

# CATALOGUE

UNIVERSITY OF WASHINGTON  
FOR 1923-1924

ANNOUNCEMENTS  
FOR 1924-1925

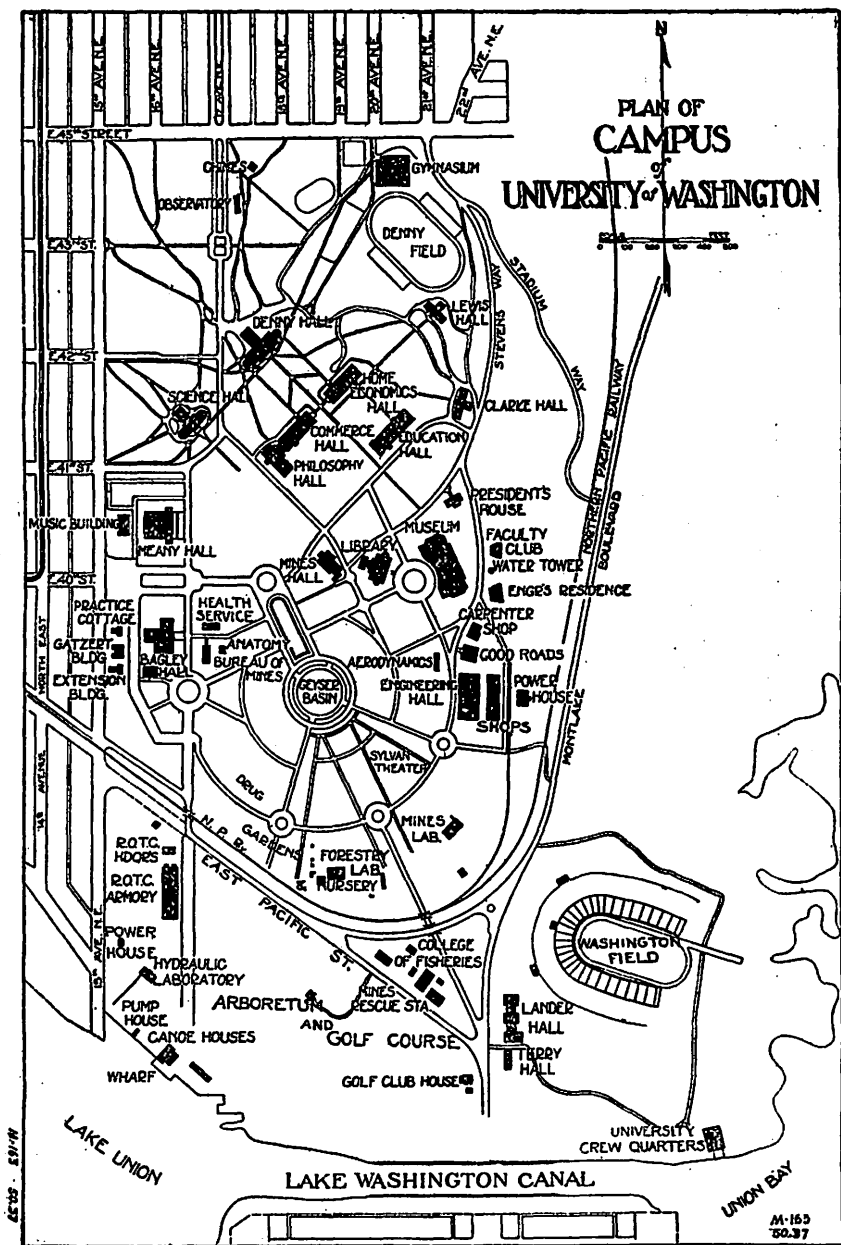


SEATTLE, WASHINGTON

Seattle  
University of Washington Press  
1924

### **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.



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## THE UNIVERSITY CALENDAR

1924-1925

### AUTUMN QUARTER

Examinations for admission, and for exemption from Freshman  
English...Wednesday, Thursday, and Friday, September 24, 25, and 26  
Consultation day.....Monday, September 29  
Registration day.....Tuesday, September 30  
Instruction begins.....Wednesday, October 1, 8 a.m.  
Regular Meeting of the Faculty.....Tuesday, October 21, 4 p.m.  
Thanksgiving recess begins.....Wednesday, November 26, 6 p.m.  
Thanksgiving recess ends.....Monday, December 1, 8 a.m.  
Regular meeting of the Faculty.....Tuesday, December 16, 4 p.m.  
Examinations for admission.....Wednesday, Thursday and Friday,  
December 17, 18, and 19.  
Instruction ends.....Friday, December 19, 6 p.m.

### WINTER QUARTER

Consultation day.....Monday, January 5  
Registration day.....Tuesday, January 6  
Instruction begins.....Wednesday, January 7, 8 a.m.  
Regular Meeting of the Faculty.....Tuesday, January 27, 4 p.m.  
Washington's Birthday (holiday).....Monday, February 23  
Regular Meeting of the Faculty.....Tuesday, March 10, 4 p.m.  
Examinations for admission.....Monday, Tuesday, and Wednesday,  
March 23, 24 and 25.  
Instruction ends.....Wednesday, March 25, 6 p.m.

### SPRING QUARTER

Consultation day.....Monday, March 30  
Registration day.....Tuesday, March 31  
Instruction begins.....Wednesday, April 1, 8 a.m.  
Campus day.....Friday, April 17  
Regular Meeting of the Faculty.....Tuesday, April 21, 4 p.m.  
Memorial day (holiday).....Saturday, May 30  
Regular Meeting of the Faculty.....Tuesday, June 9, 4 p.m.  
Examinations for admission.....Wednesday, Thursday, and Friday,  
June 10, 11 and 12.  
Instruction ends.....Friday, June 12, 6 p.m.  
Class Day and Alumni Day.....Saturday, June 13  
Baccalaureate Sunday.....Sunday, June 14  
Commencement.....Monday, June 15

### SUMMER QUARTER

Consultation day.....Tuesday, June 16  
Registration day.....Wednesday, June 17  
Instruction begins.....Thursday, June 18, 8 p.m.  
Independence day (holiday).....Saturday, July 4  
First term ends, second term begins.....Friday, July 24  
Instruction ends.....Friday, August 28, 6 p.m.

## THE BOARD OF REGENTS

JAMES H. DAVIS, President.....	Tacoma
Term ends March, 1928	
WINLOCK W. MILLER, Vice-President.....	Seattle
Term ends March, 1926	
ROGER R. ROGERS.....	Spokane
Term ends March, 1926	
WERNER A. RUPP.....	Aberdeen
Term ends March, 1927	
OSCAR A. FECHTER.....	Yakima
Term ends March, 1928	
RUTH KARR McKEE.....	Kelso
Term ends March, 1929	
GEORGE DONWORTH.....	Seattle*
Term ends March, 1929	
JOHN T. HEFFERNAN.....	Seattle**
Term ends March, 1929	

WILLIAM MARKHAM, Secretary to the Board

\*Resigned, June 1, 1924.

\*\*Appointed June 16, 1924.

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## COMMITTEES OF THE BOARD OF REGENTS

BIOLOGICAL STATION.....	Davis (chairman), Fechter, Rogers
BUILDINGS AND GROUNDS.....	Miller (chairman), Rupp, Davis
COOPERATIVE SERVICES.....	Heffernan (chairman), McKee, Davis
FINANCE.....	Rogers (chairman), Miller, Heffernan
LANDS AND DEMONSTRATION FOREST.....	Rupp (chairman), Fechter, McKee
METROPOLITAN LEASE.....	Fechter (chairman), Rupp, Miller
STUDENT WELFARE.....	McKee (chairman), Rogers, Heffernan

## 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 MACKAY 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

## OFFICERS OF ADMINISTRATION

9

### ASSISTANT ADMINISTRATIVE OFFICERS

LILLIAN BROWN GETTY.....	Secretary to the President
JAMES GARFIELD FLETCHER, A.B.....	Alumni Secretary
JAMES MATTHEW O'CONNOR, JR., A.B.....	Editorial Secretary
MAY WARD, A.M.....	Assistant Dean of Women
MAX HIPKOB .....	Assistant Purchasing Agent
WILLIAM BEACH JONES, A.B.....	Cashier
AIMEE WILSON.....	Secretary to the Comptroller
SARA 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
ROBERTA W. LIMBACH.....	Chief Clerk, Bureau of Appointments
<i>Anna McCullough</i>	<i>Assistant Cashier</i>

### 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.
ARTHUR BEARDSLEY, LL.B. B.S. (Lib. Sci.) (Washington).....	Law Librarian
MARIA ALPHONSO, A.B. (Nebraska).....	Catalogue Librarian
MARGUERITE PUTNAM, A.B., B.S. (Lib. Sci.) (Washington).....	Order and Accession Librarian
IDA WILSON, A.B. (Nebraska).....	Circulation Librarian
EMMA PRAEL McDONNELL, A.B. (Washington).....	Pedagogical Librarian
THELMA EDWARDS, A.B., B.S., (Lib. Sci.) (Washington).....	First Assistant Catalogue Librarian
JESSIE HOTSON, A.B. (California).....	First Assistant Order and Accession Librarian
MARIE SNEED, A.B., B.S. (Lib. Sci.) (Washington).....	First Assistant Circulation Librarian
ELVA BATCHELLER, A.B., B.S. (Lib. Sci.) (Washington).....	First Assistant Reference Librarian
LIDIA MCCUTCHEON, A.B. (Iowa) (Washington Library School).....	Second Assistant Reference Librarian.
LUELLA LARSON, B.S., A.B., (Lib. Sci.) (Washington).....	Second Assistant Catalogue Librarian
DOROTHY BAKER, A.B., B.S. (Lib. Sci.) (Washington).....	Second Assistant Circulation Librarian.
LOUISE HOWARD.....	Third Assistant Catalogue Librarian
EDGAR ROBINSON, A.B. (Toronto).....	Third Assistant Reference Librarian

### THE MUSEUM

FRANK STEVENS HALL.....	Director of the Museum
SAMUEL F. RATHBUN.....	Honorary Curator of Birds
MARTHA FLAUGHAUT, A.B.....	Assistant

### THE EXTENSION SERVICE

ALEXANDER CRIPPEN ROBERTS, Ph.D.....	Director
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### ENGINEERING EXPERIMENT STATION

CARL EDWARD MAGNUSSON, Ph.D. E.E.....	Director
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### PUGET SOUND BIOLOGICAL STATION

THEODORE CHRISTIAN FRYE, Ph.D.....	Director
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### UNITED STATES ARMY RESERVE OFFICERS' TRAINING CORPS

JAMES FRANCIS BRADY.....	Colonel, C.A.C.
OTTO HARRY SCHRADER.....	Major, C.A.C.
ARTHUR EUGENE ROWLAND.....	Major, C.A.C.
KEITH SUMNER GREGORY.....	Major, U.S.A. Retired
MILLARD FILLMORE HARMON.....	Major, Air Service
EDGAR HARRISON UNDERWOOD.....	Captain, C.A.C.

## UNIVERSITY OF WASHINGTON

WILLIAM ALLAN HALE.....	Captain, Infantry
HAROLD RAGAN PRIEST.....	Captain, Infantry
JOHN EDWARD NOLAN.....	First Lieutenant, Infantry
BRYAN SEWALL HALTER.....	Second Lieutenant, Infantry
CHARLES BENTON FRANKE.....	Warrant Officer, U.S.A., Retired
HARRY BARRE WHITE.....	Warrant Officer, U.S.A.
EARL THOMAS.....	Staff Sergeant, D.E.M.L.
EMIL H. WUNDERLICH.....	Quartermaster Sergeant, U.S.A. Retired
WALTER LANG.....	Sergeant, D.E.M.L.
CHARLES BOYLE.....	Sergeant, D.E.M.L.
RAY A. BAILEY.....	Sergeant, D.E.M.L.
HARRY BECKETT.....	Sergeant, D.E.M.L.
IRA M. HULL.....	Sergeant, D.E.M.L.
CHARLES E. FREEMAN.....	Private First Class, D.E.M.L.
PATRICK J. MAUGHAN.....	Private First Class, D.E.M.L.

## 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. LARSON, M.S.....	Junior Metallurgist
HAROLD E. MESSMORE, M.S.....	Junior Chemist

## STATE CHEMIST

CHARLES WILLIS JOHNSON, Ph.C., Ph.D.....State Chemist

## UNITED STATES VETERANS' BUREAU REHABILITATION DIVISION

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

## BUILDINGS AND GROUNDS

FREDERICK ELWELL .....Superintendent

## 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
MINNIE BELL BURDON, M.D.....	Medical Examiner for Women
MAUDE REEDER, R.N.....	Resident Nurse
MARY E. SHIAOH, R.N.....	Public Health 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 MEANT  
J. ALLEN SMITH<sup>1</sup>  
CAROLINE HAVEN OBER  
JOHN THOMAS CONDON  
TREVOR KINCAID  
FREDERICK MORGAN PADELFORD  
MILNOR ROBERTS  
WILLIAM SAYERY  
FREDERICK ARTHUR OSBORN  
DAVID THOMSON  
CHARLES WILLIS JOHNSON  
PIERRE JOSEPH PERIN  
THEODORE CHRISTIAN FRYE  
ROBERT EDOUARD MORITZ  
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  
CHARLES CHURCH MORE  
HENRY KERTZER BENSON  
JOHN WEINZEL  
HUGO WINKENWERDER  
VERNON LOUIS PARBINGTON  
FREDERICK ELMER BOLTON  
EDWIN JOHN VICKNER  
EFFIE ISABEL RAITT  
WILLIAM FRANKLIN ALLISON

STEVENSON SMITH<sup>2</sup>  
WILLIAM PIERCE GORSUCH<sup>3</sup>  
CLARK PRESCOTT BISSETT  
ALLEN ROGERS BENHAM  
LESLIE JAMES AYER  
FRED CARLETON AYER  
JOHN NATHAN COBB  
WILLIAM MAURICE DEHN  
HOWARD WOOLSTON<sup>4</sup>  
MATTHEW LYNN SPENCER  
GEORGE MCPHAIL SMITH  
BURT PERBONS KIRKLAND  
HOWARD THOMPSON LEWIS  
JAMES EDWARD GOULD  
CHARLES EDWIN WEAVER<sup>5</sup>  
ERIC TEMPLE BELL  
GEORGE WALLACE UMPHREY  
CARL FRIELINGHUYSEN GOULD  
JOHN LOCKE WOODBSTER  
HOWARD HALL PRESTON  
EDGAR DUNNINGTON RANDOLPH  
EDGAR ALLEN LOEW  
JOSEPH DANIELS<sup>6</sup>  
FRIEDRICH KURT KIRSTEN  
WINNIFRED SUNDERLIN HAGGETT  
WILLIAM DANIEL MORIARTY  
ELIAS TRENT CLARK  
WILLIAM EDWARD COX  
HERBERT ELLSWORTH COBT  
CARL SPENCER DAKAN  
JAMES FRANCIS BRADY  
JAMES PRINGLETON LICHTENBERGER

### ASSOCIATE PROFESSORS

LOREN DOUGLAS MILLMAN  
THOMAS KAY SIDEX  
EDWARD MCMAHON  
CHARLES WESLEY SMITH  
GEORGE SAMUEL WILSON  
OTTO PATZER<sup>7</sup>  
CHARLES WILLIAM HARRIS  
EDWARD GODFREY COX  
ALLEN FULLER CARPENTER  
HENRY LOUIS BRAKEL  
GEORGE BURTON RIGG  
HARRY EDWIN SMITH  
ARTHUR MELVIN WINSLOW  
HARRY RUBEY  
CHARLES GOGGIO  
RODERICK DUNCAN MCKENZIE  
ROBERT MAX GARRETT<sup>12</sup>

HERMAN VANCE TARTAR  
ROY MARTIN WINGER  
MORITZ ROSEN  
ALBERT FRANZ VENINO  
CARL PAIGE WOOD  
ELDIN VERNÉ LYNN  
HENRY AUGUST LANGENHAN  
WALTER ISAACS  
MACY MILMORE SKINNER  
THOMAS GORDON THOMPSON  
ROBERT WILLIAM JONES  
RALPH WARNER HAMMETT  
CARL RAYMOND FELLERS  
CHARLES RAYMOND ATKINSON  
ARTHUR DOUGLAS DEPOS<sup>8</sup>

1. Died Jan. 30, 1924.
2. Absent, 1923-24.
3. Died Jan. 11, 1924.
4. Absent Fall Quarter, 1923-24.
5. Absent Spring Quarter, 1923-24.
9. Winter Quarter, 1923-24.
12. Died July 8, 1924.

## ASSISTANT PROFESSORS

EDWIN JAMES SAUNDERS  
 GEORGE IRVING GAYETT  
 ELI VICTOR SMITH  
 HARVEY BRUCE DENSMORE  
 CLARENCE RAYMOND COREY  
 GRACE GOLDENA DENNY  
 FRED WASHINGTON KENNEDY  
 ERNEST OTTO ECKELMAN  
 CHARLES LOUIS HELMALINGE  
 JOHN WILLIAM HOTSON  
 THERESA SCHMID MCMAHON  
 LOUIS IRVING NEIKIRK  
 FRANCES DICKET  
 SAMUEL HERBERT ANDERSON  
 SERENO BURTON CLARK  
 CURT JOHN DUCASSE  
 BROR LEONARD GRONDAL  
 EDWIN RAY GUTHRIE<sup>2</sup>  
 VIRGINIA CUNNINGHAM PATTY  
 HEWITT WILSON  
 MARY EMMA GROSS  
 IRA LEONARD COLLIER  
 GEORGE EDWARD GOOSPEED  
 CHARLES CULBERTSON MAY  
 JOHN CHARLES RATHBUN<sup>2</sup>  
 CURTIS TALMADGE WILLIAMS

JOSEPH BARLOW HARRISON  
 MARTHA KOEHNE  
 JAMES GEORGE ARBUTHNOT  
 HORACE GUNTHERP  
 PAUL WASHINGTON TERRY  
 KEITH SUMNER GREGORY  
 LOUIS PETER DE VRIES  
 LESLIE SPIER<sup>2</sup>  
 HENRY STEPHEN LUCAS<sup>4</sup>  
 JAKOB AALL OTTESEN LARSEN  
 HAROLD PRIEST  
 WILLIAM ALLAN HALE  
 LOUISE VAN OGLE  
 GORDON RUSSELL SHUCK  
 HOMER EWART GREGORY<sup>11</sup>  
 ADDIE JEANETTE BLISS<sup>4</sup>  
 EDGAR HARRISON UNDERWOOD  
 ARTHUR EUGENE ROWLAND  
 GILBERT SIMON SCHALLER  
 MILLARD FILLMORE HARMON  
 OTTO HARRY SCHRAEDER  
 FORD KEELER BROWN  
 PRIMITIVO ELIO SANJULJO  
 AUGUST DVORAK  
 RACHEL EMILIE HOFFSTADT  
 JOHN EARL GUBERLET

## LECTURERS AND ASSOCIATES

JOSEPH GRATTAN O'BRYAN  
 FREDERICK POWELL  
 CONRAD ZIMMERMAN  
 LILIAN BLOOM  
 JAMES WEHN  
 EUGENE WORMAN  
 AMBROSE PATTERSON  
 ETHEL SANDERSON RADFORD  
 MARJORIE WHIPPLE PETERSON  
 JAMES MCCONAHEY  
 WILLIAM BENNETT HENDERSON  
 PAMELIA JONES  
 SYLVIA KERRIGAN<sup>4</sup>  
 BERTHA ALMEN VICKNER  
 EBBA DAHLIN  
 EARL WEST  
 ELIZABETH SOULE  
 CLARENCE EDMUNDSON  
 CARL ZENO DRAVES  
 CLYDE MYRON CREAMLET  
 RACHEL ELIZABETH HAMILTON  
 ENOCH BAGSHAW  
 FRANK CHESTER VAN DE WALKER  
 ALEXANDER CRIPPTEN ROBERTS  
 JAMES POSTLEWAIT ROBERTSON  
 PEARCE CRANE DAVIS  
 ARTHUR RUDOLPH JERBERT  
 CORNELIUS OSSEWARD  
 GERTRUDE KRAFFT  
 GUSTAF ALFRED MAGNUSSON<sup>6</sup>  
 NORMAN LEE BURTON

IVY BUCHANAN  
 RUSSELL STANLEY CALLOW  
 GEORGE SMITH  
 DORSETT GRAVES  
 JANE SORRIE LAWSON  
 JAMES MATTHEW O'CONNOR, JR.  
 ALICE COLEMAN BOGARDUS  
 MARIE ALPHONSO  
 MARGUERITE PUTNAM  
 OSCAR ELDRIDGE DRAPER  
 ALFRIDA STORM  
 ALBERT LOVEJOY  
 MARJORIE FORCHEMER  
 WILLIAM GRIFFITH  
 HAZEL MARIE HAUCK<sup>7</sup>  
 JOHN BUTLER  
 ERNA GUNTHER SPIER<sup>8</sup>  
 SARAH VIRGINIA LEWIS  
 ARLIEN JOHNSON  
 LUELLA VENINO  
 CLARA BELL LYNCH  
 WAYNE CAMPBELL SUTTON  
 ANDREW HAUC<sup>9</sup>  
 DANIEL HUNTINGTON<sup>8</sup>  
 OTTIS BEDNET SPERLIN  
 MINNIE BELL BURDON  
 HOMER WHEELON<sup>9</sup>  
 ROSAMOND ADAMS<sup>9</sup>  
 HELEN JACKSON HUBBELL<sup>6</sup>  
 FREDERICK WELLS WOODBRIDGE<sup>8</sup>

## INSTRUCTORS

WALTER BELL WHITTLESEY  
 FRANK JOSEPH LAUBE  
 ALLETTA GILLETTE  
 ALBERT PORTER ADAMS

ANNETTE EDENS  
 JAMES BAKER HAMILTON  
 MARTHA DRESSLER<sup>10</sup>  
 FOREST JACKSON GOODRICH

2. Absent 1923-24.
4. Absent Fall Quarter, 1923-24.
6. Fall Quarter, 1923-24.
7. Oct. 1, 1923 to Feb. 1, 1924.
8. Fall and Winter Quarters, 1923-24.
9. Winter Quarter, 1923-24.
10. Absent Oct. 1, 1923 to Feb. 1, 1924.
11. Spring Quarter, 1923-24.



## INSTRUCTORS (Continued)

CLINTON LOUIS UTTERBACH  
 CLARENCE LOUIS ANDERSON  
 RALPH MASON BLAKE  
 GEORGE KIRCHNER  
 WILLIAM RONALD WILSON  
 HARRY JOHN MCINTIRE  
 JOSEPH TAYLOR  
 LOU EASTWOOD ANDERSON  
 EILENE FRENCH  
 GLENN ARTHUR HUGHES  
 KARL ELIAS LEIB  
 RUTH MARGARET LUSBY  
 WILLARD HENRY ELLER  
 SARGENT POWELL  
 HENRY STAGER  
 BYRON TOWNE MCMINN  
 ROBERT HAROLD EDMONDS  
 GINO VINCENT MEDICI DE SOLENNI  
 GEORGE LISLE HOARD  
 CLARENCE LESTER WHITE  
 ELGIN ROSCOE WILCOX  
 MARY LAURA AID  
 FRANK HARTMOND HAMACK  
 OMBGA HILTON NELSON  
 GEORGE SHERMAN SMITH  
 ADA TILLEY  
 BRYAN SEWALL HALTER

JOHN EDWARD NOLAN  
 WILLIAM RUSSELL  
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 HELEN FEERTMAN  
 JOHN VICTOR FARRAR  
 HELEN RHODES  
 MARCUS ALBERT HANNA  
 DONALD RUSSELL CRAWFORD  
 LEO ARTHUR BORAH  
 HERBERT AMIL WALDKOENIG  
 WARREN LORD BEUSCHLIN  
 HERMANC MULLMEISTER  
 WALDO SEMON  
 RAYMOND FOREST FARWELL  
 RUFUS BRELAND  
 FLORENCE MAY MORSE  
 HENRY LADD  
 SAMUEL DEMOSS  
 ARTHUR HERBERMAN  
 ALFRED LAWRENCE MILLER  
 EDWARD PUGH PRICE  
 LYALL BAKER COCHRAN  
 ROBERT ALEXANDER HUESTIS<sup>8</sup>  
 SERGIUS AMALLETT<sup>9</sup>  
 HIRAM MARTIN CHITTENDEN, JR.<sup>9</sup>  
 HOPE LUCILLE FOOTE  
 HUGH MCDOWALL CLOKIE<sup>11</sup>

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MAXINE WILKES, B.S. .... Botany  
 MARGARET MYERS, B.S. .... Botany  
 LENA HARTGE, B.S. .... Botany  
 LAURA ANGST, A.B. .... Botany  
 ANNA COLLINS, A.M. .... Botany  
 CONSTANCE WEST, B.S. .... Chemistry  
 CECIL WEST, B.S. .... Chemistry  
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 JAMES BROWNING, Ph.B. .... Business Administration  
 RALPH MERRILL RUTLEDGE, M.S. .... Business Administration  
 ALTHA PERRY CURRY, J.D. .... Business Administration

8. Fall and Winter Quarters, 1923-24.

9. Winter Quarter, 1923-24.

11. Spring Quarter, 1923-24.

## TEACHING FELLOWS (Continued)

NETTINA STROBACH, (Emerson College)	Dramatic Art
ARNE JENSEN, A.B.	Education
SOPHUS WINTHELL, A.M.	English
EDWIN FORD, A.B.	English
JEAN LAMBERT, A.B.	English
GERDA OKERLUND, A.B.	English
MARGARET RAINE, A.B.	English
MELVIN LEVY, A.B.	English
LOUISE PARKER, A.B.	English
FREDERICK BLAENHBY, A.B.	English
ALFRED WARD, B.S.	Geology
CAROLINE ECKELMAN, A.B.	German
LOIS GRIFFITHS, B.S.	Mathematics
MARGARET THOMAS, B.S.	Mathematics
HAROLD WATT, B.B.A.	Mathematics
DOROTHY GASTON, B.S.	Pharmacy
HELEN EHEIM, B.S.	Pharmacy
HARRY SHOEMAKER, B.S.	Pharmacy
HARRIET SNIDOW, B.S.	Pharmacy
ORIS SANDUSKY, A.B.	Philosophy
SARAH BROWN, A.B.	Philosophy
CHARLES BATLIS, A.B.	Philosophy
FLOYD CAVE, A.B.	Political Science
JOEL BERKMAN, A.B. (Educ.)	Political Science
NANCY BAYLEY, B.S.	Psychology
GEORGE VETTER, B.S. (For.)	Psychology
GLADYS STRONG, A.B.	Psychology
WILLIAM WILSON, B.S.	Physics
GEORGE KRETCHMAR, B.S. (E.E.)	Physics
KERSTEN NEWBERY, B.S.	Physics
DAVID REINHOLD ANSELM, B.S.	Physics
DOROTHY CHESLEY, A.B.	Romanic Languages
ROBERT TURNER, A.B.	Romanic Languages
ELIZABETH MACDONALD, A.B.	Romanic Languages
JOHN ALBIG, A.M.	Sociology
ANDREW LIND, A.B.	Sociology
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CLAIR HANNUM, B.S.	Zoology
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## GRADUATE SCHOLARS

EDWARD KONGSLE, B.B.A.	Business Administration
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## RESEARCH FELLOWS

HENRY CLAY FISHER, B.S.	Mining (Metallurgy)
GORDON JEFFERS, B.M.	Mining (Metallurgy)
JOHN ANSDEN NUOKOLS, B.M.	Mining (Coal Washing)
ALBERT CAMERON RICHARDSON, B.S.	Mining (Coal Washing)
CARL EDWIN WOOD, B.S. (Ch.E.)	Mining (Ceramics)

## LORETTA DENNY FELLOWS

CECILIA CUTTS, A.B.	Greek
ELIAS THORLEIF RUUD ARNESEN A.B. A.M.	English
ROY DAVIDSON MCLELLAN, A.B. M.S.	Geology

## ARTHUR A. DENNY FELLOWS

CLARENCE CORLEON GREEN, A.B.	English
DUDLEY WILSON WILLARD, B.Ed. A.M.	Education
JAMES ORIN OLIPHANT, A.B.	History
GEORGE HERBERT NEEDHAM, B.S.	Pharmacy
WALLACE THORBERN, B.S. (Ch.E.)	Ceramic Engineering

## DUPONT FELLOWSHIP

MELVILLE FLETCHER PERKINS, B.S. (Ch.E.)	Chemistry
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## BON MARCHE INDUSTRIAL FELLOWSHIP

HAZEL MARIE HAUCK

COLUMBIA UNIVERSITY FELLOWSHIP IN MINING ENGINEERING AND CHEMISTRY  
(Not yet awarded)

## ALPHABETICAL LIST OF THE UNIVERSITY FACULTY

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- 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.
- 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.
- CHARLES CULBERTSON MAY.....Assistant Professor of Civil Engineering  
B.S., (C.E.), Washington, 1910.
- EDMOND STEPHEN MEANTY.....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.
- ALFRED LAWRENCE MILLER.....Instructor in Civil Engineering  
B.S., (C.E.), Washington, 1920.
- 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.....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.
- FLORENCE MAY MORSE.....Instructor in Business Administration  
A.B., Colorado, 1910; A.M., 1912.
- HERMANOE MULLMEISTER.....Associate in Mathematics  
Phil.Cand., Royal University of Utrecht, Holland, 1910; Ph.D., 1913.
- LEWIS IRVING NEIKIRK.....Assistant Professor of Mathematics  
B.S., Colorado, 1898; M.S., 1901; Ph.D., Pennsylvania, 1903.
- OMEGA HILTON NELSON.....Instructor in Pharmacy  
Ph.C., Washington, 1915; B.S., 1917; M.S., 1921.
- JOHN EDWARD NOLAN.....First Lieutenant, Inf., D.O.L.,  
Instructor in Military Science and Tactics  
A.B., St. Joseph's College, 1909.
- 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.
- MARJORIE WHIPPLE PETERSON.....Associate in Chemistry  
A.B., Colorado, 1917; M.S., Washington, 1924.
- FREDERICK POWELL.....Lecturer on Gold Dredging  
E.M., Columbia.
- SARGENT POWELL.....Instructor in Chemistry  
B.S., M.S., Washington, 1916; Ph.D., Illinois, 1919.
- EDWARD PUGH PRICE.....Instructor in Electrical Engineering  
B.S., (E.E.), Texas, 1921; M.S., (E.E.), Illinois, 1923.
- 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.
- MARGUERITE PUTNAM.....Associate in Library Science  
A.B., Washington, 1921; B.S., 1923.
- ETHEL SANDERSON 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.....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.D., 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.P.A.
- 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 RUERTY.....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.
- PRIMITIVO ELIO RODRIGUER SANJURJO.....Acting Assistant Professor of Romanic Languages  
B.L., Instituto de Orense, 1894; LL.B., Salamanca, 1900.
- 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.....Assistant Professor of Shop Engineering  
B.S., Illinois, 1916.
- OTTO HARRY SCHRADER.....Assistant Professor of Military Science and Tactics  
B.S., (E.E.), Purdue, 1908.
- WALDO SEMON.....Instructor in Chemistry  
B.S., Washington, 1920; Ph.D., 1923.
- GORDON RUSSELL SHUCK.....Assistant Professor of Electrical Engineering  
E.E., Minnesota, 1906.
- THOMAS KAY SIDNEY.....Associate Professor of Latin and Greek  
B.A., Toronto, 1891; Ph.D., Chicago, 1900.
- MACY MILMORE SKINNER.....Associate Professor of Business Administration  
A.B., Harvard, 1894; A.M., 1895; Ph.D., 1897.
- 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 MCPHAIL SMITH.....Professor of Inorganic Chemistry  
B.S., Vanderbilt, 1900; Ph.D., Freiburg, 1903.
- GEORGE SHERMAN SMITH.....Instructor in Electrical Engineering  
B.S., (E.E.), Washington, 1916; E.E., 1924.
- 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 LYLE 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.
- OTTIS BEDNEY SPERLIN.....Lecturer on English  
A.B., Indiana University, 1903; Ph.M., Chicago, 1908.
- ERNA GUNTHER SPIER.....Associate in Anthropology  
A.B., Barnard, 1919; A.M., Columbia, 1920.

- 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., Stanford, 1902; A.M., 1906; Ph.D., California, 1909.
- ALFRED STORM.....Associate in Design  
Columbia
- WAYNE CAMPBELL SUTTON.....Associate in Physical Education  
A.B., Washington, 1915.
- 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.....Associate 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.
- 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; M.B.A., Washington, 1923.
- LOUISE VAN OELS.....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 Leschetizky.
- LUELLA VENINO.....Associate in Music  
Leschetizky.
- EDWIN JOHN VICKNER.....Professor of Scandinavian Languages  
A.B., Minnesota, 1901; A.M., 1902; Ph.D., 1905.
- BERTHA ALDEN VICNER.....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 WEINZIRL.....Professor of Bacteriology  
B.S., Wisconsin, 1896; M.S., 1899; Ph.D., 1906; Dr.P.H., Harvard, 1918.
- EARL DOWNS WEST.....Associate in Mathematics  
A.B., Ohio State College, 1900; A.M., Adrian College, 1908.
- HOMER WHEELSON.....Lecturer on Psychology  
A.B., Washington, 1911; M.S., St. Louis University, 1916; M.D., 1918.
- CLARENCE LESTER WHITE.....Instructor in Civil Engineering  
B.S., (C.E.), Iowa, 1909; C.E., 1914.
- WALTER BELL WHITTLESLEY.....Instructor in French  
A.B., Washington, 1907; A.M., 1909.
- 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, 1918.
- WILLIAM RONALD 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.
- FREDERICK WELLS WOODBRIDGE.....Associate in Business Administration  
B.B.A., Washington, 1922; M.B.A., 1923.
- 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

1924-1925

### ADMINISTRATIVE BOARDS

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

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

**EXTENSION**.....A. C. Roberts, Thomson, Landes, Bolton, W. E. Cox, Raitt, H. T. Condon

**STUDENT DISCIPLINE**.....Deans Landes, Magnusson, Thomson, Profs. W. E. Cox, Lantz

**SCHEDULE AND REGISTRATION**—Stevens, Stone, Wilson, McIntyre, Rigg, Tartar, Terry, Sidey, Draper, Dressalar, Saunders, Wood, Carpenter, 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, C. Gould, J. E. Gould, Hughes, Patterson

**ASSEMBLY**.....Spencer, Winger, Glen, Hughes

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

**CURRICULUM**—Cobb, Johnson, Bolton, Loew, E. T. Clark, Spencer, Henry, Benson, L. J. Ayer, Corey, Patzer, Dakan, Wood, A. C. Roberts, Stone.

**ENTRANCE EXAMINATIONS**.....Stone, A. C. Roberts, Terry, R. E. Hamilton

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

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

**JUNIOR COLLEGES AND RELATIONS WITH SECONDARY SCHOOLS**—Bolton, Thomson, Padelford, Frye, Frein, E. McMahon, Stone.

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

**MEMORIAL SERVICES**.....Carpenter, Glen, Gowen, Meany, Henry, Raitt, H. T. Condon

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

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

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

**PUBLICATIONS**.....Henry, Padelford, Magnusson, Spencer, Frye, Kennedy, O'Connor

**RULES**.....Benham, Goodner, Bell, More, Haggett, J. E. Gould, Stone

**SPECIAL STUDENTS**.....J. E. Gould, Stone, and dean of college concerned

**STUDENT AFFAIRS**—Thomson, Winkenwerder, Padelford, J. E. Gould, Ward, Daniels, McMahon, Loew, Gross, and eight representatives of student organizations.

**STUDENT HEALTH**.....Hall, J. E. Gould, Haggett, Weinzirl, Worcester

**STUDENT WELFARE**.....J. E. Gould, Haggett, More, Raitt, Carpenter, W. E. Cox

**RHODES SCHOLARSHIPS**.....Densmore, Harrison, Larsen, Brown, Cole, Quainton

**WASHINGTON UNION**.....Meany, J. T. Condon, Landes, Thomson, Lewis, 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, 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 is under construction, and a Women's Building is contemplated as funds become available. A new forestry building, the gift of Mrs. Alfred H. Anderson, to be known as the Alfred H. Anderson Memorial Hall, also is under construction and will be completed during the next biennium.

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 136,885 volumes, and receives 900 current magazines. About 6,000 volumes are being added each year.

The library of the Law School contains more than 28,000 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 type, 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 are also 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 archaeology 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 archaeology 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 laboratories fully equipped for work in anatomy, astronomy, botany, chemistry, (including separate laboratories devoted to general chemistry, analytical chemistry, food inspection and analysis, physiological, industrial and pharmaceutical chemistry), geology, psychology, physics and zoology.

#### ENGINEERING LABORATORIES

*Chemical Engineering.*—A thoroughly modern fireproof building houses the chemical laboratories. Fully equipped separate laboratories are devoted to general chemistry, analytical chemistry, food inspection and analysis, organic chemistry, physiological chemistry, industrial chemistry, 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 the 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.*—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.*—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.

*Mechanical Engineering.*—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.

#### 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 has a constant temperature of approximately 98° Fahrenheit, and in it samples of canned fishery products can 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 are also 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 collection 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, gas pump, gas tank, hygrodeik, 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, coop-

erage, 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 \$50,000 to \$75,000 annually on a sustained yield basis. It is expected that title to the tract will be completed in the near future. Negotiations for completing title to this tract for the University are being temporarily held up. It is hoped they may be taken up again during this year.

#### 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.

#### MINING, METALLURGICAL AND CERAMIC LABORATORIES

*Mining, Ore Dressing, Metallurgy.*—Mines Hall contains the offices, library, classrooms, drafting rooms and museum, the 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, and illustrative exhibits. The 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. The arrangement of the machinery permits a gravity flow throughout. The mill is in constant use for testing ores.

*Ceramics and Coal Washing.*—The Mines Laboratory contains ceramic equipment, offices and class rooms. The apparatus may be used for both manufacturing and testing ceramic products. 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. 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 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 thermo-couple, radiation, and optical pyrometers and fired with both gas and oil.

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 for 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.

The building also contains fuel and analytical laboratories for the College of Mines and the U.S. Bureau of Mines, a room for conducting float-and-sink 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. 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

In addition to its general laboratories the department of physics is rapidly equipping the Bureau of Testing to meet the demand for accurate calibration and testing of scientific instruments. Standards of the bureau are 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.

#### 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 located near Laurelhurst boulevard. 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.

#### 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 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 College 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 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 41-43 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, 1924 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 either by (a) raising his grades by passing the regular "make-up" examinations of his school, or (b) 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 46).

#### 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 scholarship requirement outlined above and presents fifteen units\* of credit, distributed as follows:

- (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).

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\*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.

- \*\* (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 at least 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 student 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.

##### *College of Fine Arts*

3 units of English.  
1 unit of algebra.  
1 unit of plane geometry.  
\*\*2 units in one foreign language.

1 unit in one of the following: physics, chemistry, botany, zoology.  
1 unit in a history or  $\frac{1}{2}$  unit in U. S. history, and  $\frac{1}{2}$  unit civics.

---

\*\*A student who has not taken in high school the amount of foreign language required for admission to the college he plans to enter, 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 Business Administration*

- |                           |   |
|---------------------------|---|
| 3 units of English.       | 2 units of history. (May include civics and economics.) |
| 1 unit of algebra.        | 1 unit of typewriting.                                  |
| 1 unit of plane geometry. |   |

*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.                          | 1 unit of plane geometry. |
| 1½ units of elementary and advanced algebra. | 1 unit of physics.        |

(Students planning to take Forestry are advised to take solid geometry and botany in high school.)

*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 one of the following: physics, chemistry, botany, zoology, physiology, general biology. (Must include satisfactory amount of laboratory work.) |
| 1 unit of algebra.                 |  |
| 1 unit of plane geometry.          |  |
| ††2 units in one foreign language. |  |

*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 pages 44, 45)

## ACCREDITED SCHOOLS

The list of accredited secondary schools in the State of Washington is as follows for the year 1924-1925:

## I. Public High Schools

Aberdeen	Burlington (U. H.)	Davenport	Everett
Adna	Burton (U. H.)	Dayton	Fairfield
Albion (U. H.)	Camas	Deer Park	Fall City
Almira	Cashmere	Deming (Mt. Baker H.S.)	Farmington
Anacortes	Castle Rock	Dixie	Ferndale
Anatone	Centerville	Doty	Fife
Arlington	Centralia	Dryad	Foster
Asotin	Chehalis	Duvall	Friday Harbor
Auburn	Chelan	East Mill Plain (U. H.)	Garfield
Battle Ground	Cheney	Eatonville	Gig Harbor
Bellingham	Chewelah	Edison	Goldendale
Whatcom	Chimacum	Edmonds	Grandview
Fairhaven	Clarkston	Edwall	Granger
Bickleton	Cle Elum	Ellensburg	Granite Falls
Black Diamond	Colfax	Elma	Greenacres (Vera H. S.)
Blaine	Colville (U. H.)	Endicott	Hamilton
Bothell	Connell	Entiat	Harmony
Bremerton (U. H.)	Coulee City	Enumclaw	Harrington
Bridgeport	Coupeville	Ephrata	Hartline
Brewster	Cowiche		
Buckley	Creston		

††A student who 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 and Pharmacy, 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 any 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.

Hillyard	Monroe	Raymond	St. John
Hoquiam	Montesano	Reardan	Sultan (U. H.)
Hunter	Morton	Redmond	Sumas
Ilwaco	Mossy Rock	Renton	Sumner
Ione	Mount Vernon (U.H.)	Republic	Sunnyside
Issaquah	Moxee	Richland	Tacoma
Kalama	Naches City	Richmond Beach	Lincoln
Kapowsin	Napavine	Ridgefield	Stadium
Kelso	Naselle	Ritzville	Tekoa
Kennewick	Newport	Riverside	Tenino
Kent	Northport	Rochester	Thorpe
Kettle Falls	Nooksack	Rockford	Tieton
Kirkland (U.H.)	(Victory H. S.)	Rosalia	Toledo
Kittitas (U. H.)	North Bend	Roslyn	Tonasket
Klamber (Boitsfort	Oakesdale	Roy	Tolt (U. H.)
H. S.)	Oak Harbor	Seattle	Toppenish
La Conner	Oakville	Ballard	Touchet
La Crosse	Odessa	Broadway	Twisp
Lake Stevens	Okanogan	Franklin	Two Rivers
Langle	Olympia	Garfield	Vader
Latah	Omak	Lincoln	Valleyford
Leavenworth	Oroville	Queen Anne	Vancouver
Lebam	Orting	Roosevelt	Vashon
Lind	Otis Orchard	West Seattle	Walla Walla
Lower Naches	Outlook	Sedro-Woolley	Wapato
Lynden	Pateros	Selah	Washougal
Mabton	Palouse	Sequim	Washtucna
Malden	Pasco	Shelton	Watsville
Mansfield	Pe Ell	Skykomish	Waverly
Maple Valley	Pomeroy	Snohomish	Wenatchee
Marcus	Port Angeles	Snoqualmie	White Bluffs
Marysville	Port Orchard (So.	South Bend	White Salmon
Mead	Kitsap H. S.)	Spangle	Wilbur
Medical Lake	Poulsbo	Spokane	Wilson Creek
Menlo	Port Townsend	Lewis and Clark	Winlock
Meridian (U. H.)	Prescott	North Central	Winslow
Kent, R. 1.	Prosser	Orchard Avenue	Woodland
Meridian, Ferndale,	Pullman	Sprague	Yacolt
R. 1.	Puyallup	Stanwood	Yakima
Millwood	Quincy	Steptoe	Yelm
Molson	Rainier	Stevenson	Zillah

## II. Other Secondary Schools in Washington

Annie Wright Seminary, Tacoma.	St. Dominic's Academy, Everett.
Aquinas Academy, Tacoma.	St. James Cathedral High School, Seattle
Forest Ridge Convent, Seattle (provisional).	(provisional).
Gonzaga High School, Spokane.	St. Martin's College, Lacey (high school
Holy Names Academy, Seattle.	department).
Holy Names Academy, Spokane.	St. Nicholas School, Seattle.
Moran School, Rolling Bay.	St. Paul's Academy, Walla Walla (pro-
Pacific Lutheran Academy, Parkland.	visional).
Seattle Pacific College, Seattle (academy).	Walla Walla College Academy, Walla Walla
Seattle College, Seattle.	(provisional).
Spokane College, Spokane (preparatory de-	Y. M. C. A., Seattle (high school depart-
partment) (provisional).	ment) (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 admission to 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 work completed at the normal school; the minimum amount accepted as a year's work being thirty-six weeks of attendance with at least forty-five quarter credits; not more than nineteen of which shall have been earned in one quarter.

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 quarter 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.

## UNIVERSITY OF WASHINGTON

## 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 23, 24, 25; September 24, 25, 26; and December 17, 18, 19, 1924; March 23, 24, 25; June 10, 11, 12; and July 22, 23, 24, 1925. 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
	Trigonometry	Spanish	Commercial
		History other than U. S.	Vocational

Entrance examinations will also be held on request at the following points in the state, on July 22, 23, and on September 3, 4, 1924:

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 41).

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 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 and the dean of the college concerned.

#### UNCLASSIFIED STANDING

If a graduate of a four-year accredited secondary school meets the scholarship requirements outlined on page 41 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.

#### ADMISSION OF SPECIAL STUDENTS

Special students are students of mature years who have not had the opportunity to complete a satisfactory high school course but who, by reason of special attainments, may be prepared to undertake certain courses, though not as candidates for degrees.

No person less than twenty-one years of age will be admitted to the status of special student, but it is specifically emphasized that mere attainment of any given age does not constitute adequate qualification for admission to this status.

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 during the previous year.

The graduates of an accredited high school are not admitted as special students, but are expected to qualify for regular undergraduate standing in accordance with the general rules.

The University has no "special courses"; all courses are organized for regular students—that is, students who have had the equivalent of a good high school education and have been fully matriculated. Special students are admitted to these regular courses for which, in the judgment of the instructor, they have satisfactory preparation.

Entrance examinations in the subjects of fundamental importance for the work proposed will be assigned in all cases in which the Committee on Special Students deems such examinations advisable.

All available certified records 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, he 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.

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.

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.

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

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.

#### FOREIGN STUDENTS

Students from approved schools in foreign countries will be admitted under the same general conditions as those from American schools, provided they have a sufficient working knowledge of English to enable them to carry regular college work successfully.

#### REGISTRATION

Registration for all students for the autumn quarter will take place on Monday and Tuesday, September 29 and 30, 1924; for the winter quarter on Tuesday, January 6, 1925; for the spring quarter, Tuesday, March 31, 1925 and for the summer quarter, Wednesday, June 17, 1925.

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 students 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.

## MEDICAL EXAMINATIONS

All students entering the University for the first time are required to present themselves for appointment for medical examinations, on or before the day following registration, men to the infirmary and women to the department of physical education for women in the gymnasium.

## 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.

tration 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.*

**Transcript Fee.**—One transcript of record is furnished the student without charge; a fee of \$.50 is charged for each additional transcript.

#### LABORATORY FEES AND DEPOSITS

The following laboratory fees and deposits will be collected quarterly during the ensuing year, 1924-25. 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
200 To be arranged.	
Architecture—112, 113, 114.....	1.00
54, 55, 56, 104, 105, 106, 154, 155, 156.....	3.00
Astronomy—1 .....	1.00
Bacteriology and Pathology—4, 101, 102.....	4.00
104, 105, 106, 111, 112, 204, 205, 206.....	5.00
Botany—1, 2, 3, 11, 12, 13, 14, 53, 70, 101, 105, 106, 107, 111, 140, 141, 142, 180, 181, 182, 190, 191, 192, 200, 233, 250, 251, 271, 272, 273 .....	2.00
119, 143, 144, 145, 279, 280.....	3.00
Ceramics—180, 193 .....	5.00
110, 191, 192.....	10.00
121, 122, 123.....	12.00
Chemistry—All courses except 52, 116, 117, 118, 173, 175, 200, 221, 222, 223, 224, 225, 231, 232, 233.....	6.50
176, 178, 250 to be arranged.	
Breakage Ticket.....	\$5.00
Desk Key.....	\$5.00
Civil Engineering—1, 4, 21, 22, 23, 24, 27, 30, 38, 55, 56, 126, 142, 167..	2.00
Dramatic Art—104, 105, 106.....	3.00
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
150, 285, 286, 287.....	2.50
196, 197, 198—\$2.50 payable first quarter, thereafter \$.50 a quarter.	
Electrical Engineering—132, 141, 181, 196, 198.....	2.00
102, 110, 112, 122, 162, 164.....	4.00
Engineering Shops—52, 53, 54, 55, 105, 106, 107, 115, 120.....	2.00

Fisheries—53, 54, 55, 101, 102, 103, 104, 105, 112, 140, S.C. 8, S.C. 9, S.C. 11, S.C. 12, S.C. 13.....	3.00
106, 107, 108, 130, S.C. 7.....	4.00
150, 151, 152, 155, 156, 157, 201, 202, 203, 205, 206, 207 to be arranged.	
Food Preservation—120, 160, 161, 162, 165, S.C. 14.....	4.00
170, 171, 172, 180, 181, 182, 230, 231, 232, to be arranged.	
Forestry and Lumbering—1, 5, 51, 52, 53, 57b, 58, 101, 102, 104, 105....	2.00
S.C. 186, 187, 188, 189, 213, 214, 215.....	3.00
Geology—11, 112, 113.....	1.00
1, 2, 21, 105, 120, 123, 124, 131, 132.....	2.00
Home Economics—8, 43, 101, 102, 190.....	2.00
25, 112, 113, 121, 127, 133, 135, 143, 183, 188.....	3.00
4, 5, 9, 105, 106, 107, 108, 116, 120.....	6.00
207, 208, 209, \$1.00 a credit hour.	
204, 205, 206, \$2.00 a credit hour.	
Journalism—61, 90, 91, 92, 138, 160.....	\$ 1.00
51, 101, 115, 120, 130, 131, 133, 136, 140, 170, 171, 172, 173, 174, 175	2.00
(Maximum fee for any one student \$2.50 per quarter)	
Library Science—Text Book Fee—One or more courses except course 1 per quarter.....	1.50
Lockers—Anatomy, Chemistry, Education, Engineering, Home Econ- omics, and Mines Buildings, a year.....	.50
Mathematics—(Statistics 13) .....	1.00
Mechanical Engineering—83, 151, 152, 153,, 167.....	2.00
Metallurgy—103, 163, 191, 192, 193.....	5.00
102 .....	10.00
153, 160 .....	12.00
101 .....	20.00
Mining—101, 151, 191, 192, 193.....	5.00
152, 176 .....	10.00
Music—18, 19, 20, 68, 69, 70, 118, 119, 120, 168, 169, 170, as listed below:	
Adams, Canfield, Ferryman, Oliver, 1 lesson a week.....	15.00
2 lessons a week.....	30.00
Venino, Van Ogle, Rosen, Tilley, Lynch, Kirchner, Wood, Bogardus, 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.....	3.00
(Key deposit—\$1.00)	
Pipe Organ, an hour a day for the quarter.....	12.50
(Key deposit—\$1.00)	
Nursing—5 .....	1.00
Painting, Sculpture and Design—5, 6, 7, 9, 10, 11, 52.....	1.00
53, 54, 55, 56, 57, 58, 103, 104, 157, 158.....	2.00
72, 73, 74, 107, 108, 109, 116, 117, 118, 122, 123, 124, 160, 161, 162.	3.00
Pharmacy—15 .....	1.00
9, 10, 11.....	3.00
7 .....	4.50
1, 2, 3, 5, 6, 113, 114, 115, 195, 196, 197.....	6.50
201, 202, 203, to be arranged.	



Physical Education—174, 175 (Swimming).....	2.50
87, 88 (Golf).....	3.00
All other P.E. courses, or combination of P.E. courses other than those listed above.....	.50
Combination 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, 103, 113, 126, 206.....	2.00
114 .....	4.00
54, 115 .....	5.00
Psychology—1 .....	1.00
Sociology—1 .....	1.00
Zoology and Physiology—1, 2, 3, 4, 5, 6, 7, 54, 55, 60, 61, 101, 106, 107, 108, 121, 155, 156, 157.....	2.00
111, 115 .....	2.50
151, 152, 153.....	3.00
201, 202, 203 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 one physician and two nurses. Medical advice and office treatment are available during school hours.

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 62.)

**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.

*Bureau of Appointments.*—This office assumes the responsibility of all placement work. It is desirable that every student have a conference with the secretary sometime before graduation. The office is available to undergraduates for the purpose of advisement. 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 toward 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 sub-

ject, 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 therefore 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 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 an annual fellowship of \$700 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.

*Mu Phi Epsilon Scholarship.*—Mu Phi Epsilon, national honorary musical sorority, offers a scholarship of one lesson a week for a school year, in either voice, violin, cello or organ. (See College of Fine Arts.)

*The Climax Locomotive Company Scholarship in Forestry.*—The Seattle branch of the Climax Locomotive Co. offers an annual scholarship of \$100. The award is to be made on the basis on self-dependence, scholarship and wholesomeness of influence to a student majoring in forestry.

#### 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 Buty Prize.*—The Frank Buty 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.

*The Charles Lathrop Pack Prize.*—Charles Lathrop Pack, president of the American Tree Association, offers an annual prize of \$50 for the best essay by a student majoring in forestry. The subject shall be chosen with reference to interesting the general public in forestry matters.

*Northern Clay Company Prize.*—The Northern Clay Company offers a prize of \$150 for an article illustrating the best use of color in a building.

#### 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. 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 1922-23 the business transacted amounted to \$260,000, 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 1922 the sales amounted to \$163,237.06.

*Christian Association.*—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); Associated 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); Atelier (Architecture); Xi Sigma Pi (Forestry, Men);

*Washington University State Historical Society.*—The Washington University State Historical Society has for its purpose the preservation of historical 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 excuse 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 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 failing to make grades of A, B, or C in two-thirds of his registered hours for any quarter shall be warned.

(c) 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.

(d) 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.

(e) Any student who, at the end of any academic year, has failed to make grades of A, B, or C in at least two-thirds of his registered hours for the year shall be dropped.

(f) Reinstatement of a student disqualified under the provisions of Rule 23 shall be allowed only on permission of the board of deans. If a student is re-instated, he shall be on probation and shall register under conditions prescribed by his dean, who shall be his registering officer.

(g) 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. Such a student shall remain on probation until he has made grades of A, B, or C in at least two-thirds of a normal schedule for one quarter.

(h) 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 or D.....	Intermediate
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. The two-week limit may be extended to three weeks in those cases in which a student has obtained a regular leave of absence from his dean. (This provision for extension of time shall not apply to one-term summer courses.) An Incomplete in a course is convertible into a passing grade, only during the next quarter in which the student is in residence, and provided the work of the course shall have been finished in a satisfactory manner. 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.

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.

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\*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.

## 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	.90 " "
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 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. Have presented fifteen (15) Carnegie units for entrance requirements. This provision shall not apply to students regularly registered for credit in Mus. 17, 10, 11 and 12, 28, 29 and 30.
3. Be registered for at least twelve hours' work in a regular or special course as defined in the curriculum of his school or college.
4. 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.
5. Not have a total of failures on his previous record, in this or any other institution, exceeding one-fifth of his total hours earned.
6. Keep off probation.
7. Secure a written leave of absence, if his absence from classes is required by participation.

(b) An incomplete shall not be counted as failure or passed until adjusted.

(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, Y.M.C.A. and Y.W.C.A. presidents, 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, as defined in Rule 38, shall remain eligible, scholastically, for the remainder of the season of participation; 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 inter-collegiate athletic activity, a student must:

1. Comply with the foregoing general rules of eligibility.
2. 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 freshman teams.
3. Have completed thirty-six (36) quarter hours of scholastic work, and earned passing credits therefor.
4. 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.
5. Pass any physical tests set by the department of physical education.
6. 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 part 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 "scholastic credits" or provisional credits in two quarters, or 15 in one quarter, at this University. Credits or provisional credits for work taken to remove entrance conditions and not counted as college credit may not be applied. (Provisional credits are those given on successful completion of one quarter's work in a course running through two or three quarters. Such credit becomes final when the entire course is complete.)

(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.

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 1924-25

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 of the College of Liberal Arts
FRED CARLTON ATSE, 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 the School of Education
HERBERT E. CORT, 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
HOWARD THOMPSON LEWIS, A.M. (Wisconsin).....	Professor of Economics and Dean of the College of Business Administration
EDMOND STEPHEN MBANY, M.L. (Wisconsin).....	Professor of History
WILLIAM DANIEL MORIARTY, Ph.D. (Michigan).....	Professor of Economics and Business Administration
ROBERT EDWARD MORITZ, Ph.D. (Nebraska), Ph.N.D. (Strassburg).....	Professor of Mathematics
CAROLINE HAVEN OBER.....	Professor of Spanish
FREDERICK MORGAN PADELFORD, Ph.D. (Yale).....	Professor of English; Dean of Graduate School
VERNON LOUIS PARRINGTON, A.B. (Harvard), A.M. (Emporia).....	Professor of English
HOWARD HALL PRESTON, Ph.D. (Iowa).....	Professor of Economics and Business Administration
EFFIE ISABELL RAITT, M.A. (Columbia).....	Professor of Home Economics
EDGAR DUNNINGTON RANDOLPH, Ph.D. (Columbia).....	Professor of Education
OLIVER HUNTINGTON RICHARDSON, Ph.D. (Heldelberg).....	Professor of European History
ALEXANDER C. ROBERTS, Ph.D. (Washington).....	Professor of Education
WILLIAM SAYERT, Ph.D. (Harvard).....	Professor of Philosophy
STEVENSON SMITH, Ph.D. (Pennsylvania).....	Professor of Psychology
OTIS BEDNEY SPERLIN, Ph.M. (Chicago).....	Lecturer on English
GEORGE WALLACE UMPHREY, Ph.D. (Harvard).....	Professor of Romanic Languages
EDWIN JOHN VICKNER, Ph.D. (Minnesota).....	Professor of Scandinavian Languages
HOMER WHEELON, M.D. (Saint Louis).....	Lecturer on Psychology
HOWARD B. WOOLSTON, Ph.D. (Columbia).....	Professor of Sociology
*CHARLES EMANUEL MARTIN, Ph.D. (Columbia).....	Professor of Political Science
ALLEN FULLER CARPENTER, Ph.D. (Chicago).....	Associate Professor of Mathematics
EDWARD GODFREY COX, Ph.D. (Cornell).....	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 KAY SIDET, Ph.D. (Chicago).....	Associate Professor of Latin and Greek
MAOT MILMORE SKINNER, Ph.D. (Harvard).....	Associate Professor of Economics and Business Administration
ROY M. WINGER, Ph.D. (Johns Hopkins).....	Associate Professor of Mathematics
WILLIAM HENRY GEORGE, Ph.D. (Harvard).....	Associate Professor of Political Science
GRACE GOLDENA DENNY, A.M. (Columbia).....	Associate Professor of Home Economics
CURT JOHN DUCASSE, Ph.D. (Harvard).....	Associate Professor of Philosophy
ADDIE JEANNETTE BLISS, A.M. (Columbia).....	Assistant Professor of Home Economics
FORD KEELER BROWN, A.B. (Washington).....	Assistant Professor of English
HARVEY BRUCE DENSMORE, A.B. (Oxford).....	Assistant Professor of Greek
LOUIS PETER DEYRIES, Ph.D. (Wisconsin).....	Assistant Professor of Romanic Languages
AUGUST DVORAK, Ph.D. (Minnesota).....	Assistant Professor of Education
ERNEST OTTO ECKELMAN, Ph.D. (Heldelberg).....	Assistant Professor of German
GEORGE IRVING GAVETT, B.S. (Michigan).....	Assistant Professor of Mathematics

\*Absent on leave 1924-1925.



EDWIN RAY GUTHRIE, Ph.D. (Pennsylvania).....	Assistant Professor of Psychology
JOSEPH BARLOW HARRISON, A.B. (Oxford).....	Assistant Professor of English
CHARLES LOUIS HELMLINGE, A.M. (Washington).....	Assistant Professor of Romanic Languages
MARTHA KOEHNKE, A.M. (Ohio State).....	Assistant Professor of Home Economics
HENRY S. LUCAS, Ph.D. (Michigan).....	Assistant Professor of History
JAKOB A. O. LARSEN, A.M. (Oxford).....	Assistant Professor of History
THERESA SCHMID McMAHON, Ph.D. (Wisconsin).....	Assistant Professor of Economics
LEWIS I. NEIKIRK, Ph.D. (Pennsylvania).....	Assistant Professor of Mathematics
VIRGINIA C. PATTY.....	Assistant Professor of Home Economics
PRIMITIVO R. R. SANJURJO, LL.B. (Salamanca)....	Acting Assistant Professor of Romanic Languages
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
FRANK LAUBE, A.M. (Washington).....	Assistant Professor of Political Science
GLENN ARTHUR HUGHES, A.M. (Washington).....	Assistant Professor of English and Dramatic Art
READ BAIN, A.M. (Oregon).....	Lecturer on Sociology
JOSEPH HALL, A.B. (George Washington University)....	Lecturer on Oriental Languages
CLYDE MYRON CRAWLEY, M.S. (Washington).....	Associate in Mathematics
EBBA DAHLIN, A.M. (Washington).....	Associate in History
RACHEL HAMILTON, A.M. (Washington).....	Associate in French
ARTHUR R. JERBERT, M.S. (Washington).....	Associate in Mathematics
ARLIEEN JOHNSON, M.A. (Columbia).....	Associate in Sociology
PAMELIA PEARL JONES, M.A. (Iowa State).....	Associate in English
SYLVIA FINLAY KERRIGAN, A.M. (Washington).....	Associate in English
JANE S. LAWSON, A.M. (Saint Andrews).....	Associate in English
BERTHA ALKEN VICKNER, A.M. (Washington).....	Associate in English
EARL D. WEST, A.M. (Adrian).....	Associate in Mathematics
FERNAND CATTELAINE, A.M. (Baylor).....	Associate in Romanic Languages
KENNETH COLE, B.L. (Oxford).....	Associate in Political Science
ELENORA M. WESNER, A.M. (Northwestern).....	Associate in German
RALPH MASON BLAKE, Ph.D. (Harvard).....	Instructor in Philosophy
LURLINE SIMPSON, A.M. (Washington).....	Associate in French
AMY V. HALL, A.M. (Washington).....	Associate in English
JOSEPH MARION TAYLOR, M.S. (Adrian).....	Associate in Mathematics
RUFUS G. BRELAND, A.B. (Chattanooga).....	Instructor in English
MARTHA ESTELLA DRESSLER, M.S. (Columbia).....	Instructor in Home Economics
VICTOR JOHN FARRAR, A.M. (Wisconsin).....	Instructor in History
RUTH M. LUSBY, A.M. (Columbia).....	Instructor in Institutional Management
HERMANCE MULLENBASTER, Ph.D. (Utrecht).....	Instructor in Mathematics
WALTER BELL WHITTLESLEY, A.M. (Washington).....	Instructor in French
WILLIAM R. WILSON, M.S. (Washington).....	Instructor in Psychology
CECIL EDEN QUAINTON, A.B. (Manitoba).....	Instructor in History
GEORGE A. LUNDBERG, Ph.D. (Minnesota).....	Instructor in Sociology

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JAMES GEORGE ARBUTHNOT, B.S. (Kansas State College)....	Director of Physical Education for Men.
IRVING MACKAY GLEN, A.M. (Oregon).....	Professor of Music; Dean of the College of Fine Arts
MARY EMMA GROSS, A.M. (Columbia).....	Director of Physical Education for Women
DAVID CONNOLLY HALL, M.D. (Chicago)....	University Health Officer; Professor of Hygiene
TREVOR KINCAID, A.M. (Washington).....	Professor of Zoology
ALBERT R. LOVEJOY (Emerson).....	Associate in Dramatic Art
FREDERICK ARTHUR OSBORN, Ph.D. (Michigan).....	Professor of Physics
GEORGE BURTON RIGG, Ph.D. (Chicago).....	Associate Professor of Botany
EDWIN JAMES SAUNDERS, A.M. (Harvard).....	Assistant Professor of Geology
GEORGE McPHAIL SMITH, Ph.D. (Freiburg).....	Professor of Inorganic Chemistry

## GENERAL STATEMENT

The College of Liberal Arts provides instruction in languages, education, economics and business administration, history, mathematics, philosophy, political science, psychology, sociology, and anthropology. 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 degrees. 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. More detailed information concerning admission may be found on pages 40-48.

