Armstrong, Vernon Bly, Grad. Seattle
 Arnold, Cecile, Ed. Beach, ND
 Arnold, John A, UD, LA. Monitor
 Arntzen, Edward J, Grad. Parkland
 Aronin, Samuel M, LD, LA. Seattle
 Arthun, Amber B, Grad. Seattle
 Ashley, Lucy, FA. Sandpoint, Ida
 Astel, George B, UD, Jour. E. Stanwood
 Athow, Verona, LA. Buckeye
 Atkins, Thomas Harry, Sp, BA. Seattle
 Atkinson, Agnes, Grad. Fresno, Cal
 Atwood, S.F, UD, LA. Prosser
 Axley, Rolla F, Law. Salem, Ore
 Axtelle, George E, Sci. Hood River, Ore

Bade, Alfred H, Spc, Bus. Seattle
 Bailey, Elsworth B, Jr Eng. Tacoma
 Bailey, Frank H, Grad.
 Bailey, James, 2nd Law. Seattle
 Bailey, Myron B, UD, Edu. Seattle
 Bailey, Oscar H, Spl BA. Riverside, Cal
 Bailey, Theodora A, UD, Sci. Seattle
 Bailie, Provis, UD, LA. Seattle
 Bailie, R. T, LD, BA. Seattle
 Baird, Charles Glenn, Grad.
 Baisden, Leo B, Grad. Seattle
 Baker, Albert Lundy, Sr, Eng. Yakima
 Baker, Dorothy Ida, UD, LA. Seattle
 Baker, Jas Arthur, B D, Grad. Harlan, Iowa
 Baker, Martin H, Jr Ed. Marysville
 Baker, Portia, Grad. Spokane
 Balch, Wilbur L, LD, BA. Greeley, Colo
 Baldwin, Anna L, UD, LA.
 Ball, Rollyn, UD, BA. Seattle
 Balle, Alfred, Spec, Sci. Seattle
 Balzer, Norb Chas, LD, BA. Spokane

Balzer, Walter W, LD, BA. Spokane
 Banker, Helen D, UD, Educ. Winthrop
 Barber, Helen M, LD, LA. Kent
 Barker, Carl V, Grad. Tacoma
 Barlow, L Leland, Prov, LA. Seattle
 Barquist, Eva, UD, Sci. Seattle
 Barron, Dale H, LD, Pharm. Seattle
 Barry, Georgia C, Grad. Snohomish
 Bartholomew, Wayne L, LD, BA. Seattle
 Bassford, F Albert Jr, Unc, BA. Seattle
 Bates, Edwin, Unc, Ba. Summerfield, Ohio
 Bautista Marcelino, LD, Ed. Philippines
 Bayley, Elizabeth, Sr, LD. Seattle
 Bean, Leonard G, Unc, Law. Walla Walla
 Beard, Irma, Prov, Ed. Wilkinsburg, Pa
 Beardslee, Will G, Unc, Law. Bothell
 Beck, Harry G, LD, Sci. Seattle
 Becker, Gladys A, Grad. Seattle
 Beecher, M M, Grad.
 Belch, M Jean. Anacortes
 Bell, Romona, Unc, Ed. St Paul, Minn
 Belstad, Walter C, Grad. Seattle
 Belswick, Emily, Unc, LA. Seattle
 Benjamin, George T, LD, Min. Vancouver
 Bennett, Mabel A, LD, LA. LaGrande, Ore
 Bennett, Richard F, UD, Ed. Kirkland
 Bennetts, Alice L, LD, LA. Tacoma
 Benthien, Elsie M, Grad. Tacoma
 Bereiter, Marvel, LD, LA. Seattle
 Berg, Gunmar H, UD, Ed. Kelso
 Berg, Ida Blanche, Unc, LA.
 Bergman, Eunice M, LD, Sci. Ft Angeles
 Berquist, Fred E, UD, LA. Spokane
 Berquist, T G, Prov, Ed. Parkers, Minn
 Best, Erle Clifton, LD, LA. Seattle
 Best, Walter C, Spl, BA. Seattle
 Betts, Elias A, Spl, FA. Seattle
 Bewell, Blanche L, LD, BA. Seattle
 Binnie, Mary C, LD, Sci. Brail, BC
 Birks, Margaret E, Grad. Seattle
 Birney, Frances, Unc, FA. Seattle
 Bishop, Theodore B, UD, LA. Clarkston
 Bizby, Florence, UD, Ed. Bellingham
 Bjorklund, Ellen, Grad. Tacoma
 Bjorkquist, E Joseph, UD, LA. Spokane
 Blackburn, Richard L, UD, LA. Republic
 Blando, Patricio, LD, LA. Philippines
 Blegen, Florence, Prov, Ed. Spokane
 Blegen, Minerva, Spl, Sci. Spokane
 Blitsch, Norman D, Spl, Fish. Seattle
 Blomquist, Roy W, UD, BA. Hoquiam
 Blosser, Stella B, LD, LA. Snohomish
 Blucher, Laura, Prov, FA. New Castle, Pa
 Blumenfeld, Zipora, Grad. Seattle
 Bogle, Donald L, Prov, Eng. Puyallup
 Bollinger, Morris A, 1st Law. Methow
 Bolman, James, UD, Ed.
 Bolton, Edwin, Grad. Seattle
 Bondeson, Selma, Prov, LA. Seattle
 Booman, Albert, UD, Ed. Lynden
 Borgeson, S E, Prov, LA. Minneapolis, Minn
 Bowen, Albert H, Spl, Eng. Seattle
 Bowen, Leola F, UD, Educ.
 Bowers, Bernice, Grad. Kellogg, Idaho
 Bowers, Dora M, Prov, LA. Eau Claire, Mich
 Bowman, Conrad H, Grad. Maple Valley
 Bowman, Edna E, UD, Ed. Everett
 Bowman, Laura M, UD, Ed. Yakima
 Bowman, Ward S, Grad. Everett
 Boyd, Esther, LD, LA. Seattle
 Boydston, Harry G, Spl, BA.
 Boyeson, John L, Spl, Eng. Elliyard
 Bracken, Harold A, LD, Phar. Seattle
 Brackett, Laurence, Prov, LA. Seattle
 Bradeson, Victor D, Grad. Salem, Ore
 Bradford, Denman F, Spl, BA. Seattle
 Brandriff, Herman, UD, Sci. La Crosse

Brandt, Mary, LD, FA.....	Seattle	Campbell, Ruth, Grad.....	Puyallup
Brask, Andreas C, Prov, Ed.....	Spokane	Campbell, Veronica, Grad.....	Seattle
Brannen, Robert C, Unc, BA.....	.....	Carlson, Agnes N, Grad.....	Seattle
Brazel, Charles Clyde.....	.....	Carlisle, Isabelle, Grad.....	Seattle
Breazeale, Inez E M, Grad.....	Mt Vernon	Carlson, Edie A, LD, ED.....	Willapa
Brennan, B Lenna, LD, Ed.....	Bellingham	Carlson, Florence, UD, ED.....	Seattle
Brennan, Robert A, LD, A.....	Seattle	Carlson, John Arvid, Eng Fr.....	Seattle
Bresnahan, Myrtle, Prov, Ed.....	Seattle	Carlson, Hjalmar A, Sp, Sci.....	.....
Bressler, Margaret, UD, LA.....	Centralia	Carlston, Kenneth S, LD, BA.....	Seattle
Brethorst, Alice B, UD, Ed.....	Seattle	Carmichael, Ruth F, Mrs, UD, BA.....	Seattle
Brethorst, Stephen W, Prov, Law.....	Seattle	Carr, Mrs. Grace M, Unc, FA.....	.....
Breuer, Leo W, UD, Ed.....	Bellingham	Carr, Howard M, Grad.....	Tacoma
Brewer, Florence Dudley, Grad.....	.....	Carr, Myra, Spl, Sci.....	Tacoma
Brewer, Glenn E, LD, LA.....	Seattle	Carrithers, Lillie A, UD, Ed.....	Centralia
Bridston, A Olga, UD, Ed.....	Valley, Mont	Carroll, Geneva, Grad.....	Seattle
Briggs, Howard Bovee, Grad.....	Pullman	Carroll, M Jack, LD, BA.....	Seattle
Brigham, Leon H, Grad.....	Seattle	Carroll, Joseph D, Grad.....	Mansfield
Brinck, Stephen M, Grad.....	Seattle	Carter, Mary Frances, UD, Ed.....	Elma
Brockerman, George W.....	.....	Cartwright, Vance, LD, Sci.....	.....
Brogan, Marguerite A, Prov, LA.....	Seattle	Carson, Myra A, UD Ed.....	Denver, Colo
Brooks, Helen L, UD, LA.....	Monico, Wisc	Carson, Mary G, UD, Ed.....	Denver, Colo
Broward, Ella, Sr, LA.....	Seattle	Case, Austin F, UD, LA.....	Seattle
Brown, Barton W, Sr, Eng.....	Seattle	Casey, Lois Osborne, Sp, LA.....	Seattle
Brown, Caroline F.....	.....	Casey, Rosamond, Unc, LA.....	Seattle
Brown, Cecil C, LD, Sci.....	Dayton	Cassidy, Margaret, Sp, LA.....	Seattle
Brown, Earl T, Grad.....	Centralia	Cassill, C Harvey, UD, BA.....	Spokane
Brown, Elnora, Prov, Ed.....	Moxee City	Catheart, Edith E, UD, LA.....	Seattle
Brown, Harry Henry.....	.....	Cattle, Edith, UD, Sci.....	Seattle
Brown, Imogene, LD, Ed.....	Sumas	Cauby, Cora B, Unc, BA.....	Bellingham
Brown, Leland P, Grad.....	Olympia	Cave, Floyd A, UD, LA.....	Seattle
Brown, Martin, LD, Eng.....	Seattle	Chadwick, Edna R, FA.....	Seattle
Browne, Clarence H, Sr, BA.....	Seattle	Chalaide, Donald, UD, LA.....	New York
Broz, Maybelle, UD, Ed.....	San Jose, Cal	Chalfant, Anna Belle, Ed.....	Akron, Ohio
Bruff, Ettie Julia, Jr, Ed.....	Yakima	Chamberlain, Dorothy, Grad.....	Seattle
Bryant, Charles M, Spec, Sci.....	.....	Chamberlain, Helen D, Grad.....	Seattle
Budrow, Theodore T, Jr, Sci.....	Pullman	Chamberlain, Percy I, Grad.....	Seattle
Bullock, Cecil F, LD, Ed.....	Seattle	Chambers, Edward V, UD, Ed.....	Seattle
Burbank, Myrtle, LD, LA.....	Seattle	Chambers, Horace J, UD, LA.....	Seattle
Burgess, Dolly Dean, Spec, LA, Helma, Mont	.....	Chapman, Aleeta E, UD, Ed.....	Seattle
Burggraf, Kath, Unc, Ed.....	Blackfoot, Minn	Charroin, Ida R, UD, ED.....	S Bellingham
Burke, Helen G, Grad.....	Eugene, Ore	Chen, Duang Bing, Unc, Eng.....	China
Burkett, Benjamin, LD, LA.....	Groseclose, Va	Chen, Tung Pai, UD Fish.....	China
Burkman, Joel A, UD, Ed.....	Seattle	Child, Helen, UD, LA.....	Seattle
Burkman, Orpha, LD, Ed.....	.....	Chilson, Claude M, UD, ED.....	Seattle
Burleigh, Bess M, UD, Ed.....	Seattle	Chin, Chun, Grad.....	.....
Burnett, Charles H, LD, LA.....	Hollywood	Christiansen, Clara M, UD, LA.....	Prakland
Burns, Jessie E, Jr, LA.....	Seattle	Christensen, Mildred, Unc, FA.....	Centralia
Burns, Malcolm O, LD, Eng.....	.....	Christianson, B S, LD, Ed, Crookston, Minn	.....
Burns, Omar A, Grad.....	Seattle	Christoffersen, W G, UD, Sci.....	Seattle
Burnside, Mary F, Grad.....	Lewiston, Ida	Chute, Ernest E, Grad.....	Peshastir
Burton, Clara B, LD, Sci.....	Colby	Clark, Alta M, LD, Sci.....	Seattle
Bush, Florence W, Grad.....	Seattle	Clark, Cella Lucile, UD, LA.....	Mt Vernon
Bush, Irene Marion, UD, Sci.....	Vancouver	Clark, Ena, UO, LA.....	Palmyra, Mo
Butcher, Owen, UD, LA.....	Attica, Ind	Clark, Herald R, Grad.....	Provo, Utah
Butler, Robert S, UD, LA.....	Seattle	Clark, Newman H, Unc, Law.....	Everett
Butt, Ferdinand H, UD, LA.....	Seattle	Clarke, Norma G, Audi.....	.....
Button, Arthur Oscar, LD, Bus.....	Leban	Clark, Spencer C, Sp, LA.....	Seattle
Byers, Dorothy O, LD, Sci.....	Seattle	Clawson, Florence Ellen, UD, ED.....	Seattle
Byers, Mary Helen, LD, FA.....	Seattle	Clinch, Vernon M, UD, LA.....	Anolsa, Minn
Byrd, Agnes B, Jr, Ed.....	Darby, Mont	Ciulow, Mrs Edith M, Sp, Ed.....	Wenatchee
Byrd, Evelyn L, UD, BA.....	Burns, Ore	Cochrane, Roy, LD, LA.....	.....
Byrne, Kathryn, LD, Sci.....	Seattle	Coe, Frank A, Sp, Eng.....	Seattle
Byrnes, Francille, Jr, LA.....	Lind	Coffinberry, Pearl, Grad.....	Seattle
Byron, Margaret, UD, LA.....	Seattle	Colner, Gladys, UD, LA.....	Seattle
		Cole, Clinton, Forrest, LD, FA.....	Seattle
		Cole, W John, LD, LA.....	Seattle
		Cole, Miriam B, Grad.....	Seattle
Cady, Osman H, Grad.....	Palouse	Cole, Sylpha J, Unc, LA.....	Bellingham
Cain, Riley W, UD, Ed.....	Seattle	Coleman, J. Sidney, Ed.....	Emporia, Kansas
Calder, Mary Etta, Sp, Ed.....	.....	Coles, Paul D, Unc, Law.....	Seattle
Calhoun, Nora E, Grad.....	Burlington	Collins, Marie Anna, Grad.....	Seattle
Callaghan, Dennis M, LA.....	Seattle	Collins, Opal H, Grad.....	Seattle
Callahan, A H, Law.....	Seattle	Colter, Josephine H, UD, LA.....	Seattle
Callow, Doris, UD, FA.....	Seattle	Compton, Mary B, Grad.....	Seattle
Calloway, F L, Unc, For.....	Seattle	Condit, Charlotte F, UD, LA.....	Hagerman, Ida
Cameron, Donald P, LD, BA.....	Victoria, BC	Connell, Archie M, Grad.....	Walla Walla
Cameron, May, Prov, LA.....	.....	Conner, Cora A, Ed.....	Seattle
Campbell, Alex, LD, BA.....	Seattle	Connor, Garland D, UD, BA.....	Spokane
Campbell, Alice A, LD, ED.....	Seattle	Conway, Zelma, LD, LA.....	Enumclaw
Campbell, Chas J, LD, BA.....	Spokane	Cook, Richard H, LD, Phar.....	Seattle
Campbell, Clyde G, UD, Ed.....	Bellingham	Cooke, Mrs Amy T, LD, FA.....	Seattle
Campbell, Jean P, Unc, LA.....	Spokane	Cooke, Hulda, LD, Sci.....	Bellingham
Campbell, Oliver H, Grad.....	Spokane		