*Scholarship Requirement.*—The University has adopted a scholarship requirement of a 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.

*Freshman Standing.*—Freshman standing in the College of Liberal Arts 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) 3 units of English.
- (b) 1 unit of algebra.
- (c) 1 unit of plane geometry.
- \*\* (d) 2 units in one foreign language.
- (e) 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).
- (f) 2 units in subjects presented in the above groups (1), (2), (3).
- (g) 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.

\*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.

\*\*If a student has not taken in high school the amount of foreign language required for admission to the college, 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 Liberal Arts the foreign language requirement may be satisfied 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.

‡If a student has not taken in high school certain subjects prescribed for admission to the College of Liberal Arts 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. A student entering without having satisfied a specific 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.

The student expecting to enter the College of Liberal Arts 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, the minimum amount accepted as a year's work being 36 weeks of attendance with at least 45 quarter credits, not more than 19 of which shall have been earned in one quarter.

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.

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 obtain the degree of bachelor of arts (A.B.) the student must complete not less than 190 credits, must observe the restrictions in regard to major and group requirements, scholarship requirements, and the requirements of the lower and upper divisions, and must show a reading knowledge of one of the foreign languages taught in the University. (See V on page 74.)

##### 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.

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

(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 languages and literature, Romanic languages and literature, Russian, Scandinavian.

*Group 2. Philosophical.*—Anthropology, 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 below.

(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 8.

### 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 3 quarters (9 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.

\*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.

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 will 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.

Students planning to enter the School of Education by way of the College of Liberal Arts must satisfy both the entrance requirements and the requirements of the first two years of the college. The *rare* exceptions to this rule will be passed upon by the dean of the college.

## 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 Latin 13; (e) Greek 11 and 13; (f) Greek 11 and 12; (g) Greek 15 and 16; (h) Latin 11 and Latin 13; (i) any two of Oriental history, Life and Literature, 50, 51, 52.
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 the 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 the 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 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 of 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.

A total of thirty-six credits in courses given outside the College of Liberal Arts may be counted toward a bachelor of arts degree. Of these thirty-six not more than twenty-four may be taken in any one college or school, except that from the College of Fine Arts thirty-six credits may be counted.

#### SIX-YEAR ARTS AND LAW CURRICULUM

This combined course allows a student with a good record to obtain 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 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 degree of bachelor of arts, 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.

The requirement of a reading knowledge of one of the foreign languages taught in the University does not apply to candidates for the two degrees in the arts-law curriculum.

#### 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.

## COLLEGE OF SCIENCE

### THE FACULTY, 1924-1925

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 of the College of Science
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, Sc.M., M.D. (Chicago)	Professor of Hygiene and University Health Officer
HENRY KREITZER BENSON, Ph.D. (Columbia)	Professor of Industrial Chemistry
JOHN WEINZIERL, Dh.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
JAMES BRADY, Colonel, C.A.C., (U. S. Military Academy)	Professor of Military Science and Tactics
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 WINGER, Ph.D. (Johns Hopkins)	Associate Professor of Mathematics
HERMAN VANCE TARTAR, Ph.D. (Chicago)	Associate Professor of Mathematics
THOMAS GORDON THOMPSON, Ph.D. (Washington)	Associate Professor of Chemistry
GRACE GOLDENA DENNY, M.A. (Columbia)	Associate Professor of Home Economics
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
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
EDWIN R. GUTHRIE, Ph.D. (Pennsylvania)	Assistant Professor of Psychology
GEORGE EDWARD GOODSPEED, JR., B.S. Min.E. (Massachusetts Institute of Technology),	Assistant Professor of Geology
VIRGINIA CUNNINGHAM PATTY, (Columbia)	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
MARTHA KOEHNE, A.M. (Ohio)	Assistant Professor of Home Economics
ROYAL K. GREENE, Major, C.A.C., (Grad. U.S. Military Academy)	Assistant Professor of Military Science and Tactics
HENRY C. K. MUEHLNBERG, Major, Air Service, (Grad., U. S. Military Academy),	Assistant Professor of Military Science and Tactics
OTTO HARRY SOHRADER, Major, C.A.C., B.S. (E.E.) (Purdue)	Assistant Professor of Military Science and Tactics
KEITH SUMNER GREGORY, Capt. Ret., (Grad., U.S. Military Academy)	Assistant Professor of Military Science and Tactics
HAROLD PRIEST, Captain, U.S.A. (Washington)	Assistant Professor of Military Science and Tactics
EDGAR HARRISON UNDERWOOD, Capt., C.A.C., B.S. (Chem.Eng.) (Tennessee)	Assistant Professor of Military Science and Tactics
WILLIAM HALE, Capt., Inf., A.B. (St. Joseph's College)	Assistant Professor of Military Science and Tactics
HUGH C. ADAIR, Captain, Inf.	Assistant Professor of Military Science and Tactics
RACHEL EMILIE HOFFSTADT, Dr.S., (Johns Hopkins)	Assistant Professor of Bacteriology
JOHN EARL GURERLET, Ph.D. (Illinois)	Assistant Professor of Zoology

\*Absent on leave.

ROBERT C. MILLER, Ph.D. (California).....	Assistant Professor of Zoology
LILLIAN C. IRWIN, M.D. (Cooper Medical College).....	Lecturer on Physical Education for Women
LILLIAN BLOOM, (Grad. Medical Gymnastic Institute, Stockholm, Sweden).....	Associate in Physical Education
ETHEL SANDERSON RADFORD, A.B. (McGill).....	Associate in Chemistry
MARJORIE WHIPPLE PETERSON, M.S. (Washington).....	Associate in Chemistry
EARL D. WEST, A.M. (Adrian College).....	Associate in Mathematics
ELIZABETH S. SOULE, R.N. (Malden, Massachusetts, Hospital School of Nursing and Public Health).....	Associate in Nursing
CLARENCE EDMUNDSON, B.S. (Idaho).....	Associate in Physical Education
CARL ZENO DRAVES, M.S. (Ch.E.) (Washington).....	Associate in Chemistry
CLYDE MYRON CRAMLET, M.S. (Washington).....	Associate in Mathematics
ENOCH BAGSHAW, B.S. (M.E.) (Washington).....	Associate in Physical Education
ARTHUR RUDOLPH JERBERT, M.S. (Washington).....	Associate in Mathematics
RUSSELL STANLEY CALLOW, A.B. (Washington).....	Associate in Physical Education
DORSETT GRAVES (Missouri).....	Associate in Physical Education
WAYNE SUTTON, A.B. (Washington).....	Associate in Physical Education
JOSEPH M. TAYLOR, M.S. (Adrian College).....	Associate in Mathematics
LOU EASTWOOD ANDERSON, B.S. (Washington).....	Associate in Physical Education
WILLARD HENRY ELLER, B.S. (E.E.) (California).....	Instructor in Physics
MARTHA DRESSLAR, M.S. (Columbia).....	Instructor in Home Economics
WILLIAM RONALD WILSON, M.S. (Washington).....	Instructor in Psychology
SARGENT G. POWELL, Ph.D. (Illinois).....	Instructor in Chemistry
MARY AID, A.B. (Wisconsin).....	Instructor in Physical Education
LYMAN C. BOYNTON, Ph.D. (Columbia).....	Instructor in Chemistry
JOHN NOLAN, 1st Lieut., Inf., A.B. (St. Joseph's College).....	Instructor in Military Science and Tactics
RAYMOND FORREST FARWELL, A.B. (California).....	Instructor in Astronomy
MATILDA JANE MCGOWND, A.M. (Columbia).....	Instructor in Physical Education
HERMANOE MULLEMEISTER, Ph.D. (Royal University of Utrecht, Holland).....	Instructor in Mathematics
WALDO SEMON, Ph.D. (Washington).....	Instructor in Chemistry
IONE HELMICH, B.S. (Washington).....	Assistant in Physical Education for Women



## 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.	E. Mathematics
B. Biology	F. Military Science
C. Chemistry	G. Physics
D. Geology	
- III. Required curricula in group majors leading to the degree of bachelor of science:
 

A. For prospective teachers
B. Combined Science and Law
C. Library Science
- IV. Prescribed curricula in vocational subjects:
 

A. Pre-medical	C. Home Economics
B. Nursing	D. Physical Education for Women.
- V. One-year course leading to certificate in Public Health Nursing.

## 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 40, 48, 49.

*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 41.

*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 of 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 choose 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 the 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 minimum of 190 credits is required for graduation from any of these curricula.

## 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	Psychology 1 .....	5
Chemistry 1 .....	5	Chemistry 2 .....	5	Chemistry 28 .....	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 181 .....	5	Chemistry 182 .....	5	Chemistry 111 .....	5
Anatomy 105 .....	6	Anatomy 106 .....	6	Anatomy 107 .....	6
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 .....	5	Electives .....	5	Electives .....	5

## FOURTH YEAR

Bacteriology 123 .....	2	Bacteriology 111 .....	5	Bacteriology 112 .....	5
Bacteriology 120B .....	3	Bacteriology 124 .....	2	Bacteriology 125 .....	2
Electives .....	10	Bacteriology 121B .....	3	Bacteriology 122B .....	3
		Bacteriology 121A .....	5	Bacteriology 122A .....	5

\*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.

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

## 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	5	Mathematics or Elective. 5	5
Botany or Zoology .....	5	Botany or Zoology..... 5	5	Electives .....	10
Electives .....	5	**Mathematics or Elect.. 5	5		
Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%

## SECOND YEAR

Chemistry or Physics... 5	Chemistry or Physics.... 5		
Major .....	Major .....	Major .....	5
Electives .....	Electives .....	Electives .....	10
Mil. Sci. or Phys. Ed... 1%	Mil. Sci. or Phys. Ed... 1%	Mil. Sci. or Phys. Ed... 1%	1%

## THIRD YEAR

Major .....	5	Major .....	5	Major .....	5
Soc., Pol. Sci. or Econ.. 5	5	Soc., Pol. Sci. or Econ.. 5	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	5	Chemistry 2 or 22..... 5	5	Chemistry 23 .....	5
Mathematics 4 .....	5	Mathematics 5 .....	5	Mathematics 6 .....	5
English 1 .....	5	English 2 or Electives.. 5	5	Electives .....	5
Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%

## SECOND YEAR

Chemistry 101 .....	5	Chemistry 109 .....	5	Chemistry 110 .....	5
Physics 1 or 97..... 5	5	Physics 2 or 98..... 5	5	Physics 3 or 99..... 5	5
Mathematics 61 .....	3	Mathematics 62 .....	3	Electives .....	5
Electives .....	2	Electives .....	2	Mil. Sci. or Phys. Ed... 1%	1%
Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%		

## THIRD YEAR

Chemistry 181 .....	5	Chemistry 182 .....	5	Chemistry 183 .....	5
Electives .....	5	Electives .....	5	Electives .....	5
Group Options		Group Options		Group Options	
(a) General—		(a) General—		(a) General—	
Electives .....	5	Electives .....	5	Electives .....	5
(b) Industrial—		(b) Industrial—		(b) Industrial—	
Chemistry 121 .... 5	5	Chemistry 122 .... 5	5	Chemistry 123 .... 5	5
(c) Physiological—		(c) Physiological—		(c) Physiological—	
Physiology 151 .... 5	5	Physiology 152 .... 5	5	Physiology 153 .... 5	5

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

<sup>1</sup>Options: (a) Geology or Mineralogy. (b) Mechanical Drawing. (c) Biological Science.

<sup>2</sup>Students expecting to elect the industrial group in junior year must take Chemistry 52 the spring quarter of the sophomore year.

<sup>3</sup>In 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.

<sup>4</sup>The History of Chemistry, Chem. 190 and 191 are suggested as electives in either the junior or senior year.

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## FOURTH YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Chemistry 181 .....	5	Chemistry 182 .....	5	Chemistry 183 .....	5
*Electives .....	2	*Electives .....	2		
<b>Group Options</b>		<b>Group Options</b>		<b>Group Options</b>	
(a) General—		(a) General—		(a) General—	
Chemistry 154 or		Electives .....	8	Electives .....	10
Electives .....	5				
Electives .....	3				
(b) Industrial—		(b) Industrial—		(b) Industrial—	
Chem. Eng. 171....	5	Chem. Eng. 172... 5		Electives .....	10
Chem. Eng. 176....	3	Chem. Eng. 178... 3			
(c) Physiological—		(c) Physiological—		(c) Physiological—	
Chemistry 161 ....	5	Chemistry 162 ....	5	Chemistry 163 ....	3
Chemistry 164 ....	3	Chemistry 165 ....	3	Electives .....	7

## D. GEOLOGY

## FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Mathematics 4 (or)....	5	English 1 .....	5	English 2 or Elective....	5
Geology 1 .....	5	Geology 2 .....	5	Mathematics 6 (or)....	5
Chemistry 1 or 21....	5	Chemistry 2 or 22....	5	Chemistry 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	Physics 2 .....	5	Metallurgy 102 .....	5
Chemistry 111 .....	5	Geology 21 .....	5	Geology 120 .....	3
Civil Engineering 1....	3	Civil Engineering 21... 3		Civil Engineering 4....	3
Geology 101 .....	3	Electives .....	3	Geology 122 .....	2
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

## THIRD YEAR

Geology 123 .....	3	Geology 124 .....	4	Geology 125 .....	4
Botany or Zoology....	5	Botany or Zoology....	5	Geology 132 .....	5
Geology 140 .....	3	Geology 118 .....	3	Electives .....	5
Astronomy 1 .....	5	Geology 131 .....	5		

## FOURTH YEAR

Mining 51 .....	3	Geology 127 .....	5	Geology 128 .....	3
Geology 121 .....	3	Thesis .....	2	Geology 117 .....	3
Geology 126 .....	3	Electives .....	8	Thesis .....	2
Thesis .....	2			Electives .....	3
Electives .....	5				

## E. MATHEMATICS

## 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 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

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
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 18.....	5
Business Ad. 64.....	5	Business Ad. 65.....	5	Electives .....	5

## FOURTH YEAR

## GROUP I—SECONDARY SCHOOL TEACHERS

Education 110 .....	3	Education 110 .....	3	Education .....	3
Education 145 .....	5	Electives .....	12	Mathematics .....	3
Electives .....	7			Electives .....	3

## 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. 175.....	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. )	
Math. 2 (Solid Geometry).....	5	Mil. Sci. 71-72-73 A. S.).....	5
Math. 4 (Plane Trigonometry).....	5	Physics 1-2 or 97, 98.....	10
Civil Eng. 1 (Eng. Draw.).....	3	Chemistry 1-2, or 21-22.....	10
Civil Eng. 21 (Plane Surv.).....	3	French, German or Spanish.....	9 or 10
English 1-2 .....	10	Dramatic Art 31-32.....	6
French, German or Spanish 1-2-3.....	15	History 57-58-59 .....	9
	51		49 or 50

## SUMMER QUARTER—BASIC R. O. T. C. CAMP

Third Year	Credits	Fourth Year	Credits
Military Science 104-105-106)		Military Science 154-155-156)	
Military Science 114-115-116)		Military Science 164-165-166)	
Military Science 124-125-126).....	9	Military Science 174-175-176).....	9
Philosophy 1, 2, 3 or 5.....	5	Military Science Thesis.....	5
Soc., Pol. Sci. or Econ.....	10	*Approved Electives .....	32
*Approved Electives .....	21		
	45		46

## 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 three units established here, Infantry, Coast Artillery or Air Service, 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.

## III. REQUIRED CURRICULA IN GROUP MAJORS

## A. 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) 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.
- (b) 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.
- (c) If 20 credits of chemistry are taken, only 15 of geology are required.
- (d) When mathematics is selected as one of the three sciences, physics must be selected also.
- ~~(e) The modern foreign language required shall be either French or German and a continuation of the language taken in high school.~~
- (f) 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.

**B. 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.

**C. 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 A.), substituting courses in library science for the 18 credits in education stipulated for the senior year. A portion of the fourth year and all of 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 Library School.)

**IV. 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**

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Chemistry 1 or 21.....	5	Chemistry 2 or 22.....	5	Chemistry 23 .....	5
Zool. 3 (Pre-medical)....	5	Zool. 4 (Pre-medical)....	5	Physiology 7 .....	5
English 1 .....	5	English 2 .....	5	Psychology 1 .....	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	

**SECOND YEAR**

Sci. French or German. 5	Chem. 128 (Organic)... 5	Chem. 129 (Organic)... 5
Physics 1 .....	Physics 2 .....	Physics 3 .....
English 78 .....	Electives .....	Ec. 1 or Pol. Sci. 1... 5
Mil. Sci. or Phys. Ed... 1%	Mil. Sci. or Phys. Ed... 1%	Mil. Sci. or Phys. Ed... 1%

**THIRD YEAR**

Anatomy 101 .....	Anatomy 102 .....	Anatomy 103 .....
Anatomy 105 .....	Anatomy 106 .....	Anatomy 107 .....
Bacteriology 101 .....	Bacteriology 105 .....	Bacteriology 106 .....

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## FOURTH YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Physiology 151 .....	5	Physiology 152 .....	5	Physiology 153 .....	5
Chemistry 161 .....	5	Chemistry 162 .....	5	Bacteriology 112 .....	5
Bacteriology 104 .....	4	Bacteriology 111 .....	5	Elective .....	8
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.

## 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 106....	5	Nursing 8 .....	3
Home Economics 105....	5	Physiology 55 .....	5	Pharmacy 13 .....	3
Physiology 54 .....	5	Sociology 1 .....	5	Anatomy 101 .....	5
Phys. Ed. ....	1½	Pharmacy 12 .....	3	English 40 .....	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

	Credits		Credits
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	
Surgical Nursing .....	20	Nursing .....	5
Obstetrical and Gynecological Nursing. 20		Administration .....	5

## 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 practical 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, 116, 8, 25, 107, 108, 111, 112, 113, 143, 144, 175—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, and 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 7 .....	8
Zool. 1 or Bot. 1 .....	5	Chemistry 5 .....	5	Chemistry 6 .....	5
Phys. Ed. ....	1½	Zool. 2 or Bot. 2 .....	5	Lang. (Anc. or Mod.) ..	5
		Phys. Ed. ....	1½	Phys. Ed. ....	1½
Preferred electives—H.E. 4, 7, 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 1 .....
Phys. Ed. ....	Phys. Ed. ....	Economics 1 .....
		Phys. Ed. ....
Preferred electives—H.E. 5; P.S.D. 9; Bact. 101.		

##### THIRD YEAR

Philosophy 2 .....	Sociology 1 .....
Preferred electives—H.E. 105-106, 111, 112, 113, 116; Physics 80-90.	

##### FOURTH YEAR

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

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## GROUP II—FOOD AND NUTRITION

## FIRST YEAR

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

Preferred electives—H.E. 4, 7, 8, 25; P.S.D. 9.

## 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 144 .....	5
Phys. Ed. ....	1	Phys. Ed. ....	1	Phys. Ed. ....	1

Preferred electives—H.E. 5

## THIRD YEAR

Economics 1 .....	5	Chemistry 104 .....	4
		Sociology 1 .....	5

Preferred electives—H.E. 107-108, 111, 116; Nursing 5; Physics 89-90.

## FOURTH YEAR

Preferred electives—H.E. 183, 148, 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 7 .....	5	Chemistry 5 .....	5	Chemistry 6 .....	5
Phys. Ed. ....	1%	Phys. Ed. ....	1%	Phys. Ed. ....	1%

Preferred electives—H.E. 4, 7, 8, 25; P.S.D. 9.

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—				Bacteriology 101 .....	5
Home Economics 5 ....	5				

## THIRD YEAR

Education 101 .....	5	Education 110 .....	5	Economics 1 .....	5
				Education 119 .....	3
				Sociology 1 .....	5
Preferred electives—				Home Economics 107-108...	
Physics 89 .....	5	Physics 90 .....	5	Home Economics 143 .....	
Home Economics 112... 5		Home Economics 113 .. 5			
Home Economics 116... 5		Home Economics 111... 3			

## FOURTH YEAR

Education 160I .....	3	Education 161J .....	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 7 .....	5	Chemistry 5 .....	5	Lang., Lit. or Hist. ....	5
Phys. Ed. ....	1%	Phys. Ed. ....	1%	Phys. Ed. ....	1%

Preferred electives—H.E. 4, 7, 25; P.S.D. 9; Law 54.

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## 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 135 .....	5	Chemistry 136 .....	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
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Preferred electives—H.E. 107-108, 111, 116, 124, 143; Chem. 104, 144; Physics 89-90.

## FOURTH YEAR

Preferred electives—H.E. 121, 122, 123, 125, 144, 145, 183, 190, 191; B.A. 62; Arch. 1-2.

## GROUP V—TEXTILES, CLOTHING AND FINE ARTS

### SUMMARY

	Credits		Credits
College requirements .....	85	Free electives .....	31
Fine Arts .....	31	Physical Education .....	10
Home Economics .....	53		
			190

### SUGGESTED SCHEDULE

College Requirements	Credits	Fine Arts	Credits	Home Economics	Credits
English .....	10	P. S. & D. 9-10-11....	35	H.E. 7, Survey.....	2
Lang., Lit. or Hist....	20	P. S. & D. 169-170....	4	H.E. 8, Ele. Clothing..	3
Laboratory Science ..	10	Arch. 1-2 .....	4	H.E. 25, Textiles .....	5
Physiology 7 .....	5	P. S. & D. Electives....	10	H.E. 127, Non-Textiles.	3
Economics 1 .....	5			H.E. 101-102 .....	4
Sociology 1 .....	5			H.E. 112-118 (Clothing)	10
Psychology 1 .....	5			H.E. 130-131 Trade	
Philosophy 1 or 2....	5			dressmaking .....	8
				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 Adv. Textiles	2
				" " .....	2
Total .....	65	Total .....	31	Total .....	58
Free Electives.....	31	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	Physiology 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. 181 (Correc.)	3	Phys. Ed. 132 (Correc.)	3	Phys. Ed. 133 (Correc.)	3
Phys. Ed. 167 (Athlec.)	3			Phys. Ed. 122 (Kin'g'y)	3
				Phys. Ed. 169 (Athlet.)	3

## FOURTH YEAR

Education 145 .....	3	Education 145 .....	2	Electives .....	7
Education 119 .....	3	Electives .....	7		
Education 160.R. ....	2			Phys. Ed. 163 (Anthro.)	2
Preferred Electives—		Phys. Ed. 155 (Dancing)	2	Phys. Ed. 156 (Dancing)	2
Phys. Ed. 154 (Dancing)	2	Phys. Ed. 152 (Ad. in		Phys. Ed. 153 (Meth.	
Phys. Ed. 170 (Athlet.)	2	Phys. Ed.) .....	2	Hyg. Inst.) .....	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.

If neither chemistry nor physics has been taken in high school either chemistry or physics must be taken in the University, in which event the student may substitute for one of these sciences ten hours in approved courses in the College of Science.

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 1 (curricula with major in one department).

## V. CURRICULUM LEADING TO CERTIFICATE IN PUBLIC HEALTH NURSING

The broadening of the field of nursing has created a demand on the part of nurses for definite study along lines which experience has shown to be closely interwoven with the problems of the family and the community. A nurse must combine with the technical knowledge she already possesses an understanding of the fundamental principles of economics and the social sciences.

The demand for properly trained and qualified public health nurses is constantly increasing as new fields open through recognition by the public of the economic value of the work. Beginning each quarter of the year the University offers a nine-months' course in public health nursing, which is open to graduate nurses who are deemed qualified for such work, and who wish to broaden their training to take up positions in this specialized line.

The curriculum:

	<i>Credits</i>		<i>Credits</i>
Nursing 51 .....	2	Psychology 1 .....	5
Nursing 102 .....	3	†Psychology 131-132 .....	6
Nursing 108 .....	3	†Bacteriology 103 .....	5
Sociology 171 .....	3	†Principles of Education .....	5
†Home Economics 105-106 .....	10	Field work .....	16
Dramatic Art 31 .....	3		

†Electives.

## 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, 1924-25

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 of the School  
 of Education  
 FREED CARLETON AYER, Ph.D. (Chicago).....Professor of Education  
 EDWARD DUNNINGTON RANDOLPH, Ph.D. (Columbia).....Professor of Education  
 ALEXANDER CRIPPEN ROBERTS, Ph.D. (Washington).....Professor of Education and  
 Director of Extension Service  
 CURTIS TALMADGE WILLIAMS, Ph.D. (Clark).....Assistant Professor of Education  
 PAUL WASHINGTON TERRY, Ph.D. (Chicago).....Assistant Professor of Education  
 AUGUST DVORAK, Ph.D. (Minnesota).....Assistant Professor of Education  
 CECIL LEONARD HUGHES, A.M. (Washington).....Lecturer in Education  
 ANNE SIGURD JENSEN, M.A. (Washington).....Teaching Fellow in Education

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HENRY LANDES, A.M. (Harvard).....Professor of Geology; Dean of the College of Science  
 EDMOND STEPHEN MEANY, 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 MACKAY 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  
 STEVENSON SMITH, Ph.D. (Pennsylvania).....Professor of Psychology  
 HOWARD THOMPSON LEWIS, A.M. (Wisconsin).....Professor of Economics; 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  
 EDWIN JAMES SAUNDERS, A.M. (Harvard).....Assistant Professor of Geology  
 ERNEST OTTO ECKELMAN, Ph.D. (Heidelberg).....Assistant Professor of German  
 FRANCES DICKEY, A.M. (Columbia).....Assistant Professor of Music  
 MARY EMMA GROSS, A.M. (Columbia).....Director of Physical Education for Women

## GENERAL STATEMENT

The School 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 schools 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.

*Bureau of Appointments.*—The University maintains an appointment bureau to assist students in obtaining desirable positions. The services 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, the minimum amount accepted as a year's work being 36 weeks of attendance with at least 45 quarter credits, not more than 19 of which shall have been earned in one quarter.

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 .....	3
145. Practice Teaching .....	5
150. Educational Measurements .....	3
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 College 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 .....	3
✓ 150. Educational Measurements .....	3
✓ 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 .....	3
150. Educational Measurements .....	3
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
150. Educational Measurements .....	3
152. 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, earn a total of 45 credits, and to complete the following courses in education: Any exemption or substitution must be approved by the dean of the School of Education.

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

As a part of the total 45 credits they also must complete 10 credits in some teaching subject approved by the head of the department in which the academic 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
150. Educational Measurements .....	3
152. 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	
	<i>*Credits</i>		<i>*Credits</i>
101. Introduction to Study of Education	5	119. Secondary Education	3
110. Psychology of Teaching Method	5	160. 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		15
Electives in Education	2		
	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	
	<i>*Credits</i>		<i>*Credits</i>		<i>*Credits</i>
101. Introduction to the Study of Education	5	110. Psychology of Teach- ing Method	5	119. Secondary Education	3
110. Psychology of Teach- ing Method	5	119. Secondary Education	3	145. Practice Teaching	5
119. Secondary Education	3	145. Practice Teaching	5	150. Educ. Measurements	3
145. Practice Teaching	5	150. Educ. Measurements	3	152. Social Surveys	2
160. Teachers' Course in Special Subject	2	152. Social Surveys	2	160. Teachers' Course in Special Subject	2
	20	160. Teachers' Course in Special Subject	2	Academic Subjects	10
			20	Free Electives	15
					45

One year of residence in this University.

These will presumably select work to apply on a master's degree.

\*Quarter Hours.

### DISTRIBUTION OF COURSES IN EDUCATION IN PREPARATION FOR SPECIAL TYPES OF DEGREES. 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
*Credits	*Credits	*Credits	*Credits
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 Teaching Method ... 5	Psych. of Teaching Method ... 5	Psych. of Teaching Method ... 5	Psych. of Teaching Method ... 5
Secondary Education ..... 3	Secondary Education ..... 3	Secondary Education ..... 3	Secondary Education ..... 3
Teachers' Course in Special Subject ..... 2	Teachers' Course in Special Subject ..... 2	Teachers' Course in Special Subject ..... 2	Teachers' Course in Special Subject ..... 2
Practice Teaching 5	Practice Teaching 5	Practice Teaching 5	Practice Teaching 5
Educ. Measurements ..... 3	Educ. Measurements ..... 3	Educ. Measurements ..... 3	Educ. Measurements ..... 3
Electives in Education ..... 2	Electives in Education ..... 2	Electives in Education ..... 2	Electives in Education ..... 2
<hr/> 25	<hr/> 25	<hr/> 25	<hr/> 25

### ADDITIONAL REQUIREMENTS IN EDUCATION FOR MASTER'S DEGREE

Junior High School 2	Junior High School 2	Educational Sociology ..... 5	Junior High School 2
High School Organization .... 2	Individual Mental Testing ..... 6	Psych. of Elementary School Subjects ..... 3	Group Intelligence Tests ..... 5
Psych. of High School Subjects 3	Psych. of Elementary School Subjects ..... 3	Educational Administration ... 6	Psych. of Elementary School Subjects ..... 3
Educational Administration .. 6	Educational Administration ... 6	Electives ..... 3	Educational Administration ... 6
Electives ..... 9	Electives ..... 5	Thesis ..... 6	Electives ..... 6
Thesis ..... 6	Thesis ..... 6		Thesis ..... 6
<hr/> 28	<hr/> 28	<hr/> 28	<hr/> 28

### 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:

*Credits	*Credits
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	<hr/> 25

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

*Credits	*Credits
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	<hr/> 120
History of Education..... 5	

\*Quarter Hours.

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.

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.

BACTERIOLOGY

*Academic Major:* Courses 101, 102, 103, 104, 106, and 9 hours selected from 123, 124, 125, 120b, 121b, 122b; total 36 credits.

*Academic Minor:* Courses 101, 102, 103, and electives; 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 had a year of college physics. Grades must average at least C to secure a recommendation for teaching chemistry.

CIVICS

*Academic Major:* Political Science 1, Economics 1, Sociology 1, and 5 Political Science 1, Sociology 1, Economics 1, and one of the following groups: Political Science, 130, 115, 100, Political Science, electives; Sociology 29, 51, 55, 56, 180-181-182; 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 Major in Latin:* Greek 1 and 2, and 25 credits from Latin 21, 22, 23, 50, 60, 70, 107, 108, 109.

*Academic Minor in Latin:* Twenty credits from Latin 21, 22, 23, 50, 60, 70, 107.

*Academic Major in Greek:* Ten credits of Latin and 25 from Greek 1, 2, 3, 4, 5, 101, 102, 103.

*Academic Minor in Greek:* Twenty credits from Greek 1, 2, 3, 4, 5.

## COMMERCIAL TEACHING

(See Economics and Business Administration.)

## DRAMATIC ART

*Academic Major:* Courses 4-5, 61, 62, 101-102, 127, 151, 153; total 35 credits.

*Academic Minor:* Courses 4-5, 61, 62, 101-102; total 20 credits.

## DRAWING

*Academic Major:* Courses 5, 6, 7, 9, 10, 11, 16, 17, 18, 101, 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; 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 combination with political science and sociology.

## COMMERCIAL TEACHING

*Academic Major:* Courses 62, 63, 54, 55, 56; minimum 35 credits, in addition to Educ. 160D or 160DD.

If more are elected 83 and 102 are recommended.

*Academic Minor:* Courses 62, 63, 64, 56; 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, 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, 107, 120, 123, 124, 126, 131; minimum, 35 credits.

b. Courses 1 or 12, 2, 10, 11, 107, 111, 112, 113, 116, 117, or 118; minimum, 35 credits.

*Academic Minor:* Courses under either a or b, as follows:

a. Courses 1, 2, 21, 112; minimum, 20 credits.

b. Courses 1 or 12, 10, 11, 107, 112; minimum, 20 credits.

#### GERMANIC LANGUAGES AND LITERATURE

*Academic Major:* Minimum 35 credits, in addition to Education 160G.

*Academic Minor:* Minimum 20 credits.

Major recommendation for teaching, at least 27 credits in courses above 100, including Education 160G.

#### 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 57-58-59. 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 5, 7, 43, 107-108, 116, 145, 148, 190, 191; total 36 credits.

*Academic Minor in Principles of Nutrition:* Courses 5, 107-108, 116, 145; total 20 credits.

*Academic Minor in Textiles and Clothing:* Courses 7, 25, 112-113, 143, total 20 credits.

*Academic Major in Textiles and Clothing:* In addition to the minor 130-131, 133, 135, 148; total 36 credits.

#### JOURNALISM

*Academic Minor:* Courses 51, 101, 120, 150; total 20 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; total 35 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

*Academic 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 60, 61.

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; 114, 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.

*Academic Minor in Athletic Coaching:* Minimum 20 credits including courses 101, 102, 103, 115.

#### 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, 170-171-172. Education 160.R. Practice Teaching, Education 145 is additional in all cases except by exemption by the dean of the School of 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 40; 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 in physical education. 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, 115, 100, 130, and electives to make minimum of 35 credits.

*Academic Minor:* Courses 1, 115, 100, 130, minimum 20 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, 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 credits in one language.

*Academic Minor:* Minimum of 20 college credits in one language.

*Recommendation for Teaching French:* Courses 41, 101-102-103, 158, 159, Educ. 160T, electives from literary courses 10 credits.

*Recommendation for Teaching Spanish:* Courses 101-102-103, 159, electives from literary courses 10 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 Minor 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 54-55 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, 1924-1925

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 of the Library School
CHARLES WESLEY SMITH, A.B., B.L.S. (Illinois)....	Associate Professor of Library Science
MARIE SMART ALFONSO, A.B. (Nebraska), B.S. in L.S. (Washington).....	Instructor in Library Science
MARGUERITE E. PUTNAM, A.B. and B.S. in L.S. (Washington)...	Instructor in Library Science
SARAH VIRGINIA LEWIS, Certificate in Library Science (Wisconsin).....	Associate 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, (46 credits) 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>
Library Economy .....	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.....	2
Special lectures .....	1
Practice (300 clock hours).....	10

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, 1924-1925

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California)	President
JOHN THOMAS CONDON, LL.M. (Northwestern)	Dean of Faculties
HOWARD T. LEWIS, M.A. (Wisconsin)	Professor of Economics; Dean of the College of Business Administration
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
WILLIAM E. COX, A.M. (Texas)	Professor of Business Administration
CARL S. DAKAN, B.S. (Missouri)	Professor of Business Administration
WILFRED ELDRED, Ph.D. (Harvard)	Professor of Business Administration
HARRY E. SMITH, Ph.D. (Cornell)	Associate Professor of Business Administration
MACY M. SKINNER, Ph.D. (Harvard)	Associate Professor of Business Administration
CHARLES H. ATKINSON, A.M., Ph.D. (Columbia)	Associate Professor of Business Administration
HENRY A. BURD, Ph.D. (Illinois)	Associate Professor of Business Administration
THERESA McMAHON, Ph.D. (Wisconsin)	Assistant Professor of Business Administration
HOMER E. GREGORY, A.M. (Chicago)	Assistant Professor of Business Administration
KARL E. LEIB, J.D. (Stanford)	Assistant Professor of Business Administration
JAMES M. MCCONAHEY, 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, M.B.A. (Harvard), C.P.A.	Lecturer in Accounting
OSCAR E. DRAPER	Lecturer in Business Administration
ARTHUR TRUAX	Lecturer in Business Administration
FRANK C. VAN DE WALKER, M.B.A. (Washington)	Associate in Business Administration
F. H. HAMACK, LL.B. (Georgetown)	Instructor in Business Administration
RAYMOND F. FARWELL, A.B. (California)	Instructor in Maritime Commerce
WILLIAM A. RUSSELL, Certificate (Polytechnicum of Munich)	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
RALPH LAMONT	Assistant in Business Administration
EDWARD CRUZEN, B.B.A. (Washington)	Teaching Fellow in Business Administration
R. M. RUTLEDGE, A.B. (Wisconsin)	Teaching Fellow in Business Administration
RAYMOND WHITTLESLEY, A.B. (Illinois)	Teaching Fellow in Business Administration
EARL WOOD, A.B. (Whitman)	Teaching Fellow in Business Administration
FREDERICK M. PADELFORD, Ph.D. (Yale)	Professor of English; Dean of the Graduate School
WILLIAM SAVEBY, Ph.D. (Harvard)	Professor of Philosophy
ROBERT EDOUARD MORITZ, Ph.D. (Nebraska), Ph.N.D. (Strassburg)	Professor of Mathematics
HENRY KREITZER BENSON, Ph.D. (Columbia)	Professor of Chemical Engineering
CARL EDWARD MAGNUSSON, Ph.D. (Wisconsin), E.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 history provide the larger equipment necessary for dealing with the 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 40, 48, 49.

*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 41.

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.

#### CURRICULUM

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			Credits
B.A. 1	General Economics. Autumn, winter, spring, summer. Lecture and discussion groups. Five hours a quarter.....		5
B.A. 2	Applied Economics. Winter, spring. Lecture and discussion groups. Five hours a quarter.....		5
B.A. 7	Geographical Background of Industry. Autumn, winter, spring, summer. Five hours.....		5
*Math. 11-12	Mathematical Theory of Investments. Autumn, winter, spring, summer. Five hours a quarter.....		10
Math. 13	Statistical Method. Autumn, winter, spring, summer. Five hours a quarter.....		5
**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
			45 + 5
SECOND YEAR			Credits
B.A. 54-55-56	Business Law. Autumn, winter, spring, summer. Three quarters required. Three hours a quarter.....		9
Hist. 56-57-58	History of the United States. Autumn, winter, spring. Three hours a quarter.....		9
B.A. 62-63-64	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)	5
	Approved Electives.....		5
	Military Science or Physical Education.....		5
			48 + 5
BUSINESS CURRICULUM			
THIRD YEAR			Credits
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
			45
FOURTH YEAR			Credits
B.A. 180	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
			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 in 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 realizes 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

\*Students majoring in Maritime Commerce (and these students only) may substitute B.A. 52 and 68, Navigation and Ship Operation, for Math. 11 and 12, in fulfilling requirements for the B.B.A. degree.

\*\*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.

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                            | 159. Advanced Money and Banking                |
| 2. Applied Economics                            | 160. Advanced Economics                        |
| 57. Money and Banking                           | 181. American Labor Problems                   |
| 58. Risk and Risk Bearing                       | 182. European Labor Problems                   |
| 61. Social and Economic Standards of Living     | 185. Labor Legislation (2 hrs.)                |
| 70. Economics of Marketing and Advertising      | 181-182-183. Economics of Consumption (2 hrs.) |
| 104. Economics of Transportation                | 186. Women in Industry                         |
| 105. Business Organization                      | 188. History of Economic Thought               |
| 121. Corporation Finance                        | 189. Economics of Distribution                 |
| 123. Investment Analysis                        | 201. Graduate Seminar                          |
| 127. Foreign Exchange and International Banking | 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>
Principles of Accounting..	5	Advanced Accounting ....	5	Advanced Accounting .....	5
Business Organization ....	5	Corporation Finance .....	5	Investment Analysis .....	5
Philosophy .....	5	Political Science .....	5	Argumentation .....	5
	<u>15</u>		<u>15</u>		<u>15</u>

##### FOURTH YEAR

Advanced Economics .....	5	Business Report Writing..	5	Research .....	5
Accounting .....	10	Accounting .....	10	Accounting .....	10
	<u>15</u>		<u>15</u>		<u>15</u>

#### ADVERTISING

##### SECOND YEAR

- B.A. 61, Social and Economic Standards of Living, and  
B.A. 70, Economics of Marketing and Advertising.

†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.

THIRD YEAR					
<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
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					
Business Organization ....	5	Corporation Finance .....	5	Investment Analysis .....	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 Risk Bearing... 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					
Secretarial Correspondence	5	Office Training & Practice	3	Business Report Writing..	5
Sec'l Bus. Forms & Papers	5	Philosophy .....	5	Teachers' Course in Short-	
Political Science .....	5	Argumentation .....	5	hand and Typewriting... 5	
		Electives .....	2	Electives .....	5
	15		15		15

FOURTH YEAR					
Introduction to Education..	5	Office Management .....	5	Practice Teaching .....	5
Advanced Economics .....	5	Psychol. & Teach. Meth... 5		Com. Teachers' Course... 5	
Research .....	5	Secondary Education .....	5	Electives .....	5
	15		15		15

## \*FOREIGN TRADE

THIRD YEAR					
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

## INDUSTRIAL AND EMPLOYMENT MANAGEMENT†

THIRD YEAR					
Advanced Accounting ....	5	Advanced Accounting ....	5	Advanced 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

\*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.

†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.



## FOURTH YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
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
	<u>15</u>		<u>15</u>		<u>15</u>

## 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 Risk Bearing...	5	Political Science .....	5	Life Insurance .....	5
Argumentation .....	5	Office Management .....	5	Business Statistics .....	5
Contracts or Math. 151...	5	Contracts or Math. 152...	5	Agency or Math. 153...	5
	<u>15</u>		<u>15</u>		<u>15</u>

## 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
	<u>15</u>		<u>15</u>		<u>15</u>

## 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	Geog. Background of Ind..	5
English .....	5	Psychology .....	5	Sociology .....	5
Math. 13 .....	5	Ship Operation .....	5	Money and Banking.....	5
	<u>15</u>		<u>15</u>		<u>15</u>
<i>Fourth Quarter</i>	<i>Credits</i>	<i>Fifth Quarter</i>	<i>Credits</i>	<i>Sixth Quarter</i>	<i>Credits</i>
Business Law .....	3	Business Law .....	3	Business Law .....	3
History 57 .....	3	History 58 .....	3	History 59 .....	3
Risk and Risk Bearing...	5	Paper Work in Shipping..	5	Navigation .....	5
Accounting .....	5	Accounting .....	5	Accounting .....	5
	<u>16</u>		<u>16</u>		<u>16</u>
<i>Seventh Quarter</i>	<i>Credits</i>	<i>Eighth Quarter</i>	<i>Credits</i>	<i>Ninth Quarter</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
	<u>15</u>		<u>15</u>		<u>15</u>
<i>Tenth Quarter</i>	<i>Credits</i>	<i>Eleventh Quarter</i>	<i>Credits</i>	<i>Twelfth Quarter</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			Business Statistics .....	5
	<u>16</u>		<u>13 or 15</u>		<u>15</u>

## 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>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</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
	<u>15</u>		<u>15</u>		<u>15</u>

## 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
	<u>15</u>		<u>15</u>		<u>15</u>

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>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Market Analysis .....	5	Advertising Campaigns ...	5	Sales Management .....	5
Retail Sales Problems....	5	Retail Buying Problems..	5	Retail Organiz. Problems..	5
Philosophy .....	5	Political Science .....	5	Argumentation .....	5
	<u>15</u>		<u>15</u>		<u>15</u>

## 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, 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		
	<u>15</u>		<u>15</u>		<u>15</u>

## 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
	<u>15</u>		<u>15</u>		<u>15</u>

## 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 8 and 9. 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 Risk Bearing . . . . .	5	Corporation Finance . . . . .	5	Econ. of Mark. and Adv. . . . .	5
	<hr/> 15		<hr/> 15		<hr/> 15

## FOURTH YEAR

Exporting and Importing . . . . .	5	R. R. Finance & Adm. . . . .	5	Investment Analysis . . . . .	5
American Labor Problems . . . . .	5	Employment Management . . . . .	5	Rail and Marine Rates . . . . .	5
Economic Problems . . . . .	5	Trade of Far & Near East . . . . .	5	Research . . . . .	5
	<hr/> 15		<hr/> 15		<hr/> 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 in 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 freshmen 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, 1924-1925

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 of the School of Journalism
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)	Editorial Secretary and Associate in Journalism
LEO A. BORAH, A.M. (Washington)	Instructor in Journalism
ALICE FREIN, A.B. (Washington)	Secretary to the Director

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EDMOND STEPHEN MEANY, M.L. (Wisconsin)	Professor of History
WILLIAM SAYERT, 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 CARLTON AYER, Ph.D. (Chicago)	Professor of Education
WILLIAM DANIEL MORIARTY, Ph.D. (Michigan)	Professor of Business Administration
AMBROSE PATTERSON	Associate in Fine Arts
FRANK H. HAMACK, LL.B. (Georgetown)	Instructor in Business Administration

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### 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 on both the business and editorial sides, and to provide such studies as are best adapted to give the broad training necessary for 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 journalism library and reading room, the faculty offices, the University Press, and all the mechanical equipment for teaching practical journalism.

*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, 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.*—Five 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 Columns* staff have chapters of Hammer and Coffin, the national comic-magazine fraternity, and Sigma Upsilon, the national literary fraternity. Students specializing in advertising have also a chapter of Alpha Delta Sigma, national advertising fraternity for men.

*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 73, 74.)

*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 1924-1925 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 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, the profession of journalism, and the community newspaper are open to lower division students. 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.

*Minor in Journalism.*—Students wishing to minor in journalism must include the following courses in their minor: Journalism 51 (News Writing), 101 (Reporting), 120 (Copy Reading), and 150 (Editorial Writing)—a total of twenty hours.

*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 particularly well 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 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 YEAR <sup>1</sup>			
	<i>Credits</i>	<i>Journalism</i>	<i>Credits</i>
<i>Architecture</i>			
10-11-12. Freehand Drawing.....	3	1. ‡Journalism as a Profession.....	1
<i>Dramatic Art</i>		<i>Military Science</i>	
40. Introductory Public Speaking....	5	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>	
<i>History</i>		1. ‡Introductory Sociology .....	5
5-6. English Political and Social History .....	10		
SECOND YEAR			
	<i>Credits</i>	<i>Painting</i>	<i>Credits</i>
<i>Architecture</i>		56-57-58. Drawing and Painting.....	9
112, 113. Freehand Drawing .....	4	<i>Philosophy</i>	
<i>Economics</i>		6. ‡Introduction to Logic <sup>2</sup> .....	5
62, 63. Accounting .....	10	<i>Political Science</i>	
70. Economics of Markets.....	5	140. ‡Political Parties .....	3
‡Shorthand		115. Public Finance .....	5
<i>English</i>		<i>Psychology</i>	
67, 68, 69. ‡Great American Writers. 6		1. ‡General Psychology .....	5
<i>Foreign Language</i> .....	10	<i>Science</i> .....	15
<i>History</i>		<i>Sociology</i>	
57-58-59. ‡History of the United States 9		29. Social Statistics .....	
71-72-73. Ancient History .....	9	55. Human Ecology .....	5
<i>Journalism</i>		56. Family Life.....	3
51. ‡News Writing .....	5	63. ‡Community Organization .....	5
61. ‡Community Newspaper .....	3	180, 181, 182. Group Behavior.....	5
<i>Military Science</i>			
51-52-53. ‡Practical Military Science.. 5			
<i>Music</i>			
1, 2, 3. Music Appreciation .....	6		
4, 5, 6. History of Music.....	6		
THIRD YEAR			
	<i>Credits</i>	<i>History</i>	<i>Credits</i>
<i>Architecture</i>		130. Europe, 1814-1870 .....	5
101-102-103. History of Architecture. 6		131. Europe since 1870.....	5
<i>Astronomy</i>		147. Civil War Period.....	3
1. Introduction to Astronomy.....	1	148. Reconstruction Period .....	3
<i>Dramatic Art</i>		149. National Development .....	5
101-102-103. Play Acting and Producing .....	4	<i>Journalism</i>	
111-112-113. Play Writing.....	15	90, 91, 92. ‡Current Events .....	1
<i>Economics</i>		101. ‡Reporting .....	5
54, 55, 56. ‡Business Law.....	9	104. ‡Newspaper Administration ..	2
138. Sales Management .....	5	105. The Sporting Page .....	2
<i>English</i>		109. Literary and Dramatic Reviewing .....	2
70-71. ‡Shakespeare .....	6	115. ‡Elements of Publishing.....	3
98. ‡The Bible as Literature.....	3	135. Publicity .....	2
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 .....	5
<i>Greek</i>		133. Advertising Typography .....	5
11. ‡Greek Civilization <sup>3</sup> .....	5	136. ‡Comparative Journalism .....	3
		138. ‡History of Journalism .....	5
		140. ‡Business Office .....	5

<sup>1</sup>If a student has not had in high school the sciences prescribed for junior standing in Liberal Arts, he is required to take ten hours of chemistry or physics and ten hours 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.

<sup>2</sup>Philosophy 1 or 3 may be substituted for this requirement.

<sup>3</sup>Students who have taken, or who plan to take, three or more years of ancient language, may omit this requirement.

<i>Latin</i>	<i>Credits</i>	<i>Psychology</i>	<i>Credits</i>
11. †Roman Civilization <sup>4</sup> .....	5	109. Mental Tests .....	3
<i>Oriental History</i>		111. History of Psychology .....	2
114-115-116. History of Religion .....	0	128. Abnormal Psychology .....	3
<i>Philosophy</i>		<i>Science</i>	
101-102-103. History of Philosophy ...	9	<i>Sociology</i>	
<i>Political Science</i>		104. Population Problems .....	5
100. †Municipal Government .....	5	130. The Social Survey .....	5
102. Municipal Problems .....	5		

## 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	150. †Editorial Writing .....	5
162. European Labor Problems .....	5	160. Trade Journalism .....	5
176. Business Statistics .....	5	170, 171, 172. Magazine and Feature	
198. Research in Marketing and		Writing .....	6
Advertising .....	5	173. The Short Story .....	3
<i>English</i>		174-175. Short Story Writing .....	6
161-162-163. American Culture .....	9	188. News Writing for Teachers ...	2
164, 165, 166. American Literature		250. Research in Journalism .....	5
since 1870 .....	9	<i>Political Science</i>	
174-175-176. †Nineteenth Century		111. International Politics .....	5
English Poetry .....	9	130. American Federal Government..	3
183-184-185. General Literature ....	9	131. American State Government....	3
<i>Foreign Language</i> .....	10	<i>Science</i>	
<i>History</i>		<i>Sociology</i>	
153. †The Pacific Rim .....	3	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 112, 113 (Freehand Drawing); Economics 70 (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 (Drawing and Painting). All these will be found of particular value in advertising work.

*Short Story Writing.*—Students interested particularly in short story writing should elect as many as possible of the following courses, the first four in the order named: Journalism 51 (News Writing), Journalism 101 (Reporting), Journalism 170-2 (Magazine Writing), Journalism 173-5 (Short Story Writing), Dramatic Art 101-3 (Play Acting and Producing), Dramatic Art 111-113 (Play Writing), Psychology 1 (General Psychology),

## COURSES

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

# COLLEGE OF ENGINEERING

## THE FACULTY, 1924-1925

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).....	Professor of Electrical Engineering; Director of Engineering Experiment Station; Dean of the College of Engineering
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
FREDERICK KURT KIRSTEN, B.S., E.E. (Washington)....	Professor of Electrical Engineering
EDGAR ALLEN LOEW, B.S., E.E. (Wisconsin).....	Professor of Electrical Engineering
GEORGE SAMUEL WILSON, B.S. (Nebraska).....	Professor of Mechanical Engineering
CHARLES WILLIAM HARRIS, C.E. (Cornell).....	Professor of Civil Engineering
ARTHUR MELVIN WINSLOW, Ph.B. (Brown), B.S. (Massachusetts Institute of Technology).....	Associate Professor of Mechanical Engineering
CHARLES CULBERTSON MAY, B.S., C.E. (Washington).....	Associate Professor of Civil Engineering and Architecture
IRA LEONARD COLLIER, 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
GILBERT S. SCHALLER, M.E. (Illinois).....	Assistant Professor of Shop Engineering
CLARENCE LESTER WHITE, C.E. (Iowa).....	Assistant Professor of Engineering
ELGIN ROSCOE WILCOX, Met.E. (Washington).....	Assistant Professor of Civil Engineering
JAMES BAKER HAMILTON, B.S. (C.E.) (Washington).....	Instructor in Civil Engineering
HARRY J. MCINTYRE, B.S. (M.E.) (Washington), M.B.A. (Washington).....	Instructor in Mechanical Engineering
BYRON TOWNE MCINN, B.S. (Oregon Agricultural College).....	Instructor in Mechanical Engineering
ROBERT H. G. EDMONDS, B.S. (Whitman), B.S. (M.E.) (Washington).....	Instructor in Mechanical Engineering
GEORGE LISLE HOARD, B.S. (E.E.) (Washington).....	Instructor in Electrical Engineering
GEORGE S. SMITH, B.S. (E.E.) (Washington).....	Instructor in Electrical Engineering
W. L. BUSSCHLIN, B.S. in Ch.E. (California Institute of Technology).....	Instructor in Chemical Engineering
AUSTIN V. EASTMAN, B.S.(E.E.) (Washington).....	Instructor in Electrical Engineering
RAY C. LINDBLOOM, B.S. (E.E.) (Washington).....	Instructor in Electrical Engineering
ALFRED LAWRENCE MILLER, B.S. (C.E.) (Washington).....	Instructor in Civil Engineering
C. L. SULLIVAN.....	Assistant in Engineering Shops
<hr/>	
GEORGE MCPHAIL SMITH, Ph.D. (Frelburg).....	Professor of Inorganic Chemistry
ERIC TEMPLE BELL, Ph.D. (Columbia).....	Professor of Mathematics
JOHN WEINZEL, 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 credits 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 page 30.

## 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 40, 48, 49.

**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 41.

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 .....	½ unit
Solid geometry .....	½ unit
Physics .....	1 unit
Manual Training (woodwork).....	½ 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

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
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. 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

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Physics 97 .....	5	Physics 98 .....	5	Physics 99 .....	5
Qual. Chem. 101.....	5	Quant. Chem. 109.....	5	Quant. Chem. 110.....	5
Mechanism—M.E. 81....	3	Steam Eng.—M.E. 82....	3	Steam Lab.—M.E. 83....	3
Dif. Cal.—Math. 61....	3	Int. Cal.—Math. 62....	3	Chem. Tech. Ch. 52....	5
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	
	17%		17%		17%

##### JUNIOR

Indus. Chem. 121.....	5	Indus. Chem. 122.....	5	Indus. Chem. 123.....	5
English 4 .....	3	Org. Chem. 128.....	5	Org. Chem. 129.....	5
Mach. Design—M.E. 91..	2	Mach. Design—M.E. 92..	2	Dir. Cur.—E.E. 121....	4
E.E. 101 .....	4	Mechanics—C.E. 131 ..	3	D.C. Lab.—E.E. 122....	2
E.E. 102 .....	2				
	16		15		16

##### SENIOR

Phys. Chem. 181.....	5	Phys. and Theoret.		Chem. Engr. 173.....	3
Chem. Engr. 171.....	5	Chem. 182 .....	5	Electives .....	13
Chem. Engr. Thesis 176	2	Chem. Engr. 172.....	5		
Shop 55 .....	1	Chem. Engr. Thesis 178.	3		
Electives .....	3	Electives .....	3		
	16		16		16

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
R.R. Surv.—C.E. 22....	4	Quant. Surv.—C.E. 71..	1	C.E. Draw.—C.E. 75...	1
St. Engr.—M.E. 82....	3	St. Engr. Lab.—M.E. 83	3	Econ.—B.A. 3 .....	3
Physics 97 .....	5	Physics 98 .....	5	Physics 99 .....	5
Mil. Sci. or Phys. Ed..	1½	Calc.—Math. 61 .....	3	Calc.—Math. 62 .....	3
		Mil. Sci. or Phys. Ed..	1½	Mil. Sci. or Phys. Ed..	1½
	16½		16½		16½

## JUNIOR

Hydraulics—C.E. 142 ..	5	Hydr. Engr.—C.E. 143..	3	Hydr. Mach.—C.E. 145.	3
Higher Surv.—C.E. 113.	3	Highways—C.E. 122 ..	3	Field Engr.—C.E. 114..	4
Structures—C.E. 134 ..	3	English 4 .....	4	Water Sup.—C.E. 153..	3
Struc. Mat'ls.—C.E. 167	5	Dir. Cur.—E.E. 101....	4	Alt. Cur.—E.E. 121....	4
		D.C. Lab.—E.E. 102... 2		A.C. Lab.—E.E. 122... 2	
	16		15		16

## SENIOR

Sewerage—C.E. 154 ...	3	Reinf. Concr.—C.E. 139.	3	Engr. Relat.—C.E. 169.	5
Bus. Law—B.A. 54....	3	Struct. Des.—C.E. 161.	3	Wat. Sup. Probs.—C.E.)	
Geology 105 .....	5	Sewage Tr.—C.E. 158.)		155 .....	
Elective .....	5	or	3	Adv. Mech.—C.E. 135.)	
		R.R. Econ.—C.E. 115...)	3	Thesis or Elective.....	3
		Thesis or Elective.....	3	Electives .....	5
		Electives .....	5		
	16		17		16

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

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
Physics 97 .....	5	Physics 98 .....	5	Physics 99 .....	5
Dir. 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..	1½	Mil. Sci. or Phys. Ed..	1½	Mil. Sci. or Phys. Ed..	1½
	15½		15½		15½

## 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

A.C.—E.E. 163 .....	6	Trans.—E.E. 195, 196		Trans.—E.E. 198 or	
A.C.—E.E. 164 .....	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		16

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

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. ...	1½	Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½
	15½		15½		15½

## 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
Shop 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 109 .....	3
	16	Electives .....	5	Thesis 195 .....	4
			16	Electives .....	3
					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. ...	1½	Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½
	15½		15½		15½

## 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

Business Law—B.A. 54 .....	3	Gas. Eng.—M.E. 198 .....	3	Mar. Eng.—M.E. 190 .....	3
Thermo. & Ref.—M.E. 183 ..	5	Heat. & Vent.—M.E. 182 ..	3	Steam Turb.—M.E. 179 ..	3
Ship Design—M.E. 188 .....	2	Ship Design—M.E. 189 .....	2	Mach. Des.—M.E. 103 .....	3
English .....	3	Eng. Mat.—M.E. 167 .....	3	Thesis 195 .....	4
Electives .....	3	Electives .....	5	Electives .....	3
	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, 23, or 21, 22, 23.....	15
English 4 (Certificate in English Composition).....	3
Military Science or Physical Education.....	10
Civil Engineering 1, 2, 11, 12, 13, 21, 181, 132.....	24
Electrical Engineering 101, 102, and 121, 122 or 161, 162.....	12
Engineering Shops 115.....	3
Mechanical Engineering 81, 82, 83, 91, 92, 93.....	15
Business Administration 1 or 3, 62, 63, 54, 55.....	19
Technical Electives (department in which the students is registered)	26
General Electives .....	27

Total..... 195

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 MAGNUSON, 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 36.



# COLLEGE OF FINE ARTS

## THE FACULTY, 1924-1925

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California)	President
JOHN THOMAS CONDON, LL.M. (Northwestern)	Dean of Faculties
IRVING MACKEY GLEN, A.M. (Oregon)	Professor of Music; Dean of the College of Fine Arts
CARL FRELINGHUYSEN GOULD, A.B. (Harvard)	Associate Professor of Architecture
WALTER ISAACS, 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, Leschetzky), Associate Professor of Music	
CARL PAIGE WOOD, A.M. (Harvard)	Associate Professor of Music
CHARLES CULBERTSON MAY, B.S. (C.E.), (Washington)	Associate Professor of Civil Engineering and Architecture
FRANCES DICKET, A.M. (Columbia)	Assistant Professor of Music
LOUISE VAN OGLE	Assistant Professor of Music
GLENN HUGHES, A.M. (Washington)	Assistant Professor of English and Dramatic Art
JAMES A. WEHN	Associate in Modeling and Sculpture
EUGENIA WORMAN	Associate in Fine Arts
AMBROSE PATTERSON	Associate in Fine Arts
ALICE BOGARDUS, B.L. (Mills) (Columbia)	Associate in Music
ANNA ALFRIDA STORM	Associate in Design
ALBERT LOVEJOY, Graduate (Emerson College of Oratory)	Associate in Dramatic Art
JOHN BUTLER	Associate in Fine Arts
LUELLA VENINO	Associate in Music
CLARA BELLE LYNCH	Associate in Music
BURTON WAKELEY JAMES, (Cornell), (Emerson College of Oratory)	Associate in Dramatic Art
EDNA MABON, (Carleton)	Associate in Music
ALBERT PORTER ADAMS	Instructor in Music
ANNETTE EDENS, (New York School of Fine and Applied Arts, Columbia)	Instructor in Drawing
GEORGE C. KIROHNER (Leipzig)	Instructor in Music
EILENE FRENCH, B.Mus. (Washington), M.A. (Columbia)	Instructor in Music
HELEN FERRYMAN, B.Mus. (Washington)	Instructor in Music
HELEN RHODES, (Columbia)	Instructor in Drawing
HOPE FOOTE, A.M. (Columbia)	Instructor in Interior Decoration
ARTHUR HERMANN, A.B. (Arch), (Carnegie Institute of Technology)	Instructor in Architecture
LANCELOT GOWEN, A.M. (Arch.), (California)	Instructor in Architecture
LOUISE BENTON OLIVER, B.Mus. (Washington)	Assistant in Music
IRIS FERN CANFIELD, B.Mus. (Washington)	Assistant in Music
MARIE ADELE REEVES, B.F.A. (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 MORR, C.E., M.S. (Lafayette), M.C.E. (Cornell)	Professor of Civil Engineering
ERIO TEMPLES BELL, Ph.D. (Columbia)	Professor of Mathematics
ALEXANDER CRIPPEN ROBERTS, Ph.D. (Washington)	Professor of Education
THOMAS K. SIDET, Ph.D. (Chicago)	Associate Professor of Latin and Greek
CHARLES GOGGIO, Ph.D. (Wisconsin)	Associate Professor of Romance Languages
CURT JOHN DUCASSE, Ph.D. (Harvard)	Associate Professor of Philosophy
ERNEST 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
LESLIE SPIER, Ph.D. (Columbia)	Assistant Professor of Anthropology

## GENERAL STATEMENT

This college comprises the departments of architecture, music, painting, sculpture, design, and dramatic art. The department of architecture offers a curriculum of four years 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, leading to the degrees of bachelor of arts in dramatic art and bachelor of fine arts with a major in dramatic art.

*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. Such 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 scientific art, the practice of which must be based on a thorough knowledge of construction and the practical requirements of buildings. Technical training which has not recognized the importance 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 this profession is not only that students may obtain a general knowledge of architecture, but also that they may be able to cope with problems that occur in actual practice.

*Design.*—A knowledge of design is the most essential subject in a course preparing students for the profession of architecture. The program of studies is so arranged, therefore, that most weight is given to these subjects. The student gives the greater part of his afternoons to work in the drafting room. This work consists largely of problems in architectural design presented as far as possible to develop technical skill without hindering individuality of expression. After the freshman year problems will be judged by a committee of practicing architects and faculty appointed by the head of the department. Most of the work is done under the programs of the Beaux Arts Institute of Design, New York, and is sent there for judgment where it is placed in competition with work of the leading schools of architecture in this country. All drawings made by the students are the property of the department until returned.

*Construction.*—The theory and practice of construction is taught as a necessary basis for and in connection with architectural design. It prepares students in the best way for architectural practice. The department strongly recommends that the student supplement his university training by work in an architect's office. Three months of office work at least should be done by the student before he obtains his degree.

**Dramatic Art.**—The work is planned for two classes of students: (a) those who desire knowledge of dramatic art as a part of a liberal education; (b) those who need knowledge of dramatic art as a part of their technical training.

For a major the department requires 47 to 56 credits in dramatic art. Two degrees are offered: (1) Bachelor of Arts in Dramatic Art; (2) Bachelor of Arts with a Major in Dramatic Art.

#### 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 40, 42, 49.

**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 41.

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 units
- 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.

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 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 APPLIED MUSIC

(Piano, Violin, Voice, Violoncello, Organ)

##### FIRST YEAR

Autumn Quarter	Credits	Winter Quarter	Credits	Spring Quarter	Credits
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
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
	16½		16½		16½

## SECOND 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.. 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	
Econ. or 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	
	18%		16%		16%

## THIRD 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	
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	
	16		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 120 aesth... 5		Electives ..... 8		Electives ..... 5	
Electives ..... 3				Senior Program* 100... 2	
	16		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	
	16%		16%		16%

## SECOND YEAR

Music 10 Cho. or elect.. 2		†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 50 ..... 5		Physics 51 ..... 5	
Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½	
	18%		15%		15%

## THIRD YEAR

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	
	17		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.