Cooper, Edith, Unc, Ed....Middletown, Ind
 Cooper, Edna, Unc, Ed....Middletown, Ind
 Copeland, May, UD, LA.....Seattle
 Copland, Nena, LD, Sci.....Seattle
 Cordz, Lee O, Unc, Ed.....Chehalis
 Corlett, Thirza E, UD, BA.....Seattle
 Cornelius, Roland, LD, BA.....Seattle
 Corskie, Florence B, UD, Sci.....Seattle
 Cowling, Owen S, LD, LA.....Spokane
 Cox, Jessie J, Ed.....Seattle
 Craig, Harry J, Grad.....Cheyenne
 Craig, Ruth, Ed.....Seattle
 Cramer, Russell J, UD, Ed.....Bellevue
 Cramlet, C M, Grad.....Seattle
 Crane, Lillian Alice, Grad.....Seattle
 Craske, Fred H, Grad.....Centralla
 Craske, Mrs Nellie K, UD, Ed.....Centralla
 Craven, Dorothy, LD, Sci.....Butte, Mont
 Cravep, Margaret, LD, LA.....Bellingham
 Crawford, Edward I, Grad.....Seattle
 Crawford, Harriet, Ed.....Benton City
 Crawshaw, Arthur, Soph Eng.....Seattle
 Crim, Madison, Sp, BA.....Seattle
 Crim, Winnifred, UD, LA.....Seattle
 Cronin, Nona, UD, BA.....Butte, Mont
 Cross, Robert Neal, LD, LA.....Seattle
 Crowley, Beatrice, LD, BA.....Seattle
 Crowder, Harriet, Grad.....Seattle
 Croy, Donald C, UD, ED.....Bellingham
 Crummett, Ella, LD, Sci.....Uewton
 Crumb, Joseph, UD, BA.....Seattle
 Crummett, Ella, UD, Sci.....Conway
 Cruzen, Edward A, LD, BA.....Seattle
 Cullen, Ray R, Unc, Ed.....Seattle
 Cullinan, Nicholas C, LD, LA.....Seattle
 Cummings, Blanche, UD, LA.....Tacoma
 Cunningham, Allan L, UD, BA.....Seattle
 Cunningham, Theresa, Grad.....Seattle
 Curl, Clinton D, UD, Sci.....Richland
 Curtis, Carl E, Grad.....Leavenworth
 Cutts, Cecella, LD, LA.....Seattle

Dagg, Harold M, LD, BA.....
 Dahl, Bernice Irene, UD, LA.....Seattle
 Dahlin, Ebba, Grad.....Seattle
 Dalley, Walter, Unc, BA.....Everett
 Dalgity, Jean, Unc, LA.....Seattle
 Daly, Milton J, Jr, Eng.....Ketchikan, Alas
 Daly, William J Jr, 1st Law..Pt Townsend
 Dalziel, Irene, UD, Sci..Big Rapids, Mich
 Damerell, V Richard, LD, Sci.....Earlington
 Damon, Verna LaDue, Grad.....Seattle
 Darling, Floyd, Sp, FA.....Everett
 Daubenspeck, Margaret, Sp, Sci.....Seattle
 Daubenspeck, Marion H, UD, LA.....Seattle
 Davenport, Elizabeth, UD, Ed.....Palouse
 Davenport, Bernard M, UD, LA..Bellingham
 Davidson, Beth, UD, Sci.....Seattle
 Davidson, J W, Grad.....Raymond
 Davies, Enid, LD, LA.....Seattle
 Davis, Carolyn E, Sp, Sci.....Seattle
 Davis, Miss Frank H, Jr, Ed.....Waitsburg
 Davis, Herbert Fred, UD, Ed.....Sumner
 Davis, Inez, Sp, Sci.....Palisades
 Davis, Lyle S, Sp, Eng.....Seattle
 Davis, Nell James, Unc, BA.....Seattle
 Davis, Paul A, Jr, Eng.....Sequim
 Davis, Ralph J, UD, BA.....Seattle
 Davis, Ray N, LD, ED.....Twin Falls, Ida
 Davis, Thornton, LD, BA.....Seattle
 Dawson, Alice V, Grad.....Belleville, Kan
 Dawson, Dalsy, Ed.....Seattle
 Dean, Paul, UD, BA.....Seattle
 Dearborn, Elizabeth, Grad.....Seattle
 DeForce, Helen, LD, LA.....Spokane
 Degering, Ed F, UD, Sci.....Mt Vernon
 DeGrief, Leroy, Grad.....Colville
 Delta, Harry L, UD, ED.....Seattle
 Dellinger, Sarah S, UD, Ed.....Everett
 DeLong, Edyth, Ed.....Everett
 Demar, Harold, Unc, BA.....Seattle

Dennis, Margaret, UD, LA.....Seattle
 Denniston, Emma M, UD, LA.....Manchester
 Denny, K Marion, LD, LA.....Seattle
 Densford, Neva, UD, Sci.....Crothersville, Ind
 DeRiemer, Robt P, LD, Sci.....Spokane
 DeShon, Marguerite, UD, LA.....Seattle
 DeWolfe, Tom E, LA.....Seattle
 Deyon, Frank.....
 Dibb, Harold J, Sp, LA.....Great Falls, Mont
 Dickerson, Helen L, Sp, Ed.....Seattle
 Dickerson, William E, Grad.....Seattle
 Dillon, Ruby Lois, UD, Ed.....Weiser, Ida
 Diffley, Teresa, BA.....Everett
 Dimmitt, Alva Wallace, ED.....Seattle
 Dimmitt, Lorris M, Unc, Ed.....Eatonville
 Dingle, Esther, UD, LA.....Yakima
 Dinsmore, Stephen S, UD, LA.....Seattle
 Dixon, Barbara, LD, LA.....Battle Ground
 Dixon, Frank N, LD, BA.....
 Dodd, Harry LeRoy, UD, Ed.....Seattle
 Dodd, Joseph P, Jr Eng.....Seattle
 Dodd, Martha W, UD, Ed.....Bellingham
 Dodge, Florence F, Grad.....Tacoma
 Doell, Lydia J, LD, LA.....Lind
 Denflinger, Lillie, Grad.....Dunkirk, NY
 Domalanta, F A, LD, BA.....San Carlos, P.I.
 Domrese, Bernice, Unc, LA.....Seattle
 Domrese, Lillian, Unc, Ed.....Seattle
 Donahoe, Agnes M, UD, Ed.....Rosalia
 Donovan, Nellie O, UD, LA.....Spokane
 Doremus, Della Ellen, Grad.....Seattle
 Dose, Julia L, UD, BA.....Seattle
 Dougherty, Vincent P, LD, FA.....Duvall
 Douglas, John, LD, BA.....Earlington
 Down, Andrew, UD, LA.....Lacey
 Downie, Ruth E, LD Sci.....Seattle
 Draper, Edgar M, Grad.....Winslow
 Draves, Carl Zeno, Grad.....Seattle
 Draves, Galen B, Spec, BA.....Seattle
 Dreyer, Elma A, Sci.....Kansas City, Kan
 Drotning, Theo M, Grad.....Seattle
 Drumheller, Joseph, Jr Eng.....Spokane
 Drumm, Guy, Sr LD.....Seattle
 Duncan, Patricia P, UD, LA.....Toppenish
 Dunlap, Sadie, Grad.....Pe Ell
 Dunn, Edward A, Jr For.....Seattle
 Dunn, John J, 2nd Law.....Seattle
 Dunning, Guy E, Grad.....Washituna
 DuRae, Bernice, LD, LA.....Bellingham
 Duston, Laura, UD, FA.....Clarkston
 Dutton, Virginia, LD, Sci.....Seattle
 Dwelle, Horatio S, Unc, Ed.....Seattle
 Dwyer, Kathryn, LD, LA.....Rosalia
 Dyer, Ida, Unc, Sci.....Greentop
 Dyke, Joe, LD, BA.....Seattle
 Dysart, Fern, UD, LA.....Toppenish

Eades, H W, Grad.....Vancouver, BC
 Earnest, Helen, Prov, Ed.....Bothell
 Earnest, Robert Roy, UD, Ed.....Bothell
 Eccles, Grace, Grad.....Nisqually
 Eckhart, Robert B, UD, Bus.....Enumclaw
 Eckmann, Alice B, Grad.....Yakima
 Eckmann, Stella, Grad.....Yakima
 Eddy, Erma Smith, UD, Ed.....Seattle
 Edgerton, Robert, Unc, Ed.....Cunningham
 Edison, Emily H, UD, Sci.....Bellingham
 Edwards, Archie C, LD, Bus.....Seattle
 Edwards, Douglas F, Spec, Eng.....Seattle
 Edwards, Eleanor B, LD, FA.....
 Egan, Margaret L, Spec, Sci..Hay Spgs, Neb
 Eisenmann, Augusta M, Grad..Neb City, Neb
 Elderkin, Beulah, Grad.....
 Eldred, Mabel E, Prov, Ed.....Seattle
 Elliott, Edith A, UD, LA.....Seattle
 Elliott, Florence R, Unc, Ed.....Seattle
 Elliott, Jack M, Spec, Bus.....Portland, Ore
 Elliott, Louise M, UD, LA.....Seattle
 Elliott, Minnie P, Unc, LA.....Redstone, Mont
 Ellis, Coral, LD, FA.....
 Elroy, Florence M, Jr, Sci.....Asotin

Guthrie, Catherine, LD, LA.....Yakima
Guyet, Paul, Grad.....Seattle

Haack, David, UD, Bus.....Seattle
Hagerty, Frank W, LD, LA.....Seattle
Hagglund, Vera, Spec, LA.....Pt Blakeley
Hagist, Mary L, Unc, Ed.....Seattle
Haible, Jessie M, Spec, Ed.....Warren, Ohio
Haile, Daniel L, Spec, Ed.....Uncas
Haire, Florence E, UD, Sci. Weyanwega, Wis
Haley, Robert M, Prov, Ed.....Seattle
Hall, Amy Violet, Grad.....Vancouver, BC
Hall, Evelyn H, Spec, Sci.....Seattle
Hall, Frank M, Spec, Eng.....Seattle
Haller, Mary E, UD, LA.....Renton
Hallin, Ruth M, Grad.....Tacoma
Hambert, Nona C, LD, Ed.....Spokane
Hamm, Charles H, LD, FA.....Seattle
Hammerlin, Roy Nels, UD, Bus.....Tacoma
Hampson, Harriett B, Unc, LA.....Omak
Hanawalt, Paul E, Grad.....Puyallup
Handsaker, John T, Grad.....Seattle
Haney, Ethel, Spec, Ed.....Fresno, Calif
Hannan, Esther, Unc, LA.....Peshastin
Hannan, Henryetta, Unc, Ed.....Seattle
Hannum, Clair A, UD, Sci.....Seattle
Hansen, Harry P, Grad.....Puyallup
Harada, Matsutaro, UD, LA.....Japan
Hardwick, Francis T, Grad.....Pinahurst
Harper, Paul A, UD, Eng.....Seattle
Harris, Georgia, Prov, LA.....Yakima
Harris, Mary, Prov, Ed.....Seattle
Harris, Parker E, UD, Bus.....Seattle
Harris, Sue F, Prov, Ed.....Seattle
Harrison, Elizabeth, Unc, LA.....Butte, Mont
Harrison, Frances, LD, LA.....Seattle
Harrison, Mary, Unc, Ed.....Toledo, Ore
Hart, Dean B, UD, Bus.....Tacoma
Hart, Emma C, Prov, Ed.....Seattle
Hart, Hallie Ruth, Grad.....Portland, Ore
Hart, Lou Ella, UD, LA.....Olympia
Harte, May C, Unc, Ed.....New Orleans, La
Harvey, Alice Barbara, Prov, FA, Spokane
Haskin, Cosae M, Spec, Sci.....Vancouver, BC
Hassenmiller, K, Lyndon, UD, Ed.....Seattle
Hastings, Thelma, Prov, Sci.....Chehalis
Hatten, Charles B, LD, Eng.....Everett
Hatley, Mamie Chase, UD, Ed.....Colfax
Hauck, Hazel Marie, Grad.....Seattle
Hawes, V Peyton, UD, LA.....Spokane
Hawley, Sidney J, Grad.....Seattle
Hayden, Myrtle, Spec, Sci.....Calgary, Alta
Haynes, Charles D, Grad.....Seattle
Hazen, Hattie W, Spec, Ed.....Pendleton, Ore
Heacock, Jerald J, Spec, Eng.....Wenatchee
Heald, Mrs Gertrude, Spec, Ed.....Stockton, Cal
Healy, Warren C, LD, Sci.....Seattle
Heath, Herbert G, Unc, Ed.....Centralla
Heathershaw, Nelle, UD, Ed.....Des Moines, Ia
Helman, Jeffrey, LD, LA.....Seattle
Helmer, Eva, LD, LA.....Seattle
Heist, Lina, UD, LA.....Seattle
Heist, Lulu, Grad.....Salem, Ore
Heltzman, John H, Spec, LA.....Palouse
Helgeson, Marie, Prov, Ed.....Dunn Center, ND
Henderlite, Claude E, Grad.....Seattle
Henderson, Mrs Mildred T, Grad.....Seattle
Henderson, W L, Grad.....Renton
Hendricks, Ruth G, Grad.....Seattle
Hendrickson, Harvey F, UD, Sci.....Seattle
Henry, Hylas E, LD, LA.....Seattle
Henry, Verne M, Prov, Ed.....McMinnville, Ore
Hermann, Ida M, Grad.....Seattle
Hermann, Christina, Unc, Ed.....Puyallup
Hermanson, Clara M, Grad.....Renton
Herron, William A, LD, LA.....Seattle
Herrick, John S, Grad.....Seattle
Hayes, Alice Dorothy, Grad.....Seattle
Hayes, Katherine, LD, Ed.....Seattle
Higgle, Mabel Iona, UD, FA.....Seattle
Hildreth, Laura F, UD, LA.....Dillon, Mont