## COLLEGE OF FINE ARTS

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## FOURTH 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... 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 50 ..... 5		Physics 51 ..... 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 ..... 3	
Econ. or Pol. or Soc. Sci. 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. Appre.... 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	

\*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.

## 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
Econ. or Pol. or Soc. Sci. 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	
	16½		16½		16½

## THIRD YEAR

Music, electives .....	6	Music, electives .....	6	Music, electives .....	6
Phil. 129 Aesthetics.... 5		†Liberal Arts, electives.10		Electives .....	5
†Lib. Arts, electives.... 5				†Lib. Arts, electives.... 5	
	16		16		16

## FOURTH YEAR

Music, electives .....	5	Music, electives .....	5	Music, electives .....	5
†Liberal Arts, electives.10		†Liberal Arts, electives.10		†Liberal Arts, electives.10	
	15		15		15

CURRICULUM IN ARCHITECTURE LEADING TO THE DEGREE OF  
BACHELOR IN 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 Arch. Apprec... 2		Arch. 2 Arch. Apprec... 2		Arch. 3 Arch. Apprec... 2	
Arch. 4 Elem. of Design 4		Arch. 5 Elem. of Design 4		Arch. 6 Elem. of Design 4	
Arch. 7 Graphics..... 1		Arch. 8 Graphics..... 1		Arch. 9 Graphics .....	1
Arch. 47 Elem. Build.		Arch. 48 Elem. Build.		Foreign Language .....	5
Con. .... 3		Con. .... 3		P.S.D. 7 Drawing (EE) 3	
P.S.D. 72 Sculpture.... 3		P.S.D. 6 Drawing (EE) 3		Eng. 3 Rhet. & Comp.	
Eng. 1 Rhet. & Comp.		Eng. 2 Rhet. & Comp.		(CC) .....	3
(CC) .....	3	(CC) .....	3	Phys. Ed. or Mil. Sci... 1½	
Phys. Ed. or Mil. Sci... 1½		Phys. Ed. or Mil. Sci... 1½			
	17½		17½		19½

## SECOND YEAR

Arch. 51 Hist. of Arch. 2		Arch. 52 Hist. of Arch. 2		Arch. 53 Hist. of Arch. 2	
Arch. 54 Des., Grade I 3		Arch. 55 Design, Gr. I. 3		Arch. 56 Design, Gr. I. 3	
Arch. 60 Working Drgs. 2		Arch. 61 Working Drgs. 2		Arch. 62 Working Drgs. 2	
Math. 54 Trigonometry... 3		Math. 55 Algebra..... 3		Math. 56 Anal. Geom... 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	
	16½		16½		16½

## THIRD YEAR

Arch. 101 Hist. of Arch. 2		Arch. 102 Hist. of Arch. 2		Arch. 103 Hist. of Arch. 2	
Arch. 104 Design, Gr. II 5		Arch. 105 Design, Gr. II 5		Arch. 106 Design, Gr. II 5	
Arch. 112 Freeh'd Draw. 2		Arch. 113 Freeh'd Draw. 2		Arch. 114 Water Color. 2	
C.E. 130 Theory of Con. 3		Arch. 117 Build. Const. 3		Arch. 118 Build Const. 3	
Phys. 1 General..... 4		Phys. 2 General..... 5		Phys. 113 Acous. & Ill.. 4	
	16		17		16

## FOURTH YEAR

Arch. 151 Hist. of Arch. 2		Arch. 152 Theory of Ar. 2		Arch. 153 Ar. Materials. 2	
Arch. 154 Design, Gr.III 7		Arch. 155 Design, Gr.III 7		Arch. 116 Spec. & Off. Fr. 2	
Arch. 160 Pencil Sketch 1		Arch. 162 Modelling... 1		Arch. 156 Thesis & Sem. 8	
Econ. 54 Bus. Law..... 3		C.E. 106 San. & Plumb. 2		Arch. 161 Pencil Sketch 1	
E.E. 105 Elec. Wiring. 2		P.S.D. 161 Life Draw. 3		Arch. 163 Modelling ... 1	
P.S.D. 160 Life Draw. 3				M.E. 107 Heat. & Vent.. 2	
	18		15		16

\* (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.

# COLLEGE OF FINE ARTS

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## 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 Drawing..... 3		P.S.D. 6 Drawing..... 3		P.S.D. 7 Drawing..... 3	
P.S.D. 9 Art Struc.... 3		P.S.D. 10 Art Struc.... 3		P.S.D. 11 Art Struc.... 3	
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%	
	16%		16%		16%

### SECOND YEAR

P.S.D. 53 Art Struc... 3	P.S.D. 54 Art Struc... 3	P.S.D. 55 Art Struc... 3
P.S.D. 56 Dwg. & Ptg. 3	P.S.D. 57 Dwg. & Ptg. 3	P.S.D. 58 Dwg. & Ptg. 3
Foreign Language ..... 5	Greek or Rom. Art.... 1	Greek or Rom. Art.... 1
Greek or Rom. Art.... 1	Phys. Ed. or Mil. Sci.. 1%	Phys. Ed. or Mil. Sci.. 1%
Phys. Ed. or Mil. Sci.. 1%	Electives ..... 8	Electives ..... 8
Electives ..... 3		
	16%	16%

### THIRD YEAR

P.S.D. 126 Hist. of Ptg. 1	P.S.D. 127 Hist. of Ptg. 1	P.S.D. 128 Hist. of Ptg. 1
P.S.D. 103 Pottery .... 3	P.S.D. 104 Pottery..... 3	Arch. 3 Arch. Apprec... 2
P.S.D. 107 Portrait ... 3	P.S.D. 108 Portrait ... 3	P.S.D. 109 Portrait.... 3
Pol. Sci., Ec. or Soc... 5	Laboratory Science ... 5	Laboratory Science ... 5
Electives ..... 3	Electives ..... 3	Electives ..... 4
	15	15

### FOURTH YEAR

P.D.D. 157 Art. Struc.. 3	P.D.S. 158 Art. Struc.. 3	P.S.D. 152 Art Struc... 3
P.S.D. 160 Life..... 3	P.S.D. 161 Life..... 3	P.S.D. 162 Life..... 3
Electives ..... 9	Electives ..... 9	Electives ..... 9
	15	15

## FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN PUBLIC SCHOOL ART

### 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 Drawing..... 3		P.S.D. 6 Drawing..... 3		P.S.D. 7 Drawing..... 3	
P.S.D. 9 Art. Struc.... 3		P.S.D. 10 Art. Struc.... 3		P.S.D. 11 Art. Struc.... 3	
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%	
	16%		16%		16%

### SECOND YEAR

P.S.D. 53 Art Struc.... 3	P.S.D. 54 Art Struc... 3	P.S.D. 55 Art Struc... 3
P.S.D. 56 Dwg. & Ptg. 3	P.S.D. 57 Dwg. & Ptg. 3	P.S.D. 58 Dwg. & Ptg. 3
Foreign Language ..... 5	Pol. Sci., Ec., or Soc... 5	Phys. Ed. or Mil. Sci.. 1%
Phys. Ed. or Mil. Sci.. 1%	Phys. Ed. or Mil. Sci.. 1%	Electives ..... 9
Electives ..... 3	Electives ..... 3	
	15%	15%

### THIRD YEAR

P.S.D. 107 Portrait.... 3	P.S.D. 108 Portrait.... 3	P.S.D. Portrait..... 3
Greek or Rom. Art.... 1	Greek or Roman Art.... 1	Greek or Roman Art.... 1
Education 101..... 5	Laboratory Science..... 5	Education 110..... 5
P.S.D. 105 Art Struc.. 3	P.S.D. 106 Art Struc.. 3	Laboratory Science..... 5
P.S.D. 126 Hist. of Ptg. 1	P.S.D. 127 Hist. of Ptg. 1	P.S.D. 128 Hist. of Ptg. 1
Electives ..... 3	Electives ..... 3	
	16	16

## FOURTH 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. 157 Art Struc.... 3		P.S.D. 158 Art Struc... 3		P.S.D. 152 Art Struc... 3	
P.S.D. 101 Pub. Schl. Art. 2		Education 119..... 3		Education 160-P..... 2	
Philosophy 129..... 5		P.S.D. 102 Pub. Schl. Art. 2		Education 145..... 5	
Electives ..... 5		Electives ..... 7		Electives ..... 5	
	15		15		15

FOR THE DEGREE OF BACHELOR OF FINE ARTS WITH A MAJOR IN  
INTERIOR DECORATION

## 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 Drawing..... 3		P.S.D. 6 Drawing..... 3		P.S.D. 7 Drawing..... 3	
P.S.D. 9 Art Struc.... 3		P.S.D. 10 Art Struc.... 3		P.S.D. 11 Art Struc.... 3	
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%	
	16%		16%		16%

## SECOND YEAR

P.S.D. 59 Hsld. Des.... 3		P.S.D. 60 Hsld. Des.... 3		P.S.D. 61 Hsld. Des.... 3	
Arch. 1 Arch. Apprec... 2		Arch. 2 Arch. Apprec... 2		Arch. 3 Arch. Apprec... 2	
Arch. 4 Elem. of Design 4		Arch. 5 Elem. of Arch... 4		Arch. 6 Elem. of Arch... 4	
Arch. 7 Graphics..... 1		Arch. 8 Graphics..... 1		Arch. 9 Graphics..... 1	
Foreign Language..... 5		Electives ..... 5		H.E. 25 Textiles..... 5	
Phys. Ed. or Mil. Sci... 1%		Phys. Ed. or Mil. Sci... 1%		Phys. Ed. or Mil. Sci... 1%	
	16%		16%		16%

## THIRD YEAR

P.S.D. 110 Int. Dec.... 3		P.S.D. 111 Int. Dec.... 3		P.S.D. 112 Int. Dec.... 3	
P.S.D. 113 Fur. Des.... 2		P.S.D. 114 Fur. Des.... 2		P.S.D. 115 Fur. Des.... 2	
Pol. Sci., Ec., or Soc... 5		Laboratory Science.... 5		Laboratory Science.... 5	
Electives ..... 5		Electives ..... 5		Electives ..... 5	
	15		15		15

## FOURTH YEAR

P.S.D. 172 Int. Dec.... 5		P.S.D. 173 Int. Dec.... 5		P.S.D. 174 Int. Dec.... 5	
P.S.D. 126 Hist. of Ptg... 1		P.S.D. 127 Hist. of Ptg... 1		P.S.D. 128 Hist. of Ptg... 1	
Greek or Roman Art.... 1		Greek or Roman Art.... 1		Greek or Roman Art.... 1	
House Furn. 173..... 3		Fine or Lib Arts..... 3		Fine or Lib Arts..... 3	
Fine or Lib. Arts..... 5		Electives ..... 8		Electives ..... 8	
	15		15		15

## MAJOR IN PAINTING

## 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 Drawing..... 3		P.S.D. 6 Drawing..... 3		P.S.D. 7 Drawing..... 3	
P.S.D. 9 Art Struc.... 3		*P.S.D. 10 Art Struc.... 3		*P.S.D. 11 Art Struc.... 3	
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%	
	16%		16%		16%

## SECOND YEAR

P.S.D. 75 Painting..... 3		P.S.D. 76 Painting..... 3		P.S.D. 77 Painting..... 3	
P.S.D. 65 Life..... 3		P.S.D. 66 Life..... 3		P.S.D. 67 Painting..... 3	
Greek or Roman Art.... 1		Greek or Roman Art.... 1		Greek or Roman Art.... 1	
Foreign Language..... 5		Electives ..... 9		Electives ..... 9	
Phys. Ed. or Mil. Sci... 1%		Phys. Ed. or Mil. Sci... 1%		Phys. Ed. or Mil. Sci... 1%	
Electives ..... 4					
	17%		17%		17%



## THIRD 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. 105 Art Struc....	3	P.S.D. 106 Art Struc....	3	Arch. 3 Arch. Apprec....	2
P.S.D. 107 Portrait....	3	P.S.D. 108 Portrait....	3	P.S.D. 109 Portrait....	3
P.S.D. 126 Hist. of Ptg. 1	1	P.S.D. 127 Hist. of Ptg. 1	1	P.S.D. 128 Hist. of Ptg. 1	3
Pol. Sci., Ec., or Soc....	5	Laboratory Science.....	5	Laboratory Science.....	5
Electives .....	3	Electives .....	3	Electives .....	4
	15		15		15

## FOURTH YEAR

P.S.D. 160 Life.....	3	P.S.D. 161 Life.....	3	P.S.D. 162 Life.....	3
P.S.D. 175 Comp.....	3	P.S.D. 176 Comp.....	3	P.S.D. 177 Comp.....	3
Electives 163.....	9	Electives 164.....	9	Electives 165.....	9
	15		15		15

CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF ARTS  
IN DRAMATIC ART

## FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Dram. Art 4.....	3	Dram. Art 5.....	3	English Composition....	3
English Composition....	3	English Composition....	3	Foreign Language.....	5
Foreign Language.....	5	Foreign Language.....	5	Electives .....	8
Chem., Bot. or Zool....	5	Chem., Bot. or Zool....	5	Phys. Ed. or M. Sci....	1½
Phys. Ed. or M. Sci....	1½	Phys. Ed. or M. Sci....	1½		
	17½		17½		17½

## SECOND YEAR

Dram. Art 61.....	5	Dram. Art 62.....	5	Dram. Art 63.....	5
P.S.D. 169 (Cost. design) .....	2	P.S.D. 170 (Cost. design) .....	2	P.S.D. 171 (Cost. design) .....	2
Foreign Language.....	5	Psychology .....	5	Pol. Sci., Soc. or Economics .....	5
Electives .....	3	Electives .....	3	Electives .....	3
Phys. Ed. or M. Sci....	1½	Phys. Ed. or M. Sci....	1½	Phys. Ed. or M. Sci....	1½
	16½		16½		16½

## THIRD YEAR

Dram. Art 101.....	4	Dram. Art 102.....	4	Dram. Art 103.....	4
Dram. Art 127.....	5	P.S.D. 167 (Stage Design) .....	3	P.S.D. 168 (Stage Design) .....	3
P.S.D. 166 (Stage Design) .....	3	†Lib. Arts Electives....	8	†Lib. Arts Electives....	8
†Lib. Arts Electives....	3				
	15		15		15

## FOURTH YEAR

Dram. Art 151.....	3	Dram. Art 152.....	3	Dram. Art 153.....	3
†Lib. Arts Electives....	12	†Lib. Arts Electives....	12	Education 160L.....	2
				†Lib. Arts Electives....	10
	15		15		15

CURRICULUM LEADING TO THE DEGREE OF BACHELOR OF FINE ARTS  
WITH A MAJOR IN DRAMATIC ART

## FIRST YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Dram. Art 4.....	3	Dram. Art 5.....	3	English Composition....	3
English Composition....	3	English Composition....	3	Foreign Language.....	5
Foreign Language.....	5	Foreign Language.....	5	Electives .....	8
Chem., Bot., or Zool....	5	Chem., Bot., or Zool....	5	Phys. Ed. or M. Sci....	1½
Phys. Ed. or M. Sci....	1½	Phys. Ed. or M. Sci....	1½		
	17½		17½		17½

†Liberal Arts electives for the junior and senior years must be in upper division courses except with the consent of the dean.

## 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>
Dram. Art 61.....	5	Dram. Art 62.....	5	Dram. Art 63.....	5
P.S.D. 169 (Cost. Design).....	2	P.S.D. 170 (Cost. Design).....	2	P.S.D. 171 (Cost. Design).....	2
Foreign Language.....	5	Psychology.....	5	Pol. Sci., Soc., or Economics.....	5
Electives.....	3	Electives.....	3	Electives.....	3
Phys. Ed. or M. Sci....	1%	Phys. Ed. or M. Sci....	1%	Phys. Ed. or M. Sci....	1%
	<hr/> 16%		<hr/> 16%		<hr/> 16%

## THIRD YEAR

Dram. Art 101.....	4	Dram. Art 102.....	4	Dram. Art 103.....	4
Dram. Art 127.....	5	P.S.D. 167 Stage Design.....	3	P.S.D. 168 (Stage Design).....	3
P.S.D. 166 (Stage Design).....	3	Electives.....	8	Electives.....	8
Electives.....	3				
	<hr/> 15		<hr/> 15		<hr/> 15

## FOURTH YEAR

Dram. Art Electives....	3	Dram. Art Electives....	3	Dram. Art Electives....	3
Dram. Art 151.....	3	Dram. Art 152.....	3	Dram. Art 153.....	3
Phil. 129 (Aesthetics)...	5	Electives.....	9	Education 160L.....	2
Electives.....	4			Electives.....	7
	<hr/> 15		<hr/> 15		<hr/> 15

## COURSES

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

## COLLEGE OF FISHERIES

### THE FACULTY, 1924-25

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 of the College of Fisheries
CARL R. FELLERS, Ph.D. (New Jersey State College)	Associate Professor of Food Preservation
CLARENCE L. ANDERSON, M.S. (Washington)	Instructor in Fisheries
DONALD R. CRAWFORD, B.S. (Washington)	Instructor in Fish Culture
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
<hr/>	
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 KREITZER BENSON, Ph.D. (Columbia)	Professor of Chemical Engineering
JOHN WEINZEL, Ph.D. (Wisconsin), Dr.P.H. (Harvard)	Professor of Bacteriology
LESLIE JAMES AYER, J.D. (Chicago)	Professor of Law
WILLIAM MAURICE DEHN, Ph.D. (Illinois)	Professor of Organic Chemistry
GEORGE MOPHAIL SMITH, Ph.D. (Freiburg)	Professor of Inorganic Chemistry
WILLIAM DANIEL MORIARTY, Ph.D. (Chicago)	Professor of Business Administration
WILLIAM EDWARD COX, A.M. (Texas)	Professor of Business Administration
GEORGE BURTON RIGG, Ph.D. (Chicago)	Associate Professor of Botany
GEORGE SAMUEL WILSON, B.S. (Nebraska)	Associate Professor of Mechanical Engineering
HERMAN VANCE TARTAR, Ph.D. (Chicago)	Associate Professor of Chemistry
MARY MILLMORE SKINNER, Ph.D. (Harvard)	Associate Professor of Business Administration
ELDIN VERNE LYNN, Ph.D. (Wisconsin)	Associate Professor of Pharmacology and Chemistry
THOMAS G. THOMPSON, Ph.D. (Washington)	Associate Professor of Chemistry
ELI VICTOR SMITH, Ph.D. (Northwestern)	Assistant Professor of Zoology
JOHN EARL GUBERLET, Ph.D. (Illinois)	Assistant Professor of Zoology
CLARENCE LESTER WHITE, C.E. (Iowa)	Assistant Professor of Engineering
RAYMOND FORREST FARWELL, A.B. (California)	Instructor in Maritime Commerce
SARGENT POWELL, Ph.D. (Illinois)	Instructor in Chemistry
WARREN LORD BEUSCHLEIN, B.S. (Ch.E.) (California Institute of Technology)	Instructor in Chemical 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, smoke-houses, 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 offered 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 40, 48, 49.

*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 41.

*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.

#### FISHERIES LABORATORIES

For description of laboratories, see pages 31, 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 fisheries and food preservation are advised to spend their summer vacations in some line of practical work connected with the fishery and food preservation industries. 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. 57, money and banking; B.A. 105, business organization; B.A. 70, economics of markets; B.A. 137, advertising; B.A. 167, plant management; Bact. 103, public hygiene; Bot. 130, economic marine botany; Chem. 123, industrial chemistry; Chem. 144, physiological chemistry; Chem. 165, chemistry of nutrition; M.E. 82, 198, mechanical engineering; modern language (Spanish or German preferred); Physics 3; Zool. 60, 61, 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 23.....	5
English 4.....	3	C.E. 1.....	3	English 5.....	3
Mil. Sci. or Phys. Ed..	1½	Mil. Sci. or Phys. Ed..	1½	Electives .....	2
				Mil. Sci. or Phys. Ed..	1½

## SECOND YEAR

Fisheries 53.....	5	Fisheries 54.....	5	Fisheries 55.....	5
*Physics 1.....	5	*Physics 2.....	5	Zoology 5.....	5
Electives .....	5	Electives .....	5	Botany 53.....	5
Mil. Sci. or Phys. Ed..	1½	Mil. Sci. or Phys. Ed..	1½	Botany 53 or Phys. Ed..	1½

## THIRD YEAR

Fisheries 101.....	5	Fisheries 102.....	5	Fisheries 103.....	5
Fisheries 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 154.....	5	Electives .....	10	Fisheries 115.....	3
Fisheries 195.....	2			Zoology 108.....	5
Electives .....	3			Fisheries 196.....	2

## GRADUATE

Fisheries 201—Research†	Fisheries 202—Research†	Fisheries 203—Research†
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## 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 23.....	5
English 4.....	3	C.E. 1.....	3	English 5.....	3
Mil. Sci. or Phys. Ed..	1½	Mil. Sci. or Phys. Ed..	1½	Electives .....	2
				Mil. Sci. or Phys. Ed..	1½

## SECOND YEAR

Fisheries 53.....	5	Fisheries 54.....	5	Fisheries 55.....	5
Chemistry 111.....	5	Chemistry 128.....	5	Chemistry 129.....	5
*Physics 1.....	5	*Physics 2.....	5	Electives .....	5
Mil. Sci. or Phys. Ed..	1½	Mil. Sci. or Phys. Ed..	1½	Mil. Sci. or Phys. Ed..	1½

## THIRD YEAR

Fisheries 106.....	5	Fisheries 107.....	5	Fisheries 105.....	5
Bacteriology 101.....	5	Fisheries 104.....	5	Fisheries 130.....	5
Chemistry .....	5	Bacteriology 102.....	5	Fisheries 115.....	3
		Pharmacy 10.....	1	Electives .....	2

\*A student who has taken one year of physics in high school will substitute electives for Physics 1 and 2, but beginning with the autumn quarter of 1925, Physics 1, 2 and 3 will be required of all students whether they have had high school physics or not.

†Time and credit to be arranged.

§Course to be arranged.

FOURTH YEAR					
<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Fisheries 108.....	5	Fisheries 156.....	5	Fisheries 156.....	5
B.A. 54.....	3	B.A. 55.....	3	Fisheries 147.....	3
B.A. 62.....	5	B.A. 63.....	5	Fisheries 196.....	2
Fisheries 195.....	2	Electives .....	2	Electives .....	5

## GRADUATE

Fisheries 205.—Research†	Fisheries 206.—Research†	Fisheries 207.—Research†
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Attention of the student in the following curriculum is directed to the courses printed below as desirable electives. All electives must have the approval of class advisors. B.A. 7, geographic backgrounds of industries; B.A. 62, 63, accounting; Math. 4, trigonometry; Math. 5, college algebra; Zool. 1, 2, elements of zoology; Physiology 7; Psychology 1, and English 40, practical public speaking.

## III. COMMERCIAL CANNING AND CURING OF FRUITS AND VEGETABLES

FIRST YEAR					
<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
F.P. 21 Intro. to Food Preservation .....	2	F.P. 22 Intro. to Food Preservation .....	2	English 5.....	3
Chemistry 1 or 21.....	5	Chemistry 2 or 22.....	5	Chemistry 23 .....	5
Botany 1 or Elec.....	5	C.E. 1.....	3	B.A. 3 Economics.....	3
English 4.....	3	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 .....	5	*Physics 2 .....	5	*Physics 3 .....	5
Chemistry 111.....	5	Chemistry 128.....	5	Chemistry 129.....	5
Botany 70.....	5	Electives .....	5	Electives .....	5
Mil. Sci or Phys. Ed... 1½		Mil. Sci or Phys. Ed... 1½		Mil. Sci or Phys. Ed... 1½	
THIRD YEAR					
F.P. 120.....	5	M.E. 82.....	3	Fisheries 130 .....	5
Bacteriology 101.....	5	Bacteriology 102.....	5	M.E. 83.....	3
Chemistry 125.....	5	<del>Pharmacy 10.....</del>	<del>5</del>	Electives .....	7
<i>Courses to have</i>		Electives .....	9 7		
FOURTH YEAR					
F.P. 160.....	5	F.P. 161.....	5	F.P. 162.....	5
F.P. 165.....	5	B.A. 167.....	5	F.P. 172.....	5
F.P. 197 Seminar.....	2	Electives .....	5	F. P. 198.....	2
Electives .....	3			Electives .....	3
GRADUATE					
F.P. 230.—Research†	F.P. 231.—Research†	F.P. 232.—Research†			

## COURSES

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

## WINTER SESSION FOR FISHERMEN AND OTHERS

The regular annual session for fishermen and fruit and vegetable preservers will open on January 7, 1925, continuing until about March 1. A comprehensive program of short courses covering all branches of the above work are offered for the benefit of persons interested. Admission to the courses is without examination. No previous preparation, training or technical 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 issued to such students.

\*A student who has taken one year of physics in high school will substitute electives for Physics 1 and 2, but beginning with the autumn quarter of 1925, Physics 1, 2 and 3 will be required of all students whether they have had high school physics or not.

†Time and credit to be arranged.

‡Unless high school botany is offered for entrance Botany 1 must be taken in the University.



## COLLEGE OF FORESTRY

### THE FACULTY 1924-25

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 of the College of Forestry
BURT PERSONS KIRKLAND, A.B. (Cornell).....	Professor of Forestry
ELIAS TREAT CLARK, M.F. (Yale).....	Professor of Forestry
BROB 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
DAVID CONNOLLY HALL, M.D. (Chicago).....	University Health Officer; Professor of Hygiene
HENRY KREITZER BENSON, Ph.D. (Columbia).....	Professor of Chemical Engineering
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

### 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.

### BUILDING

The College of Forestry has been housed in the Forest Products Laboratory, a building 50 ft. x 85 ft. and designed primarily for research work in forest products. Through a generous gift of \$250,000 from Mrs. Alfred H. Anderson the second unit of the forestry group of buildings will be constructed during 1924. The new building, to be known as the Alfred H. Anderson Hall, will be located in front of the laboratory and the two buildings will be connected by a covered passage-way. Anderson Hall will be about 60 ft. x 150 ft. and designed in the tudor-gothic style. It will have full three floors with the addition of a large draughting room in the attic. As the gift provides for the building equipped this college will have an unusually complete equipment for demonstration, class and laboratory work.

### FOREST CLUB

The Forest Club is comprised of all students in 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 \$1 a year. It is devoted largely to Western forestry and lumbering problems.

Officers of the club for the year 1923-1924 are: President, Howard Place; vice-president, Charles R. Whipple; secretary-treasurer, Gilbert M. Orr; editor, Ray Taylor; advertising manager, Gilbert M. Orr.

#### 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.

#### FOREST AND LUMBERING LABORATORIES

For description of laboratories, see pages 32, 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 40, 48, 49.

*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 41.

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	Physics..... 1 unit
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*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.

*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 adviser. 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.

For more detailed information on graduate work, see Graduate School bulletin.

#### 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.

#### SCHOLARSHIPS AND PRIZES

*The Climax Locomotive Company Scholarship in Forestry.*—The Seattle branch of the Climax Locomotive Co. offers an annual scholarship of \$100. The award is to be made on the basis of self-dependence, scholarship and wholeness of influence to a student majoring in forestry.

*The Charles Lathrop Pack Prize.*—Charles Lathrop Pack, president of the American Tree Association, offers an annual prize of \$50 for the best essay by a student majoring in forestry. The subject shall be chosen with reference to interesting the general public in forestry matters.

#### 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, and the management of private forest holdings; (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 advisers unless such deviation is imperative.

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	

##### SECOND YEAR

For. 53 (Construction)..	3	Chem. 2 (Gen. Chem.)..	5	For. 52 (Mensuration)..	5
For. 57 (Silvics).....	3	For. 51 (Mensuration)..	5	For. 58 (Silvicult.)....	5
Chem. 1 (Gen. Chem.)..	5	English .....	3	Geol. 5 (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

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
For. 101 (Technol.)....	5	For. 158 (Util.).....	5	For. 105 (Preserva.)...	5
Physics 1 (Engs.).....	5	Physics 2 (gen.).....	5	Physics 3 (gen.).....	5
M.E. 82 (Steam Engs.).	3			For. 104 (Tim. Tests)..	5

##### *Suggested Electives*

Chem. 101 (Qual Anal.)	5	Chem. 111 (Quant An.)	5	B.A. 56 (Bus. Law)....	3
B.A. 11 (Accounting)...	5	B.A. 12 (Accounting)..	5		
C.E. 22 (Log. R.R.)...	5	B.A. 55 (Bus. Law)...	3		
B.A. 54 (Bus. Law)...	3	M.E. 83 .....	3		
Bot. 111 (Pathology)...	5				

##### FOURTH YEAR

For. 151 (Management). 5	For. 126 (Econ.)..... 3	All elective.
For. 153 (Gen. Lumber) 5	For. 152 (Management). 5	Recreation .....

##### *Suggested Electives*

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. 119 (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. Manag.)	8
For. 208 (Seminar)....	2	Elective .....	10	For. 224 (Adv. Milling and Marketing) .....	5
For. 221 (History).....	3				

## COURSES

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

## SCHOOL OF LAW

### THE FACULTY, 1924-1925

HENRY SUZZALLO, Ph.D. (Columbia), LL.D. (California).....	President
JOHN THOMAS CONDON, LL.M. (Northwestern).....	Professor of Law; Dean of the School of Law
HARVEY LANTZ, A.M. (De Pauw), LL.B. (Kent).....	Professor of Law
IVAN WILBUR GOODNER, LL.B. (Nebraska).....	Professor of Law
CLARK PRESCOTT 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., B.S. in L.S. (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 students 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 28,000 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 136,885 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 credits 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 pages 48, 49.

*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 on pages 40-48.

*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 47) 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 plus the ten required credits in military science or physical education and including all the required work, together with a major, 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 154, 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 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.

*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 examinations 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 of 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 thesis. 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 students 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 the 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, 1924-1925

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 of the College of Mines  
 \*JOSEPH DANIELS, S.B. (Massachusetts Institute of Technology), M.S. (Lehigh)...Professor  
 of Mining Engineering and Metallurgy  
 CLARENCE RAYMOND CORRY, E.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  
 HARRY M. WILTON, B.S. (Min.-Met.) (Illinois).....Instructor in Mining and Metallurgy  
 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  
 JAMES GAMBLE JOHNSTON.....Assistant in Ore Dressing  
 GEORGE THOMAS BENJAMIN.....Assistant in Metallurgy

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.N.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  
 GEORGE SAMUEL WILSON, B.S. (Nebraska).....Professor of Mechanical Engineering  
 CHARLES WILLIAM HARRIS, C.E. (Cornell).....Professor of Civil Engineering  
 EDGAR ALLEN LOEW, B.S., E.E. (Wisconsin).....Professor of Electrical Engineering  
 LOREN DOUGLAS MILLIMAN, A.B. (Michigan).....Associate Professor of English  
 HENRY LOUIS BRAKEL, Ph.D. (Cornell).....Associate Professor of Engineering Physics  
 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 EDWARD GOODSPEED, B.S. (Min.E.) (Massachusetts Institute of  
 Technology).....Assistant Professor of Geology  
 GILBERT SIMON SCHALLER, B.S. (Illinois).....Assistant Professor of Shop Engineering

### ADVISORY BOARD COLLEGE OF MINES UNIVERSITY OF WASHINGTON

ROY H. CLARKS.....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  
 Rust Building, Tacoma.  
 NATHANIEL D. MOORE.....General Manager of Pacific Coast Coal Company  
 Seattle.

### STAFF OF NORTHWEST EXPERIMENT STATION

UNITED STATES BUREAU OF MINES, DEPARTMENT OF THE INTERIOR  
 CLYDE E. WILLIAMS, B.S. (Utah).....Superintendent  
 EDWARD P. BARRETT, B.S. (Missouri).....Assistant Metallurgist  
 CLARENCE E. SIMS, B.S. (Illinois).....Electrometallurgist  
 BYRON M. BIRD, B.S. (Washington).....Assistant Mining Engineer  
 BERNARD M. LARSEN, B.S. (Wisconsin), M.S. (Washington).....Junior Metallurgist  
 FREDERICK WILLIAM SCHROEDER, A.B. (Central Wesleyan).....Junior Chemist  
 HAROLD E. MESSMORR, B.S. (Kansas), M.S. (Washington).....Junior Chemist

\*Absent autumn and winter, 1924-25.

## 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.*—Mining machinery of many kinds 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 Seattle, while patented machines, such as drills and concentrating tables, 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 illustrated in Seattle by the operations of the steam shovels, excavators which are used largely in iron and copper 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.

Other available works of interest include coal mines and coke ovens, with the largest production west of the Rocky mountains; gold, silver, copper, arsenic, antimony, and iron mines; large cement plants, several stone quarries and dressing works; clay mines, clay, terra cotta and pottery works; gravel and sand pits with large production and approved methods; a region of varied geology with many economic minerals; the Tacoma smelter and refineries; the U.S. assay office; the West Seattle steel plant of the Pacific Coast Steel Co., and plants engaged in electro-metallurgical work.

*Laboratories.*—For description of mining, metallurgical, and ceramic laboratories, see pages 34, 35.

## MINING, METALLURGICAL AND CERAMIC RESEARCH

The purpose of this department is to 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.*—Four research fellowships of \$810 annual value have been established. They 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. Applications 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.*—To encourage graduate work a fellowship of \$500 annual value is open to students in the College of Mines who are residents of the state of Washington. It is awarded for scholastic excellence and general merit, but only to 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.

*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 is done under the direction of the department, and complete records of all the data obtained are filed with the department, which reserves 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.

*Instruction for Coal Mining Men.*—Miners taking the rescue training in connection with the United States Bureau of Mines, 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.

*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 40, 48, 49.

*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 41.

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 .....	$\frac{1}{2}$ unit
Solid geometry .....	$\frac{1}{2}$ unit
Physics .....	1 unit
Manual Training, shopwork .....	$\frac{1}{2}$ 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

<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 23 .....	5
Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½
	15+1½		15+1½		15+1½

## SECOND YEAR

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. ...	1½	Mil. Sci. or Phys. Ed. ...	1½	Mil. Sci. or Phys. Ed. ...	1½
	16+1½		16+1½		16+1½

‡Mining Practice in Summer Vacation.

## THIRD YEAR

Civil Engineering 131 .....	3	Civil Engineering 132 .....	3	Geology 122 .....	2
Geology 123 .....	3	Electrical Eng. 101-102. 6		Electrical Eng. 121-122. 6	
Mining 101 .....	3	Geology 124 .....	3	Metallurgy 102 .....	5
Metallurgy 101 .....	5	Metallurgy 153 .....	2	Mining 106 .....	1
Mechanical Eng. 54 .....	1			Elective .....	2
	15		14		16

## FOURTH YEAR

Mining 151 .....	3	Mining 192 .....	2	Mining 107 .....	1
Mining 191 .....	2	Mining 162 .....	3	Mining 152 .....	5
Metallurgy 155 .....	3	Geology 127 .....	5	Mining 193 .....	1
Metallurgy 162 .....	2	Mining 103 .....	1	Mining 182 .....	3
Electives .....	5	Electives .....	4	Electives .....	4
	15		15		14

‡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.

# UNIVERSITY OF WASHINGTON 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 23 .....	5
Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%
<hr/>		<hr/>		<hr/>	
15+1%		15+1%		15+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%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%
<hr/>		<hr/>		<hr/>	
16+1%		16+1%		16+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
<hr/>		Elective .....	2
15		<hr/>	
15		15	

‡Mining Practice in Summer Vacation.

## FOURTH YEAR

Mining 151 .....	3	Mining 192 .....	2	Mining 107 .....	1
Mining 191 .....	2	Mining 162 .....	3	Mining 152 .....	5
Metallurgy 162 .....	2	Geology 127 .....	5	Mining 193 .....	1
Geology 126 .....	3	Mining 103 .....	1	Geology 140 .....	3
Electives .....	5	Electives .....	4	Electives .....	4
<hr/>		<hr/>		<hr/>	
15		15		14	

# 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 23 .....	5
Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%
<hr/>		<hr/>		<hr/>	
15+1%		15+1%		15+1%	

## SECOND YEAR

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%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%
<hr/>		<hr/>		<hr/>	
16+1%		16+1%		16+1%	

## THIRD YEAR

Civil Engineering 131... 3	Civil Engineering 132... 3	Electrical Eng. 121-122. 6
Mining 101 .....	Electrical Eng. 101-102. 6	Metallurgy 102 .....
Metallurgy 101 .....	Metallurgy 103 .....	Mining 106 .....
Mechanical Eng. 54... 1	Metallurgy 153 .....	Electives .....
Electives .....	<hr/>	
14	16	

‡Mining Practice in Summer Vacation.

‡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.

# COLLEGE OF MINES

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## FOURTH YEAR

<i>Autumn Quarter</i>	<i>Credits</i>	<i>Winter Quarter</i>	<i>Credits</i>	<i>Spring Quarter</i>	<i>Credits</i>
Mining 151 .....	3	Metallurgy 192 .....	2	Mining 107 .....	1
Metallurgy 191 .....	2	Metallurgy 193 .....	3	Mining 152 .....	5
Metallurgy 104 .....	5	Metallurgy 195 .....	2	Metallurgy 198 .....	1
Metallurgy 155 .....	3	Geology 127 .....	5	Metallurgy 166 .....	3
Metallurgy 162 .....	2	Mining 103 .....	1	Electives .....	4
		Electives .....	3		
	<hr/> 15		<hr/> 16		<hr/> 14

## COAL MINING ENGINEERING (OPTION IV)

### 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 23 .....	5
Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%
	<hr/> 15+1%		<hr/> 15+1%		<hr/> 15+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%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%
	<hr/> 16+1%		<hr/> 16+1%		<hr/> 16+1%

### THIRD YEAR

Civil Engineering 181... 3	Civil Engineering 182... 3	Electrical Eng. 121-122. 6
Mining 101 .....	Electrical Eng. 101-102. 6	Metallurgy 102 .....
Mechanical Eng. 81.... 3	Mining 122 .....	English 4 .....
Mechanical Eng. 82.... 3	Metallurgy 103 .....	Mining 106 .....
Mechanical Eng. 88.... 3		
	<hr/> 15	<hr/> 16

‡Mining Practice in Summer Vacation.

### FOURTH YEAR

Mining 151 .....	3	Mining 192 .....	2	Mining 107 .....	1
Mining 191 .....	2	Mining 171 .....	3	Mining 193 .....	1
Metallurgy 195 .....	3	Mining 176 .....	5	Mining 182 .....	3
Mining 170 .....	3	Mining 103 .....	2	Mining 178 .....	2
Mechanical Eng. 54.... 1		Electives .....	3	Electives .....	7
Electives .....	3				
	<hr/> 15		<hr/> 15		<hr/> 14

## CERAMIC ENGINEERING (OPTION V)

### 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 23 .....	5
Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%	Mil. Sci. or Phys. Ed... 1%	1%
	<hr/> 15+1%		<hr/> 15+1%		<hr/> 15+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.

## 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>
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... 1%		Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%	
	<u>16+1%</u>		<u>16+1%</u>		<u>16+1%</u>

## 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
	<u>15</u>		<u>14</u>

## FOURTH YEAR

Ceramics 121 .....	5	Ceramics 122 .....	5	Mining 107 .....	1
Ceramics 191 .....	3	Ceramics 192 .....	3	Ceramics 123 .....	5
Electives .....	7	Mining 103 .....	1	Ceramics 193 .....	2
		Metallurgy 103 .....	4	Electives .....	7
	<u>15</u>	Electives .....	2		<u>15</u>

## COURSES

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



## COLLEGE OF PHARMACY

### THE FACULTY, 1924-25

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 of the College of Pharmacy and State Chemist
ELDIN VERNE LYNN, A.B. (Washington), Ph.D. (Wisconsin)	Associate Professor of Pharmacology and Chemistry
HENRY AUGUST LANGENHAN, Ph.G. (Illinois), Ph.D. (Wisconsin)	Associate Professor of Pharmacy
FOREST JACKSON GOODRICH, Ph.C., M.S. (Washington)	Instructor in Pharmacy and Materia Medica
HENRY M. BURLAGE, A.M. (Harvard)	Instructor in Pharmacy
CORNELIUS OSSEWARD, Ph.G. (New York College of Pharmacy, Dept. of Columbia University), Ph.C. (Northwestern University)	Lecturer on Pharmacy
FRANK A. LEE, B.S. (Washington)	Assistant State Chemist
MARY LUCILLE TURNAOLIEFF, Ph.C., B.S. (Washington)	Assistant State Chemist
FREDERICK LOFGREN, B.S. (Washington)	Arthur A. Denny Fellowship
LUDWIG METZGER	In Charge of Garden of Medicinal Plants
<hr/>	
FREDERICK MORGAN PADEFORD, Ph.D. (Yale)	Professor of English and Dean of the Graduate School
FREDERICK ARTHUR OSBORN, Ph.D. (Michigan)	Professor of Physics
PIERRE JOSEPH FREIN, Ph.D. (Johns Hopkins)	Professor of Romanic Languages
THEODORE CHRISTIAN FRYE, Ph.D., (Chicago)	Professor of Botany
ROBERT EDOUARD MORITZ, Ph.N.D. (Strassburg)	Professor of Mathematics
HENRY K. BENSON, Ph.D. (Columbia)	Professor of Chemical Engineering
JOHN WEINZIEHL, Dr.P.H. (Harvard)	Professor of Bacteriology
LESLIE J. AYER, J.D. (Chicago)	Professor of Law
HOWARD THOMPSON 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

### ORGANIZATION AND 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 training is offered in technical and commercial pharmacy; in the four-year course an opportunity is offered for training in more advanced scientific pharmacy with a liberal training in other sciences and in arts. A four-year course is also offered which combines scientific training in pharmacy with business administration. The five-year or graduate course offers opportunity for more advanced training in scientific pharmacy and allied sciences and research in one of the most fertile fields of modern science. Graduate work may also be extended in courses leading to the doctorate degree.

#### REGISTRATION AS A PHARMACIST IN THE STATE OF WASHINGTON

1. An applicant for registration must be a graduate of a College of 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.
9. Recognized colleges of pharmacy (see rule 10 of handbook on pharmacy law issued by the state department of licenses) are such colleges as hold membership in the American Conference of Pharmaceutical Faculties and such foreign colleges of pharmacy as meet the standards and requirements of the American Conference of Pharmaceutical Faculties.
10. Applicants for registration as pharmacists should communicate with the state department of licenses, Olympia, Washington, for proper blanks and instructions. A fee of ten dollars for registration is payable to the state treasurer.

*Higher Standards in Pharmacy.*—The minimum course of study in the College of Pharmacy is *three years*. The aim of the 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, accounting, 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, and for research.

*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 to 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 phar-

macy. 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, materia 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 as hospital pharmacists, 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 a 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 1923-1924 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 page 35.

#### 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 40, 42, 49.

*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 41.

*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 freshmen 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 freshmen 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.

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\*A student who has not taken the required foreign language in high school must complete in the University, without credit, 20 hours (four quarters) in one foreign language.

## 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 medical 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 18 .....	5	Botany 14 .....	4
Mil. Sci. or Phys. Ed... 1%		Mil. Sci. or Phys. Ed... 1%		Pharmacy 4 .....	2
				Mil. Sci. or Phys. Ed... 1%	

## 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... 1%		Mil. Sci. or Phys. Ed... 1%		Pharmacy 15 .....	1
				Mil. Sci. or Phys. Ed... 1%	

## 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	Pharmacy 119 .....	2
				Approved Electives ....	6

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

<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	Pharmacy 119 .....	2
Pharmacy 125 .....	1	Pharmacy 126 .....	1	Pharmacy 127 .....	1
Pharmacy 112 .....	3	Pharmacy 114 .....	5	Bacteriology 101 .....	5
Pharmacy 113 .....	5	Approved Elective .....	5	Pharmacy 115 .....	5
Approved Elective .....	2				

## FOURTH YEAR

Physics 1 .....	5	Physics 2 .....	5	Approved Elective .....	5
Pharmacy 195 .....	5	Pharmacy 196 .....	5	Pharmacy 197 .....	5
Approved Elective .....	5	Approved Elective .....	5	Approved Elective .....	5

Total scholastic hours for graduation....180 plus 10 hours in military or physical education

Note.—Students seeking a definite type of training: for example, entrance to a college of medicine, will be allowed to substitute courses needed in such training for certain of the pharmacy courses listed as required in the third and fourth year. All substitutions must be approved by the dean of the college of pharmacy.

## 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

Bus. Admin. 54 (Law). 3	Bus. Admin. 55 (Law). 3	Bus. Admin. 56 (Law). 3
Pharmacy 101 .....	Pharmacy 102 .....	Pharmacy 103 .....
Pharmacy 117 .....	Pharmacy 118 .....	Pharmacy 119 .....
Pharmacy 113 .....	Pharmacy 114 .....	Pharmacy 115 .....
Pharmacy 125 .....	Psychology 1 .....	Bacteriology 101 .....
Pharmacy 112 .....		

## FOURTH YEAR

Bus. Adm. 62 (Acc'tg.) 5	Bus. Adm. 63 (Acc'tg.) 5	Bus. Adm. 3 (Econom.) 3
Bus. Admin. .... 5	Bus. Admin. 147..... 5	Bact. 106 (elective).... 4
Pharmacy 195 .....	Pharmacy 126 .....	Pharmacy 127 .....
	Pharmacy 196 .....	Pharmacy 197 .....
		Elective .....

Total scholastic hours for graduation—180 plus 10 hours of military or physical education.

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, 1924-1925

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 of the Graduate School.
HENRY LANDES, A.M. (Harvard)	Professor of Geology and Mineralogy; Dean of the College of Science.
EDMOND STEPHEN MEANY, M.L. (Wisconsin)	Professor of History
CAROLINE HAVEN OBER	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 Physics Laboratories.
WILLIAM SAVERY, 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.
PINREE JOSEPH FREIN, Ph.D. (Johns Hopkins)	Professor of French
THEODORE CHRISTIAN FRYE, Ph.D. (Chicago)	Professor of Botany
ROBERT EDOUARD MORITZ, Ph.D. (Nebraska), Ph.N.D. (Strassburg)	Professor of Mathematics.
CARL EDWARD MAGNUSSON, Ph.D. (Wisconsin), E.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 CHURCH 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 RODGERS BENHAM, Ph.D. (Yale)	Professor of English
FRED CARLTON 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
HOWARD THOMPSON LEWIS, A.M. (Wisconsin)	Professor of Economics, Deau of the College of Business Administration
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 Romanic Languages
HOWARD H. PRESTON, Ph.D. (Iowa).....	Professor of Business Administration
ERIC TEMPLE BELL, Ph.D. (Columbia).....	Professor of Mathematics
EDWARD D. RANDOLPH, Ph.D. (Columbia).....	Professor of Education
JOSEPH DANIELS, M.S. (Lehigh).....	Professor of Mining Engineering and Metallurgy
CHARLES WILLIAM HARRIS, C.E. (Cornell).....	Professor of Civil Engineering
FRIEDRICH KURT KIRSTEN, B.S., E.E. (Washington)....	Professor of Electrical Engineering
GEORGE SAMUEL WILSON, B.S. (Nebraska).....	Professor of Mechanical Engineering
ALEXANDER C. ROBERTS, Ph.D. (Washington).....	Professor of Education Director of Extension Service.
*CHARLES EMANUEL MARTIN, Ph.D. (Columbia).....	Professor of Political Science
EDGAR ALLEN LOEW, B.S. (E.E.) (Wisconsin).....	Professor of Electrical Engineering
THOMAS KAY SIDNEY, Ph.D. (Chicago).....	Associate Professor of Latin and Greek
EDWARD McMAHON, A.M. (Wisconsin).....	Associate Professor of American History
OTTO PATZER, Ph.D. (Wisconsin).....	Associate Professor of French
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 TRENT CLARK, M.F. (Yale).....	Associate Professor of Forestry
ROY MARTIN WINGER, Ph.D. (Johns Hopkins).....	Associate Professor of Mathematics
HERMAN VANCE TARTAR, Ph.D. (Chicago).....	Associate Professor of Chemistry
HENRY A. LANGENHAN, Ph.D. (Wisconsin).....	Associate Professor of Pharmacy
GRACE GOLDENA DENNY, A.M. (Columbia).....	Associate Professor of Home Economics
CURT JOHN DUCASSE, Ph.D. (Harvard).....	Associate Professor of Philosophy
WALTER ISAACS, B.S. (James Milliken).....	Associate Professor of Fine Arts
WILLIAM HENRY GEORGE, Ph.D. (Harvard).....	Associate Professor of Political Science
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
BROE LEONARD GRONDAL, M.S.F. (Washington).....	Assistant Professor of Forestry
EDWIN RAY GUTHRIE, Ph.D. (Pennsylvania).....	Assistant Professor of Psychology
HEWITT WILSON, Cert. Eng'r. (Ohio State University).....	Assistant Professor of Ceramics
CURTIS TALMADGE 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
HENRY L. LUCAS, Ph.D. (Michigan).....	Assistant Professor of History
JAKOB A. O. LARSEN, A.M. (Oxford).....	Assistant Professor of History
THERESA SCHMID McMAHON, Ph.D. (Wisconsin).....	Assistant Professor of Economics
LOUIS PETER DEVRÉS, Ph.D. (Wisconsin).....	Assistant Professor of Romanic Languages
GLENN HUGHES, A.M. (Washington).....	Assistant Professor of English and Dramatic Art
AUGUST DVORAK, Ph.D. (Minnesota).....	Assistant Professor of Education
RACHEL EMILIE HOFFSTADT, Ph.D. (Chicago), Dr.S. (Johns Hopkins)...	Assistant Professor of Bacteriology.
RALPH MASON BLAKE, Ph.D. (Harvard).....	Instructor in Philosophy
GRADUATE COUNCIL: DEAN PADELFORD, Chairman; DEANS CONDON, THOMSON, ROBERTS, MAGNUSSON, and LEWIS; PROFESSORS MEANY, OSBORN, FRYE, MORITZ, DEHN, WOOL- STON, WILLIAMS and GUTHRIE.	

\*Absent on leave 1924-1925.

## 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.

**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. Application 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 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 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 \$700 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 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 two-fold:

(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.

As soon after matriculation as feasible, a candidate for an advanced degree must file with the dean of the Graduate School an outline of his proposed work, on a blank provided for that purpose. This blank is submitted to the advisory committee for acceptance or modification. 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  
Master of Fine Arts

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 1924-1925.

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 determination of the characteristics of aerofoils, selection of aerofoils for a given purpose. Prerequisite, junior standing. Autumn, winter, spring. 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; autumn. 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; winter, spring. Kirsten.

\*\*141. *Airships*.—Aerostatics, including study of lighter-than-air machines. Prerequisite, A.E. 101, 102. 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. Three or six credits a quarter; autumn, winter, spring. Worcester.

104. *Topographic Anatomy*.—Cross and sagittal sections for correlation. Prerequisites, Anat. 101, 102, and 103. Lab. fee, \$5. Four credits; autumn, winter, and spring. Worcester.

108. *Special Dissections*.—For physicians or students who have completed the above courses in gross anatomy. Lab. fee, \$5. 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.

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\*\*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. Spier.

†52. *Primitive Social Life*.

101. *Basis of Civilization*.—Factors that determine the growth of civilizations, as illustrated by the North American Indians. Five credits; winter. Spier.

\*110. *Peoples of Europe*.

141. *Folk-Tales*.—Historical and psychological analyses. Research problems. Three credits; winter. Spier.

143. *Origins of Art*.—Development of art styles from the standpoint of beginnings. Three credits; autumn. Spier.

163. *Anthropometry*.—Growth of children; racial and social influences. Methods and interpretation of measurements. Three credits; autumn. Spier.

185. *Primitive Social and Political Institutions*.—Five credits; winter. Spier.

190, 191, 192. *Research*.—Instructor's permission necessary. Credits and hours to be arranged. Spier.

194, 195. *Anthropological Methods and Theories*.—Analysis of culture; historical and psychological methods; theories of culture growth. Open to graduates and qualified seniors. Three credits a quarter; autumn, winter. Spier.

## ARCHITECTURE

Education Hall

ASSOCIATE PROFESSORS GOULD, MAY; INSTRUCTORS HERMANN, GOWEN

All students contemplating the study of architecture should confer with the head of the department as to their special qualifications and reasons for entering the professional study of architecture. A student should have credits in plane geometry, algebra through quadratics, trigonometry, physics, and at least two years of foreign language. Forty hours of foreign language are required for graduation, twenty hours of which are provided in the curriculum. The romance languages, particularly French, should be chosen, though freedom of choice is allowed.

1-2. *Architectural Appreciation*.—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. *Architectural Appreciation*.—General survey of important periods of architectural history studied, wherever possible, in terms of present day conditions. Two credits; spring. Gould.

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†Offered in extension as a correspondence course.

\*Not offered in 1924-1925.

4-5-6. *Elements of Architectural Design*.—Problems in architectural drawing, such as walls, doors, windows colonnades, and vaults. To be taken in connection with Arch. 7-8-9. Four credits a quarter; autumn, winter, spring. Herrman.

7-8-9. *Graphical Representation*.—Elementary principles of orthographic projections, geometrical determination of shades and shadows on architectural forms; and principles and methods of perspective as applied to architectural drawing. To be taken in connection with Arch. 4-5-6. One credit a quarter; autumn, winter, spring. Herrman.

47-48. *Elementary Theory of Building Construction*.—Analysis of fundamental structural problems by application of the laws of equilibrium. Three credits a quarter; autumn, winter. May.

51-52-53. *History of Architecture*.—Technical study of the architecture of Egypt, Greece, Rome, Byzantium, the Romanesque and Gothic. Principles of historic design in terms of structural elements; theory of planning. Illustrated lectures and library research. Prerequisite, Arch. 3. Two credits a quarter; autumn, winter, spring. Gould.

54-55-56. *Architectural Design, Grade I*.—Problems of design under individual criticism; order problems and simple problems of buildings. Work is done under the Society of Beaux Arts system, and is sent to New York for judgment in competition with work from the leading architectural schools of the country. (B.A.I.D., Class B, Analytique). Lab. fee, \$3. Prerequisite, Arch. 6. Three credits a quarter; autumn, winter, spring. Gowen.

60-61-62. *Working Drawings*.—Lectures on simple building construction methods. Drafting room practice in working drawings. Interpretation of rough sketches and design studies in terms of construction. Full size and large scale studies of detail. Inspection trips. Two credits a quarter; autumn, winter, spring. Herrman.

101-102-103. *History of Architecture*.—The Renaissance. Comparative study of the periods in European architecture. Illustrated lectures and library research. Prerequisite, Arch. 53. Two credits a quarter; autumn, winter, spring. Herrman.

104-105-106. *Architectural Design, Grade II*.—Advanced problems in design done under individual criticism. (B.A.I.D. Class B Projets). Lab. fee, \$3. Prerequisite, Arch. Design Grade I. Five credits a quarter; autumn, winter, spring. Herrman.

112-113. *Freehand Drawing*.—Studies of cast of the human figure, charcoal, flat wash, and pencil. Lab. fee, \$1. Prerequisite, P.S.D. 7. Two credits a quarter; autumn, winter. Isaacs.

114. *Freehand Drawing, Water Color*.—Still life studies, and outdoor sketching in water color. Lab. fee, \$1. Prerequisite, Arch. 113. Two credits; spring. Issacs.

116. *Specifications and Office Practice*.—Specifications and all contract forms used by the architect; modern business methods, ethics and office organization. Two credits; spring. Gould.

117. *Building Construction*.—General principles of structural design; girders, columns and roof trusses in timber and steel as applied by the architect. Prerequisite, C.E. 130. Three credits; winter. May.

118. *Building Construction*.—Principles of concrete design; slab, joists, tile and joist, columns, etc., as applied by the architect. Prerequisite, Arch. 117. Three credits; spring. May.

151. *History of Architecture*.—Modern architecture in America and Europe from the middle of the eighteenth century to the present time. Illustrated lectures, library research, class discussions and papers. Prerequisite, Arch. 103. Two credits; autumn. Gowen.

152. *Theory of Architecture*.—Theory of architectural design, relation of composition and scale, and planning. Class discussions and lectures. Prerequisite, Arch. Design, Grade II. Two credits; winter. Gowen.

153. *Architectural Materials*.—Properties of materials used in architectural construction and practice; steel, concrete, wood, plaster, paint, varnish, etc. Senior standing. Two credits; spring. Hammett.

154-155. *Architectural Design, Grade III*.—Advanced design under individual criticism. (B.A.I.D., Class A Projects). Lab. fee, \$3. Prerequisite Arch. Design, Grade II. Seven credits a quarter; autumn, winter. Gowen.

156. *Thesis and Seminar*.—Architectural design problem with structural details and reports covering a complete architectural project. Individual criticism subject to program and requirements as determined by the faculty. One seminar class hour a week for discussions of projects and of topics of current interest to architects. Lab. fee, \$3. Prerequisite Arch. Design Grade III. Eight credits; spring. Gowen.

160-161. *Pencil Sketching*.—Pencil sketches of architectural subjects—the first quarter from photograph, the second from actual subject. Criticism once a week on work done. Sketching to be done outside of class hours. Definite number of sketch points required for the course. Senior standing. One credit a quarter; autumn, winter, or spring. Gowen.

162-163. *Modelling*.—Modelling of architectural subject from program; work to be done outside of class hours or as arranged. Definite number of points required for the course. Senior standing. One credit; winter, spring. Gowen.

## 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) navigators and engineers who need some knowledge of the science as part of their technical equipment.

1. *General Astronomy*.—A descriptive, non-mathematical course designed to give the student some idea of the solar system, the stars, and the place of the earth in the universe. Five credits; autumn, spring. Farwell.

53. *Practical Observing*.—Prerequisite, Ast. 1 or B.A. 52. Actual practice in finding latitude, longitude, and azimuth with the sextant. Lab. fee, \$1. One credit; spring. Farwell.

## BACTERIOLOGY AND PATHOLOGY

### *Science Hall*

PROFESSOR WEINZIERL; ASSISTANT PROFESSOR HOFFSTADT, AND  
GRADUATE ASSISTANT 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 ..... 123, 124, 125  
120b, 120b, 120b

For medical, dental students and nurses..... 101, 105, 106  
104, 111, 112

For home economics students..... 101, 102, 103

For fisheries students..... 101, 102, 103

For pharmacists and engineers..... 101

For graduates ..... All 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, \$4. 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, \$4. Five credits; autumn, spring, summer. Weinzirl and Hoffstadt.

**102. Sanitary Bacteriology.**—Water supplies and sewage disposal; meat, milk and other foods; certain industrial applications. Prerequisite, Bact. 101. Lab. fee, \$4. Five credits; winter. Weinzirl and Hoffstadt.

**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, \$5. Four credits; winter. Hoffstadt.

**105. Infectious Diseases.**—Detailed study of the pathogenic bacteria, and methods of diagnosis of infectious diseases. Prerequisite, Bact. 101. Lab. fee, \$5. Four credits; autumn. Hoffstadt.

**106. Clinical Diagnosis.**—Examination of blood, urine, gastric and intestinal contents, parasites, etc. Prerequisite, Bact. 101. Lab. fee, \$5. Four credits; spring. Hoffstadt.

**111. Pathology.**—Gross and microscopic study of inflammation and degeneration with application to the systems of the body. Prerequisite, Anat. 105. Lab. fee, \$5. Five credits; winter. Hoffstadt.

**112. Pathology.**—Gross and microscopic study of the pathology of bacterial diseases and tumors. Prerequisite, Bact. 111. Lab. fee, \$5. Five credits; spring. Hoffstadt.

**120a, 121a, 122a. 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 laboratories. Credits to be arranged; autumn, winter, spring, summer. Weinzirl.

*120b, 121b, 122b. Research.*—Investigation of assigned problems. Open to qualified students after consultation. Credits to be arranged; autumn, winter, spring, summer. Weinzirl.

*123, 124, 125. Seminar.*—Topics not included in the regular courses; reports on recent investigations and of research work done by the members. Prerequisite, senior standing, and Bact. 102 or 105. Credits to be arranged; autumn, winter, spring. Weinzirl.

#### 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.

### 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.

*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; autumn. Rigg 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.

*3. Elementary Botany.*—Plant analysis; field work with local flora. Open to students entering without botany. Lab. fee, \$2. Five credits; spring. Frye and assistants.

*11, 12. Foresters' Botany.*—Types of plants illustrating the advance in complexity. For forestry students. 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 seed plants; 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; autumn. Rigg.

101. *Landscape Gardening*.—The plants used in beautifying lawns and houseyards, their propagation and use. Lab. fee, \$2. Three credits; spring. Hotson.

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; autumn. Frye.

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, three quarters of botany and Chem. 21, 22. Lab. fee, \$3. Five credits a quarter; autumn, winter and spring. Rigg.

180, 181, 182. *Plant Pathology*.—Diseases of plants and the fungi which produce them. Prerequisite, Bot. 142. Lab. fee, \$2. Five credits a quarter; autumn, winter, spring. Hotson.

190, 191, 192. *Rusts*.—Morphology and classification of the Uredinales. Prerequisite, Bot. 142. Lab. fee, \$2. Five credits a quarter; autumn, winter, spring. Hotson.

*Teachers' Course in Botany*.—See Educ. 160A.

#### COURSES FOR GRADUATES ONLY

200. *Proseminar*.—Semi-independent work by students. Open only on consultation with the head of the department. Lab. fee, \$2. Two to five credits; any quarter. Frye.

233. *Research*.—Lab. fee, \$2. Two to five credits; any quarter. Frye.

\*240. *Phycomycetes*.

\*241. *Ascomycetes*.

\*242. *Basidiomycetes*.

250. *Algae*.—Prerequisite, Bot. 105. Lab. fee, \$2. Credits to be arranged; any quarter. Frye.

251. *Bryophytes*.—Prerequisite, Bot. 106. Lab. fee, \$2. Credits to be arranged; any quarter. Frye.

\*252. *Pteridophytes*.

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\*Not offered in 1924-1925.

\*253. *Gymnosperms.*\*254. *Angiosperms.*

271, 272, 273. *Experimental Morphology.*—Prerequisites, Bot. 106, 145, one year chemistry. Lab. fee, \$2. Two credits a quarter. Frye.

279. *Colloidal Biology.*—Prerequisites, Bot. 143, Chem. 32. Lab. fee, \$3. Five credits; any quarter. Rigg.

280. *Micrometabolism.*—Prerequisites, Bot. 12 or 107, 148. Lab. fee, \$3. Five credits; any quarter. Rigg.

## 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. *Ceramic Materials.*—Origin, occurrence, physical properties, and preparation, of clays, feldspar, limestone, magnesite, silica, and other materials used in the ceramic industry. Prerequisite, sophomore standing in engineering or mining. Three lectures or recitations. Three credits; spring. Wilson.

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 Decorations.*—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 production of structural wares, stoneware, yellow ware, porcelain and refractories. Blending, molding, drying, firing and glazing. Prerequisite, Cer. 101. Lab. fee, \$12 a quarter. Three laboratory periods and two recitations. Five credits a quarter; autumn, winter, spring. Wilson.

\*125, 126, 127. *Ceramic Plant Design.*

\*Not offered in 1924-1925.

**\*\*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.

**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; winter

**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.

#### 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. Graduate Ceramics.**—Studies of the ceramic resources of the Pacific Northwest, or in the manufacture of clay products. Prerequisite, graduate standing. Hours and credits to be arranged. Wilson.

#### CHEMISTRY

Bagley Hall

PROFESSORS BENSON, JOHNSON, DEHN, SMITH; ASSOCIATE PROFESSORS TARTAR, THOMPSON, LYNN; ASSOCIATES RADFORD, PETERSON, DRAVES; INSTRUCTORS BEUSCHLEIN, POWELL, BOYNTON.

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.

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**\*\*Will be offered if a sufficient number of students elect the course.**

## 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 (see College of Science page 77); (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 (see College of Science page 77); (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 (see College of Engineering page 120).

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.

*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. Benson.

*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.*—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 mathematics, physics, and chemistry to unit chemical operations. No fee. Prerequisites, Chem. 23, Physics 1 or 97 and Math. 61. Three lectures. Three credits; spring. Beuschlein.

*55. Forest Products.*—Prerequisite, Chem. 2 or 22. Three credits; spring. 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. Boynton.