Hill, Alice, LD, LA.....Indianapolis, Ind
Hill, Cyril Dean, 2nd Law.....Seattle
Hill, Minnie V, Spec, Sci.....Tacoma
Hillard, Thelma, LD, Ed.....Seattle
Hilton, Maud H, LD, FA.....Seattle
Himmelsbach, Dora May, Grad.....Yakima
Hinderman, E A, Prov, Ed.....Prescott
Hindley, Philip M, LD, LA.....Seattle
Hine, Elizabeth F, Grad.....Boise, Ida
Hiner, Elizabeth, Grad.....Pt Collins, Colo
Hinman, Grace, LD, Ed.....Seattle
Hinthorn, Gail Ira, LD, LA.....Hartline
Hipsley, William E, Spec, Sci.....Kirkland
Hoag, Clarice, LD, LA.....Seattle
Hoard, George L, Grad.....Seattle
Hocking, Lillian K, LD, Sci.....Seattle
Hodges, John S, Spec, Sci.....Seattle
Hodgin, E Harriett, Prov, LA.....Newberg, Ore
Hoff, Hubert James, LD, LA.....Lawrence
Hoggatt, Floyd L, LD, Eng.....Kalama
Hogue, Helen, Grad.....Seattle
Holbrook, C Ray, Grad.....Renton
Holloway, A Cecil, LD, LA.....Seattle
Holman, Harold E, Unc, For.....Seattle
Holman, R Morris, LD, Bus.....Seattle
Holmes, Elsie B, LD, Sci.....Woodland, Mich
Holt, Lucy M, UD, Sci.....Seattle
Holton, Karl William, UD, Bus.....Seattle
Hong, Nils Joseph, Grad.....Parkland
Hootman, Mary R, UD, Ed.....Seattle
Hoover, Alta Cooney, Grad.....Seattle
Hoover, Glenn E, Grad.....Seattle
Hoover, Lewis F, Spec, Sci.....Seattle
Horn, Will S, Prov, Ed.....Fairfield
Horsfall, George, Prov, Sci.....Marshfield, Ore
Hoskins, Marion, UD, Ed.....Seattle
Hoskyn, Emma J, Spec, Sci.....Calgary, Alta
Hovrud, Nora, Prov, LA.....Mt Horeb, Wis
Howard, Fred A, UD, Bus.....Stanwood
Hoyt, Joseph B, Spec, Eng.....Emmett, Ida
Hu, Yihsiang, Unc, LA.....China
Huang, Hua Piao, UD, LA.....China
Hubbell, Ruth, UD, LA.....Seattle
Hudson, Dorothy Wilma, LD, LA.....Seattle
Huf, Philip R, Unc, Sci.....Tacoma
Hughes, Anne B, UD, LA.....Seattle
Hughes, Cecil L, Grad.....Kennewick
Hughes, Evelyn I, Prov, LA.....Spokane
Hughes, Honoria, Unc, LA.....Snohomish
Humbert, George C, Grad.....Seattle
Humes, Edmond T, Spec, Phar.....Seattle
Hummell, Mattie, Unc, Ed.....St Anthony, Ida
Humphrey, Carolyn, Grad.....Seattle
Humphrey, Elska Viola, LD, FA.....Seattle
Hunsaker, Herbert C, LD, LA.....White Salmon
Hunsaker, James W, LD, Eng.....Seattle
Hunt, Ernest R, UD, LA.....Seattle
Hunt, Laurence W, LD, Bus.....Seattle
Huntworth, John W, UD, Bus.....Seattle
Hutchinson, Zoe B, UD, Sci.....Vancouver, BC
Hynes, Frank W, Spec, Fish.....Seattle

Ikeda Jubel, LD, Bus.....Kalama
Imus, Ray K, Grad.....Kalama
Ingalls, Melvin H, Spec, Eng.....Seattle
Ingram, Robert M, UD, Bus.....Seattle
Inkster, Harry, LD, Sci.....Winslow
Irvine, Helen E, Unc, Ed.....Seattle
Irwin, John I, Grad.....Seattle
Isaacs, Ruth F, Prov, Grad.....Walla Walla
Iselin, Frieda J, Prov, LA.....Banning, Calif
Isom, Marie E, LD, FA.....Seattle

Jackson, Dorothea, LD, LA.....Seattle
Jacobson, Agnes, UD, Sci.....Seattle
Jacobson, Olga, LD, LA.....Seattle
Jacobsen, Philip, Unc, Eng.....Seattle
Jaeger, Mrs Ethel, Prov, Grad.....Spokane
Jaeger, Julius P, Grad.....Spokane
Jahn, Ethel F, UD, Ed.....Richmond Highlands

- James, Marjorie, Grad.....Tacoma
Janeway, Harold L, UD, Bus.....Rosalia
Jeness, John C, UD, Bus.....Seattle
Jensen, Arne S, Grad.....Yakima
Jergensen, Mary E, LD, Bus.....Seattle
Jewell, Paul M, Spec, FA.....Seattle
Johnson, Alfred P, Grad.....Seattle
Johnson, Anna E, UD, LA.....Seattle
Johnson, Annie M, LD, Ed.....Missoula, Mont
Johnson, Berkley G, UD, Ed.....Chinook
Johnson, Beulah A, Spec, Ed.....Ft Casey
Johnson, Clarence B, Spec, Fish.....Portland
Johnson, Florence Agnes, UD, LA.....Seattle
Johnson, Harry B, Grad.....Irvine, Mont
Johnson, Hilding, UD, Eng.....Seattle
Johnson, Katherine, UD, LA.....Seattle
Johnson, Kenneth A, UD, Sci.....Seattle
Johnson, Lillian W, LD, Ed.....Seattle
Johnson, Milton S, LD, LA.....Seattle
Johnson, Nora H, LD, Sci.....Aberdeen
Johnson, Olga A, Prov, Sci, Worcester, Mass
Johnson, Vernon B, UD, Sci.....Everett
Johnston, Daniel, UD, LA.....Hobart
Joice, Anna, Prov, Ed.....Yakima
Jolly, Nydia E, UD, LA.....Seattle
Jones, Ada Cleo, LD, Ed.....Cashmere
Jones, Apollonia, LD, Ed.....Ottawa, Minn
Jones, Berthal E, Spec, Sci.....Detroit, Mich
Jones, Clarence W, Spec, Eng.....Seattle
Jones, David J, UD, Ed.....Columbus, Mont
Jones, Elizabeth, Prov, Ed.....Pipestone, Minn
Jones, Ervin M, Spec, Bus.....Seattle
Jones, Etta, Spec, Sci.....Ft Lawton
Jones, Hattie, Prov, Ed.....Richmond Beach
Jones, Lincoln, Unc, LA.....China
Jones, Margaret Slater, Grad.....Bellingham
Jones, Marian E, UD, Bus.....Hartline
Jones, Marjorie, Grad.....Seattle
Jones, W Worth, LD, LA.....Spokane
Jones, Zenith, Grad.....Seattle
Jordan, C Paul, LD, LA.....Seattle
Jorgenson, George H, UD, Bus.....Seattle
Jurgensonn, Eva, UD, Sci.....Seattle
- Kaiser, Fred H, Spec, Sci.....Rolling Bay
Kaiser, Gladys G, UD, Sci.....Seattle
Kalin, Albert, Grad.....Seattle
Kangley, Helen, UD, LA.....Seattle
Kangley, Lucy, Grad.....Seattle
Kato, Makoto, Unc, Bus.....Japan
Kautz, Bernice, UD, Ed.....Seattle
Kautz, Beryl, UD, Ed.....Seattle
Kautz, Edith, Unc, LA.....Seattle
Kawasaki, Ichizo, UD, Ed.....Japan
Kee, Sing-Tah, UD, LA.....China
Keeney, Leo D, LD, Fish.....Bothell
Kehres, Harvey E, UD, Sci.....Seattle
Keller, Earl W, LD, FA.....Seattle
Kelley, Curtis, LD, LA.....Centerville
Kelley, Eugene L, Spec, Bus.....Seattle
Kellogg, George, UD, Ed.....Seattle
Kellogg, Harold E, LD, Bus.....Seattle
Kelly, Helen P, Grad.....Bellingham
Kempkes, Jay A, Grad.....Everett
Kennedy, Mary Helen, Spec, Ed.....Kirkland
Kennett, Homer M, UD, Ed.....Seattle
Kenney, Kathleen J, LD, LA.....Deming
Kenney, Russell A, Grad.....Salem, Ore
Kenyon, George D, LD, Bus.....Seattle
Kernode, Clara A, UD, LA, Livingston, Mont
Kernighan, Edith, LD, LA.....Buckley
Ketchum, Leland H, LD, LA.....Seattle
Ketchum, William R, UD, Bus.....Seattle
Keyes, Donald C, LD, Sci.....Bellingham
Keyes, Howard C, LD, Sci.....Bellingham
Kiddler, Jay D, UD, Bus.....Seattle
Kiekenapp, Hortense, UD, Ed.....Seattle
Kincaid, Olive N, Grad.....Camas
King, Ben Randall, Grad.....Moscow, Ida
King, Cathren M, Spec, Sci.....Seattle
King, John L, LD, LA.....Seattle
- King, June L, Unc, LA.....Nampa, Ida
King, Maile Alice D, LD, Ed.....Seattle
King, Norris G, Spec, Bus.....Seattle
King, Vicar, LD, Minn.....China
Kingsley, Mrs Hazel F, Spec, Sci.....Seattle
Kinnear, Alice, LD, FA.....Seattle
Kinney, Ottilie, Unc, FA.....Glendive, Mont
Kinsey, Isabelle, LD, Sci.....Seattle
Kinsey, Mae D, Prov, Ed.....Eugene, Ore
Klous, Myrtle B, Prov, LA.....Fresno, Calif
Kirby, Ruth, LD, LA.....Seattle
Kirkpatrick, E R, Spec, Bus.....Portland, Ore
Kirschner, Earl E, Grad.....Seattle
Kittredge, Garguerite, Grad.....Seattle
Kizer, Kenneth B, UD, Ed.....Seattle
Kjack, Freda C, Prov, Ed.....Malden
Klaus, Frederick F, UD, Ed.....Chehalis
Knapp, Alta Ruth, LD, LA.....Seattle
Knapp, Elizabeth L, Unc, Ed.....Seattle
Knapp, Eugene H, Unc, Law.....Davenport
Knapp, Frederick B, Spec, Bus.....Seattle
Knaption, Florence M, UD, Sci.....Aberdeen
Knight, T Spencer, UD, Bus.....Spokane
Knoop, Olga L, Prov, Ed.....Neillsville, Wis
Knowlton, Clare, Unc, LA.....New Orleans, La
Knox, Robert, UD, Eng.....Seattle
Knoll, Clarence, Spec, Bus.....Condon, Ohio
Knuth, Ethel, LD, FA.....Butte, Mont
Koepeke, Carolyn, UD, Sci.....Seattle
Kondo, Paul T, LD, Eng.....Seattle
Kraft, Edwin A, LD, Eng.....Seattle
Kraft, Marjorie, LD, Ed.....Seattle
Kralowec, George I, UD, Ed.....Kennewick
Kramer, Karl W, UD, Eng.....Seattle
Kranz, Angelika S, Spec Sci.....Tacoma
Kravik, Viola, UD, Sci.....Everett
Kreider, Anna C, Prov, Ed.....Olympia
Kreisher, Harold C, UD, Bus.....Seattle
Krogstad, Gladys, LD, Sci.....Seattle
Kucera, John Paul, LD, Sci.....Lacey
- LaBossier, Inez, Grad.....Seattle
LaFerte, Maud C, Spec, Sci.....Seattle
Lafferty, Priscilla, Prov, Ed.....Pt Townsend
Lafranchi, Alfred, Spec, Bus.....Seattle
Lambert, Mrs Rebecca, UD, Ed.....Seattle
Lamp, Wallace, Unc, Phar.....Everett
Lamson, S Elizabeth, Spec, Sci, College Place
Landers, Sophie E, Prov, Sci.....Seattle
Landeen, William M, Unc, LA.....Seattle
Lanning, Oscar D, Spec, Sci, Pontiac, Mich
Loreau, Agnes T, Spec, Sci, Pontiac, Mich
Largent, Alta, Prov, Sci.....Kahlotus
Larkin, Mae E, Grad.....Seattle
Larsin, Josephine, UD, Ed.....Seattle
Larson, Lou Claire, UD, LA.....Seattle
Larson, Victor B, Grad.....Seattle
Lash, Frederick M, UD, LA.....Stevenson
Laub, Gaston, Spec, Bus.....Seattle
Lauber, Albert, UD, For.....Seattle
Laudy, Henry Allen, UD, Bus.....Everett
Laurence, Alice, Grad.....Fairmont, Neb
Lautz, Fritz A, UD, Bus.....Seattle
Law, Charles H, Unc, Law.....Seattle
Lawson, Thomas S, UD, LA.....Spokane
Leaf, Alice, UD, Ed.....Seattle
Lease, Howard S, UD, Bus.....Seattle
Lebel, Clara, Prov, Ed, Chippewa Falls, Wis
Lebold, Edward A, UD, Sci.....Salem, Ore
Lechner, Mrs Gladys, Unc, LA.....Seattle
Lechner, Leslie A, Grad.....Seattle
Le Clair, Belle, Grad.....Ronan, Mont
Le Clair, Cecil, Prov, Ed.....Ronan, Mont
Lee, Frank A, UD, Sci.....Seattle
Lee, Mary Vivian, Prov, Ed.....Seattle
Lee, Vernet Charles, UD, Ed.....Manzanita
Lee, Wilson, UD, Bus.....China
Leeper, Helen G, UD, LA.....Seattle
Legg, Emily, Grad.....Seattle
Lenoir, Mildred M, Unc, Sci.....Seattle
Lentz, Katherine, Grad.....Antioch, Ohio

Leonhardt, Hortense, LD, LA.....Seattle
 Leshar, Anna F, Grad., Northumberland, Pa
 Lester, Helen K, Spec, Sci.....Seattle
 Levinson, Herbert, LD, Bus.....Spokane
 Levinson, Jack, LD, LA.....Spokane
 Lewis, Elizabeth, UD, LA.....Seattle
 Lewis, Ethel M, Prov, Ed.....Salmon, Ida
 Lewis, Henry, Grad.....Tacoma
 Lewis, Mary C, Unc, Ed.....Bozeman, Mont
 Lighthouse, Margaret, Unc, Ed.....Seattle
 Likes, Myrton D, UD, Sci.....Orting
 Lim, James K, LD, Bus.....China
 Lindesmith, Blanche A, Prov, Ed.....Alliance, O
 Lineberry, Ruth, Prov, Ed.....Vancouver
 Linn, Robert D, LD, Gus.....Aberdeen
 Lister, Vannie, Unc, Ed.....Star, Ida
 Little, Irene, Prov, Ed.....Sioux City, Ia
 Littlefield, Dorothy, UD, LA.....Seattle
 Lochte, William A, Unc, Eng.....Seattle
 Lockerby, Desiah, UD, LA.....Seattle
 Lockwood, Mrs Edna M, UD, Ed.....Seattle
 Loer, Lawrence F, UD, Bus.....Seattle
 Loftfield, Gabriel, Grad.....Seattle
 Logan, Ettie, UD, Sci.....Portland, Ore
 Loken, Leo W, LD, Bus.....Everett
 Long, Marion A, Grad.....Naches
 Long, Rill H, Spec, Eng.....Montpelier, Ida
 Loomis, May S, Unc, Sci.....Seattle
 Lovell, Alma, Carolyn, Prov, Ed.....Seattle
 Lovering, Thad B, LD, Sci.....Seattle
 Luccock, Harriett, Grad.....Seattle
 Lucas, Helen M, LD, LA.....Bremerton
 Lund, John Grant, LD, LA.....Seattle
 Luten, Miriam, UD, Sci.....Seattle
 Lutz, Bertha M, Spec, Sci, Philadelphia, Pa
 Lyette, John R, LD, LA.....Seattle
 Lynch, Anna, UD, Ed.....Butte, Mont
 Lynch, Jos H, LD, Bus.....Bonners Ferry, Ida
 Lynch, Robert F, Unc, Ed.....Boise, Ida
 Lytle, Nelson E, Prov, Ed.....Tacoma

McAbee, Grace, LD, Ed.....Seattle
 McAllister, Josephine, UD, LA.....Seattle
 McCarthy, Clara G, UD, LA.....Seattle
 McCarthy, William Geo, Grad.....Seattle
 McCausland, Beth, Grad.....Seattle
 McClung, R Eugene, 3rd Law.....Seattle
 McClymont, Ruth, Prov, Ed, Holdrege, Neb
 McConnell, Mrs Avis J, LD, LA.....Seattle
 McConnell, Janie, Spec, Sci, Edmonton, Alta
 McCord, Evan S, Grad.....Seattle
 McCorkell, Roberta, Prov, FA.....Medical Lake
 McCorkill, Minnie, UD, Ed.....Spokane
 McCorkle, Mae D, Grad.....Kelso
 McCormick, Lewis M, Spec, Sci.....Seattle
 McCoy, Edward Marion, UD, LA.....Seattle
 McCoy, John W, LD, Phar.....Seattle
 McCoy, Newton C, Unc, Law.....Castle Rock
 McCreary, Howard J, LD, Bus.....Mt Vernon
 McCroskey, Wendell, LD, Bus.....Seattle
 McCulloch, Flora M, UD, LA.....Darrington
 McCullough, Charles J, Spec, Eng.....Seattle
 McDonald, Albert F, Spec, Bus.....Seattle
 McDonald, Eora, LD, LA.....Seattle
 MacDonald, Irene Hazel, Prov, Grad, Seattle
 McDonough, Otto G, UD, LA.....Seattle
 McDowell, John W, UD, Sci.....Seattle
 McEachern, Edna, Grad.....Latah
 McElroy, Jean B, UD, Bus.....Tacoma
 McGill, Eleanor, LD, LA.....Seattle
 McGill, Merrie F, UD, LA.....Seattle
 McGorran, Teresa M, Spec, Sci, Eugene, Ore
 McIlvenny, Lulu, Unc, FA.....New Castle, Pa
 McKay, Annie Laurie, LD, LA.....Seattle
 McKibben, Willbur B, Grad.....Seattle
 McKinney, C T, Law.....Wawawai
 MacKinnon, George Watson, Grad.....Seattle
 McLain, Ada E, UD, Ed.....Spokane
 McLaughlin, Blanche, Unc, Ed.....Osage, Ia
 McLean, Cyrus E, Spec, For.....Seattle
 MacLean, Duncan G, LD, Eng.....Seattle

McLean, Florence, Spec, Ed.....Seattle
 MacLean, Laura.....Seattle
 MacLean, W W, Unc, Eng, N Westminster, BO
 McLellan, Maxine, UD, FA.....Seattle
 McLeod, Annabel Jean, UD, Ed.....Seattle
 McMeen, Ruth F, UD, Ed.....Bellingham
 McMullin, Fred A, Grad.....Seattle
 McMurphy, Susannah J, Grad.....Tacoma
 McNeely, Grace, LD, LA.....Everett
 MacPherson, John H, Spec, FA.....Seattle
 MacPherson, Lenore, Unc, FA.....Seattle
 McQuaid, Alice Evelyn, LD, LA.....Seattle
 McQuaid, Thelma, LD, Sci.....Seattle
 MacQuarrie, Evan E, Spec, FA.....Seattle
 McSorley, M L, Unc, LA.....Delavan, Wis
 McVey, Maud, Grad.....Oak Park, Ill
 Macey, Kate L, Spec, Sci.....Candler, NC
 Machin, George L, Spec, Bus.....Bellingham
 Madden, Ned D, LD, Eng.....Seattle
 Mades, Allen, LD, BA.....Seattle
 Mahaffey, Audley, UD, LA.....Seattle
 Maher, Maybelle, LD, Sci, Two Harbors, Minn
 Malakoff, Milton S, LD, LA.....Seattle
 Mallory, Joseph A, Unc, LA.....Silver Lake
 Mallory, Mildred M, UD, Ed.....Silver Lake
 Mallis, Jane B, Prov, LA.....Seattle
 Malloy, Kathleen J, UD, Ed.....Manette
 Mandanas, Francisco Y, LD, Sci, Philippines
 Mapes, Carl H, UD, LA.....Seattle
 Marchand, Leslie A, Grad.....Seattle
 Margareidy, Ira.....Seattle
 Marino, Frank, LD, Fish.....Seattle
 Markey, Franklin, LD, Sci.....Easton
 Marling, Samuel E, UD, For.....Seattle
 Marmont, Nan H, LD, Bus.....Seattle
 Marquette, Elizabeth, Grad.....Shamokin, Pa
 Marquis, William J, UD, LA.....Seattle
 Marsh, Urna I, UD, FA.....Dryad
 Marshall, Thomas, Unc, Law.....Kirkland
 Martin, Alford B, LD, Bus.....Bellevue
 Martin, Elizabeth, Auditor.....Seattle
 Martin, Harold, UD, Bus.....Spokane
 Martin, Morris A, Spec, Bus.....Wildier, Ida
 Martin, Rowland J, Spec, LA.....Seattle
 Martin, William T, Prov, FA.....Seattle
 Massie, Dorothy, UD, Ed.....Brewster
 Matheson, Anna May, LD, LA.....Seattle
 Matika, Marion, Spec, FA.....Chicago, Ill
 Matthews, Charles W, LD, Eng.....Seattle
 Maurier, David A, Spec, Bus.....Seattle
 Maus, Mildred, UD, Sci.....Seattle
 Meaker, Marian E, LD, Sci.....Seattle
 Meonach, Harrison W, UD, Sci.....Kirkland
 Mehner, Margaret, LD, Ed.....Bremerton
 Mellem, Ethel M, Prov, Grad.....Cosmopolis
 Mercier, Germaine, Grad.....Seattle
 Mercier, Jeanne Almee, Grad.....Seattle
 Merrill, Grant Warren, UD, FA.....Seattle
 Merritt, Fred S, 1st Law.....Seattle
 Messelin, Angele, Spec, Ed.....Tacoma
 Metzger, Frank D, LD, Eng.....Seattle
 Meyer, Ambrose J, UD, Sci.....Lacey
 Meyer, Edward A, LD, LA.....Edmonds
 Meyer, Flora, UD, LA.....Seattle
 Meyer, Thomas E, Unc, Bus.....Seattle
 Meyer, Walter C, UD, Bus.....Seattle
 Meyer, Wilhelm H, Spec, Ed.....Seattle
 Meyers, Warren, LD, Bus.....Orting
 Mickelson, Paul W, Prov, Bus, Portland, Ore
 Middleton, Hugh M, UD, Bus.....Seattle
 Millar, Mrs Mary E, Spec, Ed.....Seattle
 Millar, Olive C, UD, Ed.....Fond du Lac, Wis
 Miller, Cecil M, Spec, Eng.....Seattle
 Miller, Elveta, Grad.....Seattle
 Miller, Ethel T, UD, FA.....Cle Elum
 Miller, Eva Mae, Grad.....Pasadena, Calif
 Miller, Frances, UD, Ed.....Seattle
 Miller, Max, Reg, Jour.....Everett
 Miller, Mervyn, LD, LA.....Seattle
 Miller, Vera C, UD, Ed.....Seattle
 Milne, Donald, Special.....Seattle
 Miner, Eva Lee, LD, Sci.....Seattle

- Minich, John M, UD, Sci.....Seattle
 Minnis, Marjorie E, Grad.....Seattle
 Missimore, Alma, Prov, Ed.....Seattle
 Mitchell, Lynnwood G, LD, Bus.....Seattle
 Mock, Charles W, Spec, For, Fairbanks, Alas
 Moe, Rachel Lena, Grad.....Ellensburg
 Monda, George Oscar, LD, LA.....Seattle
 Moode, Noble, Prov, Sci.....Spokane
 Moore, Charles A, Grad.....Seattle
 Moore, Charles S, Spec, Eng.....Seattle
 Moore, Georgia Ethel, UD, Ed.....Spokane
 Moore, Gerald E, Grad.....Seattle
 Moore, Grace E, Prov, FA.....Spokane
 Moore, Harold W, LD, Bus.....Filler, Ida
 Moore, Joseph R, UD, Ed.....Concrete
 Moore, Lillie B, Spec, LA.....Seattle
 Moore, Ruth L, UD, LA.....Tacoma
 Moran, Charles G, 3rd Law.....Seattle
 More, Luther, LD, Ed.....Seattle
 Morgan, Miles Evan, Grad.....Seattle
 Morgan, Verona, UD, Bus.....Seattle
 Morgaridge, Ira, Spec, Eng.....Seattle
 Morrison, Ruth, Prov, Sci.....Hood River, Ore
 Moulthrop, Lena V, Prov, LA.....Walla Walla
 Mount, James N, UD, Ed.....Snohomish
 Mowry, Lavinia, LD, Ed.....Seattle
 Muckleston, Ralph W, Grad.....Seattle
 Mulligan, Henry W, Prov, Ed.....Seattle
 Mullen, James T, Spec, Bus.....Seattle
 Mullin, Samuel E Jr, LD, LA.....Bellingham
 Mulinx, Forrest E, Spec, LA.....Seattle
 Munro, Kathleen, LD, Ed.....Seattle
 Munson, Harriet, Unc, Ed, Minneapolis, Minn
 Murdock, Forrest G, Grad.....Hoquiam
 Murray, Charles, UD, Sci.....Tacoma
 Murray, James B, LD, Bus.....Seattle
 Murray, Mildred, UD, LA.....Kent
 Murray, Valois A, UD, Bus.....Seattle
 Maykens, Henry E, UD, Sci.....Pt Orchard
 Myers, Donald P, UD, Bus.....Seattle
 Myers, Harland, LD, LA.....Orting
 Myers, Lenore, Prov, LA.....Seattle
 Myroie, Ruth, Grad.....Kent
- Nagel, Julius A, Spec, Sci.....Oak Harbor
 Nagel, Mary S, Prov, Ed.....Oak Harbor
 Nave, Samuel A, Grad.....Seattle
 Neal, Marguerite Z, Spec, LA.....Seattle
 Neal, Russell L, LD, Ed.....Washtucna
 Neary, Raymond, UD, Sci.....Lacey
 Needy, Anna, LD, LA.....Ft Smith, Ark
 Neely, J Ralph, LD, LA.....Spokane
 Neely, Marguerite M, Prov, FA.....Tacoma
 Neighbor, Emily, Grad.....Seattle
 Neilson, Irene M, UD, FA.....Kallispell, Mont
 Nelson, Carolyn, Prov, Ed.....Seattle
 Nelson, Eleanor, Prov, LA.....Seattle
 Nelson, Jeannette, Spec, Sci.....Seattle
 Nelson, Leone, Grad.....Seattle
 Nelson, Ned H, UD, Eng.....Seattle
 Nelson, William Edward, Spec, FA.....Seattle
 Nesbitt, Lura, Grad.....Detroit, Minn
 Ness, Arthur B, Grad.....Tacoma
 Ness, Sever W, Prov, Ed.....Yakima
 Neterer, Elizabeth, Grad.....Seattle
 Nettleton, Alice, UD, LA.....Tacoma
 Nettleton, Marie, UD, Ed.....Kirkland
 Newbern, Richard L, Spec, Bus, Charleston
 Newlove, Gwendolyn G, UD, LA.....Seattle
 Newton, Florence E, Prov, LA.....Seattle
 Neylan, Margaret, LD, FA.....Elkader, Ia
 Nichols, Walter Robert, Grad.....Vashon
 Niederjohn, Anna, Prov, Ed.....California, Mo
 Nielson, Clara F, Prov, Ed.....Ferndale
 Niemi, Helen, Prov, Ed.....Esk, Alas
 Nitschke, Paul, LD, Sci.....The Dalles, Ore
 Noble, Maybelle, Unc, FA.....Vancouver, BC
 Noel, Lionel S, LD, Eng.....Snohomish
 Nogle, Lucretia, Prov, Ed.....Spokane
 Nokes, Herald T, Prov, Sci.....Riverton, Utah
 Nolan, Vincent A, Spec, Bus.....Seattle
- Noland, Frank, Spec, Bus.....Bremerton
 Nordlie, Glenn J, UD, Eng.....Seattle
 Norfolk, Genevieve F, Unc, Sci.....Seattle
 Norman, Lilla O, LD, LA.....Richmond Beach
 Norris, Ralph H, LD, Bus.....Seattle
 Norton, Theo E, LD, LA.....Tacoma
 Norwood, Helen, LD, FA.....Seattle
 Nowak, Helen M, UD, LA.....Seattle
- O'Brien, Mary, Prov, Ed.....Seattle
 Ochs, Maud E, UD, LA.....Seattle
 Odegard, Peter H, UD, LA.....Seattle
 Odle, M F, Prov, Ed.....Bellevue
 O'Farrell, Norman, LD, Bus.....Orting
 Ogden, Ethel, Prov, Ed.....DuPont
 Oliver, Elsie, Prov, Ed.....Kirkland
 O'Loughlin, Mary, Unc, Ed.....Mt Vernon
 Olsen, Alf Edwin, LD, Bus.....Redmond
 Olsen, Amos F, UD, Bus.....Davenport
 Olsen, Carl M, UD, Eng.....Stanwood
 Olsen, Carolyn, Prov, Ed.....Winona, Minn
 Olsen, Esther O, UD, LA.....La Center
 Olsen, Franklin E, LD, Bus.....Tacoma
 Olsen, Leah, UD, LA.....Seattle
 Olson, Alice R, Prov, FA.....Fargo, ND
 Olson, Jenny E, LD, LA.....Monroe
 Olson, Olaf E, Unc, Ed, Minneapolis, Minn
 Olson, Ronald L, Spec, LA.....Seattle
 Olwell, Eugene E, UD, Bus.....Seattle
 Omeg, Ida, Unc, Ed.....Portland, Ore
 O'Neil, Henry Clay, LD, Eng.....Seattle
 O'Neil, Arthur W, Spec, FA.....Seattle
 O'Neil, Larkin A, UD, Bus.....Seattle
 Ogenorth, Irene, Prov, Sci, Kewaskum, Wis
 Ormsby, George, Grad.....Okanogan
 Orne, Stanley, UD, Jour.....Seattle
 Orosa, Jose Y, LD, Bus.....Philippines
 Orr, Paul J, Grad.....Redmond
 Orr, Robert L, Spec, Eng.....Seattle
 Osborne, Belle M, Prov, Sci.....Seattle
 Osborne, Helen Bushie, LD, LA.....Seattle
 Osborne, Mrs Jean A, Grad.....Victoria, BC
 Osgniach, J Augustine, Grad.....Lacey
 Osgood, Robert S, Prov, LA.....Rolling Bay
 Ostensen, Floyd O, Grad.....Seattle
 Ostrand, Hildur, Grad.....Seattle
 Otis, Leota B, UD, LA.....Olympia
 Overguard, Julia, LD, Sci.....Salem
 Oxman, J Donald, Unc, Law.....Seattle
- Packard, A Henry, Grad.....Chimacum
 Packer, Florence, UD, Ed.....Seattle
 Palacol, Augustine P, LD, LA.....Philippines
 Palmateer, Lorena, Grad.....Clay Center, Kan
 Palmer, Ida S, Prov, LA.....Seattle
 Palmer, Stephen W, Prov, LA.....Seattle
 Pannebaker, Myra, UD, LA.....E Waterford, Pa
 Parisear, Eugenie B, Unc, Ed.....Seattle
 Parish, Herbert I, UD, Bus.....Seattle
 Parkhouse, Russell K, UD, Bus.....Tacoma
 Parkins, Greta, Unc, LA.....Lapwai, Id
 Parkins, Wright A, UD, Eng.....Seattle
 Parks, Clemence E, Prov, LA.....Tacoma
 Parry, Jane, LD, Ed.....Seattle
 Parselle, Edna, Unc, LA.....Menlo
 Parsons, Elvey T, Grad.....Seattle
 Pascoe, Myra A, Grad.....Seattle
 Patton, Clotilde, LD, LA.....Seattle
 Payne, M, Caroline, Unc, LA.....Seattle
 Pearson, George, Prov, Law.....Spokane
 Pease, Katharine M, UD, FA.....Seattle
 Pelz, Freda, UD, Bus.....Seattle
 Pelz, Gladys Irene, LD, LA.....Seattle
 Pelz, Irma M, Grad.....Seattle
 Percival, Winnifred, LD, Sci.....Seattle
 Perkins, Dorris Ellen, LD, FA.....Seattle
 Perkins, Julian F, LD, Bus.....Tacoma
 Perrine, Charles S, LD, LA.....Seattle
 Perry, Frank Wesley, Spec, Bus.....Seattle
 Perry, Mary Agnes, UD, LA.....Everson