**109. Quantitative Analysis.**—Gravimetric analysis. Prerequisite, Chem. 23 or its equivalent. Two lectures and three laboratory periods a week. Five credits; winter, spring. Thompson.

**110. Quantitative Analysis.**—Volumetric analysis. Two lectures and three laboratory periods a week. Prerequisite, Chem. 109. Five credits; autumn, spring. Thompson.

**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.

**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, Beuschlein.

**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 economics 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.

**140-141. Elementary Physical Chemistry.**—Descriptive, non-mathematical, for pre-med and science students not majoring in chemistry. Chemistry majors may, with the instructor's permission, take this instead of 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.

**144. Physiological Chemistry.**—For fisheries and home economic students. Prerequisite, Chem. 129 or equivalent. Three lectures and two laboratory periods. Five credits; spring.

#### ADVANCED UNDERGRADUATES AND GRADUATES

**\*150. Industrial Seminar.**

**153. Organic Analysis.**—Special methods used in the analysis of organic substances. Prerequisite, Chem. 133 and 110. Credits and laboratory period to be arranged. Autumn. Dehn.

\*Not offered in 1924-1925.

154. *Advanced Quantitative Analysis*.—Two lectures and three laboratory periods a week. Prerequisite, Chem. 23 and 110. Five credits; autumn. Thompson.

161-162. *Physiological Chemistry*.—For students of medicine, biology, bacteriology and nutrition. Deals with chemical constitution, reactions, and products of living material both plant and animal. Prerequisite, Chem. 111 and 131 or equivalent. Three lectures and two laboratory periods. Five credits; autumn, winter. Boynton.

163. *Physiological Chemistry*.—Study of normal and pathological blood and urine. For students of medicine, nurses, and clinical technicians. Prerequisites, 111 and 131 or equivalent. One lecture and two laboratory periods. Three credits; spring. Boynton.

164. *Chemistry of Plant and Animal Tissues*.—Application of physiological chemistry to the study of biology. Prerequisite, Chem. 111 or 110 and 129. One lecture and two laboratory periods. Three credits; winter. Boynton.

165. *Chemistry of Nutrition*.—Enzyme and chemical reactions involved in digestion and metabolism. Prerequisite, Chem. 111 or 110 and 129. Two lectures and one laboratory period. Three credits; autumn. Boynton.

166. *Biochemical Preparations*.—Preparations of special substances involving biochemical methods. Two to three credits; autumn, winter, spring. Boynton.

171, 172. *Chemical Engineering*.—Basic operations common to chemical industries. Laboratory studies of typical apparatus. Three recitations and two laboratory periods. Prerequisite, Chem. 52, 123. Five credits; autumn, winter. Benson, Beuschlein.

173. *Chemical Engineering*.—Continuation of 172. Three drawing periods a week. No fee. Prerequisites, Chem. 52, 123. Three credits; spring. Benson, Beuschlein.

176, 178. *Chemical Engineering Thesis*.—Subject to the approval of the head of the department, the student selects a suitable topic for investigation, which will be directed by the instructor concerned. A conference hour must be arranged. Final report must comply with the regulations of the University Library. Two to five credits a quarter; autumn, winter.

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. 110. Five credits a quarter; autumn, winter. 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.

\*190, 191. *History of Chemistry*.—Lectures and assigned readings. No fee. Prerequisite, Chem. 133, 182. Two credits; autumn, winter. Smith.

*Teachers' Course in Chemistry*.—See Educ. 160B.

#### COURSES FOR GRADUATES ONLY

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; autumn, winter, spring. Semon.

\*Not offered in 1924-1925.

203. *Advanced Physical Chemistry*.—Detailed study of the principles of thermodynamics and their application to chemical phenomena. Prerequisite, Chem. 182 or equivalent. No fee. Three lectures. Three credits; autumn. Tartar.

\*204. *Colloid Chemistry*.

205, 206, 207. *Inorganic Preparations*.—Preparation of special substances involving representative laboratory methods. Any quarter may be taken independently. Laboratory period to be arranged. Two credits; 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.

\*219. *Advanced Chemical Engineering*.

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.

231, 232, 233. *Advanced Organic*.—Detailed study of special fields of organic chemistry. Any quarter may be taken independently. Prerequisite, Chem. 129 or equivalent. 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. Staff.

## CIVIL ENGINEERING

### *Engineering Hall*

PROFESSORS MORE, ALLISON, HARRIS; ASSOCIATE PROFESSORS MAY, RUBEY; ASSISTANT PROFESSORS COLLIER, RATHBUN, WILCOX, WHITE; INSTRUCTORS HAMILTON, DE MOSS, AMALLEFF, HUESTIS, MILLER, CRITTENDEN.

1. *Engineering Drawing*.—Lettering; engineering sketching, fundamental principles of working drawings. Lab. fee, \$2. Three credits; autumn, winter, spring. White.

2. *Engineering Drawing*.—Detail and assembly drawings; 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; 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 principally with the dynamic side of the problems. Three credits; autumn, winter, spring. White.

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\*Not offered in 1924-1925.

12. *Engineering Problems*.—Continuation of the work in C.E. 11, most of the time being devoted to statics and mechanics of materials. Prerequisites, C.E. 1, C.E. 11 and Math. 51. Must be preceded or accompanied by Math. 52. Three credits; autumn, winter, spring. White.

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. 

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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. 

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55. *Forest Surveying*.—For students in forestry. Lab. fee, \$2. Two credits; winter. Allison and Hamilton.

56. *Forest Surveying*.—Chain, compass, transit and level surveying, with reference to work in forestry. Lab. fee, \$2. Five credits; spring. Hamilton.

71. *Quantity Surveys*.—Taking off quantities from plans preliminary to cost estimates. Prerequisites, C.E. 12, 13. One credit; winter. Rubey.

75. *Civil Engineering Drawing*.—Finished drawings for contract and report exhibits, etc. Prerequisites, C.E. 12, 13. One credit; spring. More.

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.

106. *Sanitation and Plumbing*.—For architects. Two credits; winter. Allison.

113. *Higher Surveying*.—Meridian observations; triangulation and base line measurements; computations and adjustment of measurements; plane table surveying. Prerequisite, C.E. 21. Lab. fee, \$2. Three credits; autumn. 

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\*114. *Field Engineering*. (*in Curriculum as 4th Spring*)

115. *Railway Economics*.—Economic theory of railway location, operation and maintenance. Prerequisite, C.E. 114. Three credits; winter. Rubey.

122. *Highways*.—Location and construction of standard types, with application to local conditions. Prerequisite, C.E. 22. Three credits; winter. 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.

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\*Not offered in 1924-1925.



130. *Theory of Building Construction*.—For architects. Three credits; autumn. May.
131. *Mechanics*.—Algebraic and graphic application of elementary principles of statics. Prerequisites, Physics 97 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; spring. Wilcox.
134. *Framed Structures*.—Application of mechanics to analysis of structural details and simple framed structures. Prerequisite, C.E. 93. Three credits; autumn. More.
135. *Advanced Mechanics*.—General theories of flexure. Problems in indeterminate structures. Senior and graduate engineers. Prerequisite, C.E. 93. Three credits; spring. More.
139. *Reinforced Concrete*.—Fundamental principles of reinforced concrete. Prerequisite, C.E. 134. Three credits; winter. 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. 131 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.
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. Three credits; spring. Harris.
147. *Hydraulic Power*.—Investigations for power development; generation of power; penstock and turbines; types of installations. Prerequisite, C.E. 142. Senior and graduate engineers. Five credits; autumn. 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, spring. 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; autumn. 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; spring. 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; spring. 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; winter. Allison.
160. *Building Construction*.—Building design and construction problems. Prerequisite, C.E. 134. Three credits; winter. More.

161. *Structural Design*.—Relation of theory of structure to engineering practice. Special application to roof and bridge trusses. Prerequisite, C.E. 134. Three 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; spring.

198. *Thesis*.—Three or six 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.

### I. GREEK

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. Prerequisite, Greek 3. Three credits; autumn, winter. Densmore.

6. *The Persian War Period*.—Wide readings in Herodotus. Prerequisite, Greek 4. Three credits; spring. Densmore.

\*8-9-10. *Greek Art*.

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 entering freshmen); winter, (open to all). Densmore.

12. *Advanced Greek Civilization*.—Continuation of Greek 11 with particular attention to the modern form of ancient problems. Conferences and discussion groups. Prerequisite, Greek 11 or junior standing.

\*Not offered in 1924-1925.

Upper division students may earn upper division credit by doing special work under the direction of the instructor. Five credits; spring.

Densmore.

13. *Greek Literature*.—The masterpieces in English translations. Knowledge of Greek not required. Five credits; autumn, winter, spring. Clark.

\*15-16. *Greek Civilization and Literature*.

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, or Greek prose writers. Xenophon's *Economist*; The Constitution of Athens; Demosthenes; Plutarch's *Lives*. Prerequisite, Greek 6. Two credits a quarter; autumn, winter, spring. Densmore.

151, 152, 153. *Plato*.—Intensive study of the Republic, the laws (in part) and some of the shorter dialogues. Prerequisite, Greek 101-102-103. Three to five credits a quarter; autumn, winter, spring. Densmore.

191, 192, 193. *Literary Criticism in Connection with Sophocles*.—For graduates and advanced undergraduates. Three to five credits; autumn, winter, spring. Densmore.

## II. LATIN

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.

11. *Roman Civilization*.—The part played in history by the Romans; their contributions to modern civilizations. Lectures, illustrated, when possible; collateral reading and reports. Five credits; autumn, winter, spring. Clark.

13. *Roman Literature*.—The masterpieces in English translation. Knowledge of Latin not required. Five credits; autumn, winter, spring. Sidey.

14-15-16. *Roman Art*.—Roman architecture for two quarters, followed by sculpture, numismatics, and minor arts. Illustrated by photographs and slides. Primarily for fine arts students but open to all. Alternates with the course in Greek art. One credit a quarter; autumn, winter, spring. Sidey.

21. *Cicero De Senectute and De Amicitia*.—Comparison of Cicero's work with similar essays. Exercises in grammar and composition. Prerequisite, three and one-half years 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.

\*Not offered in 1924-1925.

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.

107. *The Age of Cicero*.—Selected portions of Cicero's Letters and the Civil War of Caesar. Prerequisite, Latin 50 or 60 or 70. Three credits; spring. Clark.

\*108. *Vergil's Aeneid*.—Books VII-XII.

\*109. *Pliny's Letters and Tacitus, Germania*.

113. *Roman Home Life and Religion*.—Selections in Rogers and Harley's Reader with collateral reading and reports. Prerequisite, Latin 50 or 60 or 70. Three credits; winter. Clark.

\*151. *Cicero, Tusculan Disputations and Seneca, Moralia*.

\*152. *Quintilian, Book X and Horace, Ars Poetica*.

153. *Medieval Latin*.—Selections. Open to graduates and advanced undergraduates. Two to five credits; autumn. Sidey.

154. *Latin Epistolary Literature*.—Open to graduates and advanced undergraduates. Two to five credits; winter. Sidey.

155. *Cicero: De Oratore or Orator and Pro Plaucio*.—Cicero's art as an orator. Open to graduates and advanced undergraduates. Two to five credits; spring. Sidey.

*Teachers' Course in Latin*.—See Educ. 160C.

## DRAMATIC ART

Denny Hall

ASSOCIATE LOVEJOY, ASSISTANT PROFESSOR HUGHES, ASSOCIATE JAMES

The work in this department is planned for two classes of students: (a) those who desire knowledge of dramatic art as part of a liberal education; (b) those who need knowledge of dramatic art as part of their technical training.

For a major the department requires 47 to 56 credits in dramatic art. Two degrees are offered: (1) Bachelor of Arts in Dramatic Art; (2) Bachelor of Arts with a Major in Dramatic Art.

All courses in the department, with the exception of 101-102-103, may be entered at the beginning of the first, second or third quarters.

4. *Pantomime*.—Principles of gestures and pantomime. The body as

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\*Not offered in 1924-1925.

an expressive medium in dramatic action. Individual and group production of original and standard pantomimes. Three credits; autumn, winter, spring. Lovejoy.

5. *Speaking Voice*.—Cultivation of the speaking voice. Correction of speech defects. Practice in oral expression. Three credits; autumn, winter, spring. Lovejoy.

61, 62, 63. *Dramatic Interpretation*.—Selected plays are used as exercises in dramatic delivery and for the study of effectiveness in the reading of lines. Five credits a quarter; autumn, winter, spring. James.

101-102-103. *Play-acting and Play-producing*.—Practical course in the art of acting, with some time given to problems of producing. Interpretation of both standard and original plays. (Beginning autumn, 1925, prerequisite, courses 4 and 5.) Four credits a quarter; autumn, winter, spring. Lovejoy.

104, 105, 106. *Theatre Workshop*.—Construction of model and actual stage settings, properties, costumes, masks, stage lighting; general mechanics of the theatre. Three hours lecture, and six hours laboratory. Lab. fee, \$3. Five credits a quarter; autumn, winter, spring. James.

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. *The History of Theatre Art*.—Origin and development of theatre art. Physical structure of playhouses. Evolution of stage machinery and settings. Masks, marionettes. Realism, symbolism. Lectures and required readings. Five credits; autumn. (May receive credit in English.) Hughes.

131, 132, 133. *Staging of Shakespeare*.—Designed to give the student a working knowledge of Shakespearean production. One play will be studied each quarter and entire plan of production covered. Cutting, interpretation, stage business, costuming, properties and scenery. Three credits; autumn, winter, spring. Lovejoy.

151, 152, 153. *The History of Dramatic Form*.—Origin and development of the drama. Representative plays of all important periods and countries are studied and discussed. Three credits a quarter; autumn, winter, spring. (May receive credit in English.) Hughes.

#### OTHER COURSES WHICH MAY RECEIVE CREDIT IN DRAMATIC ART

English 40.—*Introductory Public Speaking*.—Five credits; autumn, winter, spring. Breland.

English 41.—*Advanced Public Speaking*.—Five credits; winter. Breland.

English 42.—*Extempore Speaking*.—Five credits; spring. Breland.

#### ECONOMICS AND BUSINESS ADMINISTRATION

##### Commerce Hall

PROFESSORS LEWIS, AYER, GOULD, PRESTON, MORIARTY, COX, DAKAN; ASSOCIATE PROFESSORS SMITH, SKINNER, ATKINSON, BIRD; ASSISTANT PROFESSORS McMAHON, GREGORY, LEIB; LECTURERS McCONAHEY, ROBERTSON, DAVIS, BURTON, DRAPEL, TRUAX; ASSOCIATE VAN DE WALKER; INSTRUCTORS HAMACK, FARWELL, RUSSELL, MORSE; ASSISTANTS BUTTERBAUGH, LAMONT.

Those students in liberal arts or business administration 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. The following courses may be regarded as available for such students: 1, 2, 57, 58, 61, 70, 104, 105, 121, 123, 127, 159, 160, 161, 162, 165, 166, 168, 169, 181-182-183, 201, 205, 207.

B.A. 1 and 2 are prerequisites to all courses except shorthand, typewriting, business law and accounting courses.

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 sections. Lewis, Preston.

2. *Applied Economics*.—Practical applications of fundamental economic principles. Fee, \$1. Five credits; winter, spring, summer sections. Lewis.

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. *Geographic Background of Industry*.—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 sections. Skinner.

11-12 *Elementary Accounting*  
15. *Typewriting I*.—Fundamental principles of typewriting. Fee \$10. No credit; autumn, winter, spring, summer.

16. *Typewriting II*.—Devoted to increasing the speed of the student on the typewriter. Fee \$10. No credit; autumn, winter, spring, summer.

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.

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; winter. Farwell.

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*.—Continuation of B.A. 54. Fee \$1. Three credits; winter. Ayer.

56. *Business Law*.—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. Sections. Preston.

58. *Risk and Risk Bearing*.—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. Sections. McMahon.

62. *Principles of Accounting*.—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: Van de Walker, Lamont, Cruzen.

63. *Principles of Accounting*.—Accounts peculiar to partnerships and corporations; correct classification of accounts; manufacturing and cost accounts; controlling accounts and subsidiary ledgers; voucher systems. Prerequisite, B.A. 62. Fee \$1. Five credits; autumn, winter, spring, summer. Sections: Woodbridge, Van de Walker, Butterbaugh, Lamont.

64. *Principles of Accounting*.—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. 62, 63. Fee, \$1. Five credits; autumn, winter, spring, summer. Sections: Gregory, Van de Walker.

66. *Ship Operations*.—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. Prerequisite B.A. 1, 2. Fee \$1. Five credits; autumn 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.

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.

**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.**—Inter-relations of manufacturers, wholesalers and retailers of lumber applying economic principles to effective methods of marketing lumber. Prerequisite, B.A. 70. Fee, \$1. Five credits; spring. Russell.

**110. Advanced Accounting.**—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: Draper, Van de Walker.

**111. Advanced Accounting.**—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. 110. Five credits; autumn, winter, spring. Cox.

**112. Advanced Accounting.**—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. 110, 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. Prerequisite, English 1. Fee, \$1. Five credits; autumn, winter, spring, summer. Sections:

**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, 62, 63, 57. Fee, \$1. Five credits; winter. Dakan.

**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. Prerequisites, B.A. 57, 62, 63, 64, 104. Fee, \$1. Five credits; winter. Atkinson.

**123. Investment Analysis.**—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; autumn, 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. 62, 63, 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; autumn.

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.

130. *Industrial Analysis and Control*.—Using cost statistics and reports as material, will deal with the development of policies for greater efficiency in management. Systems of accounting statistics with emphasis on manufacturing, selling, general administration and financial expenses with their significant ratios considered. Fee, \$1. Five credits; autumn.

McIntyre.

131. *Advanced Industrial Analysis and Control*.—Budgetary control of expenses; effects of legislation on costs; commonly accepted indices of labor efficiency. Following same method as the preceding course, the problems of manufacturing and production from the point of view of owners and executives. Fee, \$1. Five credits; winter.

McIntyre.

136. *Market Analysis*.—Analysis of products, sociology of markets, methods of distribution, methods of demand creation. Prerequisite, B.A. 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*.

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 interpre-

\*Not offered in 1924-1925.

135 Marketing of Food Products. 5 cr

140 Cooperative marketing 5 cr F.W.S. Eldred  
Spring

tation 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~~ *autumn*.

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. Prerequisite, B.A. 111-112. Fee, \$1. Five credits; *spring* ~~winter~~.

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~~ *autumn*.

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 <sup>winter</sup> accounting department in business concerns; suggested systems for various types of business. Fee, \$1. Five credit; *autumn* ~~spring~~.

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.

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.

*Half credit given for Elected*

165. *Labor Legislation*.—Development of the law, its interpretation in the solution of the American and European labor problems. Prerequisite, B.A. 1. Fee, \$1. <sup>Five</sup>Two credits; spring. McMahon.

166. *Women in Industry*.—<sup>Five</sup>Five credits; spring. McMahon.

167. *Employment Management*.—Labor surveys, 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; winter. Moriarty.

170. *Real Estate and Casualty Insurance*.—Real estate transactions, interests, liens, sales, transfers, mortgages, valuations, title, credit; fidelity, automobile, tornado and miscellaneous forms of property and liability insurance. Prerequisite, B.A. 1. Fee, \$1. Five credits; spring. Smith.

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. Skinner.

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. Atkinson.

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.

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.

181-182-183. *Economics of Consumption*.—Historical development of human wants in relation to the economic laws of consumption; influence on the production and distribution of wealth. Attempts made to control consumption through private and governmental agencies. Prerequisite, B.A. 1. Fee, \$1. Two credits; autumn, winter, spring. McMahon.

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, ~~Spring~~ <sup>Spring</sup> McConahey.

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.

195 *ABC. Research in Foreign Trade and Transportation*.—Two-five credits; autumn, winter, spring. Hours to be arranged. Skinner, Atkinson.

196 *ABC. Research in Management*.—Two-five credits; autumn, winter, spring. Hours to be arranged. Leib, Gregory.

197 *ABC. Research in Business Finance and Insurance*.—Two-five credits; autumn, winter, spring. Hours to be arranged.

Preston, Truax, Smith.

198 *ABC. Research in Marketing and Advertising*.—Two-five credits; autumn, winter, spring. Hours to be arranged. Russell.

*Commercial Teachers' Courses* see Educ. 160D and Educ 160DD.

*changed to II 184 for Sp 1925*  
COURSES FOR GRADUATES ONLY  
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, ROBERTS; ASSISTANT PROFESSORS WILLIAMS, TERRY, DVORAK; LECTURER HUGHES; TEACHING FELLOW JENSEN.

*Note:* All special teachers' courses are listed and numbered as education courses.

Course 101 is open to sophomores who have received 65 credits in college courses. It is prerequisite to all other courses in education for all students except college graduates and students entering from normal schools. The remaining courses in this group (1) are open to juniors and seniors. Courses 101, 110, 119, 145 and one teachers' course in a special subject, numbered 160 are regularly required for the five-year normal diploma. Normal school students are not permitted to take courses 101, 110 or 145. They are required to take 119, 150, 152, and from group (2) five credits in courses numbered above 150.

As a result of a petition by the students an education library fee of 50 cents is charged each student for each course in education. According to the agreement, students will not be required to purchase more than one text book in any one course.

I. ELEMENTARY COURSES

**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.**—No fee. Two credits; autumn, winter, spring. Smith.

**160C. Teachers' Course in Latin.**—Methods and problems in the teaching of high school Latin. Prerequisites, 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. 62, 63, 64, 102, 103. Fee, \$1. Five credits; spring. Two hours only count as education credit, three hours as business administration. Draper.

**160DD. Teachers' Course in Shorthand and Typewriting.**—To prepare students for teaching shorthand and typewriting. Correlation of this work with actual work in business houses. Prerequisites, B.A. 15, 16, 18, 19. Fee \$1. Five credits; spring. Two hours only count as education credit, three hours as business administration. Hamack.

**160E. Teachers' Course in English.**—Methods and problems in the teaching of English in the high school. Two credits; autumn, winter, spring. Sperlin.

*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.*

*160H. Methods of History Teaching.*—With special reference to the work of the high school. Required of majors in history who expect to teach. Prerequisite, History 160. Two credits; winter.

McMahon.

*160I, 160J. Teachers' Course in Home Economics.*—Curricula, methods of teaching and equipment. Prerequisite, H. E. 5, 116, 112, 113, 143, 144, 145; Arch. 1, 2; Physics 89-90; Bact. 101. Students must present illustrative material; consult instructors in junior year. Three recitations. Three credits each quarter; autumn, winter.

Raitt, Denny.

*\*160L. Teachers' Course in Dramatic Art.*

*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. Three credits; (Two credits in education, one credit elective); spring.

Carpenter.

*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; spring.

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.

Gross.

*160S. Teachers' Course in Physical Education for Men.*—Prerequisite, Phys. Educ. 115. Two credits; spring.

Arbuthnot.

*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.*—Survey of teaching material, with supervised practice. Continued in the winter and spring quarters as Music 165, 166. Two credits; spring.

*160Z. Teachers' Course in Zoology.*—For students preparing to teach zoology in high schools. Lab. fee, \$1. Prerequisite, Zool. 1-2. Two credits; winter.

## 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.*—History and development of the use of tests and scales in education. Group intelligence tests, elementary statistical methods as applied to the handling of educational data, educational achievement or subject tests and scales. Lab. fee \$2. Three credits; autumn, winter, spring or summer. (Two credits in Saturday section.) Dvorak.

151. *Educational Sociology.*—A systematic view of the larger relations underlying and surrounding the school, with the chief emphasis placed on generalization. Three credits, autumn, winter, spring or summer. Randolph.

152. *Social Surveys of School Studies and Activities.*—An attempt (a) to summarize the results to date of attempts by inductive methods to arrive at socially valid materials for the school studies; and (b) to evaluate the theories involved. Two credits, autumn, winter, spring or summer. Randolph.

154. *Junior High School.*—History of the reorganization movement; functions and features of the new organization. Prerequisite, Educ. 119. Two credits; autumn; three credits, spring. Terry. Roberts

156. *High School Organisation.*—The high school principal. A job-analysis including work of organizing the school, the teaching staff, the high school population, publicity, curriculum making, etc. Prerequisite, Educ. 119. Three credits; winter. withdrawal Terry.

157. *Supervision of Extra-Curricular Activities.*—History of activities, values and objectives, classification of, participation of pupils in, teachers' relation to; records, etc. Prerequisite, Educ. 119. Three credits, autumn; two 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; winter. Randolph.

163. *American Education.*—Analysis of the development of some of the more characteristic features of the American educational system, especially the American attitude, theory or philosophy of education, and teaching practices, rather than administrative organization and practices. Five credits; spring. Randolph.

165. *Problem Children.*—Subnormal, superior, backward, eccentric, and delinquent children studied from the point of view of the teacher. Five credits; winter. Dvorak.

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 behaviour. Five credits a quarter; winter, spring. Bolton.

172. *Psychology of Elementary School Subjects.*—Survey of experimental studies which furnish the basis for approved practice in learning and teaching reading, writing, arithmetic, spelling, drawing, language, history, geography. Prerequisites, Educ. 101, 110, 119. Three credits; winter or summer. Williams.

173. *Psychology of High School Subjects*.—Consideration of experimental studies which form the basis for learning and teaching subjects in the high school curriculum; English, mathematics, science, history, and foreign language. Prerequisites, Educ. 101, 110, 119. Three credits; spring.

Williams.

174. *Psychological Problems of Vocational Education*.—Intelligence levels and vocational efficiency, acquisition of skills, vocational personnel, trade and vocational tests. Three credits; spring.

Dvorak.

\*176-177-178. *Educational Guidance*.

179. *The Health Education Movement*.—Its place in the elementary and secondary school program and in the community at large. The part of the school nurse, the physical education, home economics and classroom teachers in this work. Open to students majoring in any subject, who expect to teach in elementary or high schools. Three credits; winter. Gross, Soule, Koehne.

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.

186-187. *Elementary School Curriculum*.—The construction and organization of the child elementary school curriculum. Subjects, time schedules, principles, objectives, activities, classification, adaptation, projects, platoon plan, etc. For advanced students and teachers only. Two credits a quarter; winter and spring.

Ayer.

\*191. *Educational Administrations, State and County*.

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*.—Analysis of the problems and technique of the improvement of school work through the in-service education of teachers. Five credits; autumn and spring.

Randolph.

196-197-198. *Intelligence and its Measurement*.—The concept of intelligence with its practical bearing on school and social ability. Specialized training in the Stanford-Binet individual examination. For advanced students, teachers and principals. Lab. fee, \$2 for course. Two credits a quarter; autumn, winter, and spring.

Dvorak.

COURSES 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:

201. *Problems in Modern Methods*.—For advanced students. A critical evaluation of methods in examinations, grading, supervised study, the project, socialized recitation, problem method, assignment, laboratory procedure, etc. A seminar. Two credits; autumn and summer.

Williams.

206. *Educational Statistics*.—Thorough course in the statistical treatment and interpretation of educational data. For advanced students, teachers and administrators. Three credits; autumn.

Dvorak.

\*Not offered in 1924-1925.



210. *Methods of Educational Research.*—Practices and methods in carrying out and writing up research problems. Required of all graduate students working on theses in education. One credit; autumn and summer. Dvorak.

212-213. *Comparative Education.*—Modern education in foreign countries, especially in Germany, France, England, Norway, Sweden and Canada. Relation between social ideals of nations and their educational systems. Post-war reorganizations. Influence upon educational theories and practices in America. Two credits a quarter; winter, spring. Bolton.

\*232-233. *Advanced Educational Psychology.*

261-262-263. *Seminar in Educational Sociology.*—Introductory summary of the status, problems, and methods of educational sociology, followed by practical work upon selected problems. Two credits a quarter; autumn, winter and spring. Randolph.

\*271-272-273. *Seminar in Educational Surveys.*

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. *Robert*

\*278-279. *Advanced Junior High School Problems.*

285-286-287. *Seminar in Educational Measurements.*—Theory of educational measurements. Methods of test construction. Critical evaluation of new test material. Reports. For advanced students only. Lab. fee, \$2. Two credits a quarter; autumn, winter and spring. Dvorak.

298-299-300. *Individual Research or Thesis Work.*—Original investigation of special problems. Results are usually reported in one of the seminars and when especially meritorious may be published. Special problems directed by members of the department. Three to five credits; autumn, winter, spring. Staff.

## ELECTRICAL ENGINEERING

### Engineering Hall

PROFESSORS MAGNUSSON, KIRSTEN; ASSOCIATE PROFESSOR LOEW; ASSISTANT PROFESSOR SHUCK; INSTRUCTORS HOARD, G. S. SMITH, PRICE, COCHRAN

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. Price, Smith, Cochran.

102. *Direct Currents Laboratory.*—Continuous current machinery, for non-electrical students. Prerequisite, Phys. 98. Lab. fee, \$4. Two credits; autumn, winter, spring. Hoard, Price, Shuck, Cochran.

105. *Electric Wiring and Illumination.*—A short course for architects. Two credits; autumn. Shuck.

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, Smith, Shuck.

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, Hoard, Price, Kirsten.

\*Not offered in 1924-1925.

**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; winter, spring. Shuck, Smith.

**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; winter, spring. Hoard, Price.

**\*\*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. Shuck, Price, Cochran.

**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, Price, Smith, Cochran.

**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, spring. Cochran.

**\*\*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. Cochran.

**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. To be taken with E.E. 162. Prerequisite, E.E. 111. Six credits; autumn, spring. Loew.

**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, spring. Price, Cochran, Hoard.

**163. Alternating Currents.**—Theory of alternators, rotary converters, synchronous and commutator motors and transmission lines; high tension

**\*\*Will be offered if a sufficient number of students elect the course.**

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. Loew.

164. *Alternating Current Laboratory*.—To be taken with E.E. 163. Prerequisite, E.E. 162. Lab. fee, \$4. Four credits; autumn, winter.

Smith, Shuck, Price.

171. *Electric Railways*.—Equipment, roadbed, construction and operation. Prerequisite, E.E. 109, 110. Four credits; 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. *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. Cochran.

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. 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.

191. *Engineering Equations*.—Mathematical investigation of electrical phenomena with quantitative solutions of typical engineering problems. Prerequisite, E.E. 161, 162. Three credits; winter. Loew.

190, 192, 194. *Seminar*.—Prerequisite, E.E. 163, 164. Four credits; autumn, winter, spring. Magnusson.

195. *Electric Transients*.—Exponential law of simple transients; single and double energy transients; current oscillations and traveling waves; natural period of transmission lines; short circuits 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. Smith.

198. *Electric Transients Laboratory*.—Continuation of E.E. 196. Lab. fee, \$2. Two credits; autumn, winter, spring. Smith.

210, 212, 214. *Research*.—Two to five credits a quarter; autumn, winter, spring. Magnusson.

## ENGINEERING SHOPS

ASSISTANT PROFESSOR SCHALLER

52. *Pattern Shop*.—Designing and building wooden patterns and foundry flask equipment. Lab. fee, \$2. One credit; autumn, 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, spring. Schaller.

105. *Advanced Machine Shop Practice, Millwrighting*.—Prerequisite, Shop. 53. Lab. fee, \$2. One credit; autumn. 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. One credit; spring. Schaller.

115. *Shop Management*.—Planning, routing, inspecting, material handling together with the more general phases of plant supervision. Prerequisite, Shop. 55. Lab. fee, \$2. Three credits; winter. Schaller.

120. *Factory Cost Analysis*.—Analysis of shop practice with view to determining costs of operations and products. Lab. fee, \$2. Three credits; autumn and spring. Schaller.

## ENGLISH

Denny Hall

PROFESSORS PADELFORD, PARRINGTON, BENHAM; ASSOCIATE PROFESSORS MILLIMAN, COX; ASSISTANT PROFESSORS HARRISON, BROWN, HUGHES; LECTURER SPERLIN; ASSOCIATES LAWSON, JONES, VICKNER, KERRIGAN; INSTRUCTOR BEBLAND; ASSISTANTS 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. Miss Lawson 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; autumn, winter, spring. Miss Lawson in charge.

5. *Elementary Composition*.—A second quarter's work for students in fisheries and forestry. Three credits a quarter; spring. Miss Lawson 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; winter, spring. Hughes.

\*24, 25, 26. *Victorian Prose and Verse*.

37. *Argumentation*.—Special attention to analysis, evidence, proof, and refutation. Each student required to construct briefs and to develop them into finished arguments. Prerequisite, English 1. Five credits; autumn, winter, spring.

38, 39. *Debating*.—Oral application of the principles of argumentation. Preparation of briefs required for each discussion. Important questions studied and debated in class. Prerequisites, English 37 or special permission. Five credits; winter, spring. Jensen.

40. *Introductory Public Speaking*.—Principles of effective public speaking. Attention directed to both composition and delivery. Theory and practice equally emphasized. May receive Dramatic Art credit. Prerequisite, English 1. Five credits a quarter; autumn, winter, spring. Breland.

41. *Advanced Public Speaking*.—Continuation of preceding course with special attention to the different types of public address. May receive Dramatic Art credit. Prerequisite, English 40. Five credits; 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. May receive Dramatic Art credit. Prerequisite, English 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, English 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*.—Principles of versification, with practice in verse writing. Prerequisite, English 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. Three sections.

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. Three sections. Five credits; spring.

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.

72. *Shakespeare*.—Study of the historical plays. Three credits; spring.
- 73, 74, 75. *Lower Division Contemporary Literature*.—Essay studies of European and American thought in the nineteenth century and later; followed by readings in poetry, novel and drama involving similar ideas. Three or five credits; autumn, winter, spring. Three sections.  
Milliman, Harrison.
- \*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, if regularly registered for English 101, be allowed two credits for the quarter in which the debating takes place, on recommendation of the debate coach. Two credits; autumn, winter, spring. 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. Hall.
- 104, 105, 106. *Contemporary Literature*.—Special studies in contemporary literature for advanced students. Three credits a quarter; autumn, winter, spring. Two sections. Cox, Harrison, Brown.
124. *Chaucer*.—The poetic works of Chaucer. Three credits; autumn.
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.
126. *Mediaeval Literature*.— (continued.)—Texts will include the mediaeval lyric and drama, Froissart, Dante, the Story of Burnt Njal, the Nibelungenlied. Three credits; spring.
- \*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.
- 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. *The 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.

\*Not offered in 1924-1925.

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*.

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, Rossetti. Three credits a quarter; autumn, winter, spring. Padelford.

\*183, 184, 185. *General Literature*.

\*187. *Philosophy in Contemporary Drama*.

189. *Oral Reading*.—Principles of expressive reading. Training in the natural use of the voice in reading, teaching and conversation. Practice reading in class, with criticisms and suggestions. Offered especially to those who expect to teach English. Prerequisite, upper division standing. Two credits; winter. Breland.

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.

\*194, 195, 196. *Studies in Romance*.

197, 198, 199. *British Culture in the Nineteenth Century*.—Outstanding features of English life in the nineteenth century, as these are exhibited in literature and art. Three credits a quarter; autumn, winter, spring. Benham.

*Teachers Course*.—See Educ. 160E.

#### COURSES FOR GRADUATES ONLY

For other graduate 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.

\*207, 208, 209. *English Literature from Chaucer to Dryden*.

211, 212, 213. *Seminar in 16th Century Literature*.—For the coming year the class will study the poetry of Spenser as a fusion of classical, mediaeval, and Renaissance impulses and traditions. Primarily for students who are in the second year of graduate study. Two to eight credits a quarter; autumn, winter, spring. Padelford.

224, 225, 226. *American Literature*.—Intensive study of early American literature. Two to eight credits a quarter; autumn, winter, spring. Parrington.

\*Not offered in 1924-1925.

230, 231, 232. *Old and Middle English*.—Early English Grammar Readings in Old and Middle English authors. Three credits a quarter; autumn, winter, spring. Vickner.

#### OTHER COURSES WHICH MAY RECEIVE CREDIT IN ENGLISH

*Play-writing*.—See Dramatic Art 111, 112, 113.

*History of Theatre Art*. See Dramatic Art 127.

*History of Dramatic Form*.—See Dramatic Art 151, 152, 153.

#### COURSES IN FOREIGN LITERATURE TAUGHT IN ENGLISH

(For details see foreign language departments)

French 118, 119, 120; German 106, 107, 108; Greek 13; Latin 13; Italian 181, 182, 184; Oriental Literature and Language 80, 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; ASSOCIATE PROFESSOR FELLERS;  
INSTRUCTORS ANDERSON, CRAWFORD

##### I. FISHERIES

1, 2. *Introduction to Fisheries*.—General review and history of the world's fisheries. Two credits a quarter; autumn, winter. Cobb.

6. *Pacific Fisheries*.—General review and history of fisheries of the countries bordering on the Pacific Ocean. Winter quarter is open to short course students. Two credits; winter, spring. Cobb.

Courses 7, 8, 9, 10, 11, 12, 13, 14.—(See short course circulars.)

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; spring. Cobb, Anderson.

53, 54, 55. *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.

101-102-103. *Fish Culture*.—Developmental history and artificial propagation of economic fishes, lobsters, etc. Prerequisite, Fish. 53, 54, 55, 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.

Cobb, Anderson.

106. *Handling Fresh and Frozen Fishery Products*.—Handling, care, and transportation of fresh and frozen aquatic animals. Prerequisite, Fish. 53, 54, 55. 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. 55. 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.

130. *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.

Fellers.

140. *Aquarium Management*.—Study and care of ornamental freshwater fishes in balanced and running water aquaria. Prerequisite, Bot. 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.

Anderson.

150, 151, 152. *Problems in Fish or Shell Fish 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. Lab. fee to be arranged. Five credits a quarter; autumn, winter, spring.

Kincaid, Crawford.

154. *Diseases of Fish*.—Nature and causes of disease in fish. Three lectures and two laboratory periods. Lab. fee, \$4. Five credits; autumn.

Guberlet.

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. Lab. fee to be arranged. Five credits a quarter; autumn, winter, spring.

Cobb, Fellers, Anderson.

190. *Fishways and Fish Stops*.—The design, construction and uses of fishways and fish-stops. Two lectures and one laboratory period. Three credit hours; autumn.

Cobb.

195, 196. *Seminar*.—Assigned readings and reports in current periodical literature. Bibliographical work, discussions and symposiums on subjects of general interest to advanced students in fisheries. Prerequisite, senior or graduate standing in fisheries. Two credits; autumn, spring.

Cobb, Fellers, Crawford, Anderson.

## II. FRUIT AND VEGETABLE PRESERVATION

21, 22. *Introduction to Food Preservation*.—General review and history of the art of food preserving. Two credits a quarter; autumn, winter.

Fellers.

120. *Dehydration and Curing of Fruits and Vegetables*.—Principles and methods used in drying, salting and pickling fruits and vegetables. Lab. fee, \$4. Five credits; autumn.

Fellers.

160, 161, 162. *Commercial Canning of Fruits and Vegetables*.—Methods of canning fruits and vegetables, particularly those grown in the Pacific Northwest, including preparation, grading, syruping or brining, exhausting, peeling, cooking, cooling and storing. Proper design of plants is also considered. Lab. fee, \$4. Five credits a quarter; autumn, winter, spring.

Fellers.

165. *Commercial Fruit and Vegetable By-Products*.—Scientific principles and practical methods followed in the manufacture of jam, jelly and juices; also of marmalades, glace fruits, candied fruits, maraschino cherries, and conserves. Lab. fee, \$4. Five credits; autumn.

Fellers.

170, 171, 172. *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. Lab. fee to be arranged. Five credits; autumn, winter, spring.

Fellers.

180, 181, 182. *Advanced Food Preservation*.—Applied microbiology and chemistry to problems of food preservation. Detection of spoilage, food standards and grades, gas analysis, disinfectants. Class work and laboratory may be taken together or separately. Prerequisite, Bact. 101 and 102, 2 years chemistry, and senior or graduate standing. Lab. fee to be arranged. Two to five credits; autumn, winter, spring.

Fellers.

197, 198. *Seminar*.—Assigned readings and reports on current periodical literature. Bibliographical work, discussions and symposiums on subjects of general interest to advanced students. Prerequisite, senior or graduate standing in food preservation or fisheries technology. Two credits a quarter; autumn and spring.

Cobb, Fellers, Anderson.

## COURSES FOR GRADUATES ONLY

230, 231, 232. *Research Problems*.—Investigation of assigned problems. Open to qualified graduates after consultation. Credits and time to be arranged. Autumn, winter, spring.

Fellers.

## FORESTRY AND LUMBERING

### Forest Products Laboratory

PROFESSORS WINKENWERDER, KIRKLAND; ASSOCIATE PROFESSOR CLARK; ASSISTANT PROFESSOR GRONDAL; LECTURER ZIMMERMAN

1. *Elementary Dendrology*.—Nomenclature, classification and identification of trees, including all northwest species and of one type species of each genus of the important timber trees of North America. Required of fresh-

201, 202, 203 Research in Fish & Shellfish  
205, 206, 207 " " Fish

men. Two recitations, one quiz and two 3-hour laboratory periods a week, field trips additional. Lab. fee, \$2. 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. Three credits; 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. Three recitations, two 3-hour laboratory periods. Lab. fee, \$2. Five credits; winter.

Clark and assistant.

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. Primarily for 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.

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). 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. 104, 153, 158. 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.

202 *Theses* any year  
COURSES FOR GRADUATES ONLY

201. *Forest Geography*.—Advanced dendrology. Silvicultural regions, their relation to regional industrial development and general problems of lumbering and management. Three credits; autumn. Winkenwerder.

208, 209. *Seminar*.—Reviews, assigned readings, reports, and discussions on current periodical literature and the more recent Forest Service publications. Two credits a quarter; autumn, winter. Winkenwerder, Kirkland, Grondal.

213, 214, 215. *Research*.—Credits to be arranged; any quarter. Instructors assigned according to nature of work. 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. 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. Five credits; spring. Grondal.

## 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; 1 and 11.

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 and Saunders.

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. 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. Prerequisite, Geol. 1. 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. *Weather and Climate*.—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.

21. *Mineralogy*.—Crystallography followed by descriptive mineralogy and blowpipe methods. Prerequisite, Geol. 1 and at least a high school course in chemistry. Lab. fee, \$2. Five credits; winter.

Goodspeed.

101. *History of Geology*.—The rise of geology as a science, the men who were its founders, and the wealth of literature available to the student. Prerequisites, Geol. 1 and 2. Three credits; autumn.

Landes.

105. *Geology for Engineers*.—Survey of the field of general geology for the special needs of students in civil, electrical, or mechanical engineering. Prerequisite, junior standing in the College of Engineering. Lab. fee, \$2. Five credits; spring.

Goodspeed.

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. With or without laboratory work. Prerequisite, Geol. 10 or 1. Lab. fee, \$1. Three or five credits; autumn.

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 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.*

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. 1 and 21. 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. 123. Three credits; autumn. 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. Hanna.

123. *Optical Mineralogy.*—Use of the polarizing microscope in the examination of minerals and rocks in thin sections. Prerequisite, Geol. 1 and 120. 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 uses. 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. *General Paleontology.*—Principles of paleontology and a general systematic study of fossils. Prerequisite, Geol. 2. Lab. fee, \$2. Five credits; winter. Hanna.

132. *Invertebrate Paleontology.*—Systematic study of fossil and living representatives of the Mollusca. Prerequisite, Geol. 131. Lab. fee, \$2. Five credits; spring. Hanna.

\*Not offered in 1924-1925.

**140. Structural and Stratigraphic Geology.**—Certain structural and stratigraphic features, and their practical applications. Prerequisites, Geol. 2, 120, and 122. Three credits; autumn. Hanna.

*Teachers Course in Geology.*—See Educ. 160F.

#### COURSES FOR GRADUATES ONLY

**200.** Field studies or advanced work in general geology. Credits and hours to be arranged. Each quarter. Landes.

**210.** Advanced or research work in geography, climatology or physiography. Credits and hours to be arranged. Each quarter. Saunders.

**220** Advanced or research work in mineralogy, petrography and metamorphism. Credits and hours to be arranged. Each quarter. Goodspeed.

**225.** Advanced or research work in economic geology. Credits and hours to be arranged. Each quarter. Landes.

**230.** Advanced or research work in paleontology and stratigraphy. Credits and hours to be arranged. Each quarter. Hanna.

#### GERMANIC LANGUAGES AND LITERATURE

*Denny Hall*

ASSISTANT PROFESSOR ECKELMAN; ASSOCIATE WESNER

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, winter, spring. Eckelman, Wesner.

**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. Wesner.

**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. Wesner.

**6. Second Year Rapid Reading.**—Modern prose, vocabulary building, simple conversation. Three credits; spring. Wesner.

**10, 11, 12. Second Year Review Course.**—Modern prose, grammar review with emphasis on syntax, simple conversation. Prerequisite as for Ger. 5. Two credits, autumn; three credits, winter, spring. Wesner.

**60, 61. 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, spring. Eckelman.

**\*100. Schiller.**

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\*Not offered in 1924-1925.



103. *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. 6 or 12. Three credits; autumn. Wesner.

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. Three credits, autumn; two credits, winter and spring. Eckelman.

\*110. *Advanced Prose Composition and Conversation*.

113, 114. *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. Conferences. Prerequisite, courses 5 and 10, or 5 and 60, or 6, or three years in high school. Two or three credits a quarter; winter, spring. Eckelman.

\*118-119-120. *German Prose Reading*.

\*121. *Phonetics*.

\*130-131-132. *German Institutions*.

\*133-134-135. *Modern Novels*.

\*136. *Modern Drama*.

142. *Lyrics and Ballads*.—The Romanticists. Uhland, Heine, Moerike, Storm. Schiller's ballads. Class reading and assigned topics. For upper division students. Three credits; exceptional students may earn six credits; spring. Eckelman.

151. *Lessing*.—Life and dramatic works. Minna von Barnhelm, Emilia Galotti, Nathan der Weise. Hamburger Dramaturgie. Assigned topics. Three credits; exceptional students may earn six credits; winter. Eckelman.

\*152, 153. *Goethe's Lyrics and Dramatic Works*.

181, 182, 183. *Nineteenth Century Literature*.—The drama and novel to 1880. Kleist, Grillparzer, Hebbel, Ludwig, Raabe, Keller, Storm, C. F. Meyer. Primarily for graduates. Three credits; exceptional students may earn six credits; 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 1924-1925.

## HISTORY

*Denny Hall and Philosophy Hall*

PROFESSORS MEANY, RICHARDSON; ASSOCIATE PROFESSOR McMAHON; ASSISTANT PROFESSORS LUCAS, LARSEN; ASSOCIATE DAHLIN; INSTRUCTORS FARRAR, QUINTON, 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, spring. Lucas, Larsen, Quinton, 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., 1860-1924.*—The agrarian movements for control, their causes and results. Two credits; spring. Dahlin.

*21. History of China I.*—The history of China from the earliest times to the Manchu Conquest. Five credits; autumn. Gowen.

22. *History of China II.*—The history of China from the Manchu Conquest to the present time. Five credits; winter. Hall.

30. *History of Japan I.*—The history of Japan to the beginning of the Tokugawa Shogunate. Five credits; winter. Gowen.

31. *History of Japan II.*—The history of Japan from A. D. 1600 to the present time. Five credits; spring. Hall.

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 credit. Not open to freshmen. Five credits; spring. Quainton.

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 or 5-6. Five credits a quarter; autumn, winter. Lucas.

90. *History of Alaska: Russian Expansion, 1581-1867.*—Two credits; autumn. By special work under the direction of the instructor, upper division students may receive upper division credit. Farrar.

91. *History of Alaska: First American Period, 1867-1896.*—Two credits; winter. By special work under the direction of the instructor, upper division students may receive upper division credit. Farrar.

92. *History of Alaska: Second American Period, 1896-1912.*—Two credits; spring. By special work under the direction of the instructor, upper division students may receive upper division credit. Farrar.

101-102. *The Greek World: From Alexander to its Conquest by the Romans.*—Three credits; autumn, winter. Larsen.

\*103-104. *The Roman Empire from Augustus to Justinian.*

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

\*Not offered in 1924-1925.

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, Buchanan.

111. *Greek Political Institutions*.—Three credits; spring. Larsen.

114. *Renaissance and Reformation*.—Prerequisite, 1-2 or 5-6. Five credits; spring. Lucas.

\*117. *France from the Reformation to the French Revolution*.

121-122-123. *Prussia and Northern Europe in the 17th and 18th Centuries*.—Sweden as a great power, its rise, progress and decline; the rise of Prussia and Russia. Especial emphasis on the foundation of the Prussian monarchy from the time of the Great Elector to Frederick the Great. Prerequisite, Hist. 1-2. Two credits a quarter; autumn, winter, spring.

Richardson.

129. *The French Revolution and Napoleonic Era*.—Prerequisite, Hist. 1-2. Five credits; autumn. Quainton.

130. *Europe, 1814-1870*.—Prerequisite, Hist. 1-2. Five credits; winter. Quainton.

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*.—Open only to juniors, seniors and graduates. Three credits; autumn. McMahon.

140. *The New England Colonies*.—Open only to juniors, seniors and graduates. Three credits; winter. McMahon.

141. *American Revolution*.—Open only to juniors, seniors and graduates. Three credits; spring. McMahon.

\*143. *History of United States, 1789-1815*.

\*144. *History of United States, 1815-1846*.

\*145. *History of United States, 1846-1860*.

147. *History of the Civil War Period*.—Open only to juniors, seniors, and graduates. Three credits; autumn. McMahon.

148. *History of the Reconstruction Period*.—Open only to juniors, seniors and graduates. Three credits; 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; 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; autumn. Meany.

\*Not offered in 1924-1925.

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; winter. Meany.

155. *History of Canada*.—Canadian development to the present time. Open to juniors, seniors and graduates. Three credits; 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.

160. *History in the High School*.—The meaning, value, aims and place of history in the high school curriculum; historical problems. Prerequisite for Educ. 160H. Two credits; autumn. McMahon.

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.

*Teachers' Course in History*.—See Educ. 160H.

#### COURSES FOR GRADUATES ONLY

201-202-203. *Methods of Historical Research and Criticism*.—One credit a quarter; autumn, winter, spring. Richardson.

\*204-205-206. *Historiography*.

\*215-216-217. *Seminar in English History*.

218-219-220. *Seminar in German History*.—Open only to graduate students who read German and are taking Hist. 121-122-123. One credit a quarter; autumn, winter, spring. Richardson.

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; ASSOCIATE PROFESSOR DENNY; ASSISTANT PROFESSORS PATTY, BLISS, KOHN; INSTRUCTORS DRESSLAR, LUSBY

(For curricula in Home Economics see College of Science Bulletin.)

\*1. *Food Preparation*.

\*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. Bliss.

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; autumn, winter. 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.

25. *Textiles and Clothing*.—Identification and testing of fabrics. Economics of the textile industry. Comparative values in all types of clothing. Hygiene of clothing. Care and renovation. Clothing budgets. Two lectures and three 2-hour periods, recitation and laboratory work. Lab. fee, \$3. Five credits; autumn, winter, spring. Denny.

\*32. *Clothing*.

43. *Home Sanitation*.—Selection, sanitation and care of the equipment and material of the household. Three 2-hour periods, recitation and laboratory work. Lab. fee, \$2. Three credits; autumn. Dresslar.

*Principles of Nutrition*.—(See *Phys. Educ.* 54-55-56.)—Food and nutrition as related to health. Required of second year women. One lecture a week. Two-thirds of a credit; autumn, winter, spring. (Credit in physical education only.) Bliss.

101, 102. *Needlecraft*.—History of lace and needlecraft. Application of principles of design to modern needlework. Prerequisite, H.E. 8 and P.S. D. 9. Two 2-hour periods, recitation and laboratory work. Lab. fee, \$2. Two credits a quarter; autumn, winter. Denny.

104. *Principles of Nutrition*.—A study of the values of each food material: essentials in the diet. Diet as a factor in the maintenance of health. Open to men only. Of special interest to house managers, pre-medical students, athletes, and men in the departments of mines, forestry, fisheries, and military training. Lecture and discussion. Two credits; spring. Koehne.

105-106. *Elementary Dietetics*.—*Normal Nutrition and Diet for the Sick*.—For nurses, social service students and those wishing to obtain practical knowledge of nutrition as part of a liberal education. Prerequisite, H.E. 4, Chem. 5-6, Physiology 7. Three lectures, one 2-hour period, recitation and laboratory work. Lab. fee, \$6. Five credits; autumn, winter. Koehne.

107-108. *Dietetics*.—*Principles of Human Nutrition*.—For those expecting to teach home economics or to enter professions related to food and nutrition. Prerequisite, H.E. 5, Chem. 135-136, pre-medical students, Chemistry and physiology majors may take this course with instructor's consent. Three lectures. Two 2-hour periods, recitation and laboratory work. Lab. fee, \$6. Five credits; autumn, winter. Koehne.

109. *Elements of Home Economics*.—Service course for students training to do social service work. Consideration of the budget, elements of nutrition and home sanitation. Five recitations. Five credits; winter. Raitt.

111. *Child Care and Development*.—Heredity and eugenics. The psychology of children of pre-school age; physical care; hygiene of clothing. Prerequisites, Psych. 1, Nursing 5, H.E. 25. Prerequisite or parallel, H.E. 105 or 107. A preferred elective for majors in home economics. Three credits; spring. Kincaid, S. Smith, Soule, Denny.

112-113. *Clothing.—Costume Design and Construction*.—Principles of design applied to dress and accessories. Practice in selection and construction. Prerequisite, H.E. 8 and P.S.D. 9. Five 2-hour periods, recitation and laboratory work. Lab. fee, \$3. Five credits; autumn and winter; winter and spring, respectively. Patty.

116. *Food Selection and Preparation*.—Prerequisites, H.E. 5, 105 or 107. Two lectures and three 2-hour periods, recitation and laboratory work. Lab. fee, \$6. Five credits; winter, spring. Dresslar.

120. *Advanced Food Preparation*.—Advanced work in cookery—finest processes in technique, meal planning and service, catering. Prerequisites, H. E. 5, 116. Two 3-hour periods, recitation and laboratory work. Lab. fee, \$6. Three credits; winter. Dresslar, Lusby.

121. *Large Quantity Cookery*.—Preparation of food in large quantities for cafeterias, tea rooms, dormitories, hospitals, and camps. Prerequisite, H.E. 5, 116. Laboratory practice. One lecture, two 3-hour periods, recitation and laboratory work. Lab. fee, \$3. Four credits; spring. Lusby.

122. *Buying and Dietaries*.—Marketing, buying, institution food equipment and supplies. Planning menus for dormitories, hospitals, cafeterias and tea-rooms. Prerequisites, H.E. 5, 116, 106 or 108, 124. Three recitations. Three credits; winter. Lusby.

123. *Institutional Management*.—Problems of various types of institutions, relating to their organization and operation, relation to the state and community, employment of help. Three lectures. Prerequisites, H.E. 5, 116, 107-108, and 122. Three credits; spring. Raitt.

124, 125. *Practice Work*.—Eight hours a week in the University Commons and University dormitories followed by eight hours a week in various institutions under supervision of the instructor. One hour conference a week. Two 4-hour periods or one full day should be arranged in the schedule. Prerequisites, H.E. 116, 106, or 108, Econ. 11. Three to six credits a quarter; autumn, spring. Lusby.

127. *Non-Textiles*.—Merchandise from non-textile sources; paper, leather, rubber, fur, and metals. Raw materials, sources of supply, manufacture, methods of judging. Classification of retail stores' departmental stock. Three recitations. Lab. fee, \$3. Three credits; spring. Denny.

130, 131. *Clothing: Trade Dressmaking*.—Designing and draping on the form, practice in dress construction, and study of trade conditions. Prerequisites, H.E. 112-113, P.S.D. 9, P.S.D. 169. Three 2-hour periods, recitation and laboratory work. Three credits; winter, spring. Patty.

133. *Clothing: Costume Design*.—Development of fashion from ancient times to the present with emphasis upon the best art periods. Adaptation to the present mode. Prerequisites, H.E. 112-113, P.S.D. 9 and 169. Five 2-hour periods, recitation and laboratory work. Lab. fee, \$3. Five credits; spring. Patty.

135. *Millinery*.—Design, selection, practice in construction, trade methods and materials. Prerequisites, H.E. 8 or equivalent. P.S.D. 9. Three

2-hour laboratory periods, recitation and laboratory work. Lab. fee, \$3. Three credits; autumn. Patty.

143. *Home Furnishing*.—Application of structural art principles to choice and arrangement of household furnishings. Comparative costs. Prerequisite, P.S.D. 9. Two lectures and one 2-hour period, laboratory work and excursions. Lab. fee, \$3. Three credits; autumn, spring. Denny.

144, 145. *Household Management*.—Organization of the household. Application of scientific principles. Scientific management. Household budgets and accounts. Prerequisites, H.E. 5, 116, 105-106, or 107-108, Phys-89-90, Bact. 101, Econ. 1, Soc. 1. Two recitations and conferences. Two credits; winter, spring. Raitt.

148. *Practice Cottage*.—Seniors are required to live at the Practice Cottage two or three weeks. Two credits; autumn, winter, spring. Bliss.

183. *Food: Experimental Cookery*.—Prerequisites, H.E. 5, 116. Three 2-hour periods recitation and laboratory work. Lab. fee, \$3. Three credits; spring. Dresslar.

188. *Advanced Textiles*.—Historic art fabrics. Intensive study of a modern fabric. Methods of commercial testing. Prerequisites, H.E. 25, Econ. 1. Two 2-hour periods, recitation and laboratory work. Lab. fee, \$3. Two credits; spring. Denny.

190. *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. Open to graduate and advanced undergraduates. Lab. fee, \$2. Three to four credits; autumn, winter, spring.

191. *Diet in Disease*.—Three lectures and recitations, one laboratory period and visits to hospitals. Prerequisite, H.E. 107. Open to graduates and advanced undergraduates. Lab. fee, \$4. Four to five credits; spring.

*Teachers' Course in Home Economics*.—See Educ. 160I, 160J.

#### COURSES FOR GRADUATES ONLY

\*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; autumn. 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 credit hour; 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

Commerces Hall

PROFESSOR SPENCER; ASSOCIATE PROFESSOR JONES; ASSISTANT PROFESSOR KENNEDY;  
ASSOCIATE O'CONNOR; INSTRUCTOR BORAH

**1. *Journalism as a Profession.***—Survey of newspaper making in its various phases. Required of pre-journalism majors in the freshman year. One credit a quarter; autumn. Spencer.

**51. *News Writing.***—Practice in news writing; study of news sources. Required in the sophomore year of pre-journalism majors. Lab. fee, \$2. Five credits; 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. Lab. fee \$1. Three credits; spring. Jones.

**90, 91, 92. *Current Events.***—Current state, national and world movements. One quarter required of majors in journalism. Prerequisite, Journalism 51. Lab. fee, \$1 a quarter. One credit a quarter; autumn, winter, spring. Jones.

**101. *Reporting.***—Study of all types of stories covered by a reporter. Required of majors in journalism. Prerequisite, Jour. 51. Lab. fee, \$2. Five credits; autumn, winter. Borah.

**104. *Newspaper Administration.***—Newspaper organization and management. Prerequisite, Jour. 51. Two credits; autumn. Spencer.

**\*105. *The Sporting Page.***

**109. *Literary and Dramatic Reviewing.***—Routine work of the literary and dramatic editors. Prerequisite, Jour. 51. Two credits; autumn. Jones.

**115. *Elements of Publishing.***—Head styles; proof-reading; binding; engraving; press work; problems of production. Required in the sophomore year of pre-journalism majors. Lab. fee, \$2. Three credits, autumn. Kennedy.

**120. *Copy Reading.***—Required of majors in journalism. Prerequisite, Journalism 101. Lab. fee, \$2. Five credits; winter, spring. Borah.

**130. *Fundamentals of Advertising.***—Lab. fee, \$2. Five credits; autumn. Jones.

**131. *Display Advertising.***—Prerequisite, Jour. 130. Lab. fee, \$2. Five credits; winter. Jones.

**133. *Advertising Typography.***—Type families; application of type; advertising type units; type problems. Prerequisite, Jour. 115. Lab. fee, \$2. Five credits; spring. Kennedy.

**135. *Publicity.***—General publicity methods. Two credits; spring. O'Connor.

**136. *Comparative Journalism.***—Prerequisite, Jour. 101 and 120. Lab. fee, \$2. Three credits; autumn. Jones.

\*Not offered in 1924-1925.

\*\*Will be offered if a sufficient number of students elect the course.

138. *History of American Journalism*.—Required of majors in journalism. Prerequisite, Jour. 51. Lab. fee, \$1. Five credits; spring. Spencer.

140. *The Business Office*.—Simplified accounting for newspaper plants; business office management. Required of majors in journalism. Prerequisite, Jour. 115. Lab. fee, \$2. Five credits; winter. Kennedy.

150. *Editorial Writing*.—Required of majors in journalism. Prerequisite, Jour. 101 and 120. Five credits; spring.. Jones.

160. *Trade Journalism*.—Prerequisite, Jour. 51. Lab. fee, \$1. Five credits; 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. Lab. fee, \$2 a quarter. Two credits a quarter; autumn, winter, spring. Spencer.

173. *The Short Story*.—Critical appreciation of the short story. Lab. fee, \$2. Three credits; autumn. Spencer.

174, 175. *Short Story Writing*.—Prerequisite, Jour. 173. Lab. fee, \$2 a quarter. Three credits a quarter; winter, spring. Spencer.

188. *News Writing for Teachers*.—Two credits a quarter; spring, Borah.

250. *Research in Journalism*.—Admission only by consent of the instructor. Three to five credits; autumn, winter, spring. Spencer.

## LAW

### Commeroe 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.

## 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.

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.

## LIBERAL ARTS

Denny Hall

PROFESSOR CORY

1. *Introduction to Modern Thought*.—Especially for lower division students, but open to all, and designed to help students to get their intellectual bearings. Required reading and lectures on the new theories of matter; the making of earth; the origin and nature of life; mind and behavior; utilitarian, ethical and aesthetic values. Five credits; repeated autumn, winter and spring. Cory.

180, 181, 182. *Great Studies in Modern Thought*.—Four treatises, literary, philosophic or scientific, representative of the attitudes in the Renaissance, the eighteenth century enlightenment, the romantic period, and the naturalism of today towards human motives and the significance of ideals in nature. Open to upper division students only. Three credits a quarter; autumn, winter, spring. Cory.

## COURSES FOR GRADUATES ONLY

214, 215, 216. *Studies in Realism, Literary and Philosophical*.—An attempt to develop from current theories a constructive view. Two to eight credits a quarter; autumn, winter, spring. Cory.

## LIBRARY SCIENCE

PROFESSOR HENRY; ASSOCIATE PROFESSOR SMITH; ASSOCIATE LEWIS; INSTRUCTORS ALFONSO, PUTNAM

174. *Library Economy*.—Ordering, receiving, accessioning, and mechanical preparation of books; elementary trade bibliography; correspondence and records; lending systems. Two credits; autumn. Putnam.

175. *Classification and Subject Headings*.—Decimal classification studied in detail, followed by the survey of Expansive and the Library of Congress classifications. Assignment of book numbers. Use of subject headings and classification and assignment of subject headings to specified books. Three credits; autumn. Alfonso

176, 184. *Cataloging*.—These courses include lectures, recitations and problems in dictionary cataloging, shelflisting and alphabetizing. Include ordering, handling and use of Library of Congress printed cards and authorities for the correct entry of books. Lectures on the adaptation of standard rules to the needs of the small library. Three credits; autumn, 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; autumn, winter, spring. Smith

194. *Subject Bibliography*.—Preparation of bibliography 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; 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. Lewis

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. Lewis

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, SMAL; ASSOCIATES WEST, CRAMLET, TAYLOR, JERBERT; INSTRUCTOR STAGER.

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 80.

### REQUIREMENTS OF THE DEPARTMENT

For a major in mathematics, 36 credits, including courses 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, spring.

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; autumn, spring.

Winger, Mullemeister.

5. *College Algebra*.—Prerequisite, Math. 1 or one and one-half years high school algebra. Five credits; winter.

Winger, Mullemeister.

6. *Analytical Geometry*.—Especially for students in the College of Science. Prerequisite, Math. 1, 2, or 4. Five credits; spring.

Winger, Mullemeister.

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 engineering, 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 and Architects*.—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.

Cramlet, West.