Peterson, Carrie H, UD, Ed...Wardner, Ida
 Peterson, Charles W, Grad.....Seattle
 Peterson, Clarence C, LD, Eng.....Hoquiam
 Peterson, Ida G, UD, LA.....Marinette, Wis
 Peterson, Inez H, UD, LA.....Seattle
 Peterson, John O, Spec, Ed.....Tacoma
 Peterson, Karl, Spec, Min.....Seattle
 Peterson, Lot C, Prov, Ed.....Renton
 Peterson, Ole T, UD, Ed.....Blaine
 Peterson, Sophie, Spec, LA.....Sumner
 Petrie, Roy A, LD, Bus.....Seattle
 Peyton, Lena, Prov, Ed.....Shawnee, Okla
 Pfaff, Earl A, Grad.....Seattle
 Pfaff, Lida B, Unc, Bus.....Seattle
 Pfander, Hazel, Unc, Ed.....Cashmere
 Phillips, Richard T, LD, Bus.....Seattle
 Phillips, Harrison N, Unc, Bus. Mahama, Ore
 Phillips, Harry J, Unc, Eng.....Seattle
 Phillips, Jessie West, UD, FA.....Seattle
 Phillips, Ruth Naomi, Grad.....Seattle
 Pickering, Jack C, Unc, Ed.....Seattle
 Pickett, May Belle, LD, LA.....Mt Vernon
 Pierron, Richard P, UD, LA.....Bellingham
 Pinney, William G, UD, Bus.....Seattle
 Pitman, Archie O, Prov, Sci..Portland, Ore
 Pitzer, Carl August, UD, FA.....Tacoma
 Plank, Ellis W, LD, Sci.....Pierce, Ida
 Platt, Luella B, Grad.....Seattle
 Poe, Leslie, Spec, Ed.....Grannis, Ark
 Pogue, Earl I, Prov, Ed.....Seattle
 Poland, Ethel, UD, LA.....Sumner
 Pollard, Jean, LD, LA.....Seattle
 Pooley, Frank B, Spec, Eng.....Spokane
 Porter, Nellie M, Spec, Sci.....Snohomish
 Post, Frances E, Grad.....Seattle
 Post, John Phillips, Grad.....Spokane
 Potter, Charles, Grad.....Seattle
 Powell, Frederick Jr, UD, Eng.....Tacoma
 Powers, Anna M, UD, LA.....Seattle
 Powers, Francis F, UD, LA.....Tacoma
 Powers, Francis J, UD, Bus.....Seattle
 Powers, Harry K, Spec, FA.....Seattle
 Pozzie, Jerry V, Spec, Bus.....Seattle
 Prescott, Maurine, LD, LA.....Seattle
 Price, May M, UD, LA.....Dillon, Mont
 Price, Ruth, UD, LA.....Seattle
 Proctor, Adah E, Unc, Sci.....Seattle
 Provin, Olive, UD, LA.....Woodinville
 Pryde, Joel J, Grad.....Hoquiam
 Pugsley, Walter H, Grad.....Seattle
 Purcell, J. William, LD, Sci.....Seattle
 Putnam, Marguerite E, Grad.....Seattle

Quigley, Mary J, Spec, Sci.....Seattle
 Quinn, Elizabeth, Prov, Ed.....Seattle

Rader, Martha, UD, Sci.....Walla Walla
 Ramsay, Margaret, UD, Ed.....Chinook, Mont
 Ramstead, Alvin C, LD, Bus.....Everett
 Ramthun, Lucile, UD, Bus.....Chehalis
 Randall, Harold W, Prov, Eng.....Spokane
 Randall, Julia, Prov, LA.....Seattle
 Rankin, James H, LD, Bus.....Seattle
 Rapp, Elizabeth, Spec, LA.....Spokane
 Rasmussen, George V, UD, Ed.....Seattle
 Ratcliffe, Vernon E, Unc, Bus.....Seattle
 Rath, Martha A, Grad.....Vancouver, BC
 Recart, Enrique, LD, Bus.....Santiago, Chile
 Redick, Harry H, Spec, Fish.....Seattle
 Redpath, Harry S, 1st Law.....Helena, Mont
 Reed, Clyde L, UD, Ed.....Ferndale
 Reed, Helen, Unc, Sci.....Seattle
 Reed, Jennie M, Grad.....Tacoma
 Reeder, Ardis H, LD, Bus.....Tacoma
 Reep, Ellen, UD, Ed.....Everett
 Reeves, Adele, Grad.....South Bend
 Reeves, Joseph Austin, Prov, Grad.....Sultan
 Reichert, Carlton G, UD, Bus.....Seattle
 Reid, Bella F, Prov, LA.....Drayton, N Dak
 Reiter, Bernard, LD, LA.....Seattle

Reither, S, J, Grad.....Goldendale
 Beker, Hilda M, LD, LA.....Harrington
 Reyes, Vincent, Unc, Eng.....Philippines
 Reynolds, Myron E, LD, Sci.....Seattle
 Rhodes, Josephine, Unc, LA.....Lamont
 Rice, Charles M, Unc, FA.....Everett
 Rice, Margaret D, Grad.....Prosser
 Rice, Mary B, UD, Sci.....Prosser
 Rice, Philip Richard, Unc, Ed.....Seattle
 Richards, Bradford, UD, LA.....Mt Vernon
 Richards, Catherine, UD, LA.....Spokane
 Richards, Eugene, Unc, Sci.....Seattle
 Richards, Fern M, Unc, FA.....Seattle
 Richardson, Dio, Grad.....Seattle
 Richardson, Jennie, Prov, Ed..Portland, Ore
 Richford, Maurice A, LD, Eng.....Seattle
 Rickles, Dave N, UD, Eng.....Seattle
 Rieben, Samuel Edward, UD, LA.....Seattle
 Rless, Marie H, Spec, Sci.....Tyler, Texas
 Riggs, Margaret, UD, LA.....Seattle
 Risley, Dudley B, LD, Bus.....Seattle
 Riss, Arthur H, UD, LA.....Seattle
 Riste, Ida, Unc, LA.....Seattle
 Rilvera, Simeon, LD, Sci.....Seattle
 Rooney, Marland B, Unc, LA.....Centralia
 Robb, Helen, Grad.....Seattle
 Robbins, Nadine Irene, LD, LA.....Seattle
 Roberts, Alexander C, Grad.....Seattle
 Roberts, Aubrey E, UD, LA.....Harrington
 Roberts, James Donald, UD, For..Tacoma
 Roberts, Katherine, UD, LA.....Gooding, Ida
 Roberts, Kenneth B, LD, Eng.....Seattle
 Robertson, M Catherine, Grad..Portland, Ore
 Robertson, Eleanor M, Unc, LA.....Seattle
 Robertson, Howard P, UD, Sci..Montesano
 Robertson, James Jr, Spec, Eng.....Seattle
 Robertson, H. Margaret, Spec, Sci.....Seattle
 Robinson, Bessie May, Grad.....Portland, Ore
 Robinson, Clyde A, LD, LA.....Everett
 Robinson, Eliza, Grad.....Seattle
 Robinson, Frank D, UD, Bus.....Sumner
 Robinson, George N, LD, LA.....Seattle
 Robinson, Harriet M, Spec, Ed.....Seattle
 Robinson, Morton, Unc, Bus.....Seattle
 Robinson, Ruth J, LD, Ed.....Seattle
 Robinson, Ruth Mary, UD, Libr.....Seattle
 Rodgers, Elizabeth J, Grad.....Bandon, Ore
 Rodman, Blanche, Prov, Ed.....Yakima
 Roe, Merle John, LD, Bus.....Seattle
 Roemer, Albert J, LD, Bus.....Seattle
 Rogers, Alicia K, LD, Ed.....Seattle
 Rogers, Clara E, LD, LA.....College Place
 Rogers, Henry E, UD, Ed.....Castle Rock
 Rollins, Jesse L, Spec, Eng.....Bremerton
 Rollins, Paul R, LD, Sci.....Bremerton
 Romig, Harry G, Grad.....Sheridan, Ore
 Roney, Ward William, LD, LA.....Duvall
 Roper, M Wesley, Grad.....Seattle
 Rose, Frank D, Prov, Sci..Pasadena, Calif
 Rosen, Hilda F, UD, Sci.....Duvall
 Rosendahl, Ily S, LD, Ed.....Northport
 Ross, Jean, LD, LA.....Seattle
 Rothwell, Martha D, Spec, Sci.....Spokane
 Royster, Helen, LD, Ed.....Seattle
 Ruch, Lawrence E, Spec, Sci..Applegate, Ore
 Rude, Hazel, LD, Ed.....Seattle
 Ruetenik, Norman N, LD, Ed.....Yakima
 Ruggles, Mary M, Prov, Ed.....Seattle
 Rupe, Gustave Elizabeth, UD, Ed.....Seattle
 Ruppenthal, Anna B, Grad.....Lamont
 Russell, Elsa K, UD, Ed.....Puyallup
 Russell, Florence M, UD, LA.....Seattle
 Russell, John B, Unc, Ed.....Puyallup
 Russell, Josephine V, Unc, Bus.....Seattle
 Russell, Lelia M, UD, Ed.....Luther, Mont
 Russell, Pearl E, Grad.....Seattle
 Rutter, Beatrice, UD, ED.....Spokane
 Ruzicki, Henry J, UD, Sci.....Lacey
 Ryan, Helen T, LD, Sci.....Seattle
 Ryer, Grant H, LD, Eng.....Denver, Colo

Sadler, Estelle J, UD, LA.....	Tacoma
Sammons, Mabel, Grad.....	Spokane
Samson, Elizabeth, Spec, Sci.....	Spokane
Sandall, Inez Fae, UD, Ed.....	Spokane
Sanders, Floyd, LD, Bus.....	Seattle
Sandgren, Esther, Prov, Ed.....	Seattle
Sandusky, Lawrence, UD, LA.....	Spokane
Sandusky, O E, LD, LA.....	Spokane
Santee, Eva, UD, LA.....	.....
Santee, Joseph F, Spec, Ed.....	Buena
Sather, Luella, Prov, Ed.....	Spokane
Sato, Teizo, LD, Bus.....	Japan
Savage, Anthony, Grad.....	Seattle
Sayles, Frank W, Unc, Bus.....	Seattle
Sbedlco, Ida J, Spec, FA.....	Seattle
Schaefer, Isadore, LD, LA.....	Seattle
Schechtman, Lazar, LD, Sci.....	Dayton, Ohio
Schenkar, Joseph, LD, Sci.....	Seattle
Schlauch, G H, Grad.....	Latah
Schmidt, Byron C, UD, Eng.....	Seattle
Schmidtman, Edward H, UD, Eng.....	Anuburn
Schmitt, Tessie, LD, LA.....	Seattle
Schofield, Gwendolyn, LD, LA.....	Seattle
Scholl, Suzanne E, LD, Bus.....	Seattle
Schroeder, Blanche, UD, FA.....	.....
Schuknecht, Leeland H T, Spec, Eng.....	Seattle
Scordan, Louise M, 2nd Law.....	Seattle
Scott, Agnes R, Unc, Bus.....	Omak
Scott, Frank W, UD, Bus.....	.....
Scott, Martin R, Spec, Sci.....	Taylor Spgs, Ill
Scotton, Edwin B, UD, Bus.....	Seattle
Scovell, Ora F, Prov, Sci.....	Nehalem, Ore
Seagraves, Hal E, LD, Eng.....	Seattle
Sealls, Margaret, LD, LA.....	Seattle
Sears, Ruth B, UD, Ed.....	Bellingham
Seddon, Stanley, LD, LA.....	Roslyn
Seelye, Walter B, UD, Sci.....	Seattle
Selby, Harold K, UD, Bus.....	Seattle
Sellers, Ulrich R, UD, Bus.....	Seattle
Semon, Waldo L, Grad.....	Seattle
Severson, Olive, Prov, Ed.....	DuPont
Shafer, Lloyd N, UD, Ed.....	Seattle
Shafer, Lulu, UD, Ed.....	Spokane
Shank, Charles H, UD, Sci.....	Seattle
Shanks, Clyde W, LD, Bus.....	Seattle
Shanks, Marcus M, UD, Sci.....	Seattle
Shannon, James F, Grad.....	Opportunity
Shannon, Margaret J, UD, Sci.....	Anacortes
Shannon, Mazie, Grad.....	Minneapolis, Minn
Sharpe, Elton D, UD, Ed.....	Seattle
Shaw, John A Jr, Prov, Ed.....	Spokane
Shawler, Grace, LD, LA.....	Seattle
Sheahan, Myrtle, UD, LA.....	.....
Sheehan, Madeline, Grad.....	Seattle
Sheets, Ruth E, Prov, Ed.....	Seattle
Sheldon, Dorothy, Unc, Ed.....	Nampa, Ida
Sheldon, Laura A, Spec, Sci.....	Tacoma
Shelton, Sallie L, LD, LA.....	Seattle
Sheridan, Mary Agnes, Unc, LA.....	Davenport
Sherman, Leslie, LD, Bus.....	Everett
Sherrill, Ruth H, Grad.....	Seattle
Shields, Dorothea, Spec, Sci.....	Vancouver, BC
Shields, Edith, Spec, LA.....	Seattle
Shillock, Harold E, UD, Bus.....	.....
Shimizu, Frank, Unc, Bus.....	Seattle
Shinn, Dusan T, Unc, Law.....	Spokane
Shirkey, Emily F, Grad.....	Norborne, Mo
Shively, Gretchen L, LD, Sci.....	.....
Shook, Loretta R, Prov, Ed.....	New Orleans, La
Shore, Nannie Isabel, Prov, Ed.....	Seattle
Short, Beatrice, Prov, Sci.....	Des Moines, Ia
Shrader, Grace G, Prov, Ed.....	.....
Shultz, Celia B, UD, Ed.....	Cosmopolis
Siao, Yu-Ling, UD, Bus.....	China
Sickels, Eleanor M, Grad.....	Seattle
Siemens, Lydia, UD, Ed.....	.....
Sifton, Edith, Grad.....	.....
Sifton, Edith, Grad.....	Seattle
Silvers, Josephine, UD, Ed.....	Mt Vernon
Silverstone, Eugene, LD, Phar.....	Seattle
Sim, Ida Grace, LD, Sci.....	Oakland, Calif
Simpson, Anne, Unc, Sci.....	Woodburn, Ore
Simpson, Justus Harold, Spec, FA.....	Seattle
Simpson, Lurline, Grad.....	Seattle
Simson, Jerome, Grad.....	Seattle
Simson, Loula, LD, Bus.....	.....
Sinclair, Robert L, Unc, Bus.....	Snodhomish
Singley, W Norman, LD, LA.....	Seattle
Sirjord, Alma E, Prov, Sci.....	Fertile, Minn
Sirjord, Mea F, LD, Ed.....	Fertile, Minn
Sister Elizabeth Clare, UD, Ed.....	.....
Sister Mary Estelle, UD, LD.....	Seattle
Sister Mary Alexander, Prov, LA.....	Seattle
Sister Mary Floretta, LD, LA.....	Seattle
Sister Pancratius Kearney, Prov, Ed.....	Seattle
Sister M Veronica of Milan, Prov, La.....	Seattle
Silverson, Louina, UD, LA.....	Seattle
Slauson, Margaret, LD, LA.....	Seattle
Sloan, David H, Grad.....	.....
Sloan, Roy H, Spec, Bus.....	Seattle
Slusher, Charlotte B, LD, LA.....	Seattle
Small, Frank L Jr, UD, Sci.....	Seattle
Smalley, Thom E, Prov, Ed.....	Roundup, Mont
Smith, Adelaide, UD, Sci.....	Seattle
Smith, Albert Fred, Spec, Bus.....	.....
Smith, Dorothy Alice, LD, LA.....	Chewelah
Smith, George Mimms, Grad.....	Seattle
Smith, Joseph B, Unc, Law.....	Seattle
Smith, Leona, LD, LA.....	Seattle
Smith, Leotta Belle, Spec, Ed.....	Portland, Ore
Smith, Marian A, LD, Sci.....	Tacoma
Smith, Marion E, UD, Ed.....	Bellingham
Smith, Mary Cooke, Prov, FA.....	.....
Smith, Ruth Lulu, UD, LA.....	Polson, Mont
Smith, Thad O, LD, Eng.....	.....
Smith, Walter A, LD, Bus.....	.....
Smith, W Virgil, Grad.....	Seattle
Smith, William R, Unc, Bus.....	Seattle
Sodergren, Helen, Prov, La.....	Austin, Minn
Solomon, Abe H, LD, LA.....	Seattle
Sorensen, Harry D, UD, Ed.....	Nooksack
Southwick, Charles, UD, LA.....	Chelan
Sowers, Lucile, UD, La.....	Chehalis
Spalding, Alta L, Unc, LA.....	Drain, Ore
Sparling, Robert, Prov, Ed.....	Vancouver, BC
Spaulding, David Leland, LD, Bus.....	Seattle
Spaulding, Emilie T, LD, Bus.....	Yakima
Speer, Ernest D, Grad.....	Tieton
Speer, Pearl Steineke, Grad.....	.....
Spencer, Carlton E, 1st Law.....	Eugene, Ore
Spencer, Ralph W, UD, Eng.....	Bovill, Ida
Spencer, William A, Grad.....	Seattle
Sperling, Otto F, UD, Sci.....	Spokane
Sperry, Charlene E, Unc, LA.....	Des Moines, Ia
Spieseke, Daisy M, Grad.....	Seattle
Spiller, Amy L, Prov, Ed.....	Belt, Mont
Spratlin, Allen, Unc, Law.....	Seattle
Stacey, Mildred, Grad.....	.....
Staley, Joseph C, Prov, Ed.....	Kennecock
Stallard, Tully K, LD, Bus.....	Greenacres
Stanley, Claude R, Spec, Bus.....	Seattle
Stanton, Margaret, UD, LA.....	Seattle
Stapleton, Margaret L, Prov, LA.....	Bellingham
Stearns, Grace V, Unc, LA.....	Vancouver
Stedman, Lewis L, Unc, Law.....	Seattle
Steele, Charles E, Spec, Ed.....	Seattle
Steinbach, Helen F, UD, Ed.....	N Rockford, ND
Steinberg, AmyJ, UD, Ed.....	Monmouth, Ore
Steinberg, Fannie, Unc, Ed.....	Monmouth, Ore
Stenberg, Betsy P, UD, LA.....	Bow
Stephens, Samuel D, UD, Ed.....	Eugene, Ore
Sterling, Elizabeth C, Grad.....	Vancouver
Stevens, George, Unc, Bus.....	Puyallup
Stevens, Theo G, Unc, Ed.....	Bridgeport
Stewart, Isabel C, Grad.....	Seattle
Stewart, Nira, UD, Ed.....	St Petersburg, Fla
Stewart, Sue M, Prov, Ed.....	Bellingham
Stickney, Amy, LD, LA.....	Bothell
Stone, Caleb S Jr, UD, Sci.....	.....
Stone, Nellie C, UD, Sci.....	Thornton
Stone, Sally Byrd, UD, Ed.....	Wallace, Ida
Stone, Samuel, Spec, FA.....	.....
Stols, Elma, UD, Ed.....	New Uim, Minn
Storer, Leslie R, Prov, Ed.....	McKenna

Storey, M Eugenia, UD, Ed.....Seattle
 Storey, Ralph E, Grad.....Seattle
 Storm, Charlotte, LD, FA.....Tacoma
 Stowasser, Frances, LD, LA.....Tomah, Wis
 Straight, Robert, LD, Ed.....Vancouver, BC
 Stratton, Irving R, UD, LA.....Seattle
 Streater, Gertrude I, Grad.....Seattle
 Strong, Mra Flora M, Grad.....Seattle
 Stroud, Percy M, Grad.....Cosmopolis
 Struble, Mildred, Grad.....Spokane
 Stuart, Emma L, Prov, Ed.....Kansas City, Mo
 Stubblefield, Laura, UD, Ed.....Walla Walla
 Sullivan, John D, Grad.....Seattle
 Sullivan, Robert Edward, UD, Ed.....Seattle
 Summers, Hope, Prov, LA.....Walla Walla
 Sundling, Doris M, UD, Bus.....Seattle
 Sutton, Beulah, Grad.....Fayetteville, Ark
 Sutton, Phoebe Jane, LD, Sci.....Seattle
 Swafford, Henry K, Spec, Bus.....Seattle
 Swanson, Ruby, UD, LA.....Pondlatch, Ida
 Sweedland, Fretha, UD, Ed.....Seattle
 Sweeney, Frank E, LD, Bus.....Seattle
 Sweet, Helen E, Grad.....Seattle
 Swingle, E Margaret, Grad.....Seattle
 Swisher, Ida Belle, Prov, Grad.....Seattle
 Szymkowiak, E A, Spec, For, Milwaukee, Wis

Taber, Beatrice W, UD, Ed.....Bellevue
 Tack, Bernhard A, Grad.....Walla Walla
 Tack, Helen C, Grad.....Walla Walla
 Takahashi, Miyo, LD, Ed.....Japan
 Tanner, Josephine W, UD, LA.....Seattle
 Tanner, Mary C, LD, Ed.....Seattle
 Tartar, Clyde S, UD, Sci.....Seattle
 Taylor, Bertrand, UD, LA.....Sumner
 Taylor, Leah M, LD, Ed.....Seattle
 Taylor, Margaret S, Grad.....Missoula, Mont
 Taylor, Raymond F, LD, For, Bloomfield, NJ
 Tee-Garden, Chester U, Reg, Jour.....Seattle
 Tegland, Nellie M, UD, Ed.....Little Rock
 Terry, Lawrence, LD, Phar.....Tacoma
 Tevis, James, UD, Bus.....Seattle
 Thomas, Lee Baldwin, UD, Bus.....Sumas
 Thomas, Lenore, Grad.....Bellingham
 Thomas, Letty K, Unc, LA.....Seattle
 Thomas, Margaret C, LD, Sci.....Bellingham
 Thome, Joseph M, Unc, Law.....Granger
 Thompson, Harold A, LD, Sci.....Seattle
 Thompson, Jessie M, Prov, Ed.....Bremerton
 Thompson, Laura, Spec, Sci, Portland, Ore
 Thompson, Marguerite E, LD, LA.....Seattle
 Thompson, Roy Evans, LD, Eng.....Colville
 Thorpe, Clarence S, UD, Eng.....Seattle
 Thrun, Florence I, Prov, Ed.....Seattle
 Thune, Elmer T, UD, Ed.....Edmonds
 Thwing, Clarence, Grad.....Seattle
 Tinch, Edwin A, Spec, FA.....Bremerton
 Tolmie, Jack R, Grad.....Seattle
 Toner, Martin E, UD, LA.....Lacey
 Torigoye, Kazutaro, Auditor.....Japan
 Totten, Morrell P, 1st Law.....Seattle
 Trempe, Louis A, Grad.....Winslow
 Trukositz, Elizabeth, UD, LA.....Spokane
 Trumbull, Fannie, UD, LA.....Portland, Ore
 Tschudin, Ethel A, LD, Phar.....Seattle
 Tsoi, Naai Shing, UD, Bus.....China
 Tubbs, Ray V, Grad.....Adrian, Mich
 Tucker, Ellen, LD, Bus.....Seattle
 Tucker, Julia Elsie, Spec, FA, Vancouver, BC
 Tucker, Margaret, UD, Ed.....Kansas City, Mo
 Tucker, William C, LD, LA, Richmond Beach
 Tumander, Ruth, Grad.....Seattle
 Turinsky, Angeline, LD, LA.....Seattle
 Turnbull, Fred A, Unc, Ed.....Skykomish
 Turner, Cecilia, LD, LA.....Everett
 Turner, C Maynard, UD, Eng.....Everett
 Turner, Robert E, UD, LA.....Spokane
 Turner, Theodore S, 1st Law.....Seattle

Van Tilborg, Mary, LD, LA.....Seattle
 Van Winkle, Edith, Prov, Sci.....Seattle

Varensen, Annie, Spec, Sci.....Tacoma
 Veitch, Edith Jane, Grad, Grand Forks, ND
 Von Bubo, Max, UD, Eng.....Seattle
 Von Ericksen, Lyle G, UD, LA.....Hilliard
 von Pressentin, Dorothea, UD, Ed.....Seattle

Wachter, Virginia, UD, LA, Texarkana, Tex
 Wafer, Mary Barbara, UD, Ed.....Seattle
 Wagener, Leona M, Prov, Ed.....Walla Walla
 Wahl, Bernenna, UD, LA.....Seattle
 Walker, Claude G, Unc, Sci.....Enumclaw
 Walker, Ernest K, LD, Sci, Hermosa Bch, Cal
 Walker, Maude E, Unc, Ed.....Seattle
 Wall, George, UD, Ed.....Lacey
 Wallace, Allan E, Grad.....Seattle
 Wallace, Clara Louise, Grad.....Seattle
 Waller, Vera, LD, Ed.....Seattle
 Walsh, Catherine, Spec, Ed.....Seattle
 Walsh, William R, Spec, Bus.....Seattle
 Walter, G Avery, Prov, Grad.....Sunnyside
 Walton, Alice A, Spec, Sci, Kansas City, Kan
 Wang, Fuchow, Unc, LA.....China
 Wang, Jen-Ling, Unc, LA.....China
 Wann, Arva W, LD, Bus.....Seattle
 Ward, Alma M, UD, Ed.....Seattle
 Warren, Imogene C, Prov.....Seattle
 Warren, Tryphena, Spec, FA.....Bellingham
 Wasem, Weldon S, LD, Bus.....Seattle
 Watson, Anna E, Grad.....Seattle
 Watson, Eugenia, LD, Ed.....Paul, Ida
 Watson, Vesta H, Prov, Ed, Springdale, Ark
 Watt, Elsie, UD, Bus.....Seattle
 Weage, Avery D, Grad.....Seattle
 Weaver, Don, Unc, LA.....Seattle
 Weaver, Grace, Grad.....Seattle
 Weaver, Stanley R, LD, Bus.....Seattle
 Webster, Elisabeth, Grad.....Port Angeles
 Weeks, Gladys, UD, LA.....Shoshone, Ida
 Weeks, Patricia, Unc, Bus, Minneapolis, Minn
 Weinziir, Adolph, UD, Sci.....Seattle
 Weir, John A, Prov, Grad, Saskatoon, Can
 Welden, Carrie, UD, Ed.....Spokane
 Wells, Ernest, Grad.....Seattle
 Welty, John L, LD, Eng.....Seattle
 Welty, Leo D, Unc, Ed.....Apple Creek, Ohio
 Wenig, Edward J, Grad.....Seattle
 Werner, Winnifred, Grad.....Greenville, Mich
 West, Anelta, LD, Ed.....Seattle
 West, Earle Downs, Grad.....Seattle
 Westberg, Alma E, Grad, Kensington, Minn
 Westerberg, Ivar S, Grad.....Tacoma
 Wheeler, Marshall E, Spec, Bus, Seattle
 Whelpley, Bessie, LD, Ed.....Spokane
 Whitl, Margaret L, LD, Ed.....Eureka, Mont
 Whitcomb, Alice, UD, Ed.....Seattle
 White, Mrs Lyda A, LD, LA.....Seattle
 White, Mabel N, UD, Ed.....Everett
 White, Marie, UD, LA.....Seattle
 White, Myrtle, LD, Sci.....Seattle
 Whitehouse, Stuart, LD, LA.....Walla Walla
 Whitman, Avar, Grad.....Burton
 Whitmore, Ernest R, LD, Bus.....Buckley
 Whitney, Albert J, UD, LA.....Yakima
 Whittle, William B, Spec, Bus.....Seattle
 Wied, Ida Carol, Grad.....Wauapaca, Wis
 Wiegman, Hertha E, Unc, LA.....Spokane
 Wiegman, Marguerite, UD, Ed.....Seattle
 Wienr, Israel T, UD, LA.....Seattle
 Wilcox, Milo F, UD, Bus.....Seattle
 Wilkinson, Edward E, Grad.....Klabe
 Willard, Dorothy E, UD, LA.....Seattle
 Willard, Dudley, Grad.....Seattle
 Williams, Jessie B, LD, Ed.....Seattle
 Williams, Kenneth G, Spec, Bus.....Spokane
 Williams, Mary Louise, UD, Ed.....Seattle
 Williams, Ruth Jane, Unc, LA.....Kirkland
 Williams, Theresa M, Prov, Ed.....Seattle
 Williams, Weldon, Unc, Ed.....Opportunity
 Williams, William Owen, UD, Bus.....Seattle
 Williamson, Reba, UD, Sci.....Greybull, Wyo
 Williamson, Rupert W, Unc, Law, Filer, Ida