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. Winger, Neikirk, Jerbert, Cramlet, Carpenter, Bell.

#### FOR GRADUATES AND UNDERGRADUATES

101. *Spherical Trigonometry with Applications*.—Prerequisite, Math. 2 and 4. Two credits; autumn.

Moritz.

102, 103. *Solid Analytical Geometry*.—Prerequisite, Math. 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.*

\*161, 162, 163. *Analytical Mechanics.*

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.

*Teachers' Course in Mathematics.*—See Educ. 160M.

#### COURSES FOR GRADUATES ONLY

\*201, 202, 203. *Differential Geometry.*

\*204, 205, 206. *Modern Algebra.*

\*207-208-209. *Theory of Relativity.*

\*211, 212, 213. *Foundations of Mathematics.*

214, 215, 216. *Modern Analysis.*—Two credits; autumn, winter, spring.  
Bell.

\*217, 218, 219. *Elliptic and Theta Functions.*

\*221, 222, 223. *Higher Plane Curves.*

224, 225, 226. *Real Variables.*—Three credits; autumn, winter, spring.  
Moritz.

\*227, 228, 229. *Theory of Numbers.*

\*231, 232, 233. *Theory of Infinite Processes.*

\*251, 252, 253. *Mathematical Journal and Research Club.*

#### MECHANICAL ENGINEERING

##### *Engineering Hall*

PROFESSORS EASTWOOD, WILSON; ASSOCIATE PROFESSOR WINSLOW; INSTRUCTORS  
McINTYRE, McMINN, EDMONDS

70. *Elements of Gas Engines.*—Arranged for the short course students in fisheries and others. Two credits; winter. 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, McIntyre, McMin, Edmonds.

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, McMin, Edmonds.

\*Not offered in 1924-1925.

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, Edmonds.

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.

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.

107 *Heating and Ventilation*.—An abridged course for students in the department of architecture. Prerequisite, junior standing. Two credits; spring.

Eastwood.

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, McMin.

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; autumn, winter.

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, winter.

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.

Winslow.

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; spring, winter, autumn.

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.

**194. *Seminar.***—Two credits; winter. McMinn.

**195. *Thesis.***—Investigation, design or experiment under direction of the professor in charge. Two to five 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. Wilson.

**211. *Research.***—Time to be arranged. <sup>2-5</sup>Three credits a quarter. Eastwood.

## MILITARY SCIENCE AND TACTICS

### *The Armory*

COLONEL BRADY, MAJOR GREENE, MAJOR MUHLENBERG, MAJOR SCHRADER, MAJOR GREGORY, CAPTAIN UNDERWOOD, CAPTAIN ADAIR, CAPTAIN HALE, CAPTAIN PRIEST, LIEUT. NOLAN, WARRANT OFFICER WHITE, WARRANT OFFICER FRANKS, QUARTERMASTER SERGEANT WUNDERLICH, SERGEANTS LANG, BOYLE, BAILEY, COMPTON, 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 residence. 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 81).

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**\*\*Will be offered if a sufficient number of students elect the course.**

## 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. One and two-thirds credits; autumn.

102. *Advanced Infantry.*—Accompanying weapons and leadership. One and two-thirds credits; winter.

103. *Advanced Infantry.*—Tactics and leadership. One and two-thirds credits; spring.

104. *Advanced Infantry.*—Field engineering: Elements of military field engineering with the study of trenches, obstacles, shelters, emplacements, observation posts, etc.; sand table instruction; field work. Leadership: practical drill and instruction in the duties of an officer. Primarily for students majoring in Military Science. Three credits; autumn.

105. *Advanced Infantry.*—Accompanying weapons, including nomenclature, use, care and repair, mechanics of weapons, practical exercises with weapons and instruments, range and target exercises. Leadership: practical drill and instruction in the duties of an officer. Primarily for students majoring in Military Science. Three credits; winter.

106. *Advanced Infantry.*—Tactics. Tactical principles governing the conduct of the platoon and smaller units in offensive and defensive combat, details of organization, equipment and tactical employment of companies. Leadership: practical drill and instruction in the duties of an officer. Primarily for students majoring in military science. Three credits; spring.

111. *Advanced Coast Artillery*.—Orientation and leadership. One and two-thirds credits; autumn.

112. *Advanced Coast Artillery*.—Gunnery and leadership. One and two-thirds credits; winter.

113. *Advanced Coast Artillery*.—Gunnery and leadership. One and two-thirds credits; spring.

114. *Advanced Coast Artillery*.—Orientation. Reconnaissance of battery positions. Determination of coordinates and orienting lines. Meridian determinations. Transit and calculations. Leadership: practical drill and instruction in the duties of an officer. Primarily for students majoring in Military Science. Three credits; autumn.

115. *Advanced Coast Artillery*.—Gunnery. Study of trajectory and effects of velocity, air density, temperature, altitude, problems in computation of firing data for 8" howitzer, 155 G.P.F. and seacoast artillery. Leadership. Primarily for students majoring in military science. Three credits; winter.

116. *Advanced Coast Artillery*.—Gunnery. Observation of fire. Methods of fire adjustment for fixed and mobile heavy artillery. Problems in fire adjustment. Conduct of actual heavy artillery fire, 155 G.P.F. and 3-inch fixed seacoast guns at Ft. Casey. Primarily for students majoring in military science. Three credits; spring.

121. *Advanced Air Service*.—Communications, liaison, aeronautical engines and leadership. One and two-thirds credits; autumn.

122. *Advanced Air Service*.—Communications, liaison, aeronautical engines and leadership. One and two-thirds credits; winter.

123. *Advanced Air Service*.—Aerial photography, minor tactics, aeronautical engines, administration and leadership. One and two-thirds credits; spring.

124. *Advanced Air Service*.—Communications: Radio telegraphy and telephony; operation of instruments and ground panels; use of Very pistols, flares, and reflectors in liaison. Aeronautical engines: theoretical instruction on the Liberty 12 aircraft engine, including ignition and carburetion. Leadership. Primarily for students majoring in military science. Three credits; autumn.

125. *Advanced Air Service*.—Communications: Radio telegraphy and telephony. Liaison with artillery, work of the Observation Squadron and Observer, reconnaissance, adjustment of fire, work with the infantry and cavalry. Theoretical instruction on rotary and radial engines, the Le Rhone engine. Leadership. Primarily for students majoring in military science. Three credits; winter.

126. *Advanced Air Service*.—Aerial Photography. Aerial photographs, and their interpretation, types of cameras used and instruction in their care and operation. A brief study in minor tactics. Practical instruction on the Liberty 12 aircraft engine. General administration. Leadership. Primarily for students majoring in military science. Three credits; spring.

## FOURTH YEAR

151. *Advanced Infantry*.—Military law, history and policy, and leadership. One and two-thirds credits; autumn.

152. *Advanced Infantry*.—Tactics and leadership. One and two-thirds credits; winter.

153. *Advanced Infantry*.—Tactics, company administration and leadership. One and two-thirds credits; spring.

154. *Advanced Infantry*.—Military law. Military history, military resources and military strength of the United States, the state of national preparedness for war at critical periods, the cost of American wars, the traditional military policy of the United States. Leadership. Primarily for students majoring in Military Science. Three credits; autumn.

155. *Advanced Infantry*.—Tactics. Principles governing the organization, armament, equipment and conduct of the rifle, machine gun, howitzer and headquarters companies in offensive and defensive combat. Leadership: practical drill and instruction in the duties of an officer. Primarily for students majoring in military science. Three credits; winter.

156. *Advanced Infantry*.—Tactics. Continuation of tactical instruction as given in M.S. 155. Company Administration: Lectures on practical administration of a company including interior economy and management, preparation of papers pertaining to administration. Leadership. Primarily for students majoring in military science. Three credits; spring.

157. *Military Thesis on Infantry*.—Five credits; autumn, winter, spring.

161. *Advanced Coast Artillery*.—Military law, history and policy, and leadership. One and two-thirds credits; autumn.

162. *Advanced Coast Artillery*.—Tactical employment of heavy artillery and leadership. One and two-thirds credits; winter.

163. *Advanced Coast Artillery*.—Company administration, field engineering and leadership. One and two-thirds credits; spring.

164. *Advanced Coast Artillery*.—Military law. Military history, military resources and military strength of the United States, the state of national preparedness for war at critical periods, the cost of American wars, the traditional military policy of the United States. Leadership. Primarily for students majoring in military science. Three credits; autumn.

165. *Advanced Coast Artillery*.—Tactical employment of heavy artillery. Selection of positions, defensive and offensive fires, counter preparation, counter battery and other prearranged fires, use of artillery in seacoast and harbor defense liaison and leadership insofar as artillery is concerned. Leadership. Primarily for students majoring in military science. Three credits; winter.

166. *Advanced Coast Artillery*.—Lectures on company administration, preparation of papers pertaining to administration of a battery. Field engineering insofar as heavy artillery is concerned. Leadership: practical drill and instruction in the duties of an officer. Primarily for students majoring in military science. Three credits; spring.

167. *Military Thesis on Coast Artillery*.—Five credits; autumn, winter, spring.

171. *Advanced Air Service*.—Aerial gunnery, navigation, aeronautical engines, and leadership. One and two-thirds credits; autumn.

172. *Advanced Air Service*.—Bombardment equipment, aeronautical engines, airplanes, rigging, and leadership. One and two-thirds credits; winter.

173. *Advanced Air Service*.—Airplanes, air service organization, aeronautical engines and leadership. One and two-thirds credits; spring.

174. *Advanced Air Service*.—Aerial gunnery: use of the weapon in the air; use of the camera gun. Theoretical instruction in navigation, meteorology and its relation to aerial navigation. Aeronautical engines: theoretical instruction on the Hispano Suiza engines. Leadership. Primarily for students majoring in military science. Three credits; autumn.

175. *Advanced Air Service*.—Theoretical and practical study of bombardment equipment. Aeronautical engines: practical work on the Liberty 12 aircraft engine, study of fusillade, wing surfaces, tail surfaces, control surfaces, struts, cones, and general equipment, preliminary instruction in rigging. Leadership. Primarily for students majoring in military science. Three credits; winter.

176. *Advanced Air Service*.—Airplanes: practical work on dismantling and assembling of airplanes, a study of the organization table of the Air Service. Aeronautical engines; practical instruction on the Hispano Suiza 8. Leadership. Primarily for students majoring in military science. Three credits; spring.

177. *Military Thesis on Air Service*.—Five credits; autumn, winter, spring.

## METALLURGY

### Mines Hall

PROFESSORS ROBERTS, DANIELS; ASSISTANT PROFESSOR COREY; INSTRUCTOR WILTEN;  
ASSISTANTS MCCORMICK, BENJAMIN

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, Chem. 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. Three recitations and one laboratory period. Lab. fee, \$5. Four 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. Three 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.

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 the use of the microscope in testing industrial alloys. One recitation and two laboratory periods. Lab. fee, \$5. Three credits; winter. Corey.

165. *Metallurgy Calculations*.—Physical chemistry of the metallurgists, slag calculations, etc., illustrated by figures quoted from the present practice at a number of smelting plants. Prerequisite, senior standing. Three recitations. Three 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. *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.

#### COURSES FOR GRADUATES ONLY

211, 212, 213. *Graduate Thesis*.—Preparation of a thesis 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. Corey.

221, 222, 223. *Graduate Metallurgy*.—Studies in metallurgy. Prerequisite, graduate standing. Hours and credits to be arranged. Corey.

### MINING

#### Mines Hall

PROFESSORS ROBERTS, DANIELS; ASSISTANT PROFESSOR CORBY; LECTURERS GLENN, POWELL; INSTRUCTOR WILTZEN; ASSISTANTS SCHONING, MCCORMICK, JOHNSTON

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 college 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.

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. A government certificate is given on completion of the course. Required of all students in the College of Mines. One credit; winter. Daniels, Schoning.

106. *Mining Excursion*.—A five days' trip, 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 five days' trip, taken in the spring of the senior year, similar to Min. 106. One credit; spring. Roberts, Daniels, Corey.

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.

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; 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.

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.

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\*\*Will be offered if a sufficient number of students elect the course.

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. *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.

#### COURSES FOR GRADUATES ONLY

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. One credit; autumn, winter, spring.

Roberts, Daniels, Corey, Wilson.

211, 212, 213. *Graduate Thesis*.—Preparation of a thesis in mining engineering, or in geology and mining, or in coal mining. 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.

\*\*221, 222, 223. *Graduate Metal Mining*.—Studies in metal mining or in ore dressing. Prerequisite, graduate standing. Hours and credits to be arranged. Roberts.

251, 252, 253. *Graduate Coal Mining*.—Studies in coal mining or in the preparation or uses of coal. 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. Research work is under joint direction of the United States Bureau of Mines and the College of Mines. 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. The preparation and utilization of coal.
2. Ceramics.
3. Electrometallurgy.

#### MUSIC

##### *Music Building*

PROFESSOR GLEN; ASSOCIATE PROFESSORS ROSEN, VENINO, WOOD; ASSISTANT PROFESSORS DICKEY, VAN OGLE; ASSOCIATES BOGARDUS, L. VENINO, LYNCH; INSTRUCTORS ADAMS, KIRCHNER, FRENCH, ———, FERRYMAN; ASSISTANTS OLIVER, CANFIELD.

1, 2, 3. *Music Appreciation*.—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.

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\*\*Will be offered if a sufficient number of students elect the course.



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.

‡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. These courses may carry upper division credit in cases where the student has previously been enrolled in music courses for at least two years.

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.

18, 19, 20. *Applied Music (Freshman)*.

68, 69, 70. *Applied Music (Sophomore)*.

118, 119, 120. *Applied Music (Junior)*.

168, 169, 170. *Applied Music (Senior)*.

Students in other colleges and schools of the University 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, Mrs. A. F. Venino, Ferryman.

(b) *Violin*.—Rosen, Oliver.

— (c) *Voice*.—Glen, ———, Bogardus.

(d) *Violoncello*.—Kirchner, Canfield.

(e) *Pipe Organ*.—Lynch.

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.

‡Only those who have successfully completed the work in course 11 will be eligible for registration in course 12.

\*\*Will be offered if a sufficient number of students elect the course.

**\*\*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.

**34, 35, 36. Voice Training.**—(*Applied Music*).—Principles of correct breathing and tone production essential to good singing. Two credits a quarter; autumn, winter, spring. Bogardus.

**51, 52, 53. Harmony.**—Includes analysis and keyboard practice. Prerequisite, some knowledge of the piano, Music 7, 8, 9, and 14, 15, 16. Three credits a quarter; autumn, winter, spring. Wood, Wilson.

**51D, 52D. Harmony.**—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.**—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.** *7 w s 2 cr 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.

**84, 85, 86. Advanced Voice Training.**—Two credits a quarter; autumn, winter, spring. Bogardus.

**101, 102, 103. Advanced Harmony.**—Prerequisite, Mus. 51, 52, 53. Three credits a quarter; autumn, winter, spring. Wood.

**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 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 stringed trios, quartets and quintets. One credit a quarter; autumn, winter, spring. Rosen.

**127, 128, 129. Advanced Sight Singing.**—Study of larger choral works. Prerequisite, Mus. 7, 8, 9, or instructor's permission. Two credits; autumn, winter, spring. Dickey.

**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.

\*\*Will be offered if a sufficient number of students elect the course.

\*Not offered in 1924-1925.

*140, 141, 142. Orchestral Instruments 2 cr 7 w s adam*

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.

\*161, 162, 163. *Polyphonic Forms*.

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; autumn, winter. French.

\*180, 181, 182. *University Band (advanced)*.

199. *Senior Program*.—Two credits. Time to be arranged.

*Teachers' Courses in School Music and Piano Playing*.—See Educ. 160N and 160X.

#### 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.

#### SCHOLARSHIPS

*Scholarship in Piano Study*.—Mr. A. F. Venfno 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.

*Mu Phi Epsilon Scholarship*.—Mu Phi Epsilon, national honorary musical sorority, offers a scholarship of one lesson a week for a school year, in either voice, violin, 'cello or organ.

Prior to the beginning of the fall term, a private tryout will be held before the committee of judges, which will be composed of three Mu Phi Epsilon members and two members of the faculty of the music department. The award will be made according to talent, personality, financial situation, promise, and general scholastic standing.

It is a requirement: (1) That the scholarship be awarded a University of Washington student of at least one year's attendance in the music department of the University.

(2) That the scholarship award, if won by (a) a senior, shall be paid back three years after the time of the award. (b) a junior, shall be paid back four years after the time of the award. (c) a sophomore, shall be paid back five years after the time of the award, in order to perpetuate and establish a permanent scholarship fund.

\*Not offered, in 1924-1925.

(3) That Mu Phi Epsilon members shall not be eligible for the competition.

The winner shall have the option of selecting the teacher.

Applications must be sent to the Dean of the Fine Arts College before September 15 of each year.

#### PIANO

*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 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.

*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; Mrs. Venino, \$22 a quarter; Miss Ferryman, \$15 a quarter.

*Vocal Music*.— ———, \$22 a quarter; Mrs. Bogardus, \$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. Mrs. Oliver, \$15 a quarter.

*Pipe Organ*.—Mrs. Lynch, \$22 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.

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. Five 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. Five credits; winter. 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. Soule.

*Course in Child Care and Development*.—See Home Economics 111.

## ORIENTAL HISTORY, LITERATURE AND LANGUAGES

### *Philosophy Hall*

#### PROFESSOR GOWEN, LECTURER HALL

The requirement of one year's work in ancient languages and literature may be satisfied by any two of courses 51, 52, and 53. Special work assigned in these courses may be used toward advanced credits. Courses 21, 22, 30 and 31 count for credits in the department of history; courses 115, 116, and 117 in the department of philosophy; and courses 40, 60, 44, 41, 61 and 45 in the college of business administration. Courses above 100 are intended for juniors, seniors and graduates.

40. *Contemporary Chinese Civilization I*.—Three credits; winter. Hall.

41. *Contemporary Chinese Civilization II*.—Three credits; winter. Hall.

44. *Chinese-Japanese Commercial Terms*.—Two credits; winter. Hall.

45. *Chinese and Japanese Resources*.—Two credits; spring. Hall.

†50. *Literature of India*.—Indian literature from the Vedas to the work of Rabindranath Tagore. Five credits; autumn. Gowen.

†51. *Literature of the Euphrates Valley and of Egypt*.—A survey of literary discoveries in Sumerian, Babylonian, Assyrian and Egyptian archaeology. Five credits; winter. Gowen.

†52. *Literature of Persia*.—From the cuneiform inscriptions of the Achaemenians to the Fifteenth century A.D. Five credits; spring. Gowen.

60. *Contemporary Japanese Civilization I*.—Three credits; winter. Hall.

61. *Contemporary Japanese Civilization II*.—Three credits; spring. Hall.

70. *Chinese Literature*.—Three credits; winter. Hall.

71. *Japanese Literature*.—Three credits; spring. Hall.

80. *Semitic Literature*.—Survey of the contents and literary significance of the Hebrew Scriptures. Three credits; spring. Gowen.

†By special work under direction of instructor, upper division students may receive upper division credit.

101-102-103. *Hebrew, Aramaic or Arabic*.—Five credits; autumn, winter, spring. Gowen.

104-105-106. *Sanscrit*.—Grammar and readings in the Nala, the Hito-padeca and the Veda. Five credits; autumn, winter, spring. Gowen.

114. *History of Religion*.—Primitive conceptions of religion. Natuřism and Spiritism. Three credits; autumn. Gowen.

115. *History of Religion*.—The religions of the Far East. Three credits; winter. Gowen.

116. *History of Religion*.—Judaism, Christianity, Muhammadanism. Three credits; spring. Gowen.

#### RELATED COURSES IN OTHER DEPARTMENTS

*History of China I*.—See History 21. Five credits; autumn. Gowen.

*History of China II*.—See History 22. Five credits; winter. Hall.

*History of Japan I*.—See History 30. Five credits; winter. Gowen.

*History of Japan II*.—See History 31. Five credits; spring. Hall.

#### PAINTING, SCULPTURE AND DESIGN

##### *Philosophy Hall*

ASSOCIATE PROFESSOR ISAACS; ASSOCIATES WEHN, PATTERSON, WOMAN, STORM, BUTLER;  
INSTRUCTORS EDENS, RHODES, FOOTE

Students applying for advanced standing should present samples of work done, to the head of the department.

5, 6, 7. *Drawing*.—Technique of drawing in charcoal, colored chalks and water color from casts and still life. Prerequisite for any subsequent course in drawing or painting. Lab. fee, \$1. Three credits a quarter; autumn, winter, spring. Isaacs, Patterson, 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. Three credits a quarter; autumn, winter, spring. Edens, Rhodes, Storm.

16, 17, 18. *Art Appreciation*.—Introductory course intended to give the student a familiarity with the nature of works of art. Lectures, illustrated by lantern slides, from the world's masterpieces. One credit a quarter; autumn, winter, spring. Isaacs.

53. *Art Structure*.—Continuation of P.S.D. 11. Lab. fee, \$2. Three credits; autumn, spring. Storm.

54. *Art Structure*.—Design applied in batik, and tie and dye. Prerequisite, P.S.D. 53. Lab. fee, \$2. Three credits; winter. Storm.

55. *Art Structure*.—Design applied in wood-block printing. Prerequisite, P.S.D. 53. Lab. fee, \$2. Three credits; spring. Storm.

56, 57, 58. *Drawing nad Painting*.—Work in various mediums from life, still life or landscape. Lab. fee, \$2. Three credits a quarter; autumn, winter, spring. Butler.

59, 60, 61. *Household Design*.—Designs for tiles; leaded glass, metal work, fixtures and embroidery. Three credits a quarter; autumn, winter, spring. Foote

§65, 66, 67. *Drawing and Painting*.—Lab. fee, \$2. Three credits; autumn, winter, spring. Isaacs, Butler.

72, 73, 74. *Sculpture*.—Elementary course in modelling in clay and wax. Construction of plaster moulds. Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Wehn.

§75, 76, 77. *Advanced Painting*.—Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Isaacs, Patterson.

101, 102. *Public School Art*.—Execution of problems suitable for use in the public schools. Methods of presentation. Two credits; winter and spring. Rhodes.

103, 104. *Pottery*.—Lab. fee, \$2. Three credits a quarter; autumn, winter. Worman.

105. *Art Structure*.—Design as applied to lettering. Three credits; autumn and winter. Edens.

106. *Art Structure*.—Poster designing. Three credits; winter. Edens.

107, 108, 109. *Portrait Painting*.—Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Patterson.

110, 111, 112. *Interior Decoration*.—Three credits a quarter; autumn, winter, spring. Foote.

113, 114, 115. *Furniture Design*.—Lectures on the history of furniture with the execution of original design for furniture. Two credits a quarter; autumn, winter, spring. Foote.

116, 117, 118. *Illustration*.—Drawing, painting and composition for book decoration. Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Butler.

122, 123, 124. *Sculpture*.—Lab. fee, \$3. Three credits; autumn, winter, spring. Wehn.

126, 127, 128. *History of Painting*.—Evolution of the great schools of painting. One credit a quarter; autumn, winter, spring. Butler.

151, 152. *Art Structure*.—Decorative composition using landscape and other motives. Application in block printing. Three credits a quarter; winter, spring. Rhodes.

157. *Metal Work*.—Etching, sawing and hammering of copper and brass. Lab. fee, \$2. Three credits; autumn. Edens.

158. *Jewelry*.—Lab. fee, \$2. Three credits; winter. Edens.

§159. *Jewelry*.—Three credits; winter. *adv problems* Edens.

160, 161, 162. *Life*.—Lab. fee, \$3. Three credits a quarter; autumn, winter, spring. Isaacs.

§163, 164, 165. *Composition*.—Principles of pictorial design in three dimensions. The compositions are done in oil and other mediums. ~~Two~~ <sup>Three</sup> credits a quarter; autumn, winter, spring. Isaacs.

Offered if elected by a sufficient number of students.

207, 208, 209 *Portrait painting professional*  
260, 261 262 *adv painting intensive from life*  
263, 264, 265 *composition*

5 cr  
5 cr  
5 cr



166, 167, 168. *Art Structure*.—Design suitable for application in stage decoration and costuming. Three credits a quarter; autumn, winter, spring. Edens.

169, 170, 171. *Costume Design*.—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. Foote.

179. *Costume Design*.—Two credits; autumn, winter, spring. Edens.

Suggested elective for P.S.D. majors, Anth. 143.—*Origins of Art*. Spier.

*Teachers' Course in Methods in Teaching Art*.—See Educ. 160P.

#### PHARMACY AND PHARMACEUTICAL CHEMISTRY, PHARMACOLOGY, TOXICOLOGY, MATERIA MEDICA AND FOOD CHEMISTRY

*Bagley Hall*

PROFESSOR JOHNSON; ASSOCIATE PROFESSORS LYNN, LANGENHAN; LECTURER OSSEWARD; INSTRUCTORS GOODRICH, NELSON, 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. Nelson and assistants.

4. *Commercial Pharmacy*.—Lecture course, covering the commercial problems of the practical pharmacists. 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*.—Theory and practical application of extemporaneous compounding. About 200 prescriptions are compounded illustrating the theory of class room work. One lecture, one quiz, and one laboratory period a week. Lab. fee, \$3 a quarter. Three credits a quarter; autumn, winter, and 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.

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.

\*\*Will be offered if a sufficient number of students elect the course.

112. *Materia Medica*.—Advanced course in dealing largely with animal drugs and biological products. Three credits; autumn. Goodrich.

113, 114, 115. *Advanced Prescriptions*.—Difficult and incompatible prescriptions. Special problems in dispensing, and new and non-official remedies. Manufacture of diagnostic reagents. 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.

125, 126, 127. *Current Problems*.—Lectures 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.

195, 196, 197. *Pharmaceutical Chemistry*.—The pharmacy and chemistry of alkaloids, glycosides, oils, volatile oils and other plant and animal principles of pharmaceutical importance. The course will also include the separation and identification of poisons from animal tissue. Two lectures and three laboratory periods. Lab. fee, \$6.50 a quarter. Five credits; autumn, winter, spring. Lynn.

201, 202, 203. *Investigation*.—Senior and graduate students may undertake original investigation in pharmacy, pharmaceutical chemistry, pharmacology, volatile oils and plant principles under the direction of an instructor. Laboratory fee according to credit and type of work. Credit to be arranged. Autumn, winter, spring.

## PHILOSOPHY

### *Philosophy Hall*

PROFESSOR SAVERY; ASSOCIATE 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.

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*.

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 a quarter; autumn, winter, spring. (May be counted for credit in Philosophy.) Gowen.

123. *Philosophy in English Literature of the Nineteenth Century*.—From Wordsworth to Shaw, Wells and Chesterton, and including Emerson, Whitman and Masters. (Alternates with Eng. 187 as requirement for seniors in the Library School.) Prerequisite, Phil. 1. Five credits; spring. Savery.

129. *Esthetics*.—The origin and motives of art and the esthetic principles of the different forms of art. Five credits; autumn. Ducasse.

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*.

#### COURSES FOR GRADUATES ONLY

214-215-216. *Seminar in Logic*.—Deduction, Induction, Probability. Two or three credits a quarter; autumn, winter, spring. Savery.

204-205-206. *Seminar in Metaphysics*.—Three credits a quarter; autumn, winter, spring. Blake.

\*241-242-243. *Plato and Aristotle*.

\*244-245-246. *Seminar in Hume and Kant*.

247-248-249. *Seminar: The Philosophy of Schopenhauer and Nietzsche*.—The philosophy of the will. The will to live and the will to power. Contrast of Schopenhauer's pessimism and Nietzsche's affirmation of the value of life, Schopenhauer's doctrine of sympathy and Nietzsche's egoism, democratic and aristocratic codes of morality, the saint and the superman. Three credits a quarter: autumn, winter, spring. Ducasse.

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\*Not offered in 1924-1925.

## 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. 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.

111. *Scout Organizations and Management*.—Lectures on aims and policies of scouting. Some periods will be devoted to camping, camp cooking, hiking, signalling, knot tying, first aid, tree study, troop formations and plans for organizing and conducting a troop. Five credits; winter. Arbuthnot.

112. *Scout Leadership*.—Study of the text *Community Boy Leadership*, together with a comparison of such standard programs as Boy Scouts, Girl Scouts, Campfire Girls and Woodcraft League. Opportunity will be offered to visit and study local Court of Honor and other phases of activities by Seattle Scouts. Five credits; spring. Arbuthnot.

\*\*114. *Physical Diagnosis*.—Two credits; spring. Hall.

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. Three credits a quarter; autumn, winter, spring. Arbuthnot.

*Teachers Course in Physical Education for Men*.—See Educ. 160S.

## PHYSICAL EDUCATION AND HYGIENE FOR WOMEN

### Gymnasium

ASSISTANT PROFESSOR GROSS, DIRECTOR; LECTURER IRWIN; ASSOCIATES ANDERSON, BLOOM, INSTRUCTOR AID, MCGOWND; ASSISTANT HELMICH

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

\*\*Will be offered if a sufficient number of students desire the course.

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 deferment 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, hiking, riding, quoits, dance drama, and golf. The Women's Athletic Association cooperates 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, Helmich, Aid, McGownd.

4, 5, 6. *Hygiene.*—One hour of lecture. Two-thirds credit a quarter; autumn, winter, spring.

Irwin.

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, McGownd, Helmich.

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. McGownd.

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. Bliss.

57, 58, 59. *Sophomore Corrective Gymnastics*.—Two hours of practice. One credit a quarter; autumn, winter, spring. Bloom.

61. *Folk Dancing*.—Two hours of practice. One credit a quarter; autumn, winter. McGownd.

64. *Hockey*.—Two hours of practice. One credit; autumn. Helmich.

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.

75. *Archery*.—Two hours practice. One credit; autumn, 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. McGownd.

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.

91, 92, 93. *Natural Dancing*.—Two hours practice. One credit; autumn, winter, spring. Aid.

101-102. *Methods of Gymnastics*.—Gymnastic terminology. Classification of gymnastic material. Principles and technique of teaching. Prerequisites, or accompanying courses, Anat. 101-102 and Physiology 54-55. Two hours lecture and two hours practice. Three credits a quarter; autumn, winter. Aid.

103. *Natural Gymnastics*.—Drills and gymnastics based on natural technique. Methods of teaching. Use and classification. Prerequisite Phys. Educ. 101-102. Two hours lecture and two hours practice. Three credits; spring. Anderson.

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. Study of folk festivals, educational values, organization,

costuming. Prerequisite, one 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. *Plays and Games*.—Singing games, dramatic plays, graded games, elementary team games, and story telling; classification, value, and methods of teaching. One lecture and three hours practical work a week. Three credits a quarter; autumn, winter. Gross.

113. *Organization and Administration of Playgrounds*.—Classification of play material, conduct and equipment of play centers. Commercial and municipal recreation; agencies promoting recreational activities. Prerequisite, Phys. Educ. 111-112. Three lectures a week. Three credits; 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. Three 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. Administration problems. Prerequisite, Phys. Educ. 101-102-103, 104-105-106, and 111-112, 113, and Educ. 160R. 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, or P.E. 91, 92, and upper division standing. Two credits a quarter; autumn, winter, spring. Aid.

\*161. *Normal Diagnosis*.

\*Anth. 163.—*Anthropometry and Biometrics*.

167. *Hockey and Soccer Coaching*.—Methods of coaching hockey and soccer. Prerequisites, Psych. 1, and knowledge of and participation in hockey. One hour lecture and two hours practice. Three credits; autumn. Helmich.

169. *Tennis and Archery Coaching*.—Prerequisite, Psych. 1 and knowledge of and participation in both sports. Two hours lecture, two hours practice. Three 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. Prerequisite, ability to swim at least two kinds of strokes. Y.W.C.A. pool. Lab. fee, \$2.50. One credit; autumn. Farrier.

175. *Advanced Course in Swimming*.—The construction and hygiene of the pool. Methods of filtration, and general organization. Y.W.C.A. pool. Lab. fee, \$2.50. Prerequisite, Phys. Educ. 174. One credit; winter. Farrier.



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.

*Teachers' Course in Physical Education*.—See Educ. 160R.

## 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, Eller, Utterbach, Anderson

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, Eller, Utterbach.

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 students in home economics, nursing and women majors in physical education. Lab. fee, \$2. Five credits; autumn and 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.

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*.—(Given 1925-1926.)

102. *Analytical Mechanics*.—An introductory course, including statics and dynamics; for students in science. Prerequisites, Phys. 3 and Math. 6. Five credits; autumn. Anderson.

\*Not offered in 1924-1925.

103. *Heat*.—Prerequisite, Phys. 3. Lab. fee, \$2. Five credits; winter. Utterbach.
- \*105. *Electricity*.—(Given 1925-1926.)
113. *Acoustics and Illumination*.—For students in architecture. Prerequisite, Phys. 2. Lab. fee, \$2. Four credits; spring. Osborn.
114. *Electrical Measurements*.—For engineering students. Prerequisite, Phys. 97, 98, 99. Lab. fee, \$4. Three credits; autumn, winter, spring. Brakel.
115. *Applications of Photography to Science Work*.—Prerequisite, special permission. Lab. fee, \$5. Three credits; winter. Higgs.
126. *Physics of AC and DC Circuits*.—Prerequisite, Phys. 3. Lab. fee, \$2. Five credits; spring. Brakel.
- \*160. *Physical Optics*.—(Given 1925-1926.)
- 167, 168, 169. *Special Problems*.—Students are admitted after consultation with the instructor. One credit; autumn, winter, spring. Osborn, Brakel, Anderson.
- \*170. *Spectroscopy*.—(Given 1925-1926.)
- \*175. *High Temperature Thermometry*.—(Given 1925-1926.)

## COURSES FOR GRADUATES ONLY

- \*200-201-202. *Dynamics*.—(Given 1925-1926.)
- 203-204. *Theoretical Electricity*.—Two credits. autumn; three credits, winter. Brakel.
- \*205. *Vibratory Motion or Sound*.—(Given 1925-1926.)
206. *Advanced Optics*.—Lab. fee, \$2. Three credits; spring. Osborn.
- 207-208. *Modern Theories*.—Thermal and electrical conduction in metals, thermionic and photoelectric phenomena, contact and thermal e.m.fs., ionizing potentials. Prerequisites, Phys. 105 and Math. 109. Three credits, autumn; two credits, winter. Anderson.
- \*209. *Thermodynamics*.—(Given 1925-1926.)
- 210-211-212. *Seminar*.—Credit arranged. Autumn, winter, spring.
- \*213-214-215. *Research*.

## POLITICAL SCIENCE

*Philosophy Hall*

PROFESSOR MARTIN<sup>1</sup>, ASSOCIATE PROFESSOR GEORGE; ASSISTANT PROFESSOR LAUBE;  
ASSOCIATE COLE

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

<sup>1</sup>Absent on leave, 1924-1925.

\*Not offered in 1924-1925.

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.

1. *Elements of Government*.—Introductory. Special attention to the citizen's part in government. Five credits; autumn, winter, spring.

41. *Evolution of Government*.—Prerequisite, Pol. Sci. 1. Five credits; autumn. George, Laube, Cole.  
George.

42. *American Political Theory*.—Prerequisite, Pol. Sci. 1. Five credits; winter. George.

43. *Problems of Democracy*.—Prerequisite, Pol. Sci. 1. Five credits; spring. George.

100. *Municipal Government*.—Municipal organization and administration in the United States and Europe. Prerequisite, Pol. Sci. 1. Five credits; autumn. Laube.

102. *Municipal Problems*.—Functions and problems of city government. Prerequisite, Pol. Sci. 1. Five credits; winter. Laube.

111. *International Politics*.—Prerequisite, Pol. Sci. 1. Five credits; spring. Laube.

115. *Public Finance and Taxation*.—Prerequisite, Pol. Sci. 1 and Econ. 1. Five credits; autumn. Laube.

116. *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.

125. *Administrative Problems*.—Prerequisite, Pol. Sci. 1. Three credits; spring. Laube.

130. *American Federal Government*.—Prerequisite, Pol. Sci. 1. Three credits; autumn. Cole.

131. *American State Government*.—Prerequisite, Pol. Sci. 1. Three credits; spring. Cole.

140. *Political Parties*.—Organization and methods of modern political parties; growth and theory of the party system. Prerequisite, Pol. Sci. 1. Three credits; winter. Cole.

150, 151, 152. *Reading Course*.—Discussions based on selected readings in political theory. Prerequisite, eight credits in political science. Two credits a quarter; autumn, winter, spring. George.

*Teachers' Course in Civics*.—See Educ. 1600.

#### COURSES FOR GRADUATES ONLY

201, 202, 203. *Seminar in Political Theory*.—Two to five credits; autumn, winter, spring. George, Laube, Cole.

#### 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. Fee, \$1. 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. The significance of sex and individual differences in practical life. Each member of the class will organize his work around a problem of personal interest. 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. Wilson.

*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. *Undergraduate Research*.—Prerequisites, Psych. 1 and 106. Three credits; each quarter. Smith, Guthrie, Wilson.

*Seminar*.—Open to all research students in the department. Weekly meetings.

#### COURSES FOR GRADUATES ONLY

Before a student registers for graduate courses his topic of research must be approved by the department.

201, 202, 203. *Graduate Research*. Smith, Guthrie, Wilson.

#### ROMANIC LANGUAGES AND LITERATURE

Denny Hall

PROFESSORS FREIN, ORR, UMPHREY; ASSOCIATE PROFESSORS PATZER, GOGGIO; ASSISTANT PROFESSORS HELMLING, DE VRIES, SANJURJO; ASSOCIATES HAMILTON, SIMPSON, CATELLAIN; INSTRUCTOR WHITTLESSEY; TEACHING FELLOWS CHESLEY, MACDONALD, TURNER, SALMONS.

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 course, except graduate, 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 credit will be given for French 1 and 2 until 3 has been completed. Five credits a quarter; autumn, winter, spring.

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*.—Intended 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. Students of the lower division should register for 71, 72, 73; those of the upper division for courses 111, 112, 113. Prerequisites, French 6 and 9 or an equivalent. Whittlesey.

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. Patzer, Helmlinge, DeVries, Whittlesey.

104, 105, 106. *Advanced Reading*.—Courses to be taken with 101, 102, 103, if so desired, to make five-hour courses. Prerequisites, 6 and 9. Two credits a quarter. French 101 and 104, 102 and 105 are offered each quarter; 103 and 106 are not offered in the autumn quarter.

Patzer, Helmlinge, DeVries, Whittlesey.

107, 108. *Themes*.—Writing of original compositions upon assigned topics. Prerequisite, French, 102. Two credits a quarter; winter, spring. Helmlinge.

118, 119, 120. *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. DeVries.

121, 122. *The French Novel*.—The French novel from its beginning to the Romantic movement. Subjects for themes in 107, 108 will be suggested by the novels discussed. Prerequisites, French 6 and 9. Three credits a quarter; winter, spring. Helmlinge.

\*124, 125, 126. *The Short Story*.

131. *Lyric Poetry*.—The best lyrics of the nineteenth century, especially those of Lamaratine, Hugo and Musset. Rules of French versification. Prerequisite, French 104 or equivalent. Five credits; autumn. Helmlinge.

141, 142. *The French Drama*.—Lectures and assigned reading. Course conducted in French. Prerequisites, 6 and 9 or equivalent. Five credits a quarter; winter, spring. Patzer.

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. Prerequisites, French 6 and 9, or equivalent. Three credits a quarter; autumn, winter, spring. DeVries.

158, 159. *Advanced Syntax*.—French syntax from the teacher's standpoint. These courses are prerequisite to the teacher's course. Prerequisite, French 103. Two credits a quarter; autumn, winter. Frein.

161, 162, 163. *Eighteenth Century Literature*.—Rapid review of the literature of the whole century, followed by more detailed study of the greatest authors of this period. Prerequisites, French 6 and 9, or equivalent. Two credits a quarter; autumn, winter, spring. Patzer.

\*Not offered in 1924-1925.

*\*171, 172, 173. Seventeenth Century Literature.*

## 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 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. Prerequisites, a good knowledge of French or English literature. Course given in English. Two credits a quarter; autumn, winter, spring. (May be counted for graduate credits in English.) DeVries.

221, 222, 223. *Old French Readings*.—One of the most helpful courses for teachers of French. Open to graduates who have studied French at least four years. Five 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.*

*Teachers' Course in French*.—See Educ. 160T.

## 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 Italian 1 and 2 until 3 has been completed. Five credits a quarter; autumn, winter, spring. Goggio.

*\*111, 112, 113. Modern Italian Literature.*

118, 119, 120. *Survey of Italian Literature*.—Lectures, and assigned reading. Prerequisite, Italian 3. Three to five credits, but class meets only three times a week. 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, Castiglione, Ariosto, Cellini, and Tasso. Lectures in English and collateral reading. Knowledge of Italian not necessary. Two credits; spring. Goggio.

## COURSE 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

\*Not offered in 1924-1925.

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.*—Each of the courses 1, 2, 3, is repeated each quarter. No credit will be given for Span. 1 and 2 until 3 has been completed. 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. May be taken with Span. 104, 105, 106, making a five-hour course. Sanjurjo.

*104, 105, 106. Advanced Reading.*—Prerequisite, Span. 9. May be taken with 101, 102, 103. Two credits a quarter; autumn, winter, spring. Sanjurjo.

*118, 119, 120. Survey of Spanish Literature.*—Selected texts, collateral reading, lectures. Prerequisites, Span. 6. Two credits a quarter; autumn, winter, spring. Umphrey.

*\*121, 122, 123. Spanish Novel.*

*131, 132, 133. Lyric Poetry.*—The mechanism of the modern lyrics, as a basis for comparison with older forms. Lectures. Reading and committing to memory some of the best modern lyrics. Prerequisite, Span. 6. Two credits a quarter; autumn, winter, spring. Sanjurjo.

*141, 142, 143. Drama.*—The drama in Spain, from its beginnings. Autumn quarter: the early period and the sixteenth century. Winter quarter: the Golden Age. Spring quarter: the nineteenth and early twentieth centuries. Representative plays are read in class, others are assigned for outside reading and reports. Prerequisite, Span. 6. Three credits a quarter; autumn, winter, spring. Sanjurjo.

*159. Advanced Syntax.*—Problems in syntax studied from the teacher's standpoint. Prerequisites, Span. 101, 102. Three credits; spring. Ober.

*184, 185, 186. Spanish American Literature.*—Representative writings of Spanish American authors. Collateral reading and reports. Lectures. Prerequisite, Span. 6. Three credits a quarter; autumn, winter, spring. Umphrey.

*Teachers' Course in Spanish.*—See Educ. 160U.

#### 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, autumn. Umphrey.

*231. Epic Poetry.*—The epic material in Old Spanish literature and its later treatment in poetry and drama. Topics are assigned for special investigation and report. Five credits; winter. Umphrey.

*241. Spanish Historical Grammar.*—Five credits; spring. Umphrey.

\*Not offered in 1924-1925.



## 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. Courses 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 Hamsun, Bojer. May be entered any quarter. Two credits a quarter; autumn, winter, spring. Vickner.

109, 110, 111. *Modern Scandinavian Authors in English Translation*.—Ibsen, Björnson, Strindberg, Selma Lagerlöf and Hamsun. Open to all.

\*Not offered in 1924-1925.

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.

#### COURSES FOR GRADUATES ONLY

\*201-202. *Old Icelandic.*

\*203-204. *History of the Swedish Language.*

205-206. *Scandinavian Literature in the Nineteenth Century.*—Two credits a quarter; winter, spring. Vickner.

\*208. *Scandinavian Lyric Poetry.*

\*209. *History of Scandinavian Literature.*

#### 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 semasology; growth of vocabulary; word values. Lectures discussions, and exercises. Prerequisite, same as for courses 190-191. This course is a continuation of courses 190-191, but may be taken separately. Two credits; spring. Vickner.

#### SOCIOLOGY

##### Philosophy Hall

PROFESSOR WOOLSTON; ASSOCIATE PROFESSOR MCKENZIE; ASSOCIATE MISS JOHNSON  
INSTRUCTOR LUNDBERG, LECTURER BAIN

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 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, 110, 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

\*Not offered in 1924-1925.

are completed. Sociology 1 or its equivalent is prerequisite throughout, 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 29, 55.

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, 161, 162.

- (2) Social Theory and Methods of Investigation offer preliminary training and background for vocational use as follows:

A Teachers of Social Science: Courses 150, 151, 152.

B Social Investigation: Courses 29, 129, 130, 180, 181, 182.

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 for graduates. 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.

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. Woolston.

29. *Social Statistics*.—Methods and sources for quantitative investigation, as applied to ethnography, demography, vital statistics, social maladjustment, and their related fields. Five credits; autumn. Lundberg.

55. *Human Ecology*.—Geographic and economic factors which determine the location and growth of communities. Types of communities, trade and market zones, significance of changing forms of transportation and communication, population selection and composition. Community structure; distribution and segregation of utilities and inhabitants. A background for the study of community problems. Five credits; autumn. McKenzie.

56. *The Family*.—Historical development of the family. Problems of American family life and programs for family welfare. Three credits; autumn. Johnson.

57. *Child Welfare*.—Rights of childhood to health, education, recreation and protection and of measures now in use to secure them. Three credits; winter. Johnson.

58. *Neighborhood Resources*.—Problems offered through schools, churches, clubs, settlements, state, national, public and private agencies that are available to neighborhoods in preventing and meeting their social problems. Three credits; spring. Johnson.

62. *Public Recreation*.—Organization of indoor and outdoor amusement; public morality and the use of leisure. Three credits; spring. McKenzie.

63. *Community Organization*.—Evolution of informal and formal organization of life in primary and secondary communities. Personal and social forces determining community policy. Neighborhood and institutional disorganization. Case studies of conscious attempts at reorganization. Should be preceded by Soc. 55. Five credits; winter. McKenzie.

\*70. *Demography*.

\*71. *Immigration*.

\*72. *Race Contacts*.

‡103. *Problems of Maladjustment*.

\*105. *Industrial Groups*.

129. *Social Exhibits*.—Technique of preparing tables, graphs, charts and other types of visual representation of sociological data pertaining to community problems. Five credits; spring. Lundberg.

130. *Social Surveys*.—Methods of planning, conducting, and presenting results of investigations of communities and institutions. Five credits; winter. Lundberg.

150. *General Sociology*.—Advanced course in theory for seniors and graduates. Mature students may substitute this work for Sociology 1 upon personal approval by the instructor. Five credits; autumn. Bain.

151. *History of Social Theory*.—The principal contributions to sociological science from the standpoint of their backgrounds. Five credits; winter. Bain.

152. *Contemporary Social Theory*.—Critical analysis of current sociological thought. Five credits; spring. Bain.

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; winter. 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*.—The social factors involved and the methods of dealing with physical defectiveness, feeble-mindedness, insanity, narcotics, alcoholism, prostitution, vagrancy. Five credits; autumn. McKenzie.

158. *Personality Problems*.—Survey of the literature on personality. Case studies of personality problems. Two credits, spring. McKenzie.

160, 161, 162. *Relief, Reform, Reconstruction*.—A summary of current programs of social betterment with critical estimate of their value for progress. Five credits. Woolston.

171-172-173. *Social work Practice I*.—Supervised field work with local social agencies. Twelve hours field work, two hours class. Permission of instructor required for admission. Five credits; autumn, winter, spring. Johnson.

180, 181, 182. *Group Behavior*.—Introduction to social psychology; local and national traits. Five credits a quarter; autumn, winter, spring. Woolston.

\*Not offered in 1924-1925.

‡Offered in extension as a correspondence course.

191-192-193. *Social Work Practice II*.—Advanced field work. Twelve hours field work; two hours class. Prerequisite, 171-172-173. Five credits; autumn, winter, spring. Johnson.

## COURSES FOR GRADUATES ONLY

207-208-209. *Community Research*.—Original investigation of special community problems. Prerequisite, graduate standing. Two credits a quarter; autumn, winter, spring. McKenzie.

221-222-223. *Seminar*.—The purpose is to train in methods of original research and investigation. Two credits; autumn, winter, spring. Woolston.

## ZOOLOGY

## Science Hall

PROFESSOR KINCAID; ASSISTANT PROFESSORS E. V. SMITH, 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 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 development 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; winter, 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.

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; 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. Prerequisite, 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.

\*Not offered in 1924-1925.

**\*\*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.

*Teachers' Course in Zoology.*—See Educ. 160Z.

#### COURSES FOR GRADUATES ONLY

**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, Guberlet, Smith.

#### 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. 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. 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. fee, \$3. Five credits; autumn, winter, spring. 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 Colleges of Liberal Arts, Science, Fine Arts, Business Administration, the Graduate School, Schools of Education, Journalism and Law, and in the Pre-medical course. The Puget Sound Biological Station at Friday Harbor maintains a session of six weeks. In 1925 this will begin June 17 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 1925 will take place on Wednesday, June 17. Students expecting to be in attendance during the last six weeks only may register on or before Thursday, July 24.

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.

*Amount of Work Registered For.*—No student shall be registered for less than 12 hours nor more than 16 hours except by consent of his dean. 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 10 hours for either term, or 19 hours for entire quarter.

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.

*Master's 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 fulfillment 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

The Puget Sound Biological Station is near Friday Harbor, Washington, the county seat of San Juan county. The population of the town is approximately 500. It is between Bellingham and Victoria, 30 miles from the former and 20 from the latter, in a direct line. The old Station site is about a quarter of a mile from town, the new about a mile. The town contains a bank, drug store, butcher shop, bakery, hardware store, garage, and a number of grocery and other stores; so one can make ordinary purchases there.

San Juan county consists of an archipelago of something like 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 is being 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 island, 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. The 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 of 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, thus affording opportunity for the study of forms and 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.

*Grounds and Buildings.*—The old site consists of 3 or 4 acres southeast of the town; the new site of 485 acres north of the town. Both have fresh water piped in, but the new one has no salt water thus far; it is only about 10 feet above high tide, however.

The buildings on the old ground are a zoological laboratory about 30x60 feet, 2 stories and attic, just above high tide; and a combination kitchen, dining room, library and botanical laboratory. The main part of this building is about 45x50 feet, one story and attic, with 20x20 kitchen annex, and 10x45 botanical laboratory beneath. Each building also contains a number of research rooms. Two new buildings have been erected on the new grounds. They are fireproof, one story structures, 24x55 feet, with cement floors. Each contains one laboratory, one research room, and one store room.

*Apparatus.*—Compound microscopes of simple make are supplied for class use from the University of Washington. Certain ordinary glassware, containers, and preservatives may be secured at the stock room. It is the aim to have in the stock room the things ordinarily called for. Unusual things cannot be supplied. Those wishing special apparatus should write the director. Rowboats are on hand for general use. It is best for research workers to bring their own microscopes.

The Station owns its own trawling boat, the gift of Robert Moran, of Rosario, Washington.

**Supply Department.**—A supply department has been established for the purpose of supplying museums and schools with zoological and botanical material for their 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 at very nearly cost. This will permit scientists to put their whole time on class work or investigation. The collection of material by private individuals cannot be permitted. Scientists are urged to co-operate with the Station in its endeavor to earn part of its running expenses through its supply department.

**Lectures.**—General lectures by the Station staff or by visitors are given as the occasion arises, in the lecture hall in camp, in a hall in the village of Friday Harbor, or about campfires on the beach.

**Registration.**—Experience has shown that it is wiser to register for one course only. Six weeks is a very short time to give to any course, even though one's whole time be put on 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 per week. For less work fewer credits may be given. All credit is recorded in the Station books in percent; 70% is the minimum for passing. Credits may be transferred directly from the Station books.

**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 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; and sometimes the demand exceeds the supply, but there has always been room in Friday Harbor.

**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.

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.

SUMMER SCHOOL OF LANDSCAPE PAINTING

FRIDAY HARBOR, WASHINGTON

The department of painting, sculpture and design conducts a summer school of painting at Friday Harbor, in the San Juan Islands, with a term of six weeks. The location of the school is appropriate for serious study of the peculiar qualities of the varied Northwest landscape. Among the picturesque islands of the San Juan archipelago and on the adjacent mainland the artist finds a wide range of *motifs*. The school is organized to give a serious group of students opportunity for intensive work in landscape painting and drawing.

## THE 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  
ALEXANDER C. ROBERTS, Ph.D. (Washington).....Director of the Extension Service

### ADMINISTRATIVE BOARD

DIRECTOR ROBERTS, CHAIRMAN

DEAN THOMSON, Liberal Arts

ASSOCIATE PROFESSOR COX, Business Administration

DEAN LANDES, Science

PROFESSOR RAITT, Home Economics

DEAN BOLTON, Education

COMPTROLLER CONDON

### THE FACULTY, 1924-1925

The Extension faculty is composed of members of the general faculty who give extension courses and of the following instructors on the Extension staff:

WILLIAM BENNETT HENDERSON, A.B., (Princeton), LL.M., (George Washington), Lecturer on Business Administration.

EMUEL JACOB FOREMAN.....Lecturer on Water Transportation

ALLETTA MARIA GILLETTE, A.B., (Smith), A.M., (Washington).....Instructor in English

H. DEALY DVORAK, A.M., (Clark), Ph.D., (Brown).....Instructor in Education

### OFFICE STAFF

MARY C. GRADY.....Office Manager

CORINNE B. BABCOCK.....Secretary in charge of Seattle City Office

EDNA HINDMAN, A.B.....Secretary for Home Study

HARRIETTE R. BAILEY.....Assistant

### EXTENSION SERVICE

The Extension Service of the University of Washington provides university instruction by mail and in extension classes and lectures for those who cannot give full time to university study.

This service was organized in 1912. More than ten thousand students have been enrolled, a large number of whom have earned credits through extension study toward a university degree. Others have taken this work for the practical business values, greater professional and technical skills, and purely cultural satisfactions of wider reading and finer appreciations.

The Extension Service presents for 1924-1925 the following activities:

1. EVENING CAMPUS CLASSES

4. GRADUATE MEDICAL LECTURES

2. OFF CAMPUS CLASSES

5. GRADUATE NURSES' INSTITUTE

3. HOME STUDY

6. FIRLAND SCHOOL FOR NURSES

7. NAVIGATION SCHOOL

About two hundred courses are available either through correspondence or in classes at moderate fees. This Service is an integral part of the University, and is maintained by the State for educational services to those engaged in gainful employment but who desire to pursue advanced study.

### UNIVERSITY CREDIT

Most of the courses at present offered by correspondence may be taken by properly qualified students for credits towards a university degree. Applicants for enrollment wishing to take courses for credit should send their credentials for entrance to the University, with their application, if these credentials are not already on file with the Registrar of the University. Credit work is of course subject to all rules and regulations of the Univer-

sity that are applicable. The work must be thorough, must show creditable grade and must be completed within a reasonable time, which is estimated to be not more than one year for five credit courses and proportionally less for shorter courses.

These qualifications are clearly stated, so that there may be no disappointment from expectations that cannot be fulfilled of an easy road to a degree. Home study is not such a road. It is slow and laborious; but it is worth all the time and money that it costs if considered from the standpoint of its value in mental training, the pleasure that may be had from this mode of using one's time, and the widening of the horizon of one's mind.

#### HOME STUDY CREDITS AND UNIVERSITY DEGREES

Students who are unable to spend in residence the full number of years required for a university degree may take as many as half of the required credits for graduation through Home Study, provided that not less than one year of work is done in residence at the University of Washington. For such Home Study courses, the student should plan well in advance and with the advice of University authorities. The studies required in the freshman and sophomore years are more largely available for Home Study. Therefore, to make a combination of Home Study and residence study, students should plan for the first rather than the latter part of the University course in Home Study.

#### TUITION FEES

Moderate fees have always been charged by the University of Washington for extension instruction. It is proper that the individual directly benefited should pay his part toward the support of this work. The following requirements and conditions should be thoroughly understood:

Fees are due and payable at the time of enrollment and no fees are refunded except upon rejection of the student or failure to give the course. Enrollment constitutes an agreement on the part of the student to complete the course and he must take the responsibility for any failure on his part to do it.

Fees are based upon a uniform charge of \$4 per credit hour. Extension courses cost therefore: \$8 for a two-hour course; \$12 for a three-hour course; \$16 for a four-hour course; \$20 for a five-hour course.

#### HOME STUDY COURSES

The number and subjects of courses offered for Home Study vary from time to time. There are more than two hundred courses in nearly ninety subjects now organized. Present plans call for the development of the Home Study curricula to a total of more than three hundred courses. Many courses have been offered for several years; others are entirely new. All have been adjusted to the special needs of Home Study students.

*Home Study Courses of Instruction.*—Anthropology, astronomy, botany, classical languages and literature, dramatic art, economics and business administration, education, English language and literature, geology, Germanic languages and literature, history, home economics, journalism, mathematics, music, navigation, painting, sculpture and design, philosophy, political science, psychology, Romanic languages and literature, Scandinavian languages and literature, sociology, zoology.

The University reserves the right to change this list without notice. Faculty changes, the publication of new textbooks, changes in the material to be emphasized may compel the withdrawal or shifting of courses. It is planned to keep the list of courses revised and as nearly permanent as circumstances warrant.

## GRADUATE MEDICAL LECTURES

In cooperation with the Washington State Medical Society and the King County Medical Society, the eighth Graduate Medical Lectures were held July 14 to 18 inclusive, 1924. The lecturers were Sir John Herbert Parsons, surgeon in the Royal London Ophthalmological Hospital, London, England, John Osborn Polak, professor of obstetrics and gynecology, Long Island College Hospital, New York, and Elliott P. Joslin, clinical professor of medicine, Harvard Medical School. The enrollment in the 1924 lectures was 208.

## FIRLAND SCHOOL FOR NURSES

In cooperation with the authorities of the Firland sanitorium, the School for Graduate Nurses in 1924 has enrolled from 25 to 30 students in each of the classes offered through the Extension Service. A two-year curriculum covering 20 credits of advanced University work is offered.

## GRADUATE NURSES' INSTITUTE

In cooperation with the Washington State Graduate Nurses' Association, the Washington State Public Health Nurses' Association, the State League of Nursing Education, and the King County Graduate Nurses' Association, the Extension Service conducted the first Graduate Nurses' Institute July 7 to 12, 1924. The faculty consisted of Edna L. Foley, superintendent of Chicago Visiting Nurse Association; Carol L. Martin, instructor in the Presbyterian Hospital, Chicago; Elnora E. Thomson, director of the Far Western Extension Office, American Child Health Association; Assistant Professor Martha Koehne and Professor Howard Woolston of the University of Washington faculty. Ninety-two nurses enrolled in this institute.

## HYGIENE OF MATERNITY AND INFANCY

The Extension Service cooperates with the Washington State Department of Health, Division of Child Hygiene, and the Children's Bureau of the United States Department of Labor, in conducting a course in the Hygiene of Maternity and Infancy. This is a home study course in which more than 400 have enrolled during the year 1924.

## OFFICE OF THE EDITORIAL SECRETARY

**MATTHEW O'CONNOR, A.B.**.....Editorial Secretary  
**HARRIOTT WESTMORELAND**.....Assistant

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 co-operate with publicists and editors who desire information regarding the University or any of its specialized departments.

All official publications of the University of Washington are issued under the direction of the editorial secretary. The following publications have been issued:

The Puget Sound Biological Station Series, three volumes.

The University of Washington Publications, as follows:

*Anthropology*.—Vol. 1, No. 1. The Whaling Equipment of the Makah Indians, by T. T. Waterman.

*Botany*.—Vol. 1, No. 1. Production of Root Hairs in Water, by Ethel M. Bardell.

*Geology*.—Vol. 1, No. 1. Tertiary Faunal Horizons of Western Washington, by Charles E. Weaver. No. 2. Paleontology of the Oligocene of the Chehalis Valley, by Katherine E. H. Van Winkle. No. 3. Fauna from the Eocene of Washington by Charles E. Weaver and Katherine Van Winkle Palmer. No. 4. Foraminifera from the Eocene of Cowlitz River, Lewis County, Washington.

*Language and Literature*.—Vol. 1. The Poems of Henry Howard, Earl of Surrey, by Frederick Morgan Padelford. Vol. 2. Spenser's Use of Ariosto for Allegory, by Susannah Jane McMurphy. Vol. 2, No. 2. Thomas Dekker: A Study in Economic and Social Backgrounds, by Kate L. Gregg.

The Publications in Language and Literature include studies in the various languages and literatures, ancient and modern, represented at the University. The series replaces and absorbs The Publications in English, of which the following volumes have appeared:

Vol. 1. Uno Linderlof's Elements of the History of the English Language, translated, by Robert Max Garrett. Vol. 2. The Political and Ecclesiastical Allegory of the First Book of the Faerie Queen, by Frederick Morgan Padelford. Vol. 3. Johannes Steenstrup's The Medieval Popular Ballad, translated by Edward Godfrey Cox. Vol. 4. The Pearl: An Interpretation, by Robert Max Garrett.

*Mathematics*.—Vol. 1, No. 1. An Arithmetical Theory of Certain Numerical Functions, by Eric Temple Bell. No. 2. Cyclic-Harmonic Curves: A Study in Polar Coordinates, by Robert E. Moritz.

*The Social Sciences*.—Vol. 1, No. 1. Studies in Matriculation Statistics, Intelligence Ratings and Scholarship Records at the University of Washington, by Alexander Crippen Roberts. No. 2. Causation and the Types of Necessity, by Curt John Ducasse. Vol. 2, No. 1. Tiberius Caesar and the Roman Constitution, by Olive Kuntz.

The University of Washington Engineering Experiment Station Series as follows:

No. 1. Creosoted Wood Stave Pipe and Its Effect Upon Water for Domestic and Irrigational Uses. (Bureau of Industrial Research.) No. 2. An Investigation of the Iron Ore Resources of the Northwest, by William Harrison Whittier. (Bureau of Industrial Research.) No. 3. An Industrial Survey of Seattle, by Curtis C. Aller. (Out of Print.) (Bureau of Industrial Research.) No. 4. A Summary of Mining and Metalliferous Mineral Resources in the State of Washington with Bibliography, by Arthur Homer Fischer. No. 5. Electrometallurgical and Electrochemical Industry in the State of Washington, by Charles Denham Grier. No. 6. Ornamental Concrete Lamp Posts, by Carl Edward Magnusson. No. 7. Multiplex Radio Telegraphy and Telephony, by F. M. Ryan, J. R. Tolmie, R. O. Bach. No. 8. Voltage Wave Analysis with Indicating Instruments, by Leslie Forrest Curtis. No. 9. The Coking Industry of the Pacific Northwest, by Joseph Daniels. No. 10. An Investigation of Compressed Spruce Pulleys, by George Samuel Wilson. No. 11. The Theory of Linear-Sinoidal Oscillations, by Henry Godfrey Cordes. No. 12. Motor Truck Logging Methods, by Frederick Malcolm Knapp. No. 13. Tensions in Track Cables and Logging Skylines, by Samuel Herbert Anderson. No. 14. Current Suppression by Means of Parallel

Resonance, by Henry Godfrey Cordes. No. 15. Electric Heating of Residences, Part I, by Edgar Allan Loew. No. 16. Sewage Disposal for Suburban Homes and for Isolated Institutions, by William Franklin Allison. No. 17. Transmission Line Design, Part I. Mechanical Features, by Frederick Kurt Kirsten. No. 18. The Clays and Shales of Washington, by Hewitt Wilson. No. 19. The Chemical Utilization of Wood in Washington, by Henry Kreitzer Benson, Thomas Gordon Thompson and George Samuel Wilson. No. 20. Electric Heating of Residences, Part II, by Edgar Allan Loew. No. 21. Experimental Data on Relative Cost of Gas and Electricity for Cooking, by Martha Estella Dresslar. No. 22. An Analysis of the Weir Coefficient for Suppressed Weirs, by Charles William Harris. No. 23. The Electrostatic Electromagnetic Conversion Factor, by Loyal Vivian Bewley. No. 24. Characteristic Surfaces of Thermionic Valves, by Jack Roderick Tolmie. No. 25. Development of Influence Lines as Applied to Statically Indeterminate Airplane Beams, by Robert James Minshall and Frederick Burt Farquharson. No. 26. Hydro-Electric Power in Washington, Part I. A Reconnaissance Survey, by Carl Edward Magnusson. No. 27. A Comparative Test of the Flow of Water in 8" Concrete and Vitrified Clay Sewer Pipe, by Elgin Roscoe Wilcox. No. 28. A Study of Coal Washing Problems of the Pacific Northwest, by Earl Renwick McMillan and Byron Matthew Bird. No. 29. Transmission Line Design, Part II, Mechanical Design of Spans, by George Sherman Smith. No. 30. Oscillographic Determination of the Thermionic Triode Static Characteristics, by Albert Kalin.