Wilson, Abe, LD, Bus.....Everett
 Wilson, Dorothy, Prov, Sci.....Seattle
 Wilson, Emma J, UD, LA.....Seattle
 Wilson, B Faye, Grad.....Toppenish
 Wilson, Faye A, UD, Ed.....Bellingham
 Wilson, Florence Aiden, Grad.....Seattle
 Wilson, Frances Imogen, Grad.....Bothell
 Wilson, Gretta M, LD, LA...St Joseph, Mo
 Wilson, Howard W, LD, Eng..Portland, Ore
 Wilson, Josie, Grad.....Lawrence, Kan
 Wilson, Lena E, Grad.....Seattle
 Wilson, Lucile H, LD, Sci.....Hoquiam
 Wilson, Maxie, LD, LA.....Seattle
 Wineberg, Anah C, Unc, Sci....Vancouver
 Winther, Sophus Keith, Grad...Eugene, Ore
 Wiseman, B Evangeline, Unc, Ed.....
 Witting, Arthur, LD, Eng.....
 Wolfe, Chia Chin, Spec, Bus.....China
 Wong, Elsie Nyuk Tain, UD, Sci...Hawaii
 Wong, Frank S, UD, Bus.....Seattle
 Wong, Fred C, LD, Sci.....China
 Wong, Walter, LD, Bus.....China
 Wood, Harold S, LD, Bus.....Sunnyside
 Woodbridge, Florence, UD, Bus.....Seattle
 Woodbridge, Frederick, Grad.....Seattle
 Woodrum, Florence, UD, Ed.....Seattle
 Woods, Dan L, UD, Sci.....Eugene, Ore

Woodside, James H, LD, Bus.....Seattle
 Woodward, Sibylla A, UD, LA.Granite Falls
 Woodworth, Earl G, UD, Bus.Vancouver, BC
 Woolridge, Roy, Grad.....Everett
 Wotherspoon, Gavin C, LD, FA....Seattle
 Wright, Annah, LD, LA.....Seattle
 Wright, George P Jr, LD, Bus....Tacoma
 Wright, Howard H, UD, Bus.....Everett

Xitco, Margaret C, Unc, Sci....Bellingham

Yerington, Myles, LD, Sci.....Omak
 Young, Albert C, LD, Sci.....Seattle
 Young, Dorothy Vail, UD, Ed....Tacoma
 Young, Kate E, LD, LA....Portland, Ore
 Young, La Verne, Grad.....Tacoma
 Young, William W, UD, LA.....Renton
 Yuasa, Yelnen, Auditor.....Japan

Zee, Ernest, UD, Bus.....China
 Zeller, William S, LD, Sci....Walla Walla
 Zimmerman, Chloe H, Grad...Sapulpa, Okla
 Zinn, Elma, LD, LA.....Seattle
 Zubert, Vernon, Unc, LA.....

PUGET SOUND BIOLOGICAL STATION—1922

Allen, Hazel.....	Los Angeles, Cal.	McMillin, Harvey C.....	Seattle
Altman, Luther C.....	Bellingham	Morgensen, Annie.....	Hastings, Neb.
Andrews, Harry L.....	Chicago, Ill.	Mullen, Doris.....	Seattle
Andrews, Orrel M.....	Wichita, Kans.	Myers, Margaret.....	Everson
Bechtel, Eva.....	Kansas City, Mo.	Moherman, Helen.....	Wellsville, Kans.
Bell, Ethel D.....	Eureka, Kans.	Moherman, Laura.....	Wellsville, Kans.
Blackburn, Glessie D.....	Stafford, Kans.	Oakley, Eldora V.....	Seattle
Carpenter, Pearl.....	Kansas City, Kans.	Oberholser, Ethel L.....	Seattle
Case, Ethel J.....	Spokane	Parke, Charles G.....	Seattle
Cavanaugh, Ruth Lois.....	Dighton, Kans.	Philpott, Charles H.....	Kansas City, Mo.
Chambers, Ava L.....	Seattle	Platt, Ruth E.....	Seattle
Cobb, Genevieve.....	Seattle	Follock, Barbara.....	Seattle
Covell, Walter P.....	Corvallis, Ore.	Fommerenke, Wesley T.....	Lawrence, Kans.
Coventry, Edwin J.....	Everett	Freacott, Gerald W.....	Eugene, Ore.
Cox, Teresa.....	Ontario, Ore.	Feuter, Alexia M.....	Seattle
Credwison, Beatrice.....	Portland, Ore.	Russell, Ruth W.....	Eugene, Ore.
Cunningham, Jeffrey.....	Victoria, B.C.	Sawyer, Dulza.....	Tacoma
Daugherty, Anna M.....	Seattle	Sawyer, Ruth E.....	Spokane
Dellinger, Mary.....	Everett	Shannon, Louesa.....	Seattle
Eigenbrodt, Harold.....	Campaign, Ill.	Sheldon, Sarah M.....	Seattle
Estep, Amy J.....	Seattle	Spilman, Marion A.....	McPherson, Kans.
Gamble, Helen M.....	Portland, Ore.	Stason, Maragret.....	Corvallis, Ore.
Gerhold, Ella M.....	Greeley, Kans.	Steele, Susie.....	Seattle
Gillis, Beasie.....	Garnett, Kans.	Stewart, Emma Jo.....	Portland, Ore.
Gregory, Marguerite.....	Kansas City, Mo.	Stone, Anna.....	Lawrence, Kans.
Harris, Ellis B.....	Spokane	Stover, Miriam.....	Seattle
Hartge, Lena A.....	Seattle	Talbott, Virginius.....	Friday Harbor
Hay, Marjorie.....	Seattle	Upton, Mina.....	Fredonia, Kans.
Henderson, Nell F.....	Seattle	vanOrsdall, Otie.....	Seattle
Hilen, Ethel.....	Seattle	vanWert, Mary C.....	Albany, Ore.
Holt, Vesta.....	The Dalles, Ore.	Wolcott, Grace.....	Topeka, Kans.
Homan, Marion.....	Hoquiam	Warner, Ruth.....	Seattle
Howard, Moretta.....	Portland, Ore.	Warner, William.....	Seattle
Jensen, Marian.....	Seattle	Way, Lois Edith.....	Seattle
Killarney, Margaret.....	Atchinson, Kans.	Wells, Dorothy.....	Seattle
Larrabee, Edward.....	Bellingham	Wells, Wayne W.....	Marshfield, Ore.
Leonard, Vida F.....	Urbana, Ill.	Wentworth, Maragret.....	Seattle
Lindquist, Irene.....	Seattle		

SHORT COURSE IN FISHERIES—1923

Baker, Warren B.....	Seattle	Korn, Robert Wade.....	Seattle
Burnette, Julian G.....	Seattle	Pierson, Harry W.....	Seattle
Caldwell, E. B.....	Seattle	Roth, Alexander.....	Seattle
Driver, Henna F.....	Seattle	Schlesser, Joseph.....	Seattle
Dybwad, P. F.....	Seattle	Williams, Jack B.....	Seattle
Funchion, James.....	Seattle	Wilson, Harry J.....	Seattle
Hawn, E. W.....	Charlestown		

SHORT COURSE IN FORESTRY—1923

Ackley, Julian.....	Friend, Ore.	Jones, Reginald.....	Seattle
Allman, N.....	North Vancouver, B.C.	McLeod, R. A.....	Leeburn, Ont. Canada
Berry, Carl M.....	Tacoma	Reneker, Chas. E.....	Seattle
Bevan, Jesse.....	Yale	Smith, Wm. H.....	Tygh Valley, Ore.
Dawson, J. C.....	New Denver, B.C.	Sones, J. E.....	Seattle
Forseth, Chas. E.....	Seattle		

WINTER MINING SESSION—1923

Brown, George.....	Nanaimo, B.C.	Huffman, J. L.....	Alderson, W. Va.
Egeness, Alexander.....	Reno, Nev.	Scott, Aretas.....	Seattle
Flood, Kenneth.....	Burnett, B.C.		

SUMMARY OF ENROLLMENT 1922-1923

BY SCHOOLS AND COLLEGES

SCHOOLS AND COLLEGES	SUMMER QUARTER			AUTUMN QUARTER	WINTER QUARTER	SPRING QUARTER	TOTAL
	1st T.	2nd T.	TOTAL				
	1	2	3				
Graduate ...	354	327	397	186	200	206	223
Men	165	159	189	100	109	114	111
Women	189	168	208	86	91	92	112
Liberal Arts	357	328	381	1401	1465	1869	1647
Men	122	123	131	490	561	510	608
Women	235	205	250	911	904	859	1039
Science	230	174	240	519	504	449	605
Men	84	79	90	213	221	179	262
Women	146	95	150	306	283	270	343
Bus. Admin.	242	226	250	1094	1103	942	1303
Men	216	199	222	941	966	815	1123
Women	26	27	28	153	137	127	180
Education	367	294	409	104	125	128	127
Men	102	76	107	30	41	30	35
Women	265	218	302	74	84	98	92
Engineering	82	78	85	616	622	509	763
Men	82	78	85	615	621	508	761
Women				1	1	1	2
Fine Arts	86	66	91	442	408	385	497
Men	24	21	25	74	63	76	84
Women	62	45	66	368	345	309	413
Fisheries	7	8	7	26	39	20	41
Men	7	8	7	25	37	19	39
Women				1	2	1	2
Forestry	11	12	11	105	134	98	147
Men	11	12	11	105	133	97	146
Women					1	1	1
Journalism	6	7	7	48	39	39	55
Men	4	5	4	21	24	20	28
Women	2	2	3	27	15	19	27
Law	57	46	64	149	144	138	161
Men	55	44	61	144	138	132	156
Women	2	2	3	5	6	6	5
Library Sci.	2		2	27	22	28	29
Men				2	2	2	4
Women	2		2	25	20	26	25
Mines	7	6	8	61	66	49	85
Men	7	6	8	61	66	49	85
Pharmacy	10	10	12	119	112	118	136
Men	8	8	8	92	89	80	103
Women	2	2	4	27	23	33	33
Total ..	1818	1582	1964	4897	4983	4473	5819

NOTE.—Columns 1, 2, 4, 5, and 6 represent census figures—i.e. the enrollment taken on a stated day within the first month of a term or quarter. Columns 3 and 7 show figures representing the number of individuals; column 3 the number registered during the summer quarter, column 7 the number registered during the regular academic year. For comparison with other institutions the figures in columns 3 and 7 should be used, as these are the customary catalogue figures.

SUMMARY OF ENROLLMENT 1922-1923

By CLASSES

CLASSES	SUMMER QUARTER			AUTUMN QUARTER	WINTER QUARTER	SPRING QUARTER	TOTAL
	1st T.	2nd T.	TOTAL				
	1	2	3	4	5	6	7
Graduates ..	365	385	410	230	245	252	288
Men	174	167	199	138	146	150	158
Women	191	168	211	98	99	102	125
Seniors	252	252	273	757	691	738	828
Men	142	133	148	450	400	403	498
Women	110	119	125	307	291	335	330
Juniors	438	387	488	802	843	832	933
Men	172	150	186	463	516	496	545
Women	261	237	302	339	327	336	388
Sophomores ..	305	298	315	1284	1268	1064	1499
Men	146	162	151	725	785	612	880
Women	159	136	164	559	483	452	619
Freshmen	250	165	258	1689	1766	1463	2073
Men	126	99	133	1024	1092	872	1284
Women	124	66	125	665	674	591	789
Specials	213	145	220	129	167	124	208
Men	127	107	131	113	132	98	178
Women	86	38	89	16	35	26	25
Total ..	1818	1582	1964	4897	4983	4473	5819

TOTAL STUDENTS IN RESIDENCE

During regular academic year.....	5819
During summer quarter.....	1964
	7783
Deduct summer quarter duplicates.....	778
	7005

EXTENSION STUDENTS

Correspondence	577
Men	316
Women	361
Extension Classes.....	1062
Men	286
Women	776
Total Extension.....	1639

NOTE.—The Extension Service enrolls students at any time during the twelve months. The figures given indicate the number actually studying by correspondence, or in extension classes during some part of the year beginning July 1, 1922.

NOTE.—Columns 1, 2, 4, 5, and 6 represent census figures—i.e. the enrollment taken on a stated day within the first month of a term or quarter. Columns 3 and 7 show figures representing the number of individuals; column 3 the number registered during the summer quarter, column 7 the number registered during the regular academic year. For comparison with other institutions the figures in columns 3 and 7 should be used, as these are the customary catalogue figures.