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.

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*An Epizootic of Aspergillosis in Chickens.*—Journal of the American Veterinary Medical Association, Vol. 63, No. 5. August, 1923.  
*Parasites of Dogs and Cats of Oklahoma.*—Proceedings of the Oklahoma Academy of Science, Vol. 3. October, 1923.

GUNTHERP, HORACE

- An Albino Western Robin in Seattle.*—Condor, Vol. 25, No. 132. 1923.

## DEGREES

DEGREES CONFERRED JUNE 18, 1923

### BACHELOR DEGREES

#### COLLEGE OF LIBERAL ARTS

##### BACHELOR OF ARTS

Anderson, Mabel Felton	Flisken, Marjorie Kerr <sup>1</sup>
Bailey, Myron Edwin <sup>1</sup>	Flack, Lena Elvina
Baille, Provis Marcia <sup>2</sup>	Fleming, Bessie Jean <sup>1</sup>
Baker, Dorothy Ada <sup>1</sup>	Fletcher, Elizabeth Brodwater <sup>1</sup>
Baker, Ella Meagher	Flockol, George Howard
Barnes, Frances Jane	Flowers, Ruby Jane <sup>1</sup>
Bates, John Montague <sup>1</sup>	French, Merle Carolyn
Bayley, Elizabeth Palmer	Freyd, Greta G.
Baylis, Charles Augustus ( <i>magna cum laude</i> )	Gernaey, Maude Louise
Beckerjeck, Rozella	Gilbert, Horace Nathaniel <sup>1</sup> ( <i>cum laude</i> )
Bender, Nathaniel B.	Gilbert, Mary Margery <sup>2</sup>
Bennett, Richard Francis <sup>1</sup>	Gillman, Ethel Miriam
Berquist, Fred E.	Glover, Allen Ross <sup>2</sup>
Bjorquist, Enoch Joseph <sup>1</sup>	Gose, Vera <sup>1</sup>
Black, Elizabeth Susanna	Gray, Beatrice Wright <sup>1</sup>
Blanchard, Elizabeth Estelle	Gray, Helen Frances <sup>2</sup>
Blogg, Ainsworth	Green, Clarence C. ( <i>cum laude</i> )
Bowman, Edna Elizabeth <sup>1</sup>	Groth, Joyce Irene ( <i>cum laude</i> )
Boyer, Vera	Hammer, Joyce
Bressler, Margaret <sup>1</sup>	Hankinson, Helen Adelaide
Brooks, Helen Louise <sup>1</sup>	Hanson, Esther Annette
Broward, Ella Jeanette <sup>1</sup>	Harada, Matsutaro <sup>2</sup>
Brown, Lorna Estelle	Harris, Mary Prince
Bryce, Gertrude Amy <sup>2</sup>	Harrison, Everett Falconer
Buerk, Louise Caroline	Hart, Emma C. <sup>2</sup>
Bursell, Frances Imogene ( <i>cum laude</i> )	Hart, Lou Ella
Bush, Lyle Kenneth <sup>1</sup>	Hart, Ruth M.
Butler, Judson Rae	Heiner, Eva
Byron, Margaret	Hennes, Delbert P.
Calhoun, Alma	Herrick, Ellen ( <i>cum laude</i> )
Case, Austin F. <sup>2</sup>	Howarth, Harriet Marie
Cathcart, Edith Eleanor <sup>1</sup>	Howell, W. Aline
Cave, Lloyd A. ( <i>cum laude</i> )	Huang, Hua Piao <sup>2</sup>
Cave, Roy Clinton	Hunsacker, Herbert Cason <sup>1</sup>
Chambers, Horace James <sup>2</sup>	Janeck, Marion Delferna
Chapman, Aleta Elva	Johnson, Florence A. <sup>2</sup>
Christensen, Clara Mabel <sup>1</sup>	Johnson, Genevieve Dorothy
Clarke, Lillian	Jolliffe, Margaret Jewett <sup>2</sup>
Colner, Gladys <sup>1</sup>	Jolly, E. Nydia
Colter, Josephine Hamilton	Jordan, Ruth Maddock
Condit, Charlotte Frances <sup>1</sup>	Kangley, Helen <sup>1</sup>
Crawford, William R.	Kee, Sing-Tah <sup>2</sup>
Creamer, Una Lillian	Kelley, Martha Eugenie <sup>1</sup>
Cutts, Cecelia ( <i>magna cum laude</i> )	King, Margaret Elizabeth
Darling, Irene F.	Kuykendall, Lenore
Davies, Elizabeth	Lawson, Thomas Strang
Deer, Gladys Frances	Leeper, Helen Gertrude
de la Pole, Dorothy Buller <sup>2</sup>	Levy, David P.
Dennis, Margaret	Lindberg, Martha Evelyn
Dickson, Elizabeth <sup>1</sup>	Lindner, Isabel B.
Doubravsky, Reva	Lockerby, Deslah <sup>1</sup>
Down, Andrew <sup>1</sup>	Lorenz, Crescent
Duncan, Margaret	Low, Nellie Cecelia
Duncan, Patricia Pansy	Lundberg, Vivian Madele
Dunn, Margaret Carol	MacArthur, Archibald A.
Elliott, Louise M. <sup>2</sup>	McCaig, Grace Ralston
Ericksen, Lalla Genevieve	McCarthy, Clara Genevieve <sup>1</sup>
Erwin, Susan C. ( <i>cum laude</i> )	McCush, George William
Farrar, Robert	McDonald, Lamora
Fendel, Sam Louis <sup>2</sup>	McDonald, Otto George
Fillion, Fred	McDowell, Ruth

NOTE: The persons whose names are followed by the superior figures 1 2 3 received their degrees in the quarters of 1922-1923 ending in September, December and March respectively; all others in June, 1923.

For degrees conferred at the end of the summer quarter, August 31, 1923, see page 307.

- McKay, Zenda Lorraine  
 MacNicol, Anna Elizabeth<sup>2</sup>  
 McQuaid, Alice Evelyn  
 Mahaffey, Audley Fleming<sup>2</sup>  
 Marquis, William James<sup>2</sup>  
 Mason, Violet Muriel  
 Mathis, Madge Mary  
 Meyer, Flora  
 Miller, Ethel M.  
 Miller, Marienne Elizabeth  
 Minich, John McMillan<sup>1</sup>  
 Moll, Gertrude Celeste  
 Morse, Laura Jeanette  
 Nettleton, Alice Marie<sup>2</sup>  
 Newlove, Gwendolyn George<sup>1</sup>  
 Newman, Anne  
 Newton, Mary Howe  
 Niemela, Lores William  
 Nowak, Helen Marietta<sup>2</sup>  
 Odegard, Peter H.<sup>1</sup> (*cum laude*)  
 Olsen, Esther Olinda  
 Otis, Leota Beatrice<sup>1</sup>  
 Palmer, Carolyn R.  
 Pannebaker, Myra Elizabeth<sup>1</sup>  
 Parrington, Elizabeth  
 Pennell, Dorothy Winifred (*cum laude*)  
 Peplow, Marion Lucille  
 Perry, Mary Agnes<sup>1</sup>  
 Perry, Warren Loud  
 Pettett, Ruth  
 Pickett, May Belle  
 Pond, Elizabeth Bradford  
 Powers, Anna Maria<sup>1</sup>  
 Powers, Marie Kraft<sup>2</sup>  
 Price, Ruth Garland<sup>1</sup>  
 Raine, Margaret Muir (*cum laude*)  
 Reap, Genevieve Elizabeth  
 Richardson, Elizabeth Cook (*cum laude*)  
 Rigg, Margaret<sup>2</sup>  
 Roop, Milford W.<sup>2</sup>  
 Rummel, Edith E.  
 Russell, Florence Margretta<sup>2</sup>  
 Sandusky, Lawrence  
 Sather, Olene M. (*cum laude*)  
 Scholtes, M. Geraldine  
 Settem, Clara Olive  
 Sheaham, Myrtle<sup>2</sup>  
 Shirkey, Emily Frances<sup>1</sup>  
 Simon, Dorothy  
 Skinner, Elzy Louise  
 Slater, Verla Mayfield  
 Smith, Ethel Beryl<sup>2</sup> (*cum laude*)  
 Smith, Gertrude Burwell  
 Snapp, Elizabeth Sherman<sup>2</sup>  
 Stallings, Adeline May<sup>2</sup>  
 Stancliffe, Imogene  
 Stone, Martha Elizabeth  
 Strong, Gladys Delight  
 Swanson, Ruby Francis  
 Taft, Alice Louise  
 Tanner, Josephine Warren<sup>1</sup>  
 Taylor, Archa Bertrand<sup>2</sup>  
 Thayer, Ellen Jeanette  
 Thompson, Jane Estelle<sup>2</sup>  
 Tidmarsh, Patrick Maurice  
 Topping, Willard Faville  
 Trukositz, Elizabeth<sup>1</sup>  
 Turner, Robert Elson<sup>1</sup>  
 Tuttle, Birdena Lingerman  
 Ungersma, Bernadine<sup>1</sup>  
 Vining, Genevieve Virginia  
 VonErichsen, Lyle Gordon<sup>1</sup>  
 Wang, Fuchow<sup>2</sup>  
 Weir, Gladys  
 Wheelon, Burton J.  
 White, Frances  
 White, Lyda Arnold  
 White, Marie  
 Whitney, Albert Judson<sup>2</sup> (*cum laudc*)  
 Wienir, Israel Taradai<sup>2</sup>  
 Wilson, Emma Jeanete<sup>1</sup>  
 Woods, Rachel Angeline

## COLLEGE OF SCIENCE

## BACHELOR OF SCIENCE

- Anderson, Lou Eastwood  
 Anderson, Melvin G.  
 Angst, Ernest C.<sup>2</sup>  
 Bailey, Theodora Abbott  
 Beeler, Donald T.  
 Bitner, Ella M.  
 Cekada, Bogomir Emil  
 Christopher, Ian Wesley  
 Corskie, Florence Beryl<sup>1</sup>  
 Craig, Miriam Scheetz  
 Crawford, Donald Russell<sup>2</sup>  
 Daniels, Eve Ypin  
 Doyle, James Cyril  
 Everitt, Walter Herbert  
 Galbraith, Mary Grace  
 Ganders, J. James  
 Hall, Vernon Knight<sup>1</sup>  
 Hannum, Clair Arthaud  
 Hermans, Thomas Gerald<sup>2</sup>  
 Hilen, Ethel Joan  
 Homan, Marion<sup>1</sup>  
 Jensen, Marion Gullette  
 Johnson, Florence Elizabeth<sup>1</sup>  
 Johnson, Philip Samuel (*magna cum laude*)  
 Johnson, Venus June  
 Jurgensohn, Eva E.<sup>1</sup>  
 Kehres, Harvey Edwin<sup>2</sup>  
 Koepke, Carolyn<sup>2</sup>  
 Kravik, Alfhild Viola (*cum laude*)  
 Lee, Frank A.<sup>2</sup>  
 Lelse, John Frederic  
 Likes, Myrton Dollard<sup>2</sup>  
 Luten, Miriam<sup>2</sup>  
 McDowell, John Watson<sup>1</sup>  
 McGill, Merrie P.<sup>1</sup>  
 Maus, Mildred Palmer<sup>1</sup>  
 Meenach, Harrison William<sup>2</sup>  
 Meyers, Ambrose J.<sup>1</sup>  
 Morris, Edna Mae  
 Mullen, Doris Gertrude  
 Murray, Charles Joseph<sup>1</sup>  
 Muyskens, Henry<sup>2</sup>  
 Nitschke, Paul Herman  
 Osa, Lorents August  
 Overgard, Julia Octavia  
 Patterson, Bernice Lillian<sup>1</sup>  
 Pfeufer, Philip Paul<sup>2</sup>  
 Platt, Ruth Elizabeth (*cum laude*)  
 Robertson, Howard Percy<sup>2</sup> (*cum laude*)  
 Rosen, Hilda Florence<sup>1</sup>  
 Rust, Caramel Ruth  
 Ruzicki, Henry<sup>1</sup>  
 Seelye, Walter Bale<sup>1</sup>  
 Small, Frank L., Jr.<sup>1</sup>  
 Sperling, Otto Frederick V.<sup>2</sup>  
 Stewart, Ralph Bentley<sup>2</sup>  
 Swain, Olive<sup>2</sup>  
 Tarter, Clyde Sidney  
 Thompson, Harriet Galbraith  
 Ward, Alfred H.  
 Warren, John Edwin  
 Wilson, Paul E.  
 Wong, Elsie Nyuk Tsin  
 Wood, Varlan G.



## BACHELOR OF SCIENCE IN BOTANY

Wilkes, Maxine Elouise

## BACHELOR OF SCIENCE IN GEOLOGY

McKnight, Edwin Thor (*cum laude*)

## BACHELOR OF SCIENCE IN ZOOLOGY

Bush, Marion  
 Dillion, Roll N.  
 Hendrickson, Harvey Francis

Laigo, Pablo Hipol<sup>1</sup>  
 Olson, Beatrice Mildred  
 Vidgoff, I. Jack

## BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

Dix, Ruth Edgerton

Shaw, Anna Belle

## BACHELOR OF SCIENCE IN NURSING

Kellogg, Avis Marguerite

## BACHELOR OF SCIENCE IN HOME ECONOMICS

Allinder, Elsie Kathryn  
 Anderson, Louise Chandler<sup>1</sup>  
 Baker, Ruth Evangeline  
 Cekada, Martha Amalia  
 Chapman, Marjorie E.  
 Dalziel, Margaret Irene  
 Davidson, Beth<sup>1</sup>  
 Dekker, Kate  
 Edson, Emily H.<sup>2</sup>  
 Evans, Marie J.<sup>2</sup>  
 Geer, Bernice Lura  
 Holt, Lucy Minerva<sup>1</sup>  
 Judd, Elsie Gillis<sup>1</sup>  
 Lynch, Isabelle Relis  
 McClintock, Sarah Gay  
 Mueller, Marguerite Elizabeth

Myhre, Edna, Therese  
 Nelson, Esther Olive  
 Newell, Laura Evangeline  
 Powley, Louise Wilmont<sup>2</sup>  
 Rader, Martha  
 Rice, Mary Bickelhaupt  
 Schrock, Doris Nevin  
 Silseth, Margrette Ellen  
 Spickard, Helen Florence  
 Sutton, Phoebe Jane  
 Tibbits, Erva L.  
 Van Duzen, Bess Gall  
 Warner, Marylois  
 White, Myrtle Pauline  
 Williamson, Reba  
 Wilson, Lucile Harriet

## SCHOOL OF EDUCATION

## BACHELOR OF EDUCATION

Banker, Helen Doris<sup>1</sup>  
 Berg, Gunnar Hansen<sup>1</sup>  
 Bridston, Olga Albertine<sup>1</sup>  
 Fraser, William M.<sup>1</sup>  
 Graybeal, Mattie F.<sup>1</sup>  
 Johnston, James Franklin<sup>1</sup>  
 Jones, David John<sup>1</sup>  
 Kautz, Beryl<sup>1</sup>  
 McLeod, Annabel Jean<sup>1</sup>  
 Malloy, Kathleen Jocelyn<sup>1</sup>

Mitchell, Lena Lillian<sup>1</sup>  
 Mount, James N.<sup>1</sup>  
 Peterson, Ole Theodore<sup>1</sup>  
 Siemens, Lydia Jane<sup>1</sup>  
 Stone, Sally-Byrd<sup>1</sup>  
 Thune, Elmer Theron<sup>1</sup>  
 Vannoy, Louise Hynes<sup>1</sup>  
 von Pressentin, Agnes Dorothea<sup>1</sup>  
 Williams, Mary Louise Topping<sup>1</sup>  
 Wood, Muriel<sup>1</sup>

## BACHELOR OF ARTS IN EDUCATION

Adams, Jeannette Adair<sup>1</sup>  
 Adamson, Merritt Christopher<sup>2</sup>  
 Anderson, Edna M.  
 Anderson, Edward Garrett<sup>2</sup>  
 Bewley, Ruth Lynette  
 Bolman, James<sup>1</sup>  
 Bower, Phyllis Mildred  
 Breakey, Forrest Willard  
 Brehorst, Alice Beatrice<sup>2</sup>  
 Brehorst, Cecil Frank  
 Cain, Riley Willis<sup>2</sup>  
 Chambers, Edward Vincent<sup>2</sup>  
 Donahoe, Agnes M.<sup>2</sup>

Eddy, Erma Smith  
 Evenson, Theodore O.  
 Fletcher, Ina Mary  
 Graham, Charlotte<sup>2</sup>  
 Hall, Julia Marjorie  
 Lambert, Rhea Elizabeth  
 Harris, Florence Sedalia  
 Hassenmiller, K. Lyndon<sup>1</sup>  
 Hoskins, Marion Janet<sup>2</sup>  
 Jenkins, Helena  
 Jerome, Vincent Barnes<sup>2</sup>  
 Johnston, Daniel Harvey  
 Kaufer, Monica F.

Kellogg, George Albert<sup>2</sup>  
 Kinleyside, Antoinette  
 Kizer, Kenneth B.<sup>2</sup>  
 Knox, Esther Verata  
 Lewis, Clara May  
 Lockwood, Edna Dingee  
 Mayne, Catherine Alice  
 Merrill, Gladys Meenach<sup>2</sup>  
 Nicholson, Georgia  
 Packer, Florence May<sup>2</sup>  
 Park, Etta Madge  
 Rasmussen, George Vincent  
 Rupe, Gustene Elizabeth<sup>2</sup>

Samuelson, Byron A.  
 Smith, Ethel Elizabeth  
 Stewart, Edgar Irving, Jr.  
 Storey, M. Eugenia  
 Tegland, Nellie May<sup>2</sup>  
 Turtle, Hazel Jane  
 Wafer, Barbara<sup>2</sup>  
 Watson, Eugenia Frances  
 Weage, Mary DeElla  
 West, Beth<sup>2</sup>  
 Willson, Faye Allison  
 Wright, Leota Sadie

## BACHELOR OF SCIENCE IN EDUCATION

Altman, Luther Clare<sup>2</sup>  
 Hurlburt, Blanche (*summa cum laude*)  
 King, Malle Alice Dawson<sup>2</sup>

MacDonald, Sadie Belle  
 Pierce, Alene Edna

## COLLEGE OF FINE ARTS

## BACHELOR OF ARTS IN MUSIC

Adams, Arlene Marie  
 Ballard, Mary Ernestine  
 Ballard, Myrtle Winnifred  
 Clemans, Irene Vivian  
 Groat, Elva Belle  
 Kucera, John Paul

Marsh, Urna Lillian<sup>1</sup>  
 Nordstrom, Esther Catherine  
 Olmsted, Elsie Vida  
 Paxton, Vera Sinclair  
 Storm, Charlotte Stutsman

## BACHELOR OF MUSIC

Baumgartner, Grace (*cum laude*)  
 Beckwith, Edris Lucile  
 Grant, Clare Genevieve  
 Harding, Bessie Irene  
 Miller, Ethel Talmer

Neilson, Irene Margaret<sup>1</sup> (*magna cum laude*)  
 Neylan, Margaret C.  
 Pease, Katherine Marguerite  
 Pitzer, Carl A.

## BACHELOR OF FINE ARTS

Biggs, Mary Catherine  
 Carpenter, Mary Jane<sup>2</sup>  
 Donley, Mabel Alice<sup>2</sup>  
 Ducasse, Mabel Lisle<sup>2</sup>  
 Fowler, Edna Elizabeth  
 Fulton, Lois Mildred  
 Gellatly, Bernice Isabel<sup>2</sup>

Goodwin, Olive Irene<sup>1</sup>  
 Henry, Anna Ruth  
 Law-Yow, Rose  
 McLellan, Kathleen Maxine  
 McPherson, Dorothy Vesta  
 Redmon, Dorothy B.  
 Wood, Florence (*cum laude*)

## BACHELOR OF ARCHITECTURE

Lund, Walter William

Shipman, Herman Adolf

## BACHELOR OF ARTS IN DRAMATIC ART

Archer, Helen Roberts

Merrill, Grant Warren (*cum laude*)

## COLLEGE OF ENGINEERING

## BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

Byers, Marshall Sumner  
 Carmody, Walter Robert  
 Cohen, Phillip Gordon (*cum laude*)  
 Conrad, Frank H.  
 Fursman, Oliver Chester<sup>2</sup>  
 Gitzen, Walter Henry<sup>2</sup>  
 Gordon, David Lowry  
 Hudson, Augustus Herbert  
 Johnson, Hilding Everett

Nelson, Ned Hillard<sup>1</sup>  
 Pole, Gordon Reginald<sup>2</sup>  
 Powell, Frederick, Jr.<sup>1</sup>  
 Roberts, John Terry  
 Schadt, Raymond John<sup>2</sup>  
 Schmid, Byron Clayton  
 Thoreson, Wallace  
 Underwood, Robert Cushman<sup>1</sup>  
 Wood, Carl Edwin

## BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Brown, Barton Wright <sup>2</sup>	Legg, Emmett Jenner <sup>2</sup>
Butler, Robert S.	Minshall, Robert James <sup>1</sup> ( <i>magna cum laude</i> )
Callender, James A. <sup>2</sup>	Olsen, Carl Melius
Clarke, Harold	Rinehart, Valdimir Gilham <sup>2</sup>
Dimock, Stuart Marshall	Schmidtman, Edward Herman ( <i>magna cum laude</i> )
Jensen, Leo C. <sup>2</sup>	Spencer, Ralph Wellington <sup>2</sup>
Knox, Robert Walker	Worthington, Harold Legg ( <i>magna cum laude</i> )
Kylstra, John <sup>1</sup> ( <i>cum laude</i> )	

## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Ashton, Emmett Raymond	Keene, Elmer Lester
Bailey, Ellsworth B.	Kruse, Henry R.
Baker, Albert Lundy <sup>1</sup>	Lundstrom, Allan Winston ( <i>magna cum laude</i> )
Bewley, Loyal V. <sup>1</sup> ( <i>cum laude</i> )	Mardon, T. Allen
Campbell, Donald Stiles	Mithoug, Otis Julian
Carlsen, Arthur G. <sup>2</sup>	Motz, August Joseph <sup>2</sup>
Chilberg, Elmer N. <sup>2</sup>	Murphy, Matthew Franklin <sup>2</sup>
Chilberg, Ernest Edwin <sup>2</sup> ( <i>cum laude</i> )	Nordlie, Glenn Justin
Cochran, Lyall Baker ( <i>cum laude</i> )	Parr, James Floyd
Conger, John A.	Persons, George Allan
Daly, Milton Joseph <sup>2</sup>	Remington, Arthur Ernest
Drake, Edward F.	Ross, Edward Allen, Jr.
Ehrke, Ernest Borman	Travis, Beverly A.
Eisenhower, Earl Dewey	Turner, Charles Maynard <sup>2</sup>
Fredlund, Reynold <sup>2</sup>	Von Babo, Max Arthur
Gustafson, Walter Tage	Wilson, James Victor <sup>2</sup>
Gwilym, Herald <sup>2</sup>	
Kamholz, William Elmer <sup>2</sup>	

## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Allen, David Clyde	Kelley, Cecil Starr <sup>2</sup>
Bomstead, Edward S.	Kramer, Karl W. <sup>2</sup>
Braun, Paul John	Pratt, Reginald
Dodd, Joseph Paul	Raport, Rubin W.
Edmonds, Robert Harold Gray <sup>1</sup> ( <i>magna cum laude</i> )	Roe, Arthur Oscar
Encarnacion, Fidel Pugada	Serquevick, Sergius Amalleff
Free, Alonzo Knighton	Sisler, Roland Whitmarsh <sup>2</sup>
Hahn, Carl A.	Swegle, Walter Hinckley <sup>2</sup>
Haines, Fred Smith <sup>2</sup>	Thorpe, Clarence Steven <sup>2</sup>
Haynes, Hanford	Ward, Cecil Miner <sup>2</sup>
Horst, Cecil A.	Watt, J. Graham
Jones, Walter Richard ( <i>cum laude</i> )	White, Elmer James
	Yeager, Frederick A. <sup>2</sup>

## BACHELOR OF SCIENCE

Bonnett, Howbert Bainter	Irwin, Mason
Crowe, Francis Malcolm	Johnson, C. Morrison <sup>2</sup>
Finney, Ottmer Theodore	Parkins, Wright Almen

## COLLEGE OF MINES

## BACHELOR OF SCIENCE IN MINING ENGINEERING

Glaser, Oscar A. <sup>2</sup>	Storms, Walter Rex
Knuppe, Lyman Martin	Zwicky, Everett E.
Slisson, Howard Arthur ( <i>cum laude</i> )	

## BACHELOR OF SCIENCE IN GEOLOGY AND MINING

Davis, Dwight Ed	O'Neel, Albert Brigman
Harshberger, Robert Perrine	Reynolds, Burton Mark
Johnston, Rae Lincoln	

## BACHELOR OF SCIENCE IN METALLURGICAL ENGINEERING

Cushman, Edward Henry	Magill, Fulton Y.
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## BACHELOR OF SCIENCE IN CERAMIC ENGINEERING

Heath, Frederick Twichell
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## UNIVERSITY OF WASHINGTON

## COLLEGE OF FORESTRY

## BACHELOR OF SCIENCE IN FORESTRY

Barnhisel, Arthur Howard<sup>2</sup>  
 Calder, Lester Edward  
 Clark, Carroll Clifton  
 Cochrane, Clarence French  
 Dunn, Charles Stevens  
 Dunn, Edward Albert  
 Ferguson, Russell E.<sup>2</sup>  
 French, Jasper J.  
 Garin, Rene G.<sup>1</sup>  
 Hawkins, Russell, Jr.  
 Hogan, Elwood Davis<sup>2</sup>  
 Lauber, Albert, Jr.

Lemon, Harry Edward  
 Lindsay, William K.  
 Marling, S. Earle<sup>1</sup>  
 Miller, Gilbert Alfred  
 Pelck, Clyde Frederick  
 Penas y Primo, Nazario<sup>2</sup>  
 Recart, Jr., Horacio M.  
 Roberts, James Donald<sup>1</sup>  
 Schultze, William E.<sup>2</sup>  
 Wirt, William H.  
 Wood, William Russell  
 Worthington, Robert Edgar<sup>2</sup>

## COLLEGE OF FISHERIES

## BACHELOR OF SCIENCE IN FISHERIES

Chen, Tung Pai  
 Hoffer, John Carlton  
 James, Milton Carl<sup>2</sup> (*cum laude*)

McMillin, Harvey C.<sup>2</sup>  
 Munson, James Ernest

## COLLEGE OF PHARMACY

## GRADUATE IN PHARMACY

Cheng, Pao Yuan<sup>2</sup>  
 Cramer, Dwight Lester  
 Encarnacion, Marciano M.  
 Lawrence, Henry James  
 MacNichol, Jane Margaret  
 Quass, Harry Peter<sup>1</sup>

Shure, Sol Lee  
 Stephenson, James Ross  
 Tschudin, James Ava<sup>2</sup>  
 Wills, Henry V.  
 Wise, Violet M.

## PHARMACEUTICAL CHEMIST

Blissett, Rudolf Alfred<sup>2</sup>  
 Cheng, Pao Yuan  
 Collins, Lee Raymond  
 Gaston, Dorothy Ruth (*cum laude*)  
 Neubauer, Herbert F.

Nyquist, Marie Beatrice  
 Pochert, Arthur Dean  
 Rygg, John Casper  
 Shone, Bessie Mabel  
 Werba, Peter C.

## BACHELOR OF SCIENCE

Gaston, Dorothy Ruth (*cum laude*)  
 Needham, George Herbert (*cum laude*)  
 Neubauer, Herbert F.  
 Nyquist, Marie Beatrice

Pochert, Arthur Dean  
 Shone, Bessie Mabel  
 Turnacliiff, Mary Lucille  
 Werba, Peter C.

## COLLEGE OF BUSINESS ADMINISTRATION

## BACHELOR OF BUSINESS ADMINISTRATION

Aldrich, Eric N.<sup>2</sup>  
 Anderson, Walter J.  
 Andrews, LaMar B.<sup>1</sup>  
 Bain, Harry Edward<sup>2</sup>  
 Baldwin, Clarence Henry<sup>2</sup>  
 Ball, Rollyn J.<sup>1</sup>  
 Bazzett, Hamilton Spalding  
 Blomquist, Louis E.  
 Browne, Clarence Hamlin<sup>2</sup>  
 Burnie, Donald A.<sup>2</sup>  
 Byrd, Evelyn Lenore<sup>1</sup>  
 Campbell, Edward Lyman  
 Carbajosa, Vincent C.  
 Chamberlain, Ewart Hadley  
 Clark, Howard A.  
 Clark, Wendell Whittier<sup>2</sup>  
 Clarke, Richard King  
 Coleman, Raymond W.  
 Connor, Garland Daniel  
 Copeland, Harry Elbert

Coppage, Thomas Richard  
 Corlett, Thirza E.  
 Cronin, Nona L.  
 Crouch, D. Leone  
 Crumb, Joseph Albert  
 Davis, Garnet M.  
 Davis, Ralph Jefferson<sup>2</sup>  
 Dean, William Paul  
 deLancey, Margaret Chipman  
 Dose, Julia Louise<sup>1</sup>  
 Doyle, Leona Marguerite  
 Dranga, Albert Edward  
 Drew, Donald Russell (*cum laude*)  
 Eckhart, Robert Balser<sup>1</sup>  
 Eckmann, Ray L.  
 Elliott, Clarence Raymond  
 Erickson, William Paul  
 Everett, Donna Aileen<sup>2</sup> (*magna cum laude*)  
 Ewing, Henry Clarke, Jr.  
 Fairservice, Harry Clement<sup>2</sup>

Fischer, Alden Jackson	Nielson, William Alf
Fisher, Walter Clifford <sup>2</sup>	Noll, Mark D.
Frame, Howard Andres	Nordstrom, Everett William
Franklin, Shadrach Rector <sup>1</sup>	Olsen, Amos F. <sup>2</sup>
Friedman, Samuel	Olwell, Eugene Edward <sup>1</sup>
Fry, Don W. <sup>1</sup>	O'Neill, Larkin A. <sup>1</sup>
Gillespie, James Donald <sup>2</sup>	Parish, Herbert Ivan <sup>2</sup>
Gleeson, Frank P. <sup>1</sup>	Parrish, Frank Jr. <sup>2</sup>
Greene, James Martin <sup>2</sup>	Perkins, Julian Fletcher
Harrington, J. Bernard <sup>2</sup>	Peterson, A. William
Hart, Dean Brooks <sup>1</sup>	Plummer, Morris
Hay, Larry	Powers, Francis Joseph <sup>1</sup>
Heath, Dorothy M. ( <i>cum laude</i> )	Rader, Bernard H. <sup>2</sup>
Henricksen, H. Otto	Ramstead, Alvin Clifford
Hesse, Victor Otto	Rank, Carroll Price
Hiatt, Amos ( <i>cum laude</i> )	Reichert, Carlton G.
Hindle, Stuart James	Robinson, Ted E.
Holman, Roswell Morris	Ruel, James Walker
Hopper, Charles Moody <sup>2</sup>	Sayles, Frank Wells <sup>1</sup>
Hougan, Edward O.	Selby, Harold K. <sup>2</sup>
Howard, Fred Albert <sup>1</sup>	Sellers, Ulrich Robert
Ingram, Robert M. <sup>2</sup>	Shillock, Harold E. <sup>2</sup>
Janeway, Harold Lynn	Sielk, Henry
Johnson, John L. <sup>2</sup> ( <i>cum laude</i> )	Skibeness, Alphonse Jennings
Johnson, Oscar M.	Smith, Ralph Myron
Jones, Marian Elizabeth <sup>2</sup>	Snow, Gretchen Ada
Kelley, Barbara Rosella <sup>1</sup>	Springer, Maurice E.
Ketchum, William Rabun <sup>2</sup>	Stallard, Tullv King
Kleinberg, Lester M.	Sundling, Doris Mae
Knight, Thomas Spencer	Tevis, James A. <sup>1</sup>
Lake, Florence	Thomas, Lee Baldwin <sup>2</sup>
Lautz, Fritz A. <sup>1</sup>	Thompson, Nathan Phillips
Lease, Howard Stites <sup>1</sup>	Thwing, Samuel Prentiss
Leonard, Arthur Ralph <sup>2</sup>	Torrance, Roscoe C.
Lien, E. Laura <sup>2</sup>	Tsai, Naai Shng <sup>2</sup>
Loer, Lawrence F.	Turner, Wendell Walter <sup>2</sup>
Loken, Leo Waldemar	Walker, Nina Ruth
Lovejoy, Warren Ellsworth	Walker, Ona Blanche
McCarthy, Joseph Langton <sup>2</sup>	Watt, Elsie <sup>2</sup>
MacDonald, Gladys Eora	Watt, Harold Barton
MacDonald, Mary Kathryn <sup>2</sup>	Weissenborn, Howard Hugo
MacPherson, Fraser	Wheaton, Alma Jane
Martin, Harold Morris <sup>1</sup>	Whittier, Lyman K.
Meyers, Leo E.	Wick, Sanford A. <sup>1</sup>
Middleton, Howard Newbury	Wieden, Hazel Helen
Middleton, Hugh Molland	Wilcox, Milo Fay
Miller, Raymond S. <sup>2</sup>	Wilkinson, Jessie Townley <sup>1</sup>
Milne, James Donald	Williams, Harold L.
Moody, Clark Wilbur	Williams, William Owen, Jr.
Morgan, Verona	Wilson, Alice Lolita <sup>2</sup>
Motteler, Deryl Livingston	Wilson, John Gilbert
Murphy, Harold Morris	Wong, Frank Su-Dong <sup>2</sup>
Murray, Valois Agnes <sup>2</sup>	Wood, Harold S.
Myers, Donald P. <sup>1</sup>	Woodworth, Earl Grantley <sup>2</sup>
Nadeau, George Fonda	Wright, Howard Horatio
Nelson, Hilding	Zee, C. Y. Ernest <sup>1</sup>

## SCHOOL OF LAW

## BACHELOR OF LAWS

Balley, James Milton <sup>2</sup>	McCoy, Newton C.
Bean, Leonard Glenn	McKinney, Clifford Taylor
Brown, Francis McDannell	Marsh, Eugene E.
Clark, Newman Hall	Marsh, Francis E.
Dalley, Grace Olive	Mifflin, Wesley J.
DeGrief, Leroy <sup>2</sup>	Morrow, Leona Marie
Denney, Charles Roland	Newman, Andrew William
Devin, William Franklin	Penland, Elledge Randolph
Dunn, John Joseph <sup>1</sup>	Scordan, Louise M. <sup>2</sup>
Graves, Ralph Alonzo	Shinn, Duane Thomas
Hill, Cyril Dean <sup>1</sup>	Solomon, Hyman Orley
Hillman, Robert Kline	Totten, Morrell Phelps <sup>2</sup>
Hutchinson, William Harold	Turner, Theodore S.
Kelleher, John Emmett	Weiss, Philip J.
Knapp, Eugene Henry Harboard	Wheeler, Burton J. ( <i>cum laude</i> )
Little, Herbert Satterthwaite	Wiley, Alexander Charles
McClung, Ryland Eugene <sup>1</sup>	

## UNIVERSITY OF WASHINGTON

## LIBRARY SCHOOL

## BACHELOR OF ARTS

Edwards, Elizabeth Mae  
 Hale, Ruth Elinor (*cum laude*)  
 Hardeman, Russell  
 Peterson, Agnes Christena<sup>1</sup>  
 Robinson, Ruth Mary

Shotwell, Margaret  
 Sneed, Marie Francis (*cum laude*)  
 Stanton, Margaret Tarbell  
 Tiffany, Clara Louise

## BACHELOR OF SCIENCE IN LIBRARY SCIENCE

Batchellar, Elva Lenore<sup>1</sup>  
 Kincaid, Olive Niles<sup>2</sup>  
 Lockerby, Desiah

McCredy, Rosamond Pauline  
 Putman, Marguerite Eleanor<sup>2</sup>  
 Weage, Avery Dudley<sup>2</sup>

## SCHOOL OF JOURNALISM

## BACHELOR OF ARTS IN JOURNALISM

Astel, George Bernard  
 Berst, Charles A. (*cum laude*)  
 Bishop, Theodore R.  
 Chapman, Edith Josephine  
 Day, Margaret Eloise  
 Frein, Alice Virginia Crawford  
 Johnson, Katherine  
 Judges, Frederick Byron<sup>2</sup>  
 Kraft, Warren Earl (*cum laude*)

Lyon, Henry Arthur  
 Mittelberger, Marion Caroline  
 Orne, Stanley<sup>2</sup>  
 Shanklin, Lawrence G.  
 Swanson, Ruth Edith  
 Tee-Garden, Chester Urban<sup>2</sup>  
 Turnblad, Harold Magnus<sup>2</sup>  
 Upton, Marietta

## GRADUATE DEGREES

## GRADUATE SCHOOL

## CIVIL ENGINEER

Philip Augustus Franklin  
 B.S. in C.E., University of Washington, 1911  
 Thesis: Bascule Bridge Design

## MASTER OF ARTS

C. Floyd Appleton<sup>1</sup> (Oriental Languages and Literature)  
 A.B., Seattle Pacific College, 1922  
 Thesis: International Relations in the Far East

Portia Baker<sup>2</sup> (English)  
 A.B., University of California, 1917  
 Thesis: Many Main Streets: A Study of the Small Town in American Fiction

Stephen Marius Brinck<sup>1</sup> (Education)  
 A.B., University of Washington, 1913  
 Thesis: A Study of Two Factors in School Education

Lillian Alice Dean Crane<sup>2</sup> (History)  
 A.B., University of Washington, 1922  
 Thesis: McClellan in Washington, 1853-1854

Frederick Holdaway Craske<sup>1</sup> (Education)  
 B.Ed., University of Washington, 1920  
 Thesis: History of the Present Status of Educational Tests and Measurements in the State of Washington

Verne LaDue Damon<sup>1</sup> (Education)  
 A.B., Seattle Pacific College, 1918  
 Thesis: Protestant Schools in the Northwest: A Study of Their Organization, Administration and Advantages

Grace Eccles<sup>2</sup> (English)  
 A.B., Washington State College, 1913  
 Thesis: The Role of Fate in Epic Poetry

Jesse Hugo Feldman (English)  
 Ph.B., University of Chicago, 1919  
 Thesis: Patrinus: Leaves of Verse

Frank Kale Foster (Education)

B.Ed., University of Washington, 1921

Thesis: The Status of Biological Sciences in the Accredited High Schools of the State of Washington

Harry Stanley Ganders<sup>1</sup> (Education)

B.Ed., University of Washington, 1920

Thesis: Theory and Practice in the Administration of Extra-Curricular Activities in Public Secondary Schools

Cecilia Gillmore<sup>2</sup> (Spanish)

B.S., Teachers' College, Columbia, 1915

Thesis: Rufino Blanco-Fombona, Novelist, Critic of Life and Literature

Paul Guyet<sup>1</sup> (German)

B.Ed., University of Washington, 1921

Thesis: Studien zu einer Untersuchung über den Einfluss von Schillers auf Hebbels "Demetrius" Fragment

Amy Violet Hall<sup>3</sup> (English)

B.Ed., University of Washington, 1920

Thesis: William Morris and Main Street

Cyril Dean Hill (Economics)

A.B., Seattle Pacific College, 1921

LL.B., University of Washington, 1922

Thesis: The Origin of the Marital Community Property System

Charles Ray Holbrook<sup>1</sup> (Education)

B.Ed., University of Washington, 1919

Thesis: The Profession of High School Principal

Glenn Edwin Hoover<sup>1</sup> (Sociology)

LL.B., University of Washington, 1912

A.B., University of Washington, 1918

Thesis: Rural Settlement in Western Washington

Fay O. Horn (English)

A.B., Indiana State University, 1911

Thesis: Jonson's and Shakespeare's Attitude Toward the Classes of Elizabethan Society

Cecil Leonard Hughes (Education)

B.Ed., University of Washington, 1921

Thesis: The Functions of the School Superintendent in Theory and Practice

Alfred Pullman Johnson<sup>1</sup> (Education)

A.B., University of Washington, 1917

Thesis: Duties, Powers, Preparation and Salaries of the Principals of the Accredited High Schools of Washington

Harry Marvin Kenin (Political Science)

A.B., University of Washington, 1921

Thesis: The Jury System

Sylvia Finlay Kerrigan (English)

A.B., University of Washington, 1919

Thesis: The Labor Problem in American Fiction

Morimitsu Kitamura (Political Science)

A.B., University of Washington, 1920

Thesis: The Evolution in the Position of the Laborer in Modern States

Gertrude Kraft (German)

A.B., Washington State College, 1918

Thesis: Romantische Zuge in Thomas Manns Buddenbrooks und deren Eigenart

Beatrice Mae McLeod<sup>1</sup> (Education)

B.S., University of Oregon, 1920

Thesis: Education of Mental Defectives in Special Classes in Public Schools in the United States

Elsie Anna Meler (Education)

A.B., University of Washington, 1909

Thesis: Teacher Training in our State Universities

Marjorie Elizabeth Minnis (History)

A.B., University of Washington, 1918

Thesis: The Sixteenth Century Renaissance in Medicine and Surgery

## UNIVERSITY OF WASHINGTON

Tayu Mitsunaga<sup>1</sup> (Oriental Languages and Literature)

A.B., Buddhist University, Japan, 1914

Thesis: The Shin Sect of Buddhism in Japan

Nels Arthur Bernhardsen Ness<sup>1</sup> (Education)

B.Ed., University of Washington, 1910

Thesis: The Teaching of Grammar and its Results

Peter H. Odegard (Political Science)

A.B., University of Washington, 1922

Thesis: Railroad Taxation in Washington

John Augustine Osgniach<sup>1</sup> (Philosophy)

A.B., University of Washington, 1922

Thesis: The Scholastic Interpretation of the Categories

Jennie Mabel Reed<sup>1</sup> (Education)

B.Ed., University of Washington, 1920

Thesis: An Evaluation of the Socialized Method of Teaching English in Three Elementary Schools

William Anson Spencer<sup>2</sup> (Economics)

A.B., Northwestern University, 1910

Thesis: The Co-operative Shingle Mills of Western Washington

Alice Winifred Spieseke (History)

A.B., University of Washington, 1922

Thesis: Shays' Rebellion

Dudley Wilson Willard<sup>1</sup> (Education)

B.Ed., University of Washington, 1917

Thesis: A Survey of Mental Ability with Some Educational Implications

## MASTER OF SCIENCE

Helen Lothian Arkley<sup>2</sup> (Pharmacy)

B.S., University of Washington, 1921

Thesis: New Reactions of Nitrosyl Chloride

Ruth Magdalene Davis (Pharmacy)

B.S., University of Washington, 1921

Thesis: The Hypochlorite Solutions

Lols Wilfred Griffiths (Mathematics)

B.S., University of Washington, 1921

Thesis: Contact Curves of the Rational Cubic

Arthur Rudolph Jerbert (Mathematics)

B.S., University of Washington, 1916

Thesis: The Criteria for the Nature of the Roots of Cubic and Biquadratic Equations Derived from Geometrical Considerations

Edward Milton Little<sup>2</sup> (Physics)

B.S., University of Washington, 1918

Thesis: A Preliminary Investigation of the Vibration of Struck Strings

Alexia Magdalene Reuter (Botany)

B.S., University of Washington, 1920

Thesis: Quantitative Studies on Oxygen Consumption of Tissues of Old and Young Cucumaria

John Daniel Sullivan<sup>1</sup> (Chemistry)

B.S., University of Washington, 1921

Thesis: The Role of Hydrogen Ion Concentration in the Precipitation of Colloidal Arsenious Sulfide

Leonia Maria Sundquist (Botany)

A.B., University of Washington, 1918

Thesis: Some Enzymatic Actions of Nereocystis Luetkeana

Fernley Asbury Tatum (Chemistry)

A.B., Rice Institute, 1921

Thesis: A Quantitative Determination of the Effect of Temperature Control Upon the Yield of Products formed by the Destructive Distillation of Douglas Fir

Ray Victor Tubbs<sup>2</sup> (Bacteriology)

B.S., University of Washington, 1921

Thesis: A Study of the True Thermophiles



Jean Robin Wilkes (Pharmacy)  
B.S., University of Washington, 1920  
Thesis: A Study of Pacific Coast Peppermint

John Sidney Herrick<sup>2</sup>  
B.S., in Ch.E., University of Washington, 1914  
Thesis: The Non-Colloidal Character of the Hydrolysis of Portland Cement

Melville Fletcher Perkins<sup>4</sup>  
B.S. in Ch.E., University of Washington, 1921  
Thesis: The Effect of the High Tension Arc on Various Gases

#### MASTER OF SCIENCE IN ELECTRICAL ENGINEERING

Andrew Johan Haug  
B.S. in E.E., University of Washington, 1922  
Thesis: Design of an Artificial Steel Transmission Line

Albert Kalin  
B.S. in E.E., University of Washington, 1919  
Thesis: Oscillographic Determination of the Thermionic Triode Static Characteristics

Jack Roderick Tolmie  
B.S. in E.E., University of Washington, 1919  
Thesis: The Characteristic Surface of the Thermionic Valve

#### MASTER OF SCIENCE IN FORESTRY

Florencio Tamesis y Revuelta  
B.S. in F., University of Washington, 1922  
Thesis: The Relation of the Hygroscopicity of Wood to Temperature

#### MASTER OF FORESTRY

Nazario Penas y Primo  
B.S. in F., University of Washington, 1922  
Thesis: The Determination of Errors in Partial Cruising in the Pacific Northwest and Amount of Waste Left in the Woods After Logging

Horacio Recart, Jr.  
B.S. in F., University of Washington, 1923  
Thesis: A Study of Chilean Woods

#### MASTER OF SCIENCE IN METALLURGY

Leland Kinsey Cowie  
B.S. in Met., Massachusetts Institute of Technology, 1922  
Thesis: The Melting of Sponge Iron

#### MASTER OF SCIENCE IN COAL MINING ENGINEERING

John James Curzon  
B.S. in Mining and Geology, University of Washington, 1922  
Thesis: A Study of the Distribution of Feed on Coal Washing Tables

Harold Eli Messmore  
B.S. in Eng., University of Kansas, 1921  
Thesis: The Float-and-Sink Test and its Application to Problems of Fine-size Coal

#### MASTER OF BUSINESS ADMINISTRATION

Grant Illion Butterbaugh  
A.B., University of Wisconsin, 1916  
Thesis: A System of Branch Accounting for a Chain of Retail Grocery Stores

William Eugene Dickerson  
B.B.A., University of Washington, 1921  
Thesis: A Cost System for the Wood Pipe Industry

Beatrice Berniece Dunn<sup>1</sup>  
B.B.A., University of Washington, 1921  
Thesis: Depreciation Theories and their Application to the Seattle Municipally Owned Utilities

## UNIVERSITY OF WASHINGTON

Frank Chester Van de Walker

A.B., Whitworth College, 1917

Thesis: A Development of the Theory of Profits as Reflected in Civil Court Decisions

Frederick Wells Woodbridge

B.B.A., University of Washington, 1922

Thesis: A First Quarter's Work in Accounting

## MASTER OF LAWS

Mary Gladys Hoard<sup>1</sup>

A.B., University of Washington, 1914

LL.B., University of Washington, 1917

Thesis: Comparison of the American, France and Lawyers' Reports Annotated Digest Systems

## DOCTOR OF PHILOSOPHY

Susannah Jane McMurphy

A.B., Vassar, 1903

Thesis: Spenser's Use of Ariosto for Allegory

Alexander Crippen Roberts<sup>2</sup>

A.B., University of Wisconsin, 1906

M.A., University of Washington, 1917

Thesis: Studies in Matriculation Statistics, Intelligence Ratings, and Scholarship Records at the University of Washington

Iwar Sigurd Westenberg

A.B., Clark University, 1907

M.A., Harvard University, 1908

Thesis: The School System of Sweden

## UNIVERSITY FIVE-YEAR NORMAL DIPLOMA

Adams, Jeannette Adair<sup>1</sup>Adams, Merritt Christopher<sup>2</sup>

Albee, Archie Veryl

Alinder, Elsie Kathryn

Altman, Luther Clare<sup>2</sup>Alway, Harry G.<sup>1</sup>Anderson, Beatrice<sup>1</sup>

Anderson, Edna M.

Anderson, Mabel Felton

Andrews, Rita Lenore<sup>2</sup>

Archer, Helen Roberts

Arthun, Amber<sup>1</sup>

Bailey, Theodora Abbott

Baillie, Provis Marcia<sup>1</sup>Baker, Charity Foxwell<sup>1</sup>Banker, Helen Doris<sup>1</sup>Bardarson, Otto<sup>1</sup>

Barnes, Frances Jane

Beckerjeck, Rozella

Beckwith, Edris Lucile

Beeler, Donald T.

Bell, Wylola<sup>1</sup>Bennett, Richard F.<sup>1</sup>Benthien, Elsie M.<sup>1</sup>Berg, Gunnar Hansen<sup>1</sup>

Bewley, Ruth Lynette

Biggs, Mary Catherine

Bishop, Theodore R.

Bitner, Ella M.

Bjorquist, Enoch Joseph<sup>1</sup>Blanchard, Elizabeth Estelle<sup>1</sup>Bolman, James<sup>2</sup>Bonner, Pearl Pauline<sup>1</sup>

Bower, Phyllis Mildred

Bowman, Edna Elizabeth<sup>1</sup>Bowman, Ward Simon<sup>1</sup>

Boyer, Vera

Breakley, Forrest Willard

Bridston, Olga Albertine<sup>1</sup>Brooks, Helen Louise<sup>1</sup>

Buerk, Louise Caroline

Bullock, Cecil Frank

Bursell, Frances Imogene

Bush, Lyle Kenneth<sup>2</sup>

Bush, Marian

Byrd, Evelyn Lenore<sup>1</sup>

Byron, Margaret

Carr, Howard Maynard<sup>1</sup>Carroll, Geneva North<sup>1</sup>Carter, Mary Frances<sup>1</sup>

Cave, Floyd A.

Cave, Roy Clinton

Cekada, Martha Amalia

Chamberlain, Dorothy Rebekah<sup>1</sup>Chambers, Edward Vincent<sup>1</sup>

Chapman, Marjorie E.

Christensen, Clara Mabel<sup>2</sup>

Clarke, Lillian

Coffman, Mabel Maurine

Coleman, Raymond W.

Collins, Marie Anna<sup>1</sup>Condit, Charlotte Frances<sup>1</sup>

Corlett, Thirza E.

Corakie, Florence Beryl<sup>1</sup>

Craig, Miriam Scheetz

Creamer, Una Lillian

Cronin, Nona

Dakiel, Margaret Irene

Daniels, Eve Ypin

Davidson, Beth<sup>1</sup>

Davies, Elizabeth

Davis, Mary Aileen<sup>1</sup>

Deer, Gladys Frances

Decker, Kate

de la Pole, Dorothy Buller<sup>2</sup>Delkin, Frederick Ladd<sup>1</sup>

Dix, Ruth Edgerton

Dodd, Joseph Paul

Donohoe, Agnes M.<sup>2</sup>Doremus, Della Ellen<sup>1</sup>

Doubravsky, Reva  
 Duncan, Margaret  
 Duncan, Patricia Pansy  
 Dunn, Margaret Carol  
 Eddy, Erma Smith  
 Elliott, Louise M.<sup>2</sup>  
 Ericksen, Lalla Genevieve  
 Erickson, Sylvia Patricia<sup>1</sup>  
 Erwin, Susan C.  
 Evans, Marie J.  
 Evenson, Theodore O.  
 Flack, Lena Elvina  
 Fleming, Bessie-Jean<sup>1</sup>  
 Fletcher, Elizabeth Brodwater<sup>1</sup>  
 Fletcher, Ina Mary  
 Foster, Olive Reeves<sup>1</sup>  
 Fowler, Edna Elizabeth  
 Fraser, William M.<sup>2</sup>  
 French, Merle Carolyn  
 Freyd, Greta G.  
 Fry, Don W.<sup>1</sup>  
 Fulton, Lois Mildred  
 Galligan, Glendon Edward<sup>1</sup>  
 Geer, Bernice Lura  
 Gellermann, Louis Wanger<sup>1</sup>  
 Gernaey, Maud Louise  
 Gilbert, Mary Margery<sup>3</sup>  
 Gillman, Ethel Miriam  
 Glover, Allen Ross<sup>3</sup>  
 Goodwin, Olive I.<sup>1</sup>  
 Graham, Charlotte<sup>2</sup>  
 Grant, Clara Genevieve  
 Gray, Beatrice Wright<sup>1</sup>  
 Gray, Helen Frances<sup>1</sup>  
 Gray, Howard B.<sup>1</sup>  
 Graybeal, Mattie Floss<sup>1</sup>  
 Green, Clarence C.  
 Groth, Joyce Irene  
 Hall, Julia Marjorie  
 Hammer, Joyce  
 Hankinson, Helen Adelaide  
 Hansen, Bert Benjamin  
 Hanson, Esther Annette  
 Harding, Bessie Irene  
 Hardwick, Francis T.  
 Harris, Florence Sedalia  
 Hart, Lou Ella  
 Hart, Ruth M.  
 Hassenmiller, K. Lyndon<sup>2</sup>  
 Henderson, Winfield Lester<sup>1</sup>  
 Hendricks, Ruth Gladys<sup>1</sup>  
 Hermans, Thomas Gerald  
 Herrick, Ellen  
 Hoffman, Ruth Marion<sup>2</sup>  
 Hogue, Helen<sup>1</sup>  
 Homan, Marion<sup>2</sup>  
 Hoskins, Marion Janet<sup>2</sup>  
 Howarth, Harriet Marie  
 Hunsaker, Herbert Cason<sup>1</sup>  
 Hurlburt, Blanche  
 Inus, Raymond McKinley<sup>2</sup>  
 Irwin, John I.  
 James, Marjorie<sup>1</sup>  
 Janeck, Marion Delferna  
 Jenkins, Helena  
 Jensen, Marian Gulette  
 Jerome, Vincent Barnes<sup>2</sup>  
 Johnson, Florence Agnes<sup>1</sup>  
 Johnson, Genevieve Dorothy  
 Johnson, Venus June  
 Johnstone, Daniel Harvey  
 Jolliffe, Margaret Jewett<sup>2</sup>  
 Jolly, Nydia E.  
 Jordon, Ruth Maddock  
 Kangley, Helen<sup>1</sup>  
 Kaufer, Monica F.  
 Kautz, Beryl<sup>1</sup>  
 Kelley, Barbara Rosella<sup>1</sup>

Kelley, Martha Eugene<sup>1</sup>  
 Kellner, Chester Rudolph  
 Kellogg, George Albert<sup>2</sup>  
 King, Malle Alice Dawson  
 Kinleyside, Antoinette  
 Kizer, Kenneth B.<sup>2</sup>  
 Knox, Esther Verata  
 Krogstad, Elva<sup>1</sup>  
 Kuykendall, Lenore  
 Leeper, Helen Gertrude  
 Legg, Emily<sup>1</sup>  
 Lewis, Clara May  
 Likes, Myrton Dollard<sup>2</sup>  
 Lindberg, Martin Evelin  
 Lockwood, Edna Dingee  
 Lorenz, Crescent  
 Low, Nellie Cecelia  
 Luccock, Harriet O'Neil<sup>1</sup>  
 Lundberg, Vivian Madele  
 Lynch, Isabelle Reis  
 McCaig, Grace Ralston  
 McCarthy, Clara Genevieve<sup>1</sup>  
 MacDonald, Gladys Eora  
 McDonald, Lamora  
 MacDonald, Sadie Belle  
 McDonough, Otto George  
 McDowell, Ruth  
 McGill, Merrie P.<sup>1</sup>  
 McKay, Zenda Lorraine  
 McKibbin, Wilbur Blaine<sup>1</sup>  
 McPherson, Dorothy Vesta  
 McQuaid, Alice Evelyn  
 McVey, Maud<sup>2</sup>  
 McWatters, Dorothy<sup>1</sup>  
 Mahaffey, Audley Fleming<sup>2</sup>  
 Malloy, Kathleen Jocelyn<sup>1</sup>  
 Mardon, T. Allen  
 Marlowe, Myrtle<sup>2</sup>  
 Mason, Violet Muriel  
 Mathis, Madge Mary  
 Maus, Mildred Palmer<sup>1</sup>  
 Mayne, Catherine Alice  
 Meenach, Harrison William<sup>2</sup>  
 Meyer, Flora  
 Miller, Ethel M.  
 Miller, Marienne Elizabeth  
 Moll, Gertrude Celeste  
 Moore, Charles Alexander<sup>1</sup>  
 Moore, Gerald Edward<sup>1</sup>  
 Mount, James N.<sup>1</sup>  
 Mulhern, Frances Adele<sup>1</sup>  
 Mullen, Doris Gertrude<sup>2</sup>  
 Murray, Valois Agnes<sup>2</sup>  
 Muyskens, Henry<sup>2</sup>  
 Myhre, Edna Therese  
 Nelson, Irene Margaret<sup>1</sup>  
 Nelson, Esther Olive  
 Nettleton, Alice Marie<sup>2</sup>  
 Newlove, Gwendolyn George<sup>1</sup>  
 Newton, Mary Howe  
 Neylan, Margaret C.  
 Nicholson, Georgia  
 Noll, Mark D.  
 Nowak, Helen Marietta<sup>2</sup>  
 Odegard, Peter H.<sup>1</sup>  
 Olsen, Amos F.<sup>2</sup>  
 Olsen, Esther Olinda  
 Olson, Beatrice Mildred  
 Osa, Lorents August  
 Otis, Leota Beatrice<sup>1</sup>  
 Packer, Florence<sup>2</sup>  
 Pannebaker, Myra Elizabeth<sup>1</sup>  
 Park, Etta Madge  
 Patterson, Bernice Lillian<sup>1</sup>  
 Pease, Katherine Marguerite  
 Pelz, Freda Elizabeth<sup>1</sup>  
 Pennell, Dorothy Winifred  
 Peplow, Marion Lucille

Peterson, Jennie<sup>1</sup>  
 Peterson, Ole Theodore<sup>1</sup>  
 Pettatt, Ruth  
 Pickett, May Belle  
 Pierce, Aliene Edna  
 Pittman, William H.<sup>1</sup>  
 Platt, Ruth Elizabeth  
 Pond, Elizabeth Bradford  
 Powers, Anna Maria<sup>1</sup>  
 Powers, Marie Kraft<sup>2</sup>  
 Powley, Louise Wilmont<sup>2</sup>  
 Raine, Margaret Muir  
 Rasmussen, George Vincent  
 Reap, Genevieve Elizabeth  
 Redmon, Dorothy B.  
 Rice, Mary Bickelhaupt  
 Richards, Bradford Alvin Ormsby<sup>1</sup>  
 Richardson, Elizabeth Cook  
 Roop, Milford W.<sup>2</sup>  
 Rosen, Hilda Florence<sup>1</sup>  
 Ruel, James Walker  
 Rummel, Edith E.  
 Russell, Florence Margretta<sup>2</sup>  
 Russell, Pearl Elizabeth<sup>1</sup>  
 Samuelson, Byron A.  
 Sundusky, Lawrence  
 Sather, Olene M.  
 Schmid, Byron C.  
 Schrock, Doris Nevin  
 Settem, Clara Olive  
 Shaw, Anna Belle  
 Sheahan, Myrtle<sup>1</sup>  
 Shirkey, Emily Frances<sup>1</sup>  
 Siemens, Lydia Jane<sup>1</sup>  
 Silseth, Margrette Ellen  
 Simson, Jerome<sup>2</sup>  
 Slater, Verla Mayfield  
 Smith, Ethel Beryl<sup>2</sup>  
 Spickard, Helen Florence  
 Spieseke, Alice Winifred  
 Stallings, Adeline May<sup>2</sup>  
 Stancliffe, Imogene  
 Stewart, Edgar Irving, Jr.  
 Stone, Martha Elizabeth  
 Stone, Sally Byrd<sup>1</sup>  
 Storey, M. Eugenia  
 Storm, Charlotte Stutsman  
 Strong, Gladys Delight  
 Sullivan, John Daniel<sup>1</sup>

Sundling, Doris Mae  
 Sutton, Phoebe Jane  
 Swanson, Ruby Francis  
 Swanson, Ruth Edith  
 Taft, Alice Louise  
 Tanner, Josephine Warren<sup>1</sup>  
 Taylor, Archa Bertrand<sup>2</sup>  
 Tegland, Nellie May<sup>2</sup>  
 Terry, Margaret Lois<sup>1</sup>  
 Thayer, Ellen Jeannette  
 Thune, Elmer Theron<sup>1</sup>  
 Tibbits, Erva L.  
 Turtle, Hazel Jane  
 Ungersma, Bernadine<sup>2</sup>  
 Upton, Marietta  
 Van Duzen, Bess Gail  
 Vining, Genevieve Virginia  
 von Erichsen, Lyle Gordon<sup>1</sup>  
 von Pressentin, Agnes Dorothea<sup>1</sup>  
 Wafer, Barbara<sup>2</sup>  
 Waldo, Josephine A.  
 Walker, Ona Blanche  
 Wallace, Allan Reese<sup>1</sup>  
 Ward, Cell Miller  
 Warner, Marylois  
 Watson, Eugenia Frances  
 Watt, Elsie<sup>2</sup>  
 Weage, Mary DeElla  
 Weir, Gladys  
 Werner, Winnifred<sup>1</sup>  
 West, Beth<sup>2</sup>  
 White, Frances Caroline<sup>1</sup>  
 White, Marie  
 White, Myrtle Pauline  
 Wlenand, Carl Marcus<sup>1</sup>  
 Wilkes, Maxine Elouise  
 Willard, Dorothy Elizabeth<sup>2</sup>  
 Williams, Mary Louise Topping<sup>1</sup>  
 Williamson, Reba  
 Wilson, Emma Jeanette<sup>1</sup>  
 Wilson, Lena Eveline<sup>1</sup>  
 Wilson, Lucile Harriet  
 Wilson, Paul E.  
 Wood, Florence  
 Wood, Muriel<sup>1</sup>  
 Wood, Varian G.  
 Woods, Rachel Angeline  
 Woodworth, Earl Grantley<sup>2</sup>  
 Wright, Leota Sadle

#### CERTIFICATE OF PROFESSIONAL TRAINING IN EDUCATION

Laigo, Pablo Hipol<sup>2</sup>

#### UNIVERSITY LIFE DIPLOMA

Ahnquist, Martha Edith<sup>1</sup>  
 Aitken, Victor Marshall<sup>1</sup>  
 Allison, Weaver Judson<sup>1</sup>  
 Arntzen, Edward T.  
 Ashton, Frederic William<sup>1</sup>  
 Barker, Carl Vincent<sup>2</sup>  
 Becker, Gladys Aileen  
 Billings, Oscar Harold<sup>1</sup>  
 Birks, Margaret Elizabeth<sup>1</sup>  
 Bjorklund, Ellen Margaret  
 Bohn, Herman<sup>1</sup>  
 Brakel, Marguerite Bell<sup>1</sup>  
 Catton, Lois Jane<sup>1</sup>  
 Cole, Miriam Elizabeth<sup>1</sup>  
 Compton, Mary Button<sup>2</sup>  
 Connell, Archie M.<sup>1</sup>  
 Craib, Margaret Cummings<sup>1</sup>  
 Crawford, Edward I.<sup>2</sup>  
 Cutter, Susan Ethel<sup>1</sup>  
 Dean, Mildred<sup>1</sup>

Dodge, Florence Frances<sup>1</sup>  
 Downing, Mont J.<sup>1</sup>  
 Falkoff, Anna Lea  
 Flecner, Mame Stewart<sup>1</sup>  
 Gamwell, Barbara Greene<sup>1</sup>  
 Gardner, Jessie<sup>1</sup>  
 Gose, Gladys<sup>1</sup>  
 Grant, Henry M.<sup>1</sup>  
 Hallin, Ruth Marjorie<sup>1</sup>  
 Hansen, Harry Parker<sup>1</sup>  
 Henderson, Ruby Jean<sup>1</sup>  
 Herner, Helen<sup>1</sup>  
 Hutchinson, Pansy Ethelyn<sup>1</sup>  
 Hyde, Marguerite<sup>1</sup>  
 Jaadan, Nels<sup>1</sup>  
 Johnson, Alfred P.<sup>1</sup>  
 Jones, David John<sup>1</sup>  
 Kehres, Harvey Edwin<sup>2</sup>  
 Kerrigan, Sylvia Finlay<sup>1</sup>  
 LaBoissler, Inez J.

Larson, Esther Mildred<sup>1</sup>  
 Legg, Lois Cornelia<sup>1</sup>  
 Lemon, John Francis  
 Lindblom, Florence Agnes<sup>1</sup>  
 Little, Edward Milton<sup>1</sup>  
 Meyer, Mabel June<sup>1</sup>  
 Mitchell, Lena Lillian<sup>1</sup>  
 Morris, Josephine Mae<sup>2</sup>  
 Ness, Arthur Bernhardsen<sup>2</sup>  
 Newman, Fern Burns<sup>1</sup>  
 Newton, Agnes Christensen<sup>1</sup>  
 Peterson, Gladys Lorraine<sup>1</sup>  
 Phillips, Ruth N.<sup>1</sup>  
 Pitt, Mildred Esther<sup>1</sup>  
 Podmore, Virginia Clark<sup>1</sup>  
 Poole, Jessie Lee<sup>1</sup>  
 Post, Harry Grant<sup>1</sup>  
 Prior, Porthena Rosemary<sup>1</sup>  
 Quast, Florence<sup>2</sup>  
 Reeves, Marie Adele<sup>2</sup>  
 Rich, Estelle May<sup>1</sup>  
 Robe, Dorothy Cecil<sup>1</sup>  
 Robertson, Berdena Marian<sup>1</sup>  
 Rohden, Elizabeth Helen<sup>1</sup>

Rupert, Rhea<sup>1</sup>  
 Ruppenthal, Anna B.<sup>1</sup>  
 Schlauch, Gustav H.<sup>1</sup>  
 Scott, Jeanne B.<sup>1</sup>  
 Shaw, Fredericka Sully<sup>1</sup>  
 Smithson, Emma Larson<sup>1</sup>  
 Spiescke, Daisy Marietta  
 St. Clair, Esther Anna<sup>1</sup>  
 Sully, Helen Margaret<sup>1</sup>  
 Tack, Bernhard Allen<sup>1</sup>  
 Teall, Hazel Connell<sup>1</sup>  
 Thelberg, Evelyn Elizabeth<sup>1</sup>  
 Thomas, Ethel Ada<sup>1</sup>  
 Ulleland, Astrid Olive<sup>1</sup>  
 Vannoy, Louise Hynes<sup>1</sup>  
 Wallace, Clara Louise<sup>1</sup>  
 Webster, Jessie Elizabeth<sup>1</sup>  
 Wharton, Florence Lillian<sup>1</sup>  
 Wilson, Doris Glasgow<sup>1</sup>  
 Wilson, Frances Imogene<sup>1</sup>  
 Wright, Ruth H.<sup>1</sup>  
 Zacharias, Rose Lydia<sup>1</sup>  
 Zickler, Irma Pauline<sup>1</sup>

### HONOR GRADUATE IN THE LAW SCHOOL

William Harold Hutchinson

This award is made upon the basis of the best record for scholarship and personality made by any member of the graduating class during the three years of law and his name is inscribed upon the plaque presented by the honorary law fraternity of Phi Alpha Delta.

### UNDERGRADUATE SCHOLARSHIP HONORS

#### SECOND YEAR HONORS IN LAW

Nievinski, Joseph  
 Malone, Walter

Hutcheson, Elwood

#### FIRST YEAR HONORS IN LAW

Bryan, James

Phillips, Julius Clarence

#### FIRST JUNIOR HONORS

Ahlblad, Gerda (Fine Arts)  
 Brown, Minnie (Lib. Arts)  
 Bullock, Virgil (Engr.)  
 Carlson, Gladys May (Lib. Arts)  
 Cruzen, Edward Alonzo (Bus. Ad.)  
 Davidson, Dorothy (Lib. Arts)  
 DuRae, Bernice (Lib. Arts)  
 Forsyth, Mrs. Frances (Lib. Arts)  
 Gottstein, Burton (Bus. Ad.)  
 Graybill, Anita Joan (Lib. Arts)  
 Greenleaf, Joseph T., Jr. (Bus. Ad.)  
 Hornberg, Jalmer T. (Bus. Ad.)  
 Jenner, Cornelia Elizabeth (Bus. Ad.)  
 Jones, Stephen Barr (Sci.)  
 Lansdowne, Elizabeth (Fine Arts)  
 Loewer, Charles Hastings (Bus. Ad.)

MacDonald, Louise I. (Lib. Arts)  
 Mayfield, Lola Myrtle (Bus. Ad.)  
 Miller, Alfred Amasa (Lib. Arts)  
 Nelson, Everett John (Lib. Arts)  
 Nickel, Lucille F. (Lib. Arts)  
 Peters, Jennings (Engr.)  
 Pidduck, Marjorie K. (Fine Arts)  
 Quigle, Helen Elizabeth (Lib. Arts)  
 Ryder, Maude Alice (Lib. Arts)  
 Snyder, Hart (Lib. Arts)  
 Stevens, Richard Francis (Engr.)  
 Stooddy, Helen Mary (Phar.)  
 Strand, Robert Edward (Bus. Ad.)  
 Tucker, Ellen (Bus. Ad.)  
 Zumwalt, Homer Orion (Phar.)

#### SECOND JUNIOR HONORS

Albaugh, Dorothy G. (Lib. Arts)  
 Bale, Ruth Calista (Sci.)  
 Bolsover, George (Bus. Ad.)  
 Boone, Julia Louise (Sci.)  
 Boutelle, Virginia S. (Lib. Arts)  
 Bush, Elizabeth Pauline (Fine Arts)  
 Chisholm, Dorothy Mary (Fine Arts)

Clement, Andrew Werr (Engr.)  
 Cole, Helene Adelaide (Jour.)  
 Davies, Thomas Dayton (Bus. Ad.)  
 Davis, Vernon (Bus. Ad.)  
 Dwyer, Kathryn Rita (Jour.)  
 Elliott, Maxine Bannon (Jour.)  
 Englund, Adoll (Bus. Ad.)

Faubert, Florentine V. (Lib. Arts)  
 Finlay, Maxine (Jour.)  
 Fitzgerald, Florence M. (Bus. Ad.)  
 Gambee, Elizabeth (Fine Arts)  
 Gingrich, Pearl (Lib. Arts)  
 Gundlach, Ralph H. (Lib. Arts)  
 Hagen, Richard Otto (Bus. Ad.)  
 Haggett, Dorothy Gene (Lib. Arts)  
 Hansen, Hannah Amella (Bus. Ad.)  
 Hopmann, Harry Arthur (Engr.)  
 Kenyon, Mrs. Hazel (Lib. Arts)  
 King, Robert William (Bus. Ad.)  
 Lamont, Ralph Howell (Bus. Ad.)  
 Langlow, Wesley Arnold (Lib. Arts)  
 Larkin, Frances (Lib. Arts)  
 Levinson, Jack J. (Lib. Arts)  
 Lonseth, Herbert (Sci.)  
 Lurie, David (Engr.)  
 Middlebrook, Curtis Levi (Bus. Ad.)  
 Mitchell, Verne Henry (Bus. Ad.)

Parry, Jane (Educ.)  
 Pennell, Geneva Estora (Fine Arts)  
 Pollock, Barbara (Lib. Arts)  
 Poole, Bonnie Lucile Lib. Arts)  
 Reeder, Ardis Harold (Bus. Ad.)  
 Sanders, Carrie (Lib. Arts)  
 Scholl, Suzanne Elizabeth (Bus. Ad.)  
 Seltzer, Harry David (Lib. Arts)  
 Smith, Ralph Rice (Lib. Arts)  
 Soth, Tom (Lib. Arts)  
 Thompson, Allen Emmett (For.)  
 Tominaga, Sakaye (Lib. Arts)  
 Townsend, Howard G. (Bus. Ad.)  
 Turtle, Alice (Fine Arts)  
 Underhill, Walter Morton (Educ.)  
 Van Gilder, Florence (Lib. Arts)  
 Watson, Dorothy Tullis (Jour.)  
 Weir, John M. (Engr.)  
 Winter, Evelyn M. (Lib. Arts)

## FIRST SOPHOMORE HONORS

Aldwell, Doreen (Lib. Arts)  
 Ayers, Ethel Florence (Lib. Arts)  
 Bailey, Mrs. Katharine (Lib. Arts)  
 Benham, Dorothy (Lib. Arts)  
 Coughlin, Paul J. (Lib. Arts)  
 Dix, Peres Alvin (Phar.)  
 Dobbs, Charlotte (Lib. Arts)  
 Eby, Roger Irwin (Engr.)  
 Griffin, Frederic P. (Lib. Arts)  
 Hanson, Alice Cable (Lib. Arts)  
 Horowitz, Charles (Lib. Arts)  
 Kelso, Kenneth Kay (Lib. Arts)  
 LaFollette, Marion (Engr.)

Lane, Glen L. (Engr.)  
 Lehman, Arnold (Phar.)  
 Lewis, Leon (Sci.)  
 Manning, Harold C. (Engr.)  
 Melson, Ray C. (Bus. Ad.)  
 Meyers, Sheldon C. (Lib. Arts)  
 Norie, Mary Elizabeth (Lib. Arts)  
 Peabody, Emery F. (Bus. Ad.)  
 Prescott, John Edward (Engr.)  
 Robinson, H. Gerald (Engr.)  
 Smith, Roy Martin (Engr.)  
 Veitch, Albert Hertzner (Engr.)

## SECOND SOPHOMORE HONORS

Anderson, Elizabeth (Lib. Arts)  
 Audett, Theoplas Bernard (Lib. Arts)  
 Barlow, Marie S. (Sci.)  
 Bautista, Marcelino Lopez (Educ.)  
 Berglund, William (Engr.)  
 Bingham, Robin Adair (Sci.)  
 Bloxom, John Megrath (Lib. Arts)  
 Bradford, Caty Josephine (Phar.)  
 Bryant, Mildred E. (Lib. Arts)  
 Burgeson, Elna Marie (Lib. Arts)  
 Callison, Cecil (Bus. Ad.)  
 Carlson, Theodore David (Lib. Arts)  
 Clarke, Mary L. (Lib. Arts)  
 Denning, Alice M. (Sci.)  
 Dewery, Bertha Chase (Lib. Arts)  
 Eastman, Fred Scoville (Engr.)  
 Enger, Bernice (Sci.)  
 Frost, Vernon (Lib. Arts)  
 Glenn, Wesley (Bus. Ad.)  
 Graft, George Harold (Lib. Arts)  
 Graham, Donald Penrose (Engr.)  
 Green, Clifton (Bus. Ad.)  
 Hale, Oran James (Lib. Arts)  
 Heinz, Winfield Bernard (Engr.)  
 Hocking, Lillian Katherine (Sci.)

Hunt, Beatrice (Lib. Arts)  
 Jackson, Lillian (Lib. Arts)  
 Kretschmann, Herbert F. (Lib. Arts)  
 Lane, Kathryn (Lib. Arts)  
 Larson, Gus (Lib. Arts)  
 Levinson, Herbert A. (Bus. Ad.)  
 Littell, Max E. (Bus. Ad.)  
 McFadden, David J. (Lib. Arts)  
 Miller, Charlotte E. (Lib. Arts)  
 Murphy, Mary Ethel (Sci.)  
 Nichols, Mary U. (Lib. Arts)  
 Olsen, Blanche A. (Bus. Ad.)  
 Rader, Melvin Miller (Lib. Arts)  
 Reid, Beatrice (Lib. Arts)  
 Relf, Eugenia (Fine Arts)  
 Roscoe, R. Theodore (Engr.)  
 Rueger, Clarence Raymond (For.)  
 Schmid, Calvin F. (Lib. Arts)  
 Seibert, Philip John (Bus. Ad.)  
 Shaw, Clayton Bertrand (Lib. Arts)  
 Smith, Raymond C. (Engr.)  
 Taylor, Jeannette (Bus. Ad.)  
 Terry, Miriam (Fine Arts)  
 Walker, Gile (For.)  
 Wolfe, Merle (Bus. Ad.)

## COMMISSIONS IN THE OFFICERS' RESERVE CORPS, UNITED STATES ARMY

## SECOND LIEUTENANT, INFANTRY

Erdman Jerome Allen  
 Clarence Takeya Aral  
 Donald Taylor Beeler  
 Ainsworth Blogg  
 Lee Raymond Collins

Edward Albert Dunn  
 Amos Hiatt  
 Harry Albert Lyons  
 Clyde Sidney Tarter

## SECOND LIEUTENANT. COAST ARTILLERY

Frank Huesy Conrad  
Frank Morris Plummer

Frederick Leonard Ziel

## SECOND LIEUTENANT, AIR SERVICE

James Davis Fall

Merrill McCord Stover

## HONOR GRADUATE OF THE RESERVE OFFICERS' TRAINING CORPS

Donald Taylor Beeler

## DEGREES CONFERRED AUGUST 31, 1923

## BACHELOR DEGREES

## COLLEGE OF LIBERAL ARTS

## BACHELOR OF ARTS

Allen, Vera  
Alway, Harrison Grant  
Anderson, Philena Mary  
Bakeman, Frances Louise  
Booman, F. Albert  
Brown, Edda Virginia  
Brown, Grace Adelaide  
Brown, Sarah H.  
Butcher, Owen  
Butt, Ferdinand H.  
Campbell, Arch.  
Carlson, Julia Carolyn  
Carmichael, Ruth Pearce  
Chalaire, Donald Alcide  
Dahl, Bernice Irene  
Elford, Marian Alberta  
Elyea, Winifred  
Ethel, Garland Oral  
Falk, Winona Moore  
Gibson, Edward Bayne Rogers  
Grebe, Louise Edith

Grimes, Margaret Pannebaker  
Hansen, Herman  
Harrison, Roneta Oliver  
Kinkade, Lucille  
Lambert, Rebecca Kempthorne  
Lash, Frederick Merrick  
McCulloch, Flora May  
McDonald, Darrel W.  
Mott, Franselle  
Powers, Francis Fountain  
Richards, Catherine Mary  
Robbins, Frances Rowena  
Santee, Eva  
Short, Spencer David  
Stowasser, Frances Marie  
Talbot, Mira  
Thayer, John Milton  
Valleau, Verna C.  
Vessey, Mary Isabel  
Walker, F. D. Lanier  
Windhusen, Anne Elizabeth

## COLLEGE OF SCIENCE

## BACHELOR OF SCIENCE

DeRiemer, Robert Posey  
Dodd, Martha Wilhelmina  
Ebelling, Walter Wilford  
Goodlander, Millicent G.  
Johnson, Kenneth A.

Johnson, Vernon Berthrand  
Klenholz, Leon Edward  
Pollock, Dorothea  
Steele, Susie  
Thomas, Margaret C.

## BACHELOR OF SCIENCE IN BOTANY

Daugherty, Anna Mott

## BACHELOR OF SCIENCE IN HOME ECONOMICS

Anderson, Jessie Josephine  
Beach, Leota Myrtle  
Chamberlain, Helen D.  
DeShon, Margaret

Hutchinson, Ruby Margaret  
MacLaughlin, Gay Elizabeth  
Runnings, Gladys May

## BACHELOR OF SCIENCE IN PHYSICAL EDUCATION

McElroy, Elizabeth

## SCHOOL OF EDUCATION

## BACHELOR OF ARTS IN EDUCATION

Adams, James Hall  
 Akin, Margaret Agnes  
 Alm, Reuben A.  
 Brown, Imogene  
 Burkman, Joel Andrew  
 Charroin, Ida R.  
 Christensen, Marie L.  
 Dellinger, Sarah Sherwood  
 Hatlen, Charles Bernard  
 Lapham, Margaret A.  
 Leaf, Alice  
 Lynch, Anna Martha

McCoy, Edward Marion  
 McLain, Ada Esco  
 Mehner, Margaret Theresa  
 Merriam, Sherman Lee  
 Noll, Pauline  
 Okerlund, Gerda Maria  
 Richardson, Jennie  
 Rogers, Henry E.  
 Schertel, Max  
 Shawler, Grace  
 Stevens, Theodore George  
 Wentworth, Lois Janet

## BACHELOR OF SCIENCE IN EDUCATION

Berg, Ida Blanche  
 McMeen, Ruth Frances  
 Reed, Clyde L.

Rhinesmith, O. L.  
 Wiseman, B. Evangeline

## COLLEGE OF PHARMACY

## PHARMACEUTICAL CHEMIST

Ehelm, Helen A.

Rhodes, Leonard

## BACHELOR OF SCIENCE

Cheng, Pao-Yuan

Ehelm, Helen A.

## COLLEGE OF BUSINESS ADMINISTRATION

## BACHELOR OF BUSINESS ADMINISTRATION

Amesbury, Helen Jean  
 Foster, Frederick S.  
 Fraser, Edmund Shepard  
 French, Mabelle C.  
 Halverson, Helmar O.  
 Hammerlin, Roy Nels  
 Hanson, Rainhardt Stanley  
 Hyman, Norton Beehe  
 Joubert, Stanley S.

Lindsay, Mazie Palmer  
 Meyer, Walter Charles  
 Orosa, Jose Ylagan  
 Peterson, Richard F.  
 Phipps, Guy Francis  
 Savage, Joseph Edward  
 Scott, Frank William  
 Scotten, Edwin Betz

## COLLEGE OF ENGINEERING

## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

Anderson, Adolph

Berman, Cornelio

## BACHELOR OF SCIENCE

Scott, James Gordon

## COLLEGE OF FINE ARTS

## BACHELOR OF ARTS IN MUSIC

Dustan, Laura

Peterson, Katherine Willard

## BACHELOR OF MUSIC

Buemeister, Elizabeth M.  
 Hagerty, Nellie

Skartvedt, Agnes Elizabeth



## DEGREES

309

### BACHELOR OF FINE ARTS

Byers, Maryhelen  
Hepler, Helen H.

Salladay, Ruth

### COLLEGE OF FORESTRY

#### BACHELOR OF SCIENCE IN FORESTRY

Edwards, George Washington

Marsh, Gordon Wesley

### SCHOOL OF JOURNALISM

#### BACHELOR OF ARTS IN JOURNALISM

Watts, Archie Lester

### LIBRARY SCHOOL

#### BACHELOR OF ARTS

Lucas, Martha McArthur  
Oates, Eulalie

Olson, Jenny Elizabeth  
Todd, Daphne

#### BACHELOR OF SCIENCE IN LIBRARY SCIENCE

Baker, Dorothy Ada  
Christoffers, Ethel Margaret

Lundell, Berger John Olof

### SCHOOL OF LAW

#### BACHELOR OF LAWS

Bailey, Warren  
Garver, Robert W.  
Ingham, Hepburn

Kennett, John Joseph  
Merritt, Fred Sherrill  
Scott, Byron David

## GRADUATE DEGREES

### GRADUATE SCHOOL

#### MASTER OF ARTS

Carl Vincent Barker (Education)  
A.B., University of Indiana, 1909  
Thesis: A Study of School Progress

Alice Beatrice Brethorst (Education)  
A.B. in Ed., University of Washington, 1922  
Thesis: A Survey of Health Conditions in Seattle Grade Schools with Some Educational Implications

Raymond Edward Cook (Education)  
A.B., College of Puget Sound, 1907  
Thesis: A Study of Certain Phases of School Finance and Business Administration

Elizabeth MacEachin Drummond (English)  
A.B., University of Washington, 1917  
Thesis: Influence of Donne on Webster

Adelaide Louise Fairbanks (English)  
A.B., University of Washington, 1922  
Thesis: Horace Greeley and Mid-Century Reform Movements in the United States

Nina B. Fulton (English)  
A.B., Washington State College, 1914  
Thesis: The Influence of Latin upon the Vocabulary Metre and Syntax of Paradise Lost

John Herbert Geoghegan (Sociology)  
A.B., University of Washington, 1922  
Thesis: The Migratory Worker in Seattle: a Study in Social Disorganization and Exploitation

## UNIVERSITY OF WASHINGTON

Francis Tiley Hardwick (Education)

A.B., University of London, 1892

Thesis: A Study of the Growth of Intelligence During One Year

Lucy Kangley (English)

A.B., University of Washington, 1922

Thesis: A Companion to the Society Novel from Burney to Thackeray

Minnie Dezena Loutzenhiser (Education)

B.S. in Ed., State Teachers College of Maysville, Missouri, 1919

Thesis: Achievement of Seniors of High Schools of Seattle in Relation to Their Ages

Lealie Alexis Marchand (English)

A.B., University of Washington, 1922

Thesis: The Romantic Realist Controversy in America Before 1900

William James Margula (Education)

A.B., University of Washington, 1923

Thesis: Legislation on the Junior High School

Miles Evan Morgan (Education)

B.S., University of Washington, 1915

Thesis: The Boys' Advisor in Secondary Schools

Alice Morrison (Education)

B.S., Amity College, 1908

Thesis: The Content of Modern History as Taught in our Secondary Schools: an Analysis of Typical School Textbooks

Hattie Sylvia Murray (History)

A.B., University of Idaho, 1915

Thesis: Three Studies in Pre-war Diplomacy

Marion Wesley Roper (Sociology)

B.Ed., University of Washington, 1922

Thesis: A Neighborhood Study of Juvenile Delinquency

Edward Matthewson Stilwell (Education)

A.B., University of Washington, 1910

Thesis: An Experimental Study of the Project Method in the Teaching of Physics in the High School

Martha Elizabeth Stone (Education)

A.B., University of Washington, 1923

Thesis: Bonds, Interest and Depreciation in City School Accounting

Margaret S. Taylor (English)

A.B., University of Montana, 1921

Thesis: Humor and Social Maladjustment

## MASTER OF SCIENCE

Ernest Clement Angst (Bacteriology)

B.S., University of Washington, 1922

Thesis: Thermal Death Points of the Spores of some Aerobic Bacteria

Elizabeth Hiner (Chemistry)

B.S., Colorado State College, 1919

Thesis: The Determination of the Hydrogen Ion Concentration of the Equilibrium Points in the Successive Stages of the Hydrolysis of Monocalcic Phosphate; Also of the Solubility of the Basic Arsenate of Calcium

Marguerite Emily Kittredge (Chemistry)

A.B., University of Washington, 1908

Thesis: Alcohol as a Solvent in the Extraction of Rosin

Miriam Luten (Bacteriology)

B.S., University of Washington, 1922

Thesis: A Study of the Distribution in Nature of the Common Anaerobic Bacteria

Howard Percy Robertson (Mathematics)

B.S., University of Washington, 1922

Thesis: An Extension of the Absolute Differential Calculus

## MASTER OF BUSINESS ADMINISTRATION

Harry John McIntyre

B.S. in M.E., University of Washington, 1915

Thesis: An Investigation of the Depreciation of Office Buildings

## TEACHING DIPLOMAS

## UNIVERSITY FIVE-YEAR NORMAL DIPLOMA

August, 1923.

Adams, James Hall  
 Akin, Margaret Agnes  
 Alm, Reuben A.  
 Anderson, Phyllis Mary  
 Bakeman, Frances Louise  
 Beach, Leota Myrtle  
 Booman, F. Albert  
 Brethorst, Alice Beatrice  
 Brown, Grace Adelaide  
 Brown, Imogene  
 Burkman, Joel Andrew  
 Burmeister, Elizabeth M.  
 Carlson, Julia Carolyn  
 Carmichael, Ruth Pearce  
 Chamberlain, Helen D.  
 Charroin, Ida R.  
 Christensen, Marie L.  
 Dahl, Bernice Irene  
 Daugherty, Anna Mott  
 Dellinger, Sarah Sherwood  
 Dodd, Martha Wilhelmina  
 Dustan, Laura  
 Edwards, George Washington  
 Elyea, Winifred  
 Freeman, George Walker  
 French, Mabelle C.  
 Gibson, Edward Bayne Rogers  
 Grebe, Louisa Edith  
 Grimes, Margaret Pennebaker  
 Hansen, Herman  
 Hartelius, H. F. H.  
 Hatlen, Charles Bernard  
 Huggett, Ralph A.  
 Johnson, Vernon Berthrand  
 Kaufman, Gretchen  
 Kinkade, Lucille  
 Kinsle, Edward  
 Kravik, Alfhild Viola  
 Lambert, Rebecca Kemthorne

Lapham, Margaret A.  
 Lash, Frederick Merrick  
 Leaf, Alice  
 Lindsay, Mazie Palmer  
 Loutzenhiser, Minnie Dezena  
 Lynch, Anna Martha  
 McCoy, Edward Marion  
 McElroy, Elizabeth  
 Mehner, Margaret Theresa  
 Merriam, Sherman Lee  
 Miller, Ethel Tainer  
 Mott, Franselle  
 Nelson, Beulah Mae  
 Newell, Laura Evangeline  
 Newman, Anne  
 Noll, Pauline  
 Okerlund, Gerda Maria  
 Pollock, Dorothea  
 Reed, Clyde L.  
 Rhinesmith, O. L.  
 Richardson, Jennie  
 Robbins, Frances Rowena  
 Runnings, Gladys May  
 Sallady, Ruth  
 Santee, Eva  
 Schertel, Max  
 Shawler, Grace  
 Sielk, Wm. Henry  
 Skartvoldt, Agnes Elizabeth  
 Smith, Gertrude Budwell  
 Steele, Susie  
 Stevens, Theodore George  
 Stowasser, Frances Marie  
 Tack, Helen C.  
 Thayer, John Mullen  
 Vallean, Verna C.  
 Windhusen, Anne Elizabeth  
 Wiseman, B. Evangeline

## UNIVERSITY LIFE DIPLOMA

August, 1923.

Anderson, Frances Bertine  
 Baker, Mildred Elizabeth  
 Bollman, Dean Stanley  
 Bollman, Marie A.  
 Campbell, Florence Elizabeth  
 Campbell, Mary Veronica  
 Carroll, Geneva North  
 Council, Elizabeth  
 Grossen, Tilda Freda  
 Hardwick, Freda Phyllis  
 Hauck, Hazel Marie

Hayner, Miriam Marjorie  
 Johnston, Violet Kathleen  
 Madison, Viola Delphine  
 Merchant, Jessie H.  
 Rice, Edith Allegra  
 Simpson, Lurline Violet  
 Speer, Pearl Steineke  
 Thune, Elmer Theron  
 White, Fern E. Naugle  
 Worthen, Clifton Boyd

## CERTIFICATE OF PROFESSIONAL TRAINING IN EDUCATION

Rades, Herbert  
 Galbraith, Mary Grace

Wilson, Faye Allison

JUNE 18, 1923

## †THE ARTHUR A. DENNY FELLOWSHIPS

## †THE DUPONT FELLOWSHIP

FELLOWSHIPS, SCHOLARSHIPS, PRIZES

313

THE JUDGE THOMAS BURKE PRIZES OF \$25 AND \$15 FOR EXCELLENCE  
IN FRENCH

Norma Nelle Rognon

Vera Boyer

THE JUNIOR MILITARY PRIZE  
Edwin Merritt Watne

THE THOMAS BURKE CHINA CLUB PRIZE OF \$25  
(Not yet awarded)

THE ITALIAN COMMERCIAL CLUB PRIZE OF \$75 AND \$50  
(Not yet awarded)

THE FRANK BUTY ITALIAN PRIZE OF \$20  
(Not yet awarded)

# REGISTER OF STUDENTS—1923-1924

Aagaard, Estella, Bus.....	Seattle	Allen, George W, FA.....	Spokane
Aaland, Carolina B, FA.....	Tacoma	Allen, Gordon C, For.....	Seattle
Aalbu, Dorothy, LA.....	Everett	Allen, Guerdon S, LA.....	Seattle
Aaito, Selma R, Ed.....	Douglas, Alaska	Allen, Lucena, LA.....	Seattle
Abakumoff, K V, Engr.....	Seattle	Allen, Mary Fern, Sci.....	Seattle
Abbott, Robert C, Bus.....	Seattle	Allen, Maxine Lois, FA.....	Seattle
Abbott, Susan, LD, LA.....	Seattle	Allen, Merritt, LA.....	Toppenish
Abel, Fred K, LA.....	Montesano	Allen, Ruth F, FA.....	Toppenish
Abel, George Franklin, LA.....	Montesano	Allen, Thomas S, Bus.....	Seattle
Abel, William Denzil, For.....	Montesano	Allen, H Warren, Bus.....	Seattle
Abell, Chas H, LA.....	Seattle	Allis, Marie E, LD, LA.....	San Francisco, Cal
Abogadie, Maria A, Phar.....	Philippines	Allison, Katherine M, LA.....	Seattle
Abernathy, Kenneth M, Unc, LA.....	Wenatchee	Almrig, Helen Ovilla, LA.....	Everett
Abrahamson, Jacob, Bus.....	Seattle	Altick, Bernard P, Engr.....	Seattle
Acena, Jacinta, Sci.....	Philippines	Altman, William W, Bus.....	Bellingham
Acena, Monico, Bus.....	Seattle	Alston, John F, Unc, LA.....	Everett
Ackerman, Gilbert, Engr.....	Seattle	Alton, William I, Phar.....	Sequim
Ackerman, Sidney D, LA.....	Seattle	Alutin, Alexander, For.....	Russia
Ackley, Elene, LA.....	Tacoma	Ames, Percy, Bus.....	Everett
Ackley, Wilson L, FA.....	Vancouver	Ames, Willis, LA.....	Seattle
Adams, Carlton, Engr.....	Seattle	Amey, Harry E, LA.....	Alderwood Manor
Adams, Catherine G, LA.....	Seattle	Amy, Winifred, LA.....	Seattle
Adams, Clyde Buster, Sci.....	Richmond Beach	Anders, Irene, LA.....	Seattle
Adams, Edw E, LA.....	Spokane	Anderson, Alma Carolyn, LA.....	Everett
Adams, Evert G, Bus.....	Seattle	Anderson, Anton L, LA.....	Creston
Adams, Gordon, Bus.....	Seattle	Anderson, Arthur A, Law.....	Seattle
Adams, Helen L, FA.....	Tacoma	Anderson, Audrey, LA.....	Seattle
Adams, Henrietta Marguerite, Sci.....	Seattle	Anderson, Bernard F, LD, Bus.....	Seattle
Adams, Howard W, Bus.....	Seattle	Anderson, Carl, LD, Bus.....	Seattle
Adams, John R, Bus.....	Seattle	Anderson, C P, Unc, Bus.....	Evanston, Wyo
Adams, Julius Gordon, Sci.....	Puyallup	Anderson, David T, Engr.....	Seattle
Adams, Leta Zoe, LA.....	Seattle	Anderson, David G, Engr.....	Vancouver
Adams, Orville D, Ed.....	Seattle	Anderson, Donald C, Bus.....	Aberdeen
Adams, Rachel E, LA.....	Sumner	Anderson, Dorothy, Unc, Bus.....	Seattle
Adams, Sidney, Sci.....	Seattle	Anderson, Edith, LA.....	Spokane
Adams, Susanna Catherine, LA.....	Arlington	Anderson, Edward, Bus.....	Seattle
Adams, Walter C, Engr.....	Sedro Woolley	Anderson, Edward Quin, LA.....	Olympia
Adamson, Louise, Phar.....	Seattle	Andreson, Elizabeth J, LA.....	Tacoma
Ademino, John, Bus.....	Cle Elum	Anderson, Esculene, LA.....	Seattle
Adkins, Helen E, LD, LA.....	Seattle	Anderson, Evelyn C, LA.....	Seattle
Adrianse, George N, Grad.....	Napa, Cal	Anderson, George D, Bus.....	Everett
Afrollan, Adriano, Engr.....	Philippines	Anderson, Gordon E, LA.....	Klaser
Agcaoitl, Andres G, Ed.....	Philippines	Anderson, Harold W, Engr.....	Chehalis
Agee, Dora Leola, LA.....	Blaine	Anderson, Helen G, LA.....	Seattle
Agiazat, F, Sci.....	Philippines	Anderson, Herbert H, Engr.....	Seattle
Agnew, Mertyl J, LD, LA.....	Centralia	Anderson, J Harold, LA.....	Seattle
Aguinbaldo, Pedro D, Min.....	Philippines	Anderson, Joe W, Bus.....	Kennewick
Aharan, Ada, Bus.....	Seattle	Anderson, John A, Bus.....	Seattle
Ahlblad, Gerda, FA.....	Seattle	Anderson, Joseph R, Phar.....	Seattle
Ahrens, Russel, UD, Bus.....	Farmington	Anderson, Julia J, Sci.....	Seattle
Aitchison, Edwin P, Bus.....	Spokane	Anderson, Katherine, LD, FA.....	Anacortes
Aitchison, Helen, LA.....	Spokane	Anderson, Katherine, Spec, LA.....	Seattle
Akin, Cecilia, Ed.....	Seattle	Anderson, Larz, LA.....	Rathdrum, Ida
Akins, Marian L, LA.....	Lewiston, Mont	Anderson, Leonard Andrew, Sci.....	Hoquiam
Alambrá, Jose Z, LD, Sci.....	Philippines	Anderson, Lillian Ida, Sci.....	Anacortes
Alambrá, Rufo Z, Bus.....	Philippines	Andreson, Logan, Bus.....	Edmonds
Albaugh, Dorothy, LA.....	Spokane	Anderson, Louise M, LA.....	Tacoma
Albee, Archie Veryl, LA.....	Seattle	Anderson, Margaret G, FA.....	Seattle
Alben, Edward A, Engr.....	Vancouver	Anderson, Maurice, Bus.....	Alaska
Albertson, Lois, FA.....	Seattle	Anderson, Miles M, For.....	Mahana
Aibig, John William, Grad.....	McKeesport, Pa	Anderson, Muriel, UD, Educ.....	Spokane
Aibin, Virginia, LA.....	East Seattle	Anderson, Norman B, LD, Sci.....	Seattle
Aiderson, Tom, Bus.....	Seattle	Anderson, Paul H, Unc, BA.....	DuPont
Aiderson, Vers, Sci.....	Seattle	Anderson, F Raymond, LA.....	Tacoma
Aidwell, Doreen, LA.....	Port Angeles	Anderson, Robert, FA.....	Rathdrum, Ida
Alexander, Floyd M, Phar.....	Seattle	Anderson, Roger, Grad.....	Seattle
Alexeeff, Alexander V, Engr.....	Seattle	Anderson, Stanley J, Bus.....	Seattle
Alford, Eugenia, LA.....	Lewiston, Ida	Anderson, Sylvester, Bus.....	Lowell
Alger, C S, Engr.....	Seattle	Anderson, Theresa, LA.....	Kent
Allan, Helen Q, LA.....	Seattle	Anderson, Valentine, FA.....	Seattle
Allan, James, FA.....	Seattle	Anderson, Virgil V, LA.....	Silverdale
Alleman, Mrs Marion Elwell, FA.....	Seattle	Andreas, Osborn, LA.....	Seattle
Allen, Albert A, Bus.....	Seattle	Andrews, Chas W, Bus.....	Marysville
Allen, Mrs Capitola Pinches, LA.....	Seattle	Andrews, Elizabeth, Grad.....	Echo, Or
Alleo, Edithanne, LA.....	Seattle	Andrews, Ellis E W, Spec.....	Seattle
Allen, Edna, Phar.....	Selah	Andrews, Harriett, Sci.....	Uncas
Allen, Elmer N, Engr.....	Seattle	Andrews, Joe, LA.....	Echo, Or

Andrews, Robert Marshall, Engr.	Wenatchee
Anglen, T Hayes, LD, Bus.	Seattle
Angst, Laura, Sci.	Chehalis
Ankeny, Levi, LA.	Walla Walla
Annett, Kenneth, Bus.	Hoquiam
Anselm, D R, Grad.	Seattle
Ansorge, Norman LD, LA.	Seattle
Appel, Clarence, LD, Engr.	Seattle
Appelgren, Fred W, Fsh.	Westport
Appelby, Ann, Sci.	Seattle
Appelgate, Kenneth W, LD, Sci.	Everett
Appleton, C F, Grad.	Seattle
Appleton, Muriel M, LA.	Seattle
Aquino, Juan, Bus.	Philippines
Arai, A K, FA.	Seattle
Arai, Clarence T, Law.	Seattle
Arai, F Thomas, Bus.	Seattle
Arbogast, Ray Charles, Bus.	Freewater Or
Archer, Arden F, Bus.	Walla Walla
Archev, H Dean, Bus.	Seattle
Archaga, Moses, LA.	Philippines
Arentsen, Harold, Bus.	Seattle
Argall, Margaret, LA.	Spokane
Arizumlil, Klyo, Phar.	Seattle
Armann, Edith E, LA.	Ritzville
Armin, Julia E, LA.	Long Beach, Cal
Armitage, Harry H, Bus.	Yakima
Armstrong, Glenn B, Bus.	Seattle
Armstrong, Wilmot, Bus.	Everett
Arnell, Rebecca, UD, Educ.	Auburn
Arnesen, Elias T, Grad.	Seattle
Arneson, Gus, LA.	Puyallup
Arnold, Evert F, LA.	Seattle
Arnold, Frederick G, UD, Engr.	Seattle
Arnold, Harry, LD, Bus.	Seattle
Arnold, Helen, LA.	Spokane
Arnold, John Albert, LA.	Tacoma
Arnold, G Philbrook, Engr.	Seattle
Arnold, Vera, LA.	Honolulu
Aronin, Sam, LA.	Seattle
Arthur, Jean W, FA.	Seattle
Artus, George Laurence, Sci.	Seattle
Arzaga, Flaviano, Engr.	Philippines
Ash, Simon H, Min.	Seattle
Ashley, Paul, Law.	Seattle
Ashton, Emmett R, Grad.	Seattle
Asp, Florence, Bus.	Edmonds
Audett, Theo, Law.	Seattle
Aver, Ursula Tibbels, LA.	Seattle
Augustine, J Webster, LA.	Seattle
Auld, Willis R, Bus.	Seattle
Austin, Geo R, Grad.	Seattle
Austin, Grannis H, LA.	Monroe
Austin, Harold D, Sci.	Aberdeen
Austin, Helen, LA.	Spokane
Austin, Russell A, Bus.	Aberdeen
Austin, Villairs T, UD, Sci.	Pasco
Avery, Dorothy, FA.	Seattle
Avery, John A, Bus.	Elma
Axe, Erwin F, For.	Seattle
Axtell, Frances L, Sci.	Bellingham
Ayers, James C, Spec.	Seattle
Ayers, Telle Wayne, FA.	Kelso
Babbitt, Ardsley, LA.	Seattle
Babbitt, Frederic, Engr.	Seattle
Babcock, Judd, LD, Bus.	Seattle
Babcock, Mary E, Sci.	Seattle
Bachman, Paul, Grad.	Seattle
Bachman, Raymond, LA.	Spokane
Backer, James J, Engr.	Seattle
Backland, John, LA.	Seattle
Bacon, Enos Ewing, Bus.	Yakima
Bagdley, Chas H, Bus.	Yakima
Baggott, Renaldo A, FA.	Wenatchee
Bagwill, John, Bus.	Seattle
Bagwill, Thomas V, LA.	Seattle
Bahl, Ida E, Spec.	Seattle
Bahnsen, Maurice D, Bus.	Seattle
Bailey, Arthur E, Law.	Seattle
Bailey, Dorothy B, Sci.	Seattle
Bailey, Henry E, Bus.	Seattle
Bailey, O H, Bus.	Seattle
Baird, Charles G, Grad.	Snohomish
Baird, Jean, LA.	Seattle
Bakeman, C T, LD, Engr.	Snohomish
Baker, Edward, For.	Redmond
Baker, Ella Louise, Bus.	Puyallup
Baker, Helen M, LA.	Seattle
Baker, Irene, LA.	Seattle
Baker, Jane Ayres, Jour.	Yakima
Baker, Mildred, Phar.	Centralia
Baker, Samuel G, Engr.	Seattle
Bakko, F W, Bus.	Spokane
Balakshin, Nathaly, Sci.	China
Balch, Albert S, Bus.	Blaine
Baldwin, Wilson H, LA.	Seattle
Bale, Ruth Calista, Sci.	South Bend
Ball, Fred L, Sci.	Yakima
Ballaine, Wesley, LD, Sci.	Bellingham
Ballard, Louise, Spec.	Seattle
Balle, Alfred, Sci.	Seattle
Balthaser, Gerald V, LA.	Spokane
Balzer, Elsie Margaret, Sci.	Spokane
Balzer, Norbe C, UD, Bus.	Spokane
Balzer, Walter W, Bus.	Spokane
Bamford, Ruth, FA.	Seattle
Bancroft, Cecyl, LA.	Everett
Banker, Gordon F, LD, Bus.	Winthrop
Banks, Hugh Thomas, Grad.	Seattle
Banks, William C, LA.	Yakima
Baptista, Nicolas, Sci.	Philippines
Barbee, Richard E, Spec.	Seattle
Barber, Marguerite H, LA.	Cheney
Bard, Burton E, Min.	Seattle
Bard, Mary Ten Eyck, FA.	Seattle
Barden, Claudia S, LA.	Seattle
Barker, Carroll D, Sci.	Seattle
Barker, Robert W, Engr.	Seattle
Barkey, Annette Louise, Bus.	Seattle
Barkley, Barney, Engr.	Ellensburg
Barkhuff, Alice M, Grad.	Colloa
Barlow, Marie F, LA.	Bellingham
Barlow, Marie S, Sci.	Issaquah
Barnes, Chester F, LD, Sci.	Goldendale
Barnes, Dorothy M, LD, FA.	Seattle
Barnes, Edward, LA.	Seattle
Barnes, George H, For.	Rossland, BC
Barnes, Lucy R, LA.	Seattle
Barnes, Pierre T, LA.	Seattle
Barnes, Ruth Mable, FA.	Salem, Or
Barnett, Mack F, Sci.	Tacoma
Barnett, Nell M, Grad.	Seattle
Barnett, William A, LA.	Seattle
Barnhill, Frances L, LA.	Yakima
Barquest, Wm S, Min.	Seattle
Barr, Mrs Gertrude G, Ed.	Seattle
Barr, Virginia, Sci.	Seattle
Barrager, James B, LA.	Juneau, Alaska
Barrat, Boris, Sci.	Seattle
Barron, Dale H, Phar.	Seattle
Barrow, Gwendolyn, Sci.	Machias
Barrows, Eleanor, Ed.	Kake, Alaska
Bartels, Louise G, LA.	Seattle
Bartells, Gwendolyn, Sci.	Kirkland
Barth, Francis A, Bus.	Great Falls, Mt
Barthel, Harold L, Bus.	Seattle
Barthelemy, McNair Lillian, LD, FA.	Seattle
Bartlett, Frederick A, UD, For.	Boise, Ida
Bartlett, H C, LA.	Seattle
Bartley, J L, Engr.	Zillah
Bartolome, Gregorio F, Fsh.	Philippines
Bascom, Hartzell W, Law.	Monroe
Bash, Francis C, Min.	Seattle
Bash, Mary I, Grad.	Seattle
Bashey, Elmer, Engr.	Tacoma
Bashor, Thurston, LA.	Kelso

Bassage, Harold W, LA.....	Seattle
Bassett, Samuel B, Law.....	Seattle
Bassford, Albert F, Bus.....	Seattle
Bateson, Florence B, Sci.....	Olympia
Batie, Carmen A, LA.....	Twisp
Batie, Velma M, LA.....	Twisp
Battle, W T, For.....	Vancouver, BC
Baudour, Suzanne, LA.....	Seattle
Baumgartner, Grace, Grad.....	Seattle
Bauman, Carolyn M, LA.....	Ritzville
Bautista, Enrique, Engr.....	Philippines
Bautista, Marcellino, UD, Educ.....	Philippines
Bay, Mildred, UD, Educ.....	Lynden
Bayless, Marion, Sci.....	Seattle
Bayley, Emery P, LA.....	Seattle
Bayley, Madeline V, FA.....	Seattle
Bayley, Mildred, FA.....	Seattle
Bayley, Nancy, Grad.....	Seattle
Bayley, Nettie, LA.....	Seattle
Baylis, Charles A, Grad.....	Spokane
Bayliss, Lawrence A, LD, Engr.....	Seattle
Bazett, Marian, LA.....	Seattle
Beager, Laura, Bus.....	Seattle
Beall, Harry N, Grad.....	Raymond
Bean, Gilbert, LA.....	Seattle
Bean, Minnie D, LA.....	Tacoma
Beaver, Gladys, FA.....	Seattle
Bechler, La Roza, UD, Educ.....	Seattle
Beck, Dorothy, Sci.....	Boise, Ida
Beck, Gerald Laurence, Engr.....	Roslyn
Beck, Harry G, Sci.....	Seattle
Beck, James B, LA.....	Seattle
Beck, Jean, Sci.....	Seattle
Beck, N B, Jour.....	Seattle
Beck, William H, Bus.....	Seattle
Becker, Jack, LA.....	Seattle
Beckett, Ethelyn May, LA.....	Seattle
Beckett, Hugh M, Bus.....	Seattle
Beckett, Welton D, FA.....	Seattle
Beckett, Eleanor May, LA.....	Seattle
Beckmann, Perry H, Engr.....	Asotin
Becken, John C, LD, Bus.....	Hillsboro, Ore
Beckwith, Frances, LA.....	Seattle
Bedke, Madge, LA.....	Oakley, Ida
Beebe, Dorothy B, FA.....	Seattle
Beebe, Marion, FA.....	Seattle
Beek, John Jr, Sci.....	Seattle
Beers, Gwendolyn, Unc, LA.....	Seattle
Beers, Margaret, LD, Sci.....	DuPont
Beers, Norman A, Bus.....	Seattle
Beeser, Arnold R, Law.....	Seattle
Behan, James Edw, Bus.....	Seattle
Behrens, Audrey M, LA.....	Seattle
Behrens, Eunice C, LA.....	Seattle
Bell, Bunby, LD, LA.....	Astoria, Ore
Bell, Carl S, Grad.....	Seattle
Bell, Mrs Fanny G, Ed.....	Seattle
Bell, Frances, LD, FA.....	Booneville, Mo
Bell, Mildred, Sci.....	Yacolt
Bell, Milton, Bus.....	Seattle
Bell, Ward Y, Sci.....	Seattle
Bellazzi, Roberta A, LA.....	Seattle
Bellis, Harold T, FA.....	Seattle
Bellman, Vernon A, Bus.....	Aberdeen
Bender, Edwin B, Bus.....	Tacoma
Bender, Lester A, Sci.....	Tacoma
Benedetson, Selma A, LA.....	Aberdeen
Benedict, Rufus Jr, Bus.....	Puyallup
Benedict, Viva, Sci.....	Bellingham
Benedum, Clara, LA.....	Greenacres
Benedum, Darwin M, Sci.....	Greenacres
Benham, Dorothy, Sci.....	Seattle
Benjamin, George T, Min, Vancouver, BC	
Bennett, Lawrence, LD, FA.....	Seattle
Bennett, Lois E, LD, FA.....	Seattle
Bennett, Merriel W, Bus.....	Seattle
Bennett, Sumner W, Bus.....	Fall City
Bennett, Volney, LD, Bus.....	Seattle
Bennetts, Alice L, LA.....	Tacoma
Benson, R W, Bus.....	Seattle
Bentley, Galen W, FA.....	Seattle
Bentley, Gladys Anne, LA.....	Seattle
Bentley, Helen, Sci.....	Seattle
Bereiter, Catherine A, Sci.....	Seattle
Bereiter, Marvel, LA.....	Seattle
Berezovsky, Geo, Unc, Fsh.....	Russia
Berg, Axel K, Spec, Bus.....	Hoquiam
Berg, Mrs Margaret, Ed.....	Seattle
Berg, Wilbur, Bus.....	Tacoma
Berge, Sigfred, Engr.....	Everett
Bergeson, Silvia, LA.....	Seattle
Bergh, Grace, Sci.....	Seattle
Bergland, Helen D, FA.....	Seattle
Berglund, N Wm, Engr.....	Newcastle
Bergman, Eunice Margaret, Sci.....	Seattle
Bergstrom, Charlotte, FA.....	Seattle
Bergstrom, Theo, Engr.....	Seattle
Bernal, Federico A, Sci.....	Philippines
Bernard, Jacobs D, Phar.....	Seattle
Berolski, Edw M, Law.....	Bellingham
Berquist, Fred E, Grad.....	Spokane
Berry, Roy Nell, Engr.....	Tacoma
Berry, Theo F, LA.....	Seattle
Bertelson, Ernest, LA.....	Albert Lee, Minn
Best, Elmyra, Sci.....	Yakima
Best, Erlie C, Law.....	Grants Pass, Or
Best, Walter C, Bus.....	Seattle
Bethel, Frederick B, LA.....	Spokane
Bethel, Virginia R, LA.....	Aberdeen
Bettinger, Dawn, FA.....	Edmonds
Betts, Kennedy, LA.....	Seattle
Beutel, Margaret, LA.....	Tacoma
Beveridge, Alton V, Bus.....	Seattle
Bewley, Esther G, LA.....	Seattle
Beymer, Ralph, LD, LA.....	Seattle
Bibee, Georgia C, Sci.....	Seattle
Bice, Forrest Duane, Sci.....	Ferndale
Bickel, Wm D, Bus.....	Mountain Home, Ida
Bidlake, Florence Harriet, FA.....	Seattle
Bidwell, Louise C, Sci.....	Seattle
Biehn, Stanley, Sci.....	Yakima
Bigby, Valley, FA.....	Tacoma
Bigelow, Dwight B, Bus.....	Seattle
Biggar, Edson, Bus.....	Seattle
Biggers, Ruth, FA.....	Seattle
Biggs, Lodie, Sci.....	Seattle
Bigley, John, Ed.....	Cle Elum
Bigley, John, UD, Educ.....	Cle Elum
Bille, Warren G, LD, LA.....	So Tacoma
Billesbach, Martin M, Jour.....	Winlock
Billings, Chas N, Engr.....	Seattle
Bindon, Douglas, LA.....	Bellingham
Bindon, Leonard Wm, FA.....	Bellingham
Blugham, Irene, LA.....	Seattle
Bingham, Robin A, Sci.....	Port Angeles
Bircher, Donald O, Engr.....	Seattle
Bird, Byron M, Grad.....	Seattle
Birkeland, Paul, Bus.....	Bremerton
Bischoff, Paul G, Sci.....	Seattle
Bishop, Dorothy, LA.....	Everett
Bishop, Vivian, Sci.....	Everett
Bissett, C P, Law.....	Seattle
Black, Dorothy, LA.....	Seattle
Black, J A, Engr.....	Wenatchee
Black, Julia Kathryn, FA.....	Seattle
Black, Mary C, LA.....	Tacoma
Black, Ruth U, Sci.....	Port Angeles
Blackaller, Mary Louise, FA.....	Seattle
Blackburn, R L, Ed.....	Seattle
Blaine, James A, Unc, Law.....	Seattle
Blaine, Louisa, LA.....	Seattle
Blair, Birdie, Sci.....	Spokane
Blair, Wm J, Phar.....	Seattle
Blake, Maxine Uraine, LA.....	Seattle
Blakeslee, Geo H, Bus.....	Spokane
Blanchard, Fred C, LA.....	Skagway, Alaska
Blanchard, Mary, UD, LA.....	Seattle
Blando, Patricia, LD, LA.....	Philippines
Blanks, Evangeline, LD, FA.....	Everett
Blatherwick, Leonard N, FA.....	Quannah, Tex



Blaxill, Verna H, LA.....	Seattle	Bowen, Albert H, Engr.....	Seattle
Blasier, Veryl, LA.....	Portland, Or	Bowen, Beth, Sci.....	Seattle
Bleakney, Frederick W, Grad.....	Walla Walla	Bowen, Edward V, Bus.....	Seattle
Blethen, Francis A, Bus.....	Seattle	Bowen, William Edward, Bus.....	Spokane
Bloom, Josephine, LA.....	Denver Colo	Bower, Donald D, Bus.....	Centralia
Bloom, Dorothy, LA.....	Spokane	Bower, Ruth A, FA.....	Seattle
Bloomfield, E Jervis, LD, Bus.....	Vancouver, BC	Bowerman, Daniel H, LA.....	Ashland, Or
Blossom, Rosamond, LA.....	Seattle	Bowman, Conrad Henry, Grad.....	Lynden
Blowers, Francis E, For.....	Seattle	Bowman, Donald, For.....	Seattle
Bloxom, John M, UD, LA.....	Seattle	Bowman, William, Bus.....	Mabton
Blue, Albert W, Unc, Sci.....	Seattle	Bowman, William C, LA.....	Pt Orchard
Blue, Eugenia, LA.....	Seattle	Bown, Robert Frederick, Grad.....	Tacoma
Blue, Myrlam, Unc, Sci.....	Seattle	Boxer, Mary Edith, LA.....	Seattle
Blugerman, Leonard, Engr.....	Seattle	Boyce, Lenox, Bus.....	Seattle
Blum, John R, Bus.....	Seattle	Boyd, Clell G, Bus.....	Seattle
Blumberg, Frank E, Engr.....	Seattle	Boyd, Dwaln D, Bus.....	Seattle
Blumenstein, George W, Engr.....	Seattle	Boyd, Esther, Lib.....	Seattle
Boardman, Benton L, Engr.....	Seattle	Boyd, Kenneth F, Bus.....	Charleston
Boaz, Volney T, LA.....	Manson	Boyd, L F, Bus.....	Clarkston
Bock, Edna, LD, Bus.....	Seattle	Boyd, Mrs Margaret S, Sci.....	Kirkland
Bock, Helen M, LD, FA.....	Bolse, Ida	Boyd, Robert J, Min.....	Stellacoom
Bodenheimer, William R, Engr.....	Seattle	Boyden, Blaine M, LA.....	Issaquah
Bogert, Madeline, LA.....	Seattle	Boyer, Edith, LA.....	Seattle
Boggs, Thelma, LA.....	Seattle	Boyer, John J, LA.....	Seattle
Bogolavlenky, Boris, CE.....	Seattle	Boyer, Louis A, Bus.....	Seattle
Bohan, Richard, UD, Bus.....	Bremerton	Boyer, Margaret, LA.....	Seattle
Bohannan, Leslie H, Bus.....	Farmington, Ill	Boyer, Virginia, Sci.....	Seattle
Bohart, Ruby M, Grad.....	Seattle	Boyker, Maxine Marie, LA.....	Kent
Bohn, Rachel, Sci.....	Seattle	Boyle, Gordon L, Bus.....	Everett
Bolderston, Constance, UD, LA.....	Portl'd, Ore	Boyle, Dean G, LA.....	Seattle
Bolinger, Morris A, Lav.....	Methow	Boynton, Fred R, Law.....	Seattle
Bolles, Thos D, LA.....	Yakima	Brackett, Laurence E, LA.....	Seattle
Bolsover, G S, Bus.....	Seattle	Brackett, Leroy W, UD, Engr.....	Yakima
Bolstad, Arthur, LA.....	Seattle	Bradford, James M, Bus.....	Seattle
Bolstad, Bernard, Bus.....	Seattle	Bradford, Julia W, Spec.....	Seattle
Bomar, Richard J G, Unc, Sci.....	Tacoma	Bradley, Charles A, LA.....	Manchester, N H
Bonamy, Douglas G, Engr.....	Seattle	Bradley, Florence, Ed.....	Selah
Bond, Chas A, Engr.....	Seattle	Brady, Bryant D, LA.....	Seattle
Bond, Floyd K, ChE.....	Bellingham	Bradford, Caty J, Phar.....	Seattle
Bond, Ulysses S, Bus.....	Seattle	Bragdon, Wynne, Sci.....	Seattle
Bone, Marguerite, FA.....	Juneau, Alaska	Bragg, George Tully, Bus.....	Seattle
Bonell, James H, Bus.....	Fall City	Brainard, Silas A, Bus.....	Seattle
Bonesteel, Kathryn, FA.....	Watertown, SD	Branch, Willard H, Eng.....	Seattle
Bonnefond, R E, UD, LA.....	Seattle	Brandt, Dorothy M, LA.....	Seattle
Bonner, Ida, Sci.....	Seattle	Brandebery, Elizabeth, FA.....	Seattle
Bonnett, Howbart B, Grad.....	Seattle	Brandriff, Herman, Sci.....	Seattle
Booker, M Fay, Ed.....	Seattle	Brandt, Ralph L, LA.....	Seattle
Booker, Paul B, Engr.....	Seattle	Branigan, Frances, FA.....	Seattle
Boomer, Frances P, Sci.....	Edgewood	Brannen, Robert C, Bus.....	Seattle
Boomer, Frances Norun, Sci.....	Sunnyside	Brannon, David H, Bus.....	Hoquiam
Boomer, Haven M, Bus.....	Kelso	Bras, Clarice C, Sci.....	Seattle
Boone, Julia L, Sci.....	Edmonds	Brassington, Dorothy, LA.....	Seattle
Booth, Edwin C, Bus.....	Seattle	Bratcher, Carl Archie, LA.....	Pomeroy
Booth, Mira E, Ed.....	Washtucna	Bratt, Byron, Bus.....	Seattle
Boozer, Marjoric, FA.....	Seattle	Brattain, Betty, LA.....	Seattle
Borah, Mrs Juanita F, LA.....	Seattle	Bravender, Wm Fred, LA.....	Seattle
Bordeaux, Leo Joseph, Phar.....	Olympia	Bray, Frank N, Bus.....	Sumner
Borglin, Jos N, Engr.....	Seattle	Bray, J Harold, Bus.....	Sumner
Borland, Gretchen, FA.....	Seattle	Bray, Ruth A, FA.....	Seattle
Bornstein, Helen Gyle, LA.....	Seattle	Brazel, C C, Bus.....	Olympia
Borodin, Michael M, Fsh.....	Seattle	Brazel, Thos E, Bus.....	Seattle
Borrow, Martha, Ed.....	Seattle	Brazier, Donald H, Bus.....	Seattle
Borst, Joseph O, Engr.....	Coalinga, Cal	Breckenridge, James, Bus.....	Seattle
Bostwick, J Robert, LD, Engr.....	Juanita Pt	Brendel, Mildred, LA.....	Seattle
Bosworth, Donald W, Bus.....	Seattle	Brennan, Robert A, UD, Bus.....	Seattle
Bosworth, Dorothy L, LD, FA.....	Seattle	Brennen, Gordon N, LD, Engr.....	Seattle
Bosworth, Ralph, Engr.....	Kirkland	Brennon, J P, Spec.....	Seattle
Botsford, Lawrence, LA.....	Seattle	Brethorst, Lydia, LA.....	Seattle
Botsford, Sherwood, Engr.....	Seattle	Brewer, Alice, Frances, Sci.....	Tacoma
Boudink, Lillian M, Spec.....	Tacoma	Brewer, G E, Bus.....	Seattle
Boundy, C Melburn, Ed.....	Seattle	Brewer, R Kenneth, Bus.....	Spokane
Bourgett, Emma Eunalle, FA.....	Seattle	Brewer, Vincent R, Bus.....	Seattle
Bourgette, Ralph Joseph, Bus.....	Seattle	Bridgeman, G H, Bus.....	Seattle
Bourlier, Perry L, Grad.....	Seattle	Bridgman, Alfred W, Bus.....	Vashon
Bours, Philip Wm, LA.....	Seattle	Briggs, Clifford M, Engr.....	Bremerton
Bouse, Earl Fred, For.....	Seattle	Briggs, Violet, Unc, LA.....	Coeur d'Alene, Ida
Bousfield, Winfred, Ed.....	Seattle	Briles, Gerald E, LD, Bus.....	Seattle
Boutelle, Virginia S, LA.....	Seattle	Brink, Betty A, UD, LA.....	Portland, Ore
Bovey, Paul S, Bus.....	Seattle	Brink, Herbert, Bus.....	Kent
Bow, Kathleen, Sci.....	Seattle	Brink, Ralph O, Bus.....	Seattle

Briscoe, Jacob W, Bus....	Grangeville, Ida	Buley, Lottie, SC.....	Gordonville, Minn
Britt, Jacob, Engr.....	Juneau, Alaska	Bull, Mable, LA.....	Parkland
Britt, Maurice B, Spec.....	Seattle	Bull, Jennie, LA.....	Seattle
Britton, Cathryn Margaret, FA.....	Wilbur	Bullock, Virgil W, Engr.....	Seattle
Britton, Hazel M, LA.....	Spokane	Bundy, Margaret, Jour.....	Seattle
Brix, Dale R, Sci.....	Monroe	Bundy, Robert, LD, For.....	Seattle
Brix, Egbert, LA.....	Tacoma	Bungay, Clarence Roy, Bus.....	Spokane
Brobeck, Roy A, FA.....	Seattle	Bungay, Vaughn, Bus.....	Spokane
Brobst, Robert, Unc, Bus.....	Bellevue	Bunker, Stanley, LD, For.....	Seattle
Brocksmith, Norman A, Phar.....	Nasheca, Mt	Bunoan, Pedro B, LD, Sci.....	Philippines
Broder, Percy, LA.....	Seattle	Burbank, Myrtle, Sci.....	Seattle
Broderick, R Earnest, UD, For.....	Seattle	Burd, Dorothy, LA.....	Browning, Mont
Brody, Leon, LA.....	Seattle	Burdic, Frances, LA.....	Seattle
Broeren, John N, Engr.....	Woodland	Burdick, Dorothy, Sci.....	Seattle
Broeren, Lawrence, Engr.....	Woodland	Burdick, Karl, Bus.....	Seattle
Bronson, Dana Alan, LA.....	Seattle	Burdick, Muriel J, LD, FA.....	Everett
Bronson, Donald, LA.....	Seattle	Burford, Geo B, Fsh.....	Juneau, Alaska
Bronson, Robert U, Bus.....	Seattle	Burgess, Carolyn, FA.....	Seattle
Brook, Mrs Alice, LD, Sci.....	Seattle	Burgess, David I, Bus.....	Boise, Ida
Brooks, Bernice Norma, LA.....	Wapato	Burk, Clarence F, Engr.....	Seattle
Brooks, Sheldon, LD, Engr.....	Seattle	Burke, Lloyd, Sci.....	Stockton, Cal
Brooks, Winston, Unc, FA.....	Wapato	Burkman, Joel A, Grad.....	Seattle
Broom, Lylas, LA.....	Edmonds	Burkman, Orpha, Ed.....	Seattle
Brossolt, Havana, LA.....	Butte, Mont	Burmeister, Claudys, FA.....	Seattle
Browder, Robert N, Unc, LA.....	Grandview	Burnam, David L, FA.....	Anacortes
Brown, M Catherine, LA.....	Selah	Burnam, Donald, LA.....	Walla Walla
Brown, Cecil Clark, Sci.....	Dayton	Burnell, Louise, Sci.....	Seattle
Brown, Charles L, Bus.....	Seattle	Burnett, Bert, LA.....	Seattle
Brown, Davenport J, LD, Bus.....	Sumas	Burnett, Charles Hugh, LA.....	Hollywood
Brown, Donald McLean, Engr.....	Kent	Burlett, J A, Engr.....	Seattle
Brown, Dorothea M, FA.....	Seattle	Burnett, Norman M, Bus.....	Chehalis
Brown, Edward G, Bus.....	Spokane	Burns, Dorothy Frances, LA.....	Mt Vernon
Brown, Elizabeth, LA.....	Seattle	Burns, Gordon K, For.....	Blairmore, Alta
Brown, Emilie Pierman, LA.....	Seattle	Burns, John Allen, Bus.....	Seattle
Brown, Florinda, UD, Educ.....	Tacoma	Burns, Loyal, Engr.....	Thorp
Brown, Gordon A, Bus.....	Seattle	Burns, Malcolm, Sci.....	Seattle
Brown, Harold Roswell, Engr.....	Seattle	Burns, M W, Bus.....	Seattle
Brown, Jane, FA.....	Seattle	Burns, Nina, FA.....	Seattle
Brown, John B, LD, Fsh.....	Seattle	Burpee, Frances Helen, Sci.....	Bellingham
Brown, Kathryn, LA.....	Seattle	Burr, George Danforth, Engr.....	Seattle
Brown, Martell, Bus.....	Hoquiam	Burr, Margaret, Grad.....	Seattle
Brown, Martin, Engr.....	Seattle	Burr, Wallace M, Bus.....	Seattle
Brown, Mary Catherine, LA.....	Seattle	Burroughs, Alfred P, Min.....	Woodland, N Y
Brown, Norman C, LD, LA.....	Everett	Burroughs, Walter L, Jour.....	Tacoma
Brown, Richard, Bus.....	Wallace, Ida	Burrus, Adeleine, LA.....	Pocatello, Ida
Brown, Robert W, LA.....	Seattle	Burrus, Ophelia, LA.....	Pocatello, Ida
Brown, Sarah, Grad.....	Seattle	Burson, Norris R, Bus.....	Seattle
Brown, Stephen D, Spec.....	Seattle	Burston, Arthur W, Phar.....	Seattle
Brown, Stephen Lincoln, Sci.....	Seattle	Burston, Ray, LD, Phar.....	Seattle
Brown, Vera, FA.....	Seattle	Burton, Clara Belle, LA.....	Colby
Brown, William W, Bus.....	Seattle	Bush, Elizabeth P, FA.....	Seattle
Brown, Winthrop Crockett, Min.....	Sumas	Bush, Kenneth S, Bus.....	Spokane
Brown, Warren Jr, LA.....	Seattle	Bush, Lyle K, Grad.....	Bay Center
Browne, Karl M, LD, Bus.....	Wenatchee	Bushee, Alice, FA.....	Seattle
Browne, Marjory Caroline, LA.....	Wenatchee	Bushell, Lydia, Sci.....	Seattle
Brownfield, Floyd K, Unc, LA.....	Chelan	Russ, Loring A, Sci.....	College Place
Browning, George, Bus.....	Seattle	Butchart, Chas S, LD, Bus.....	Seattle
Browning, James L, Grad.....	Warren, Ill	Butler, Arthur, Unc, Bus.....	Seattle
Broxon, Margaret, LA.....	Monrovia, Cal	Butler, Dorothy L, LA.....	Forest
Broyles, Frances, Sci.....	Seattle	Butler, George T, LA.....	Seattle
Brueggeman, William, Engr.....	Seattle	Butler, John, FA.....	Seattle
Brundage, Keene N, LA.....	Spokane	Butler, William T, Engr.....	Seattle
Brunner, Elma, FA.....	Seattle	Butt, Ferdinand H, Grad.....	Seattle
Brunner, Eugene C, Bus.....	Seattle	Butt, F Mildred, FA.....	Seattle
Brunner, John F, LD, Engr.....	Addy	Butt, Richard V, Sci.....	Seattle
Brunswig, Norman W, LA.....	Chehalis	Butt, William H, Bus.....	Seattle
Bryan, Collis C, Engr.....	Seattle	Butterfield, Ward, Bus.....	Seattle
Bryan, James W, Law.....	Bellingham	Butterworth, Harry C, Engr.....	Seattle
Bryan, Merlaine, LD, LA.....	Seattle	Butts, Everett O, Law.....	Everett
Bryant, Charles M, Engr.....	Yakima	Byars, Roe F, LA.....	Snoqualmie Falls
Bryant, Robert C, Bus.....	Clarkston	Byers, Eleanor, LA.....	Everett
Buchanan, Lorna M, LA.....	Clear Lake	Byers, Elizabeth, LA.....	Seattle
Buck, Harry Clinton, LA.....	Seattle	Byers, Dorothy, Sci.....	Seattle
Buck, Margaret F, LD, LA.....	Yakima	Byers, John R, Sci.....	Everett
Buckinger, Clarence, FA.....	Seattle	Byers, Maurice T, LA.....	Everett
Buckley, Daniel, Sci.....	Seattle	Byles, Chester, LA.....	Montesano
Buckley, Harry B, For.....	Seattle	Ryrd, Gladys, Sci.....	Burns, Ore
Buerk, Arthur W, Bus.....	Seattle	Byrkit, George P, Bus.....	Tacoma
Buffalo, Paul, LA.....	Seattle	Byrne, Kathryn, Sci.....	Seattle
Buhl, Frances Helen, Ed.....	Seattle	Byrne, Marie, Bus.....	Seattle