INDEX

- Absence, leave of, 68.
 Academic and vocational guidance, 55.
 Accredited schools, admission from, 44; list of, 44.
 Activities, student, 65, 66.
 Administration, officers of, 8; administrative boards, 25.
 Admission to the University, 41; by certificate, 42; on examination, 47; freshman standing, 42; as a special student, 45; unclassified standing, 48; advanced undergraduate standing, 46; of normal school graduate, 46; graduate standing, 47; requirements of different colleges, 43; to the Bar, 147; to extension courses, 274.
 Admission from accredited schools, 44.
 Admission to the Colleges of Liberal Arts, 70; Science, 77; Business Administration, 105; Engineering, 119; Fine Arts, 127; Fisheries, 136; Forestry, 143; Mines, 153; Pharmacy, 158; Schools of Education, 92; Library, 102; Journalism, 115; Law, 147; Graduate, 168.
 Admission, subjects recommended for, 43.
 Advanced standing, 47, 48.
 Aeronautical Engineering, 174.
 Alumni Association, 60.
 Anatomy, 174; laboratories, 30.
 Architecture, courses, 175; curricula, 130.
 Arts and Law curriculum (combined), 74, 148.
 Assistant Professors, 11.
 Associate Professors, 11.
 Associates, 12.
 Associations and clubs, 60; alumni, 60; associated students, 60; Christian associations, 60; department clubs, 61; religious and social, 61; debating, 61; musical, 61; philological, 61; honor, 61, 92, 112, 115; historical, 61; mining society, 152.
 Associated students, 60; fees, 50.
 Astronomy, courses, 178; laboratories, 30.
 Athletics, 66; for women, 66 (rule 48).
 Auditors, 49; fees, 51.
 Bacteriology, courses, 178; curriculum, 78.
 Bailey Babette Foundation for Child Welfare, 38.
 Bar, admission to the, 148.
 Bequests, 27.
 Bibliography, 277.
 Biological sciences, curriculum, 79.
 Biological station, 271.
 Board of Regents, 7.
 Botany, courses, 180; laboratory, 30.
 Buildings of University, 28; use of buildings, 67 (rule 51); officers, 10.
 B. R. Council, 113.
 Business Administration, College of, 104; faculty, 104; admission, 105; degrees, 39, 105; curricula, 106; courses, 193.
 Calendar, 6.
 Campus plan, 8, 27.
 Certificate of Proficiency for music supervisors, 126, 133; for winter session miners, 156.
 Ceramics, 182; laboratory, 35.
 Changes in registration, 50.
 Chemistry, courses, 182; curriculum, 79; laboratory, 31.
 Child Welfare, Bailey & Babette Gatzert Foundation, 38.
 Chinese (Oriental History), 245.
 Christian Associations, 60.
 Civil Engineering, 187.
 Classical Languages and Literature, 190.
 Classes, Saturday and evening, 92.
 Clubs, 60.
 College, definition of, 41.
 Committees: of the Board of Regents, 7; of the faculty, 24.
 Commons, University, 54.
 Conflicts, class, 68 (rule 50).
 Correspondence courses (Extension Service), 272.
 Courses, completion of, 50; definition of, 41.
 Credit, 41.
 Curricula, business administration, 106; education, 96; engineering, 121; fine arts, 127; fisheries, 138; forestry, 143; home economics, 84; journalism, 117; laws, 147; liberal arts, 74; library, 103; mines, 152; nurses, 84; pharmacy, 161; physical education, 87; pre-medical, 83; science, 77; special, 41.
 Curriculum, definition of, 40.
 Dally, special editions of, 65 (rule 37).
 Dean of Men, 55.
 Dean of Women, 55.
 Debate, 66 (rule 45); societies, 61.
 Deficiencies, 50 (rule 2).
 Definitions and Explanations, 40, 174.
 Degree, application for, 55 (rule 10).
 Degrees, honorary, 55; with honors, 56; two at the same time, 55 (rule 12).
 Degrees, 55; business administration, 39, 105; education, 39, 92; engineering, 39, 120; fine arts, 39, 126; fisheries, 39, 136; forestry, 39, 142; journalism, 39, 117; law, 39, 147; liberal arts, 39, 71; library, 40, 103; mines, 40, 151; pharmacy, 39, 161; professional degrees, 172; science, 39, 77; graduate, 40, 168.
 Degrees conferred, 283.
 Department Clubs, 60.
 Department, definition of, 41.
 Departments of Instruction, 175; aeronautical engineering, 175; anatomy, 175; anthropology, 176; architecture, 176; astronomy, 178; bacteriology, 178; botany, 180; ceramics, 182; chemistry, 183; civil engineering, 187; classical languages, 190; dramatic art, 192; economics and business administration, 193; education, 200; electrical engineering, 204; English, 206; fisheries, 210; forestry, 212; geology, 215; German, 218; history, 220; home economics, 223; journalism, 226; law, 228; liberal arts, 229; library science, 230; mathematics, 231; mechanical engineering, 233; military science, 235; metallurgy, 236; mining, 238; music, 240; nursing, 245; Oriental history, literature and languages, 245; painting, sculpture and design, 246; pharmacy, pharmaceutical chemistry, materia medica and food chemistry, 248; philosophy, 249; physical education and hygiene, 251; physics, 255; physiology, 268; political science, 256; psychology, 258; Rumanian languages, 259; Scandinavian languages, 263; sociology, 267; zoology, 269.
 Design, courses, 246; curriculum, 131.
 Diploma fee, 52.
 Discipline, 65.
 Directory of students, 303; summer quarter, 339.
 Dismissal, 63 (rule 23b).
 Doctor's degree, 170.
 Dormitories, University, 54.
 Dramatic art, courses, 192; curriculum, 133.
 Dramatic entertainments, 66.
 Economics, 193.
 Editorial Secretary's Office, 277.
 Editors of student publications, 65 (rule 36).

- Education, School of, 89; faculty, 89; requirements, 92; admission, 92; degrees, 89, 94; courses, 178; requirements for normal and life diplomas, 94.
- Eligibility for activities, 65 (rule 46); for public appearance, 64 (rules 40-48).
- Electrical Engineering, courses, 204; curriculum, 122; laboratory, 82.
- Endowment and support of the University, 25.
- Engineering, College of, 119; faculty, 119; degrees, 120; admission, 121; curricula, 121; courses, civil engineering, 187; mechanical engineering, 233; electrical engineering, 204; engineering experiment station, 37, 124.
- English, 206.
- Enrolment, Summary of, 352.
- Entrance Information, 42; deficiencies, 50 (rule 2).
- Equipment, 28.
- Excuses for absence, 63 (rule 22).
- Examination, entrance, 47; dates, 447; regular, 63; for exemptions in English, 47; absence from, 63; physical, 50.
- Extra and normal work, 50 (rules 3-8).
- Exemptions, 50; in English, 47.
- Expenses, A.S.U.W. fee, 50; board and room, 54; change of registration, 52; graduation fee, 54; laboratory deposits, 52; late registration fee, 52; law library fee, 52; library fee, 51; marine biological station, 52; military uniform deposits, 52; short course fee, 52; summer quarter fee, 52; special examinations, 52; tuition, 51; refunding of fees, 51; exemption from fees, 51; tutoring fees, 64.
- Extension Service, 274; faculty, 274; division of instruction, 274, 92.
- Faculty, in order of academic seniority, 11; alphabetical list, 15; professors, 11; associate professors 11; assistant professors, 11; associates, 12; instructors, 12; lecturers, 12; teaching fellows, 13; assistants, 13; library staff, 9.
- Fees, 51; refunds of, 51.
- Fellows, Arthur Denny, 14; Loretta Denny, 14; Dupont, 14; Research, 14.
- Fellowships and scholarships, 56; graduate fellowships, 57; Mars fellowship, 57; University teaching fellowships, 57; Columbia University fellowship, 57; Isabella Austin scholarships, 57; chemistry scholarship, 57; Rosenberg scholarship, 57; Washington alumnae scholarship, 57; Du Pont scholarship, 57; Imperial Order of the Daughters of British Empire scholarship, 57; awarded in 1921, 301.
- Financial obligations, 65 (rule 33).
- Fine Arts, College of, 125; faculty, 125; admission, 127; curricula, 127; degrees, 128; courses, architecture, 175; dramatic art, 192; painting and design, 246; music, 240; sculpture, 246.
- Fisheries, College of, 135; faculty, 135; degrees, 39, 136; curricula, 138; courses, 210; short course, 140, 339.
- Forestry, College of, 141; faculty, 141; admission, 142; degrees, 142; curricula, 142; courses, 212; short courses, 144, 351.
- Four Quarter System, 41.
- Fraternity and sorority pledging, 67.
- French (Romanic languages), 259.
- Freshman standing, admission to, 42.
- Geology, courses, 215; curriculum, 80; laboratory, 33.
- Germanic Languages and Literature, 218.
- Government of the University, 26.
- Grades, 64.
- Graduate Fellowships, 57; Loretta Denny, 56; Arthur Denny, 56; Bon Marche Industrial, 57; Du Pont, 57; mining and metallurgy research, 57; National research, 57; University honorary, 57.
- Graduate Medical Lectureship, 274.
- Graduate School, 164; faculty, 164; admission, 168; courses, see depts. of instruction; degrees, 38, 168; degrees conferred in 1921, 284.
- Graduation, candidates for, 55 (rule 10); requirements for, 55 (rule 11).
- Greek (Classical Languages), 190.
- Grounds, 28.
- Hazing, 66 (rule 50).
- Health Service, University, 54; officers, 10.
- Help, student, 54, 115.
- History, department of, 220; of University, 25.
- Home Economics, courses, 228; curricula, 84; fees, 53.
- Honor societies, 61.
- Hygiene (Physical Education), 251.
- Hyphens, course number connected by, 63, 173.
- Incomplete, definition of, 64, 66 (rule 40).
- Industrial Arts, 91.
- Infirmiry, University, 10, 54.
- Initiation, 67.
- Instructors, 12.
- Intercollegiate activities, 65.
- Italian (Romanic Languages), 259.
- Journalism, School of, 114; faculty, 114; admission, 115; curriculum, 117; courses, 226; laboratory, 33; fees, 53, 116.
- Laboratories, 30.
- Laboratory fees, 52.
- Late registration, 40.
- Latin (Classical Languages), 190.
- Law, School of, 146; faculty, 146; degrees, 147; courses, 228.
- Law and science course (combined), 83.
- Leave of absence, 63 (rule 22).
- Lecturers, 12.
- Liberal Arts, College of, 68; faculty, 68; admission, 70; curricula, 71; degrees, 74; courses, see Departments of Instruction.
- Library, The, 28; staff, 9; law library, 148; pharmacy library, 161.
- Library School, 102; faculty, 102; admission, 103; curricula, 103; courses, 230; fees, 51; rules, 64.
- Library privileges, 53 (rule 15c).
- Life diplomas, 94; granted, 301.
- Loan funds, 59.
- Lockers, 53.
- Lower Division, Requirements of the, 71.
- Map of the University Grounds, 3.
- Marine Biological Station, 271.
- Maritime commerce, 109.
- Mars fellowship, 57.
- Master's degree, 170.
- Mathematics, courses, 231; curriculum, 80.
- Medical Lectureship, 274.
- Memorial Library (Frederick Churchill), 115.
- Mentors, 118.
- Metallurgy, 286.
- Military Science, rules on, 62; prizes for, 57; courses, 235.
- Mine Safety Station, 37.
- Mines, College of, 150; faculty, 150; admission, 153; curricula, 153; courses, 238; laboratory, 35; winter session, 156, 351.
- Mining and metallurgical fellowships, 57.
- Miscellaneous rules, 66.
- Museum, 28.
- Music, courses, 240; curricula, 127.
- Musical organizations, 61.
- Normal Diplomas, 56, 94; granted, 286.
- Normal School Graduates, admission of, 46, 94; list of, 286.
- Normal and extra work, 50 (rules 3-8).
- Nursing, 245; curriculum, 84.

- Officers of Administration, 8.
 Organization of the University, 39.
 Organization of student body, 60.
 Oratorical contests, 66 (rule 45).
 Outside work, 50 (rule 7).
 Oriental History, Literature and Languages, 245.
 Painting, Sculpture and Design, courses, 246; curricula, 130.
 Pharmacy in Washington, Requirements to practice, 159.
 Pharmacy, College of, 158; faculty, 158; admission, 161; curricula, 163; degrees, 162; courses, 248; laboratories, 36.
 Philological association, 61.
 Philosophy, 249.
 Physical Education and Hygiene, 251; courses for men, 249; courses for women, 251; curricula, 87.
 Physical Examinations, 50.
 Physics, courses, 255; laboratories, 36.
 Physiology, 268.
 Political Science, 256.
 Positions for graduates, 55.
 Prizes in public speaking and debate, 58; for essays, 58; for Italian, 58; for Latin, 58; for French, 58; for military science, 59; for Chinese literature, 59; for architecture and design, 59; awarded in 1921, 301.
 Pre-medical curricula, 38.
 Probation, 63 (rule 23); 66 (rule 47).
 Professional degrees, 173.
 Professors, 11.
 Psychology, courses, 258; curriculum, 80; laboratories, 36.
 Public Speaking and Debate (Dramatic Art), 102.
 Publications, 115, 277; student, 65.
 Puget Sound Biological Station, 271; students, 351.
 Register of Students, 1921-1922, 303; of summer quarter, 338; or short course students, 351.
 Registration, 49; changes in, 49; late, 49.
 Regulations for withdrawals, 62.
 Requirements for bachelor's degree, 55 (rules 9-14).
 Romanic Languages, 259.
 Rules and Regulations on absence, leave of, 63; activities, student, 65, 66; athletics for women, 65; auditors, 49; buildings, use of, 65; change of grade, 63; class conflicts, 66; completion of courses, 50; credits, not recorded, 64; debate, 65; degrees, application for, 55; degrees, two at the same time, 56; discipline, 65; dramatic entertainments, 65; editors of student publications, 65; eligibility, 65; entrance deficiencies, 50; examinations, 63; residence defined, 55; scholarship standing, 62; senior year, work of, 55; senior scholars, 55; smoking, 66; social functions, 67; sororities, 67; speakers for student organizations, 66; special editions of the Daily, 65; theses, 55; tutoring rates, 64; withdrawals, 62; work unsatisfactory, 63.
 Saturday classes, 92.
 Scandinavian, 263.
 Scholars, senior, 56.
 Scholarships, 56; granted, 301.
 Scholastic requirement, 42; withdrawal, 62; scholarship standing, 61; grades, 64.
 School, definition of, 41.
 Schools, secondary, 45.
 Science, College of, 75; faculty, 75; admission, 77; curricula, 77; degrees, 77; courses (see Departments of Instruction).
 Science and law course combined, 83.
 Science, general curriculum, 78.
 Sculpture, 246.
 Senior examinations, 64 (rule 28).
 Senior year, work of, 55.
 Senior Scholars, 56, list of, 293.
 Short courses in Fisheries, 140; Forestry, 144; Mines, 156; students, 351.
 Smoking, 66 (rule 49).
 Social functions, 66 (rules 52-53).
 Sociology, 264.
 Sororities, 67 (rule 54).
 Spanish (Romanic Languages), 259.
 Speakers, 65 (rule 51b).
 Special Students, 48.
 Standing, freshmen, 42; unclassified, 48; special student, 48; advanced undergraduate, 48; graduate, 47.
 State Chemist, 10.
 Station of the U. S. Forest Service, 10.
 Student Fee (see Expenses), 50.
 Student Loan Funds, 59.
 Student Help, 53, 115.
 Studies, 62.
 Summary of Enrollment, 352.
 Summer Quarter, 269; registration, 270; admission, 270; fees, 270; students, 338.
 Summer Quarter Law School, 149.
 Teaching Fellows, 13.
 Theses, 58 (rule 14).
 Tuition (see Expenses), 50.
 Tutoring rates, 64.
 Unclassified Students, 48.
 Unit, definition of, 41.
 University Commons, 54.
 U. S. Army Reserve Officers' Training Corps, 9.
 U. S. Bureau of Mines Northwest Experiment Station, 367.
 Upper Division, requirements of the, 73.
 Vocational guidance, 55.
 Vocational Secretary's office, 55.
 Washington University State Historical Society, 61.
 Work, unsatisfactory, 63 (rule 23); extra, 50 (rules 3-8).
 Withdrawal, 62.
 Winter Session, Mines, 156, 351.
 Zoology, courses, 269; laboratory, 37.