Byrne, William G, UD, Engr.....Alaska  
 Byrnes, Robert E, Bus.....Seattle  
 Byron, Robert Lee, Bus.....Bellingham

Cady, Barbara E, LA.....Seattle  
 Cady, H C, LD, Sci.....DuPont  
 Cady, June Gray, Bus.....Wenatchee  
 Cahill, Lillis, LA.....Seattle  
 Cain, Russell A, Phar.....Richmond Beach  
 Calachan, F G, LA.....Philippines  
 Caldwell, Archie E, LD, Sci.....Seattle  
 Caldwell, Charles C, Sci.....Hoquiam  
 Caldwell, Derrald V, Bus.....Seattle  
 Caldwell, Eleanor, LA.....Seattle  
 Caldwell, Harriet, LA.....Centralia  
 Caldwell, John H, LA.....Keneraw, Neb  
 Calkin, Harriet, UD, LA.....Seattle  
 Calkins, Richard T, Bus.....Shewano, Wis  
 Callahan, Arthur H, Law.....Seattle  
 Callahan, Kenneth, LD, FA.....Seattle  
 Callett, Arthur, Law.....Seattle  
 Callow, Doris, FA.....Seattle  
 Calsky, Frances, FA.....Seattle  
 Calvin, James, LD, Sci.....Naches  
 Cameron, Donald H, For.....Yakima  
 Cameron, Donald P, Bus.....Victoria, B C  
 Cameron, Erdine Stafford, FA.....Seattle  
 Cameron, Jack, Unc, Bus.....Spokane  
 Campbell, Adrienne Mary, LA.....Seattle  
 Campbell, Alex, Bus.....Seattle  
 Campbell, Alice A, Jour.....Seattle  
 Campbell, Clyde G, LA.....Bellingham  
 Campbell, Clarence, LA.....Seattle  
 Campbell, Donald H, Phar.....Blaine  
 Campbell, Ernest W, Grad.....Seattle  
 Campbell, Helen Day, FA.....Portland, Or  
 Campbell, James A, Law.....Seattle  
 Campbell, John Frank, Bus.....Asotin  
 Campbell, Josephine M H, LA.....Rolling Bay  
 Campbell, Lorraine, LA.....Seattle  
 Campbell, Marjorie M, Sci.....Portland, Or  
 Campbell, Mildred, Phar.....Colville  
 Campbell, Morrison, LA.....Seattle  
 Campbell, Myron M, Sci.....Rosalia  
 Campbell, Robert A, Sci.....Rosalia  
 Campbell, Traver, Engr.....Seattle  
 Camperson, B H, Engr.....Seattle  
 Canfield, Ruby, FA.....Seattle  
 Canney, Ella Mae, Spec, LA.....Seattle  
 Canney, Frank R, Engr.....Seattle  
 Cannon, Joe, Bus.....Spokane  
 Capen, Donald, Bus.....Seattle  
 Capen, Ellery, Bus.....Yelm  
 Caples, D Elwood, Law.....Vancouver  
 Carbajosa, Vincent, Law.....Philippines  
 Carberry, Margaret E, LA, Glacier Pk, Mt  
 Carder, Ruth, Sci.....Seattle  
 Carey, Charles R, LA.....Colville  
 Carey, Hollis L, Sci.....Seattle  
 Carey, Vincent, LA.....Lacey  
 Carey, Willard W, Sci.....Walla Walla  
 Carico, Edgar, Bus.....Seattle  
 Carlander, Gertrude, FA.....Seattle  
 Carleton, A C, Engr.....Seattle  
 Carlisle, Verona McRae, Sci.....Vancouver, BC  
 Carlson, Carl S, Bus.....Everett  
 Carlson, Donald, Engr.....Centralia  
 Carlson, Floyd E, LD, LA.....Mt Vernon  
 Carlson, George, LD, Bus.....Independence  
 Carlson, Gladys May, LA.....Mt Vernon  
 Carlson, Helen M, LA.....Seattle  
 Carlson, John Arrid, Sci.....Seattle  
 Carlson, Julia Tecla, LA.....Seattle  
 Carlson, Laurence E, Engr.....Twain Falls, Ida  
 Carlson, Oscar C, LD, Pharm.....Wilkeson  
 Carlson, Oscar F, Engr.....Seattle  
 Carlson, Reuben, LA.....Tacoma  
 Carlson, Theodore, LA.....Everett  
 Carlson, Wilma A, Bus.....Alaska

Carlston, Kenneth S, Bus.....Seattle  
 Carlton, Victor Leonard, Sci.....Oak Point  
 Carman, Helen, LA.....Portland, Or  
 Carney, Elvin P, LA.....Seattle  
 Carpenter, Edward L, Engr.....Seattle  
 Carmichael, Chris, Bus.....Seattle  
 Carper, Theron Phillip, Bus.....Seattle  
 Carr, Dugald M, Engr.....Seattle  
 Carr, J R Cuthbert, Phar.....Tacoma  
 Carroll, Emmett R, Grad.....Seattle  
 Carroll, Frank M, Bus.....Seattle  
 Carroll, Gerhard S, Sci.....Seattle  
 Carroll, Lois, Sci.....Seattle  
 Carroll, M Jack, Bus.....Seattle  
 Carroll, Theodore B, FA.....Everett  
 Carroll, Virginia W, LA.....Seattle  
 Carson, Benjamin H, Spec, Bus.....Seattle  
 Carson, Emma L, Ed.....Seattle  
 Carstens, Clarence T, Engr.....Seattle  
 Carstens, Ernest, Bus.....Seattle  
 Carstens, Lillian, FA.....Seattle  
 Carswell, Donald W, LA.....Spokane  
 Carter, Burdette M, Bus.....Centralia  
 Carter, Charles, UD, Bus.....Seattle  
 Carter, Elizabeth, FA.....Seattle  
 Carter, Faith, Sci.....Seattle  
 Carter, Frank W, LD, Bus.....Medina  
 Carter, Leo Alexander, Engr.....Creston  
 Carter, L M, Engr.....Friday Harbor  
 Carter, Stewart, LA.....Hollywood, Cal  
 Carter, Uura Dorothea, LA.....Seattle  
 Carter, Wallace E, Engr.....Bellevue  
 Carter, William Laurence, Bus.....Kalama  
 Cartwright, Edward, Sci.....Seattle  
 Cartwright, Vance, Engr.....Seattle  
 Carver, D L, Unc, Bus.....Florence, Mont  
 Carver, Howard, LD, Bus.....Florence, Mont  
 Cary, Helen, Spec, Sci.....Seattle  
 Case, Fremont, LD, LA.....Seattle  
 Case, Kenneth, LA.....Seattle  
 Case, Howard L, LA.....Juneau, Alaska  
 Casey, Lorraine Ellen, Fa.....Seattle  
 Casey, Mary H, LD, FA.....Seattle  
 Cassels, Harry A, Bus.....Seattle  
 Cassil, C H, Bus.....Spokane  
 Castillo, Felix B, Engr.....Philippines  
 Custle, Sara, Bus.....Centralia  
 Castor, T Davis, Engr.....Seattle  
 Caster, Ray F, Law.....Martin  
 Caulkins, Alice E, LA.....Everett  
 Cauvel, Orvel S, Engr.....Spokane  
 Cavanaugh, Albert B, Bus.....Porterville, Cal  
 Cave, Floyd A, LA.....Seattle  
 Cave, Roy Clinton, Grad.....Seattle  
 Cavette, Max, Bus.....Seattle  
 Cayton, Madge R, Bus.....Seattle  
 Cekada, Rmet B, Sci.....Tacoma  
 Chace, Frank T, LA.....Stanton, Neb  
 Chadbourne, Chas A, LA.....Cresnot  
 Chaffee, Dorothea Lucile, LA.....Seattle  
 Chalaire, Donald, Grad.....New York, NY  
 Chamberlain, Virginia, LA.....Seattle  
 Chamberlain, Waldo, LA.....Seattle  
 Chambers, Ava L, Sci.....Warren, Wis  
 Chambers, Bess, LA.....Seattle  
 Chambers, Horace, LA.....Seattle  
 Chan, Geo L, Unc, Bus.....China  
 Chandler, Berniece, FA.....Seattle  
 Chandler, Harry Ruel, Bus.....Ridgefield  
 Chang, Hai Yun, LA.....Shanghai  
 Chang, H S, Law.....Hong Kong  
 Chang, Pu Yuan, Bus.....China  
 Chang, Tse-Sheng, LA.....China  
 Channell, Geo, Unc, Bus.....Seattle  
 Channel, George, Bus.....Seattle  
 Chan-Yam, Victor, LA.....Seattle  
 Chapman, Edith, Grad.....Seattle  
 Chapman, Harold G, LA.....Tacoma  
 Chapman, Horace, LA.....Seattle  
 Chapman, John C, Bus.....Seattle

Chappel, Winifred.....	Seattle	Clarke, Samuel J, For....	Washington, DC
Chapple, Guernsey P, Engr.....	Yakima	Clarke, Stanley J, LA.....	Vancouver, BC
Chard, Ronald L, Bus.....	Pomeroy	Classic, Ralph F, Fish.....	Portland, Ore
Charleston, Jack L, Bus.....	Seattle	Claus, Christian E, Ed.....	Seattle
Charleston, Wm M, LA.....	Seattle	Clausen, Chester K, CE.....	Seattle
Charlesworth, Grace, Sci.....	Bellingham	Clauson, John H, Bus.....	Seattle
Charlesworth, Ruth, FA.....	Bellingham	Clayberg, Sylvester, Bus.....	Avon, Ill
Charleris, Jim Miller, Bus.....	Great Falls, Mt	Clayton, Walter C, Engr.....	Seattle
Chase, Dorothy, LA.....	Edmonds	Cleaver, Gertrude, LA.....	Everett
Chatterton, Mary J, LA.....	Seattle	Clein, Lillian, Phar.....	Seattle
Cheal, Mary, FA.....	Seattle	Clelland, Isabelle M, FA.....	Seattle
Cheim, Natalie, LA.....	Tacoma	Clemans, Kate, LA.....	Alpine
Chen, David H, Bus.....	China	Clement, Andrew W, Engr.....	Seattle
Chen, Duang-Bing, Engr.....	China	Clement, Robt A, LA.....	Spokane
Chen, Kuei M, Unc, Bus.....	Sacramento, Cal	Cleveland, Carl M, LA.....	Tacoma
Chen, Shau Tich, Bus.....	China	Clifton, Earle, LA.....	Granite Pass, Od
Cheney, Pearle, Bus.....	Seattle	Clifton, Evelyn, LA.....	Seattle
Cheng, Pao Yuan, Grad.....	China	Cline, Denzel C, LA.....	Isabel, Kan
Cheng, Rao-Ku, LA.....	China	Cline, Eleanor, LD, FA.....	Seattle
Chesley, Dorothy Helen, Grad.....	Seattle	Clingan, Frederick S, LA.....	Seattle
Chesnut, Margaret E, LA.....	Seattle	Clingan, Helen, Sci.....	Seattle
Chess, Samuel I, UD, Phar.....	Seattle	Clithero, Raymond H, Bus.....	Yakima
Chester, W G, ME.....	Bellingham	Cloetta, Blanche, LA.....	Seattle
Cheung, H S, LA.....	Seattle	Closson, Louise, LA.....	Seattle
Childster, Charles R, Bus.....	Seattle	Cloughley, Walter M, Bus.....	Yakima
Childs, Harry J, LA.....	Tacoma	Coale, A Draper, LA.....	Tacoma
Chilton, Floyd D, Bus.....	Seattle	Coats, Florence, Sci.....	Raymond
Chilton, Rex W, LD, Bus.....	Seattle	Cobb, Genevieve, Sci.....	Seattle
Chin, Carolyn F, FA.....	Seattle	Cobb, Maurice, UD, Bus.....	Wapato
Chinn, Yuin Kee, LD, Bus.....	Seattle	Cobbey, J A, LA.....	Moscow, Ida
Chisholm, Dorothy M, FA, Wrangell, Alaska		Cochran, Edythe, FA.....	Spokane
Chisholm, Frances B, LA.....	Seattle	Cochran, Herbert W, Engr.....	Tacoma
Chittenden, Theodore P, Bus.....	Seattle	Cochran, Neil M, Bus.....	Shomish
Chitty, Lyman M, Engr.....	Everett	Cochran, Stanley, Engr.....	Seattle
Chiu, Tin Mook, Bus.....	China	Cochrane, Edw L, Law.....	Kent
Chopson, Warner, LA.....	Seattle	Cochrane, Roy, Ed.....	Seattle
Choate, Elizabeth, LD, FA.....	Seattle	Coe, Earl Alphonso, Sci.....	Portland, Or
Christensen, Clara M, Grad.....	Marysville	Coffee, W Glennon, Bus.....	Tacoma
Christensen, Elsa Henrietta, LA.....	Seattle	Coffey, Margaret Vallere, Ed.....	East Seattle
Christensen, Ferdinand, Sci.....	Seattle	Coghlan, Willard A, Bus.....	Seattle
Christensen, Nels C, LD, Bus.....	Lisabena	Cohen, Fannie S, Ed.....	Seattle
Christianson, Victor C, LA.....	Everett	Cohen, Joseph, LA.....	Seattle
Christie, Amos U, Sci.....	Eureka, Cal	Cohen, Phillip G, Grad.....	Tacoma
Christine, Chadwick, Sci.....	Tacoma	Cohn, Lewis M, LD, Sci.....	Seattle
Christophersen, Carl F, Law.....	Oakland, Cal	Cohn, Rose M, LA.....	Spokane
Christy, Bruce V, Engr.....	Seattle	Cohnan, Isabel S.....	Seattle
Chuch, Nai Jau, Bus.....	China	Coke, Martha, UD, Educ.....	Seattle
Chumlea, Leland H, LA.....	Bellingham	Colby, Thomas B, Grad.....	Seattle
Church, Anna E, Sci.....	Tacoma	Cole, Frances, LA.....	Everett
Church, Richard A, Engr.....	Seattle	Cole, Harold, Bus.....	Spokane
Churchill, Eunice, FA.....	Ellensburg	Cole, Helen Voss, LA.....	Forsyth, Mt
Churchill, Niles, LD, Bus.....	Centralia	Cole, Helene, Jour.....	Seattle
Churchill, Verne G, Bus.....	Kirkland	Cole, Marian Russell, LA.....	Seattle
Churney, Otto Leonard, Sci.....	Deming	Cole, Marjorie Edith, LD, Phar.....	Seattle
Chute, H Gordon, Law.....	Seattle	Cole, Walter J, LA.....	Seattle
Clancy, Alice, FA.....	Seattle	Collard, Albert Ed, LD, Bus.....	Spokane
Clancy, Winifred, FA.....	Medford, Ore	Collett, Wm Richard, Sci.....	Tacoma
Clark, A Everett, Bus.....	Everett	Collie, Ross F, LA.....	Seattle
Clark, A H, Engr.....	Panama Canal Zone	Collier, Helen N, Grad.....	Seattle
Clark, Alta M, Sci.....	Oakland, Cal	Collin, Herbert, Bus.....	Seattle
Clark, Arthur B, Bus.....	Seattle	Collins, Anna M, Grad.....	Seattle
Clark, Ben Inglis, Engr.....	Seattle	Collins, Cyril A, Engr.....	Seattle
Clark, David P, LA.....	Ellensburg	Collins, Hazel Irene, LA.....	Tacoma
Clark, Halbert H, Sci.....	Seattle	Collins, Narcissa L, LA.....	Seattle
Clark, Helen Davis, LA.....	Seattle	Collins, Norman, Bus.....	Spokane
Clark, Helen Frances, LA.....	Seattle	Collins, Parker P, LD, LA.....	Seattle
Clark, Howard A, Bus.....	Seattle	Collins, William A, LD, Engr.....	Seattle
Clark, Irl Bert, Bus.....	Seattle	Colman, Isabel, LA.....	Seattle
Clark, J Denny, Engr.....	Seattle	Colvin, Evelyn A, LA.....	Seattle
Clark, Lucile Jennie, LA.....	Centralia	Combes, Esther M, Sci.....	Seattle
Clark, Marjorie E, LA.....	Seattle	Combs, Dorothy June, LA.....	Seattle
Clark, P B, Engr.....	Bellingham	Comings, Everett L, Engr.....	Bremerton
Clark, Stanley Arthur, Engr.....	Centralia	Comings, Paul, Unc, Engr.....	Bremerton
Clark, Wesley M, Sci.....	Spokane	Commerce, Clifford Hugh, Bus.....	Colville
Clarke, Geo E, LA.....	Spokane	Compton, Ann, LA.....	Seattle
Clarke, Geo W, LA.....	East Seattle	Compton, Harry Otis, Engr.....	Seattle
Clarke, John F, Engr.....	Bellingham	Compton, Merrill E, Bus.....	Seattle
Clarke, Katherine, LA.....	Seattle	Cone, Maurice H, LD, Engr.....	Seattle
Clarke, Mary L, LA.....	Vancouver	Condon, Hal, Bus.....	Seattle
Clarke, Robt W, Bus.....	Olympia	Condy, Tom P, Engr.....	Sedro Woolley
Clarke, R Milton, LA.....	Bellingham		

Conger, Dorothy Mae, LA.....	Seattle
Conger, Wm M. LD, LA.....	Seattle
Conklin, Russel, Bus.....	Spokane
Conner, Amy Vesta, LA.....	Newcastle
Connolly, Zoia E, LA.....	Seattle
Connor, Aileen, LA.....	Seattle
Conover, Charles N. LD, LA.....	Seattle
Constans, Alvin M. Bus.....	Seattle
Conway, Jack, LA.....	Seattle
Conway, Norman, LD, Bus.....	Seattle
Cook, Arthur D. LD, Bus.....	Chimacum
Cook, Arthur D. Engr.....	Port Ludlow
Cook, Chesley M. Bus.....	Seattle
Cook, Doris, Bus.....	Seattle
Cook, Jack, Bus.....	Snohomish
Cook, Jo D. Law.....	Tacoma
Cook, Marjorie, LD, LA.....	Seattle
Cook, Parker E. LA.....	Seattle
Cook, Richard H. Phar.....	Seattle
Cook, Richard H. Sci.....	Bellingham
Cooke, J. Geraldine, UD, Educ.....	Seattle
Cooke, Huldah, Sci.....	Bellingham
Cookerley, Wm N. Law.....	South Milford, Ind
Cookingham, Merritt G. Engr.....	Tacoma
Coolidge, Margaret T. Sci.....	Seattle
Coolley, Zoe L. FA.....	Seattle
Coolidge, Alethea, FA.....	Seattle
Coons, Helen E. FA.....	Aberdeen
Cope, Irene, LD, FA.....	Seattle
Cooper, Edwin V. LD, Sci.....	Seattle
Cooper, Elizabeth, LA.....	Seattle
Cooper, John D. Bus.....	Tacoma
Cooper, Omer Claude, Engr.....	Auburn
Cooperman, M. H. Grad.....	Brandon, Can
Copenhaver, Edith, Bus.....	Seattle
Copenhaver, Marie B. FA.....	Seattle
Copland, Nena, Sci.....	Seattle
Coplen, Donald G. Min.....	Seattle
Coppage, Thos R. Grad.....	Seattle
Corbett, Cathryn, LA.....	Seattle
Corbett, Geo T. Bus.....	Seattle
Corbett, Kathleen, UD, LA.....	Huntsville
Corcoran, James P. Engr.....	Seattle
Corey, Elva Florence, Bus.....	Seattle
Corlett, Mildred V. LA.....	Seattle
Cornelius, Roland, Bus.....	Seattle
Cornell, Dorothy C. Bus.....	Tacoma
Corner, Howard, Engr.....	Seattle
Corson, K P. For.....	Seattle
Cory, Merle Ralph, LA.....	Tacoma
Cosser, Harold C. Bus.....	Port Angeles
Cosser, Leonard, Bus.....	Port Angeles
Costello, Ellen Marie, FA.....	Tacoma
Costner, Leslie, Bus.....	Seattle
Coughlin, Paul, LA.....	Spokane
Courtney, Chas Edwin, Law.....	Seattle
Courtney, Marta I. Sci.....	Chicago, Ill
Courtright, William, LD, LA.....	Seattle
Coventry, Edwin J. LA.....	Everett
Covington, Duane Monroe, Engr.....	Seattle
Cowan, Carol, LA.....	Medinn
Cowan, P. Bus.....	Revelstoke, BC
Cowles, Emma M. Grad.....	Yakima
Cowley, Katherine P. FA.....	Spokane
Cowling, Owen S. LA.....	Spokane
Cowling, Richard Oswald, Bus.....	Spokane
Cox, Bernadine E. LA.....	Seattle
Cox, Carl E. Bus.....	Houquiam
Cox, Cliveden L. LA.....	Hot Springs, Ark
Cox, Mrs Minnie Dolby, LA.....	Seattle
Coyne, Sophie, LA.....	Wallace, Ida
Craft, Carroll M. LA.....	McCleary
Craft, Doris Thelma, LA.....	McCleary
Craig, Marjorie B. FA.....	Seattle
Craig, L A. Bus.....	Seattle
Cram, Evelyn, LA.....	Raymond
Cramer, Dorothy M. Sci.....	Bellevue
Cramer, Dwight L. Phar.....	Centralia
Crandall, Marguerite E. LA.....	Seattle
Crane, Alice E. Sci.....	Seattle
Crane, Marlon A. LA.....	Seattle
Crankshaw, Claude P. FA.....	Monroe
Craven, Dorothy, Sci.....	Butte, Mt
Crawford, Ben, Bus.....	Tacoma
Crawford, Edw I. Grad.....	Seattle
Crawford, Frank S. Bus.....	McMinnville, Or
Crawford, Roberta M. FA.....	Seattle
Creamer, Evelyn Marlon, LA.....	Ferndale
Creltz, Wm B. Sci.....	Portland, Or
Criddle, Carol E. FA.....	Seattle
Crim, Dorothy, Ed.....	Seattle
Cristman, Martha E. Sci.....	Portage
Crofoot, Mentha, Ed.....	Seattle
Crompton, Margaret, Lib.....	Victoria, BC
Cropps, Charlottee, Sci.....	Seattle
Crosby, Forrest, Bus.....	Seattle
Crosby, Harold W. Bus.....	Seattle
Crosby, Roy H. Engr.....	Seattle
Croze, Wallace B. Bus.....	Seattle
Cross, Gertrude Elizabeth, LA.....	Ephrata
Crouch, Chas W. FA.....	Seattle
Crouch, Charles R. LA.....	Seattle
Crouley, Beatrice M. LA.....	Seattle
Crowell, Rennie W. Bus.....	Seattle
Crowston, Grace, Sci.....	Namire, Alta
Crump, Leonard W. Engr.....	Tacoma
Cruzen, Edw A. Bus.....	Seattle
Cruzen, Eugenia C. Bus.....	Seattle
Cryan, Eleanor N. LA.....	Yakima
Cullinan, Nicholas C. LA.....	Seattle
Cultum, Gordon L. Engr.....	Seattle
Culver, Edith, LA.....	Spokane
Cumins, Clarence, LD, LA.....	Wenatchee
Cummins, Grace, LA.....	Bellingham
Cummins, Lula E. Grad.....	Seattle
Cunditt, Velda P. Sci.....	Wenatchee
Cunningham, John P. LD, LA.....	Seattle
Cunningham, Marvel, Sci.....	Ellensburg
Curry, Altha Perry, Bus.....	Seattle
Curry, Harry C. Bus.....	Sedro Woolley
Curry, Jerome J. Bus.....	Yakima
Curry, Mildred, FA.....	Seattle
Curry, Wm Leslie, Engr.....	Seattle
Curtin, Hugh M. Spec.....	Seattle
Curtis, Elizabeth L. LA.....	Seattle
Curtis, Eunice M. Bus.....	Seattle
Cushman, Willis E. LA.....	Doty
Cussac, A C. Bus.....	Issaquah
Cutler, Denzil A. Engr.....	Vashon
Cutting, Glenn P. Bus.....	Seattle
Cutting, Judson M. Bus.....	Seattle
Cutting, Julia W. LA.....	Seattle
Cutts, Cecillia, Grad.....	Seattle
Dagg, Harold M. UD, Bus.....	Seattle
Dahl, Bernice I. Grad.....	Seattle
Dahl, Florence, Ed.....	Seattle
Dahl, Helen Electa, Bus.....	Seattle
Dahlberg, Edith, Sci.....	Seattle
Daigh, Margaret L. LA.....	Kirkland
Dailey, Edith L. LA.....	Seattle
Dailey, Manvel C. LD, Engr.....	Seattle
Dallas, James P. Engr.....	Seattle
Dally, Harold Nelson, Min.....	Seattle
Dalgy, Jean, UD, Educ.....	Seattle
Daly, Elizabeth, LA.....	Pt Townsend
Daly, William J. Law.....	Pt Townsend
Damerell, Richard V. Sci.....	Eurlington
Daniel, Virginia, Sci.....	Seattle
Daniels, Albert S. Bus.....	Tacoma
Daniels, Signe Edith, Sci.....	Seattle
Daniels, W C. Engr.....	Puyallup
Danner, Earl Y. Engr.....	Seattle
Dant, Andrey, LA.....	Seattle
Dant, Dorothy, LA.....	Portland, Or
da Ponte, Helen, LA.....	Seattle
Daquolag, Sebastian, Ed.....	Philippines
Dark, Carleton W. Law.....	Seattle
Darrugh, James Bard, Engr.....	Seattle

Daubenspeck, Marion, UD, LA.....	Seattle
Daughterly, Alice Iva, LA.....	Seattle
Daum, Edna, FA.....	Seattle
Daverin, A Lyle, LD, Bus.....	Yakima
Davidson, Barbara, LA.....	Seattle
Davidson, Dorothy, LA.....	Seattle
Davidson, Edw W, Engr.....	Bremerton
Davidson, K M, Bus.....	Seattle
Davidson, Margaret, LD, LA.....	Seattle
Davis, Arthur M, LD, Engr.....	Victoria, BC
Davis, Ben S, LD, FA.....	Seattle
Davis, Benjamin F, LD, Bus.....	Seattle
Davis, Rolla L N, LD, LA.....	Ridgefield
Davis, Frank L, LD, Bus.....	Seattle
Davie, George F, LA.....	Tacoma
Davies, Thomas D, Bus.....	Seattle
Davis, Ansil, FA.....	Davenport
Davis, C F, Engr.....	Seattle
Davis, Donald, Engr.....	Seattle
Davis, Elwood C, Ed.....	Seattle
Davis, Florence M, LA.....	Seattle
Davis, Genevieve, Sci.....	Seattle
Davis, Geo S, LA.....	Donald
Davis, Harvey, Bus.....	Wenatchee
Davis, Herbert Frederick, Ed.....	Seattle
Davis, J Alvin, Bus.....	Spokane
Davis, J Vernon, Bus.....	Walla Walla
Davis, Kathryn S, LA.....	Seattle
Davis, K Norma, LA.....	Renton
Davis, Lois E, LA.....	Seattle
Davis, Lane M, Phar.....	Everett
Davis, Mercie I, FA.....	Donald
Davis, Mildred A, Sci.....	Seattle
Davis, Mural E, Unc, Bus.....	Tacoma
Davis, Oliver, Bus.....	Wenatchee
Davis, Paul B, Engr.....	Endicott
Davis, Raphael, For.....	Anacortes
Davis, Ray N, Ed.....	Seattle
Davis, Ruth M, Grad.....	Bellingham
Davis, Vera, LA.....	Renton
Davis, Walter N, LA.....	Endicott
Davis, Wilbur L, Bus.....	Seattle
Davis, William E, LA.....	Toppenish
Davis, William R, LD, Bus.Gt Falls, Mont	
Davidson, W Ward, Bus.....	Spokane
Daws, Ethel Leota, Ed.....	Kirkland
Dawson, Charles Wm, Grad.....	Seattle
Dawson, Chester, Bus.....	Seattle
Dawson, Edwin, Bus.....	Spokane
Dawson, Grace E, LA.....	Seattle
Dawson, Lee, Engr.....	Seattle
Dawson, Terence T, Sci.....	Seattle
Day, Marian Eastes, Bus.....	Sedro Woolley
Deaderick, Kelly D, LA.....	Halfway, Or
Dean, Floyd M, Sci.....	Bellingham
Dean, Helen R, Bus.....	Yakima
Dearinger, Helen, FA.....	Snohomish
DeBruier, Olive, LA.....	Seattle
Deemer, Wayne, FA.....	Kelso
Deer, Martha Helen, LA.....	Shelton
Deetken, Carl R, Bus.....	Bellevue
De Force, Helen J, LA.....	Spokane
De Freest, Kathryn, LA.....	Honolulu
De Garmo, Marie N, Bus.....	Seattle
DeGraw, Cullen J, LD, Sci.....	Seattle
De Groote, Lawrence W, For.....	Auburn
De Groote, Lloyd H, For.....	Auburn
De Kray, Raymond, Bus.....	Seattle
De Laney, Paul, LA.....	Wenatchee
Delaney, Verner D, Ed.....	Seattle
de Leon, Esteban, Sci.....	Earlington
Deloso, Uldarico D, Engr.....	Philippines
del Rosario, Santiago, Bus.....	Seattle
Dell, Elwin B, UD, Educ.....	Joliet, Mont
Demar, Harold, LD, Bus.....	Seattle
Dempster, Dorothy, LD, FA.....	Seattle
Denhof, Sherie, Bus.....	Chehalis
Denning, Alice Margaret, Sci.....	Portage
Dennis, Albert W, LA.....	Kenecott, Alaska
Dennis, Bernice E, LA.....	Seattle
Denny, Esther Pearson, Bus.....	Seattle
De Serlay, Homer, Engr.....	Seattle
De Shazo, Melvin G, LA.....	Seattle
Des Autel, Adeline Marie, Ed.....	Lincoln
DeMoss, Mrs Samuel, UD, Educ.....	Seattle
de Soto, Alex, LA.....	Seattle
Devanna, Aileen, LA.....	Auburn
Devers, De Ette, LA.....	Seattle
De Voe, Betty, Sci.....	Seattle
DeWitt, Roscoe H, UD, Sci.....	Seattle
Deslatoif, P E, Unc, Engr.....	Seattle
Devera, Fernando, LD, Engr.....	Philippines
Dewar, Fred A, Bus.....	Addy
Dewey, Bertha, LA.....	Seattle
Dewey, Mary Marie, LA.....	Seattle
Dexter, George T, Engr.....	Seattle
Diaz, Arsenio E, LD, Sci.....	Philippines
Dick, Mary E, Bus.....	Sequim
Dick, Miriam Russell, LA.....	Seattle
Dick, Roger Sherman, LA.....	Seattle
Dickey, Dorothy, LA.....	Seattle
Dickinson, Charlotte L, LA.....	Seattle
Dickinson, George L, Bus.....	Napavine
Dickinson, L W, Engr.....	Seattle
Dickson, Irene Ysobel, LA.....	Seattle
Dickson, John C, Grad.....	Seattle
Dickson, William, Eng.....	Sedro Woolley
Dietderich, C E, Min.....	Vancouver
Dietz, Geo H, Sci.....	Seattle
Dilling, Margaret, LA.....	Seattle
Dillon, Margaret, Grad.....	So Bellingham
Dilworth, Richard L, LD, Bus.....	Seattle
Dimond, Lois Edith, FA.....	Spokane
Dingle, Virginia, LA.....	Newport
Dishnow, Sylvia, LA.....	Seattle
Dittemore, W Chester, Engr.....	Seattle
Ditmars, Tracy A, Bus.....	Olympia
Dittz, James, LD, LA.....	Bellevue
Dix, Marion, Jour.....	Seattle
Dix, Peres A, Phar.....	Seattle
Dixon, Frank Nell, Bus.....	Seattle
Dixon, Lillian, Unc, LA.....	Seattle
Doane, Lucile J, UD, LA.....	Sparta, Wis
Dobbins, Frank Lyman, Engr.....	Auburn
Dobbs, Benjamin, Engr.....	Pt Townsend
Dobbs, Charlotte, Sci.....	Seattle
Dobbs, Margaret C, Bus.....	Ketchikan, Alaska
Dobson, George R, Ed.....	Renton
Dobson, Thomas S, Bus.....	Renton
Dodd, Gregory E, LA.....	Wapato
Dodd, Hamlet P, Law.....	Wapato
Dodds, Watson H, LD, Bus.....	Seattle
Dodge, Elva Mabel, Sci.....	Portland, Or
Dodge, Estella, Grad.....	Seattle
Dofsen, Gertrude, FA.....	Seattle
Doheny, Geraldine, LA.....	Seattle
Doherty, Joseph C, Bus.....	Butte, Mt
Doi, Minage, Engr.....	Seattle
Dolan, Edmund R, Bus.....	Butte, Mt
Dolan, Irene, LA.....	Kent
Dolan, Margaret Mary, LA.....	Kent
Dolphin, Ruth, Bus.....	Seattle
Domingo, Liberato S, LA.....	Philippines
Donahoe, Alfred B, UD, Educ.....	Ellensburg
Donahoe, Eugene F, UD, Bus.....	Elma
Donaldson, Hallie, FA.....	Allyn
Donley, Florence E, LA.....	Seattle
Dong, Wah Chin, Bus.....	China
Donovan, Edith, Bus.....	Everett
Donworth, Mary, LA.....	Seattle
Dormann, G Robert, Engr.....	Seattle
Dorris, William W F, Bus.....	Seattle
Doscher, Anna D, Bus.....	Seattle
Doty, Wayne L, LA.....	Seattle
Dougherty, Ollie, UD, Bus.....	Seattle
Douglas, Jack, Bus.....	Seattle
Douglas, Jean E, LA.....	Tacoma
Douglass, Don D, Bus.....	Pasco
Doumit Mitchell John, Bus.....	Cathlamet
Dowling, Barbara, Sci.....	Seattle

Downie, Ruth E, Sci.....	Seattle	Edades, Victorio C, FA.....	Philippines
Downing, Elizabeth, FA.....	Seattle	Edberg, Wendell B, Law.....	Bellingham
Downing, Evelyn, LA.....	Seattle	Eddy, Richard H, For.....	Yelm
Doyle, Earl T, LA.....	Seattle	Edgell, Dwight, LD, Engr.....	Seattle
Drager, Gertrude, LA.....	Seattle	Edgerton, Ernest B, Sci.....	Seattle
Dragoo, Chas V, Bus.....	Spokane	Edgerton, James, Fsh.....	Seattle
Drake, Helen E, FA.....	Seattle	Edinger, Carter, Bus.....	Seattle
Drake, Helen Hazel, Ed.....	Portland, Or	Edmeades, Willard S, Sci.....	Seattle
Drake, Mildred Ethyl, Ed.....	Portland, Or	Edmonds, R H G, Grad.....	Seattle
Dranga, Melvin, LA.....	Seattle	Edmonds, Frank H, UD, Engr.....	Seattle
Draves, Carl Z, Grad.....	Seattle	Edris, Roy W, LD, Bus.....	Seattle
Drever, Helen B, LA.....	Seattle	Edson, Emily H, Grad.....	Bellingham
Drew, Carl W, Bus.....	Seattle	Edwards, Archie C, Bus.....	Seattle
Drew, Claire, LA.....	Seattle	Edwards, Arthur, LA.....	Seattle
Drew, Newton, Bus.....	Seattle	Edwards, Burton, Engr.....	Seattle
Driscoll, Edwin U, Bus.....	Seattle	Edwards, Clarence V, LD, Engr.....	Seattle
Driscoll, Eugene, LA.....	Renton	Edwards, Eleanor B, Sci.....	Seattle
Drotning, Theo M, Grad.....	Seattle	Edwards, Evangeline, FA.....	Seattle
Drury, Omer C, LA.....	Seattle	Edwards, John W, LD, FA.....	Seattle
Drumbeller, Joseph, Engr.....	Spokane	Edwards, Thelma Lillian, Grad.....	Seattle
Drus, Peter P, UD, LA, Coeur d'Alene, Ida		Edwards, Vern V, Bus.....	Seattle
Dryden, Miller Dale, Bus.....	Seattle	Egtvet, Percy, Bus.....	Seattle
Dryer, John S, Bus.....	Yakima	Ehelm, Helen, Grad.....	Seattle
Du Bois, Kansley L, LA.....	Vancouver	Ehrenberg, Fred C, Bus.....	Spokane
Du Bois, Richard, For.....	Vancouver	Ehrenberg, Gladys, LA.....	Spokane
Ducasse, Mabel, Grad.....	Seattle	Ehrlich, Barbara, LA.....	Seattle
Duckering, Richard E, Phar.....	Seattle	Eiffert, Opal Jean, Sci.....	Seattle
Duclayan, Pedro, Eng.....	Philippines	Eiffert, Mabel M, LA.....	Seattle
Duff, Edmund E, Engr.....	Renton	Eisenstein, Abe, Bus.....	Portland, Or
Duffy, Leo, Bus.....	Everett	Elberson, Ruth, Ed.....	Seattle
Dugan, Helen, Sci.....	Seattle	Elde, Dugney Marie, LA.....	Mt Vernon
Dugan, James, LA.....	Seattle	Eldridge, Eugene Symons, LA.....	Seattle
Dugdale, Harold F, Bus.....	Seattle	Eldridge, Wesley, UD, Bus.....	Seattle
Duke, Walter E, Spec.....	Seattle	Elford, Elizabeth, LD, LA.....	Seattle
Dunbar, Helen, LA.....	Vashon	Ellas, Frank, For.....	Seattle
Dunbar, Vera M, LA.....	Mt Vernon	Eljenholm, Richard D, For.....	Hoquiam
Duncan, Harold B, Unc, Engr.....	Seattle	Elkins, Alvin A, LD, Engr.....	Portland, Ore
Duncan, Margaret, LA.....	Custer	Elledge, Lela M, UD, LA.....	Seattle
Duncan, Margaret, LA.....	Seattle	Ellegood, John A, LD, Bus.....	DuPont
Dunham, Carrie, Bus.....	Seattle	Ellinger, Louise E, LA.....	Mt Vernon
Dunham, Mrs Margery, Law.....	Seattle	Elliot, Edith A, UD, LA.....	Seattle
Dunn, Arthur G, Law.....	Seattle	Elliott, Maxine, Jour.....	Seattle
Dunn, Edward B, LD, Bus.....	Seattle	Elliott, Merrill, Engr.....	Seattle
Dunn, Frank, LD, For.....	Seattle	Elliott, Richard C, Sci.....	Seattle
Dunn, Merle A, LD, Sci.....	Seattle	Ellis, Katherine, FA.....	Waterville
Dunn, Winifred, LA.....	Seattle	Ellis, Coral, UD, FA.....	Seattle
DuPree, Ernest F, Sci.....	Tacoma	Ellis, Rex L, Bus.....	Centralia
Dupula, Margaret, Sci.....	Seattle	Ellis, Sam B, Engr.....	Waterville
Du Rae, Berenice, Jour.....	Bellingham	Elmer, A Moore, Min.....	Seattle
Durand, Reynolds, LA.....	Seattle	Elmlund, Irving F, Sci.....	Eatonville
Durgin, Carey L, Engr.....	Enumclaw	Elzey, Florence M, LA.....	Asotin
Durham, Mrs Irene S, LA.....	Seattle	Eltzroth, Ruth, Ed.....	Buena
Durose, Fred W, LD, Sci.....	Seattle	Elwell, Dorothy P, FA.....	Vancouver
Duryee, Schuyler L, LD, Engr.....	Seattle	Elwell, Miriam, FA.....	Olympia
Dutch, Dorothy E, Sci.....	North Bend, Or	Elwell, Talmage F, Bus.....	Seattle
Dutton, Harry John, Bus.....	Seattle	Emanuel, Ellen, FA.....	Seattle
Dwyer, Kathryn, Jour.....	Rosalia	Emery, E G, Engr.....	Seattle
Dwyer, Monica, Sci.....	Rosalia	Emery, Marianne, FA.....	Seattle
Dwyer, William E, Bus.....	Bellevue	Emminger, Joe, Bus.....	Seattle
Eagleson, Margaret, LA.....	Seattle	Encarnacion, Marcelina, LA.....	Philippines
Earnest, Robt Roy, Ed.....	Bothell	Encarnacion, M Marcelano, Phar.	Philippines
Eason, Mary A, Sci.....	Seattle	Eng, Jack, Engr.....	Seattle
Easterbrook, Wm E, Bus.....	Fortress Monroe	Eng, Keys, Bus.....	China
Eastman, Fred S, Engr.....	Seattle	Eng, Richard, Sci.....	Seattle
Easton, Inez, Grad.....	Sitkum, Or	Engbert, Paul K, LD, Sci.....	Seattle
Eaton, Aldern L, Sci.....	Seattle	Engdahl, Evelyn, Sci.....	Spokane
Ebblewhite, C H, Engr.....	Spokane	Engdahl, Selma, LA.....	Mt Vernon
Eby, Harold, Grad.....	Spokane	Engel, Leo J, LD, For.....	Jamestown, NY
Eby, Roger I, LD, Engr.....	Spokane	Enger, Bernice, LD, Sci.....	Tacoma
Ecker, Anthony J, Engr.....	Clayton	England, Olga, FA.....	Seattle
Eckmann, Lloyd, Bus.....	Seattle	Engle, James R, Bus.....	Spokane
Eckman, Richard, LA.....	Seattle	Engle, N H, Bus.....	Seattle
Eckelman, Caroline E, Grad.....	Seattle	Engles, Robt, Bus.....	Seattle
Eckrem, Dagrun Lillian, FA.....	Seattle	English, James D, Engr.....	Seattle
Eckstein, Babette, LA.....	Seattle	English, Leland I, Engr.....	Seattle
Eckstein, Howard, LD, Bus.....	Seattle	Englund, Adoll B, Bus.....	Enumclaw
Eckstein, Norman C, Bus.....	Seattle	Engmann, Siri F, FA.....	Seattle
Eckstein, Shirley G, LD, LA.....	Seattle	Engstrom, Wallace R, Engr.....	Seattle
		Enloe, Kelth, Bus.....	Spokane
		Epperson, Grace, LA.....	Seattle

Epton, J Wiltale, Sci.....	Seattle
Erickson, Lloyd Gerhard, Bus.....	Bothell
Eriksen, Louise, LD, LA.....	Seattle
Erickson, Alfred Chas, Bus.....	Onk Harbor
Erickson, Alwyn J, Engr.....	Seattle
Erickson, Archie M, Engr.....	Deep River
Erickson, Elisabeth B, Ed.....	Kent
Erikson, Ella S, Spec.....	Seattle
Erickson, Elsie, LA.....	Seattle
Erickson, Lloyd Edw, Bus.....	Seattle
Erickson, Richard, Bus.....	Edmonds
Erickson, Roy C, Phar.....	Seattle
Erickson, Walden D, Bus.....	Seattle
Erickson, Earl, For.....	Seattle
Ericson, Howard Carl, Bus.....	Tacoma
Eriksen, Edw, Bus.....	Seattle
Eriksson, Archie H, UD, Educ.....	Arlington
Erskine, Rose, Sci.....	Everett
Ervin, Martha, Sci.....	Anchorage, Alaska
Erz, Evelyn, FA.....	Seattle
Estep, Amy J, UD, Educ.....	Seattle
Estepa, Sotero, Unc, LA.....	Philippines
Estey, Chas A, Bus.....	East Seattle
Estigoy, Pastor L, Engr.....	Philippines
Etherington, Thos J, Sci.....	Elma
Evans, Blodwen, LA.....	Seattle
Evans, Clementine, Phar.....	Seattle
Evans, Harry W, Bus.....	Seattle
Evans, Irene, Bus.....	Bellingham
Evans, June, Jour.....	Castle Creek, Ida
Evans, Miller, Engr.....	Seattle
Evans, Lacey H, Sci.....	Vancouver, BC
Evans, Margery C, LA.....	Kapowsin
Evans, Marian, FA.....	Spokane
Evans, Milton J, Unc, Bus.....	Bitter Lake
Evans, Winifred M, Bus.....	Solomon, Kau
Evatt, Stanley, Bus.....	Bellingham
Evans, W Fred, Bus.....	Vancouver, BC
Evans, Walter G, Bus.....	Seattle
Evenson, W E, LA.....	Hobart
Everett, Blanche, LA.....	South Bend
Everett, Elizabeth, FA.....	Seattle
Ewalt, Mildred, LA.....	Spokane
Ewell, M Mac, Engr.....	Seattle
Ewell, Winifred J, LA.....	Seattle
Eyerman, Maxine B, LA.....	Seattle
Eyerman, Ralston, Engr.....	Seattle
Fabico, Emilio F, LD, Bus.....	Philippines
Fahl, Jack B, LD, Mines.....	Seattle
Fairbanks, Donald Dee, Bus.....	Yakima
Fairchild, Inez, FA.....	Seattle
Fairley, David B, LD, Bus.....	Seattle
Fairservice, Hazel, LA.....	Clallam Bay
Fairweather, Douglas, LA.....	Seattle
Falkoff, Anna Lea, Grad.....	Seattle
Falkoff, Emma, LA.....	Seattle
Falkoff, Ernest, Law.....	Seattle
Falconer, Thomas T, LD, Bus.....	Everett
Falkovich, O C, Engr.....	Seattle
Fall, James D, UD, Engr.....	Seattle
Fullon, Vern, LA.....	Butte, Mont
Farber, Lena, LA.....	Tacoma
Farley, John M, LD, Bus.....	Seattle
Farr, Forest, Engr.....	Seattle
Farr, J Edgar, LA.....	Montesano
Farrar, Myrtle I, UD, Educ.....	Seattle
Farwell, Edwin J, Unc, Bus.....	Seattle
Farwell, Stanley E, LD, Bus.....	Yakima
Fassett, Edward, LD, Engr.....	Seattle
Faubert, Florentine V, LA.....	Shelton
Faulkner, Donald R, Bus.....	Olympia
Faussett, Mrs Madge, Ed.....	Seattle
Fay, Joy, Sci.....	Seattle
Featherstone, John A, Sci.....	Wallace, Ida
Feek, Edward O, LD, Bus.....	Seattle
Feek, Florence Margaret, FA.....	Seattle
Felch, Baxter C, Bus.....	Seattle
Felch, Margaret, Sci.....	Ellensburg
Felch, Lewis D, Engr.....	Ellensburg
Ferguson, Carey D, LA.....	Seattle
Ferguson, Edna L, LA.....	Bellingham
Ferguson, W Verne, Bus.....	Bremerton
Fernando, Ferrera, Spec.....	Philippines
Ferrera, Fernando, Sci.....	Philippines
Ferrier, Gladys Clotilde, LA.....	Aberdeen
Ferry, Edw P, LA.....	Seattle
Ferry, Frances, FA.....	Seattle
Fickle, Gall Firestone, LA.....	Seattle
Ferry, Kate, LD, LA.....	Seattle
Ficks, Amanda, Ed.....	Seattle
Fields, Earl T, FA.....	Woodland
Field, Mary Alice, LA.....	Seattle
Fifer, Harold, Engr.....	Parma, Ida
Fine, Sam, Bus.....	Seattle
Finke, LD, Engr.....	Seattle
Finke, Mabel, LA.....	Seattle
Finland, Geo Harold, Min.....	Victoria, BC
Finlay, Dreda D, FA.....	Seattle
Finlay, Lloyd C, LA.....	Seattle
Finlay, Maxine, Jour.....	Seattle
Finley, Marjorie H, FA, Red Lodge, Mont	
Finlon, Arthur, Fsh.....	Seattle
Finseth, Karen D, Sci.....	Brush Prairie
Fischer, Doris, LA.....	Seattle
Fischer, Louis, Phar.....	Seattle
Fisher, W D, LD, LA.....	Napa, Cal
Fiscus, Louis B, LA.....	Seattle
Fish, Kenneth G, Sci.....	Seattle
Fisher, Dorothy, FA.....	Seattle
Fisher, Dorsey Gassaway, LA.....	Seattle
Fisher, Harold, Sci.....	Seattle
Fisher, Henry C, Grad.....	Orchards
Fisher, L Donald, LA.....	Tacoma
Fisher, Lloyd H, Engr.....	Seattle
Fisher, Mary A, LA.....	Seattle
Fitterer, Dorothy, LA.....	Ellensburg
Fitzgerald, Florence M, Bus.....	Seattle
Fitzgerald, Hattie May, Sci.....	Seattle
Fitzhorris, Edw J, LA.....	Seattle
Fitzpatrick, Geo Wm, Engr.....	Seattle
Fitzpatrick, May, Bus.....	Seattle
Fladd, Everett J, Bus.....	Buffalo, NY
Flanigan, Margaret E, Bus.....	Seattle
Flannery, Mary Beth, LA.....	Seattle
Flannigan, Fred, LD, Engr.....	Seattle
Fleming, Delbert B, Bus.....	Yakima
Fleming, James P, Bus.....	Butte, Mt
Fletcher, Custer P, Bus.....	St Anthony, Ida
Fletcher, David O, For.....	Winlock
Fletcher, Geo G, Phar.....	Seattle
Fletcher, Gerald R, Engr.....	Seattle
Flippen, Joe W, Engr.....	Seattle
Flodin, Carl R, Engr.....	Spokane
Flodman, Milton, LD, LA.....	Wahoo, Neb
Flohr, E Firmin, Engr.....	Seattle
Flohr, L Carlos, Engr.....	Seattle
Flood, Catherine F, UD, FA.....	Tacoma
Flood, Grace, LA.....	Seattle
Flower, Alan, LA.....	Mabton
Flowers, Lorene E, LA.....	Cresota
Floyd, Lucy Lena, Sci.....	Kittitas
Flury, Faustina Grace, LA.....	Seattle
Flynn, Madeline, LA.....	Spokane
Flynn, Virginia, LD, LA.....	Spokane
Foley, Clyde C, LA.....	Portland, Or
Foley, Gertrude A, LA.....	Vancouver
Foley, John R, Bus.....	Seattle
Foley, Maurice P, LA.....	Maple Valley
Folsom, Elizabeth, LD, FA.....	Seattle
Follett, Floyd K, FA.....	Seattle
Foot, Wm H, Engr.....	Portland, Or
Foran, Lester, Bus.....	Seattle
Forbes, Helen, LA.....	Seattle
Forbes, Velma R, Sci.....	Seattle
Ford, Edwin H, Grad.....	Seattle
Ford, Foster T, Engr.....	Tacoma
Ford, Katherine Dyer, LA.....	Seattle
Ford, Melvern Bruce, Phar.....	Seattle



Ford, Pendleton, LD, LA.....Seattle  
 Foreman, Iona, Sci.....Seattle  
 Forkey, Blanche J, FA.....Yakima  
 Forman, Fred, Bus.....Wapato  
 Forrest, S R, LA.....Rolling Bay  
 Forster, Fred E, LD, Bus.....Seattle  
 Forsyth, Frances, LA.....Seattle  
 Forward, Charles Henry, For.....Seattle  
 Foss, Ella Trete, Sci.....Seattle  
 Foster, Charles J, Grad.....Seattle  
 Foster, C J, LA.....Seattle  
 Foster, Dorothy, LD, Sci.....Omak  
 Foster, Dorothy Vaughan, FA.....Seattle  
 Foster, Philip R, Ed.....Coviche  
 Foster, Robert F, Sci.....Colfax  
 Foster, Stanbery, LA.....Seattle  
 Foster, Waco T, LD, LA.....Seattle  
 Fountain, Harold A, LA.....Clarkston  
 Fowler, Helen Toles, FA.....Everett  
 Fowler, Thos U, Law.....Seattle  
 Fowlkes, Florence P, LA.....Seattle  
 Fox, John B, Engr.....Elma  
 Frahm, Lawrence W, Engr.....Seattle  
 Framo, Angel D, LA.....Philippines  
 France, Muriel Elizabeth, LA.....Montesano  
 France, R G, Bus.....Montesano  
 Frank, Robert, Bus.....Spokane  
 Frank, Beth, LD, Bus.....Seattle  
 Frank, John A, Engr.....Seattle  
 Frankland, Walter, Bus.....Seattle  
 Franklin, Alice, LA.....Denver, Colo  
 Franklin, Alice V, Grad.....Seattle  
 Franklin, Carrie E, LA.....Denver, Colo  
 Franks, Ernest, Engr.....Seattle  
 Fransoli, Thos, LA.....Seattle  
 Francis, Arthur D, LD, Engr.....Tacoma  
 Fraser, Frank, Law.....Bellingham  
 Fraser, James E, UD, Bus.....Yakima  
 Fraser, Lincoln, Phar.....Libby, Mt  
 Fraser, Russell E, Sci.....Davenport  
 Fraser, Ted A, Bus.....Bellingham  
 Fraser, Whittier, Bus.....Burton  
 Frayn, Richard L, Bus.....Seattle  
 Frayn, Robt M, LA.....Seattle  
 Frazier, Geo G, Engr.....Seattle  
 Freeburg, Roy E, FA.....Seattle  
 Freed, Ruth, LD, FA.....Seattle  
 Freeman, Geo W, Sci.....Spokane  
 Freeman, Norman L, Fsh.....Vancouver, BC  
 Freeze, Hildegard, LD, LA.....Seattle  
 Frem, Agnes A, Ed.....Seattle  
 French, Graham, FA.....Seattle  
 French, J I, Bus.....Spokane  
 French, Ray, Bus.....Okanogan  
 Fretz, W Paul, LA.....Montesano  
 Friberg, Arnold, LA.....Seattle  
 Frick, Wesley V, Sci.....Dayton  
 Fricke, Edgar F, Bus.....Stella  
 Friday, Paul D, LA.....Seattle  
 Frederici, Hazel, LD, LA.....Seattle  
 Friedberg, Edith, FA.....Seattle  
 Friedman, Abe, LA.....Seattle  
 Friend, Leroy R, Sci.....Seattle  
 Friese, Bernice V, FA.....Edmonds  
 Friese, Ernestine, LA.....Snohomish  
 Fritz, Wm M, Bus.....Port Townsend  
 Frost, Frank W, Bus.....Stanwood  
 Frost, Leona King, FA.....Seattle  
 Frost, Ruby B, Sci.....Silverdale  
 Frost, Vernon, LA.....Spokane  
 Froude, C W, Bus.....Seattle  
 Froula, Dave, Engr.....Seattle  
 Froula, Olivia, Bus.....Seattle  
 Frudenfeld, Mildred, LD, LA.....Seattle  
 Fry, Ivy Margaret, Sci.....Neilton  
 Fry, Nellie, Sci.....Neilton  
 Fryer, Valliere, Grad.....Bellingham  
 Fu Kada, Wakike, Sci.....Seattle  
 Fujiwara, Shiyuko, Spec.....Seattle  
 Fuller, Richard E, Sci.....Seattle

Fullington, Lloyd H, For.....Seattle  
 Fulton, H R, Grad.....Seattle  
 Funakush, Frank Kinichi, Engr.....Seattle  
 Funakush, Sakaye, LA.....Bellevue  
 Funkhouser, Myrtle, Lib.....Ridgefield  
 Furgeson, Leora, Unc, LA.....Seattle  
 Furgeson, Carey D, LA.....Sumner  
 Furgeson, Paul F, Ed.....Sumner  
 Furuya, Wm N, Bus.....Seattle

Gabrielson, Carl, UD, Bus.....Puyallup  
 Gaffney, John H, Bus.....Seattle  
 Gaffney, Ruth A, LA.....Seattle  
 Gaidslck, Harold, Bus.....Seattle  
 Galeno, B F, Phar.....Seattle  
 Gallagher, Eileen, LD, LA.....Seattle  
 Gallahan, Clyde, Bus.....Portland, Or  
 Gallinger, Edythe, FA.....Seattle  
 Galloway, F L, For.....Seattle  
 Galvez, Pedro R, LA.....Philippines  
 Gambee, Elizabeth, FA.....Seattle  
 Gamble, Boyd E, For.....Yakima  
 Gammell, John, Engr.....Burton  
 Ganz, Anna E, Unc, Bus.....Tacoma  
 Garcia, Maximo P, Min.....Philippines  
 Gard, Mrs Clara, LA.....Seattle  
 Gardineer, Marian, LA.....Seattle  
 Gardner, Hal, Unc, Bus.....Nisqually  
 Gardner, Harold A, Engr.....Seattle  
 Gardner, Osborne, LA.....Nisqually  
 Garland, Cathran, FA.....Seattle  
 Garland, Lois, LD, LA.....Seattle  
 Garman, G W, Engr.....Seattle  
 Garner, Helen, LA.....Omak  
 Garner, Louella, FA.....Seattle  
 Garrett, W Genevieve, LA.....Seattle  
 Garretson, Zelma, LA.....Cosmopolis  
 Garretson, Helen, LA.....Yakima  
 Garrison, Homer D, LD, Engr.....Oak Harbor  
 Garrett, Hal, LA.....Seattle  
 Garrett, Jean, LA.....Seattle  
 Garthley, Margaret, LA.....Seattle  
 Gaston, Dorothy, Grad.....Seattle  
 Gatewood, Theresa Van, Ed.....Asotin  
 Gauff, Bertha, Sci.....Wenatchee  
 Gauge, Herbert A, Bus.....Seattle  
 Gavin, Thos Jay, Bus.....Seattle  
 Gay, Gregory, Unc, Fsh.....Petrograd, Russia  
 Gayler, Anne Roberta, LA.....Bremerton  
 Gaynor, Sidney B, Bus.....Seattle  
 Geemin, Ludmila, LD, Phar.....Seattle  
 Gelbel, Fred, Bus.....Bremerton  
 Gelsendorfer, Helene, LA.....Seattle  
 Gelst, Marian E, LA.....Walla Walla  
 Gendron, Noella A, LA.....Yakima  
 Gentle, Ottolene, LA.....Seattle  
 George, Dorothy A, Sci.....Seattle  
 George, Margaret C, LA.....Seattle  
 George, Martha Mary, LA.....Seattle  
 George, Robert L, For.....Yakima  
 Geraghty, Thomas E, Grad.....Spokane  
 Gerbel, Arthur, LA.....Seattle  
 Gerbel, Maribeth, LA.....Seattle  
 Gerber, Leonard, Bus.....Seattle  
 Gerboth, Louise, LA.....Seattle  
 Gerl, Helen, FA.....Bellingham  
 Gerriets, Bertha, Bus.....Mt Vernon  
 Getchell, Asher F, LA.....Seattle  
 Getchell, Eleanor, FA.....Seattle  
 Getschmann, B, Bus.....Blaine  
 Gfeller, Matilda, Unc, Bus.....Seattle  
 Ghiselin, Alex D, Sci.....Spokane  
 Gholson, Cecil A, Bus.....Yakima  
 Gibbon, Waldyn L, For.....Everett  
 Gibbs, Alonza, LD, Bus.....Harlowton, Mont  
 Gibson, Fred O, Sci.....Davenport  
 Gibson, Russell G, Bus.....Crystal Springs  
 Gibson, R S, Unc, Bus.....Buffalo, NY  
 Giddens, Bernadine, FA.....Seattle

Gierin, Russell, Engr.....	Seattle
Gilbert, Harold S, LD, Bus.....	Seattle
Gilbert, William N, LA.....	Zillah
Gilbreath, Mrs Matilda K, LA.....	Seattle
Giles, James E, Bus.....	Port Angeles
Gill, George B, Engr.....	Portland, Or
Gill, John M, UD, Sci.....	Seattle
Gill, Kenneth H, LD, Bus.....	Snohomish
Gill, Prem S, Unc, Engr. Chubas Chak, India	
Gilleland, Mary E, LA.....	Seattle
Gillen, Charlotte, LD, FA.....	Chelan
Gillespie, H Elmer, Sci.....	Seattle
Gillespie, Loris A, UD, Bus.....	Bremerton
Gilmore, Dorothy B, LD, LA.....	Seattle
Gillett, Erma M, Sci.....	Cle Elum
Gilmore, Constance, LA.....	Seattle
Gilmore, Helen, LA.....	Seattle
Gilmore, G Hortense, LA.....	Seattle
Gilmore, John W, LD, LA.....	Seattle
Gilmore, Kathryn, FA.....	Seattle
Gilmore, Robert H, LA.....	Seattle
Gingrich, Pearl, LA.....	Olympia
Giovanni, Frank, Engr.....	Roslyn
Giuntoni, Julius, LA.....	Seattle
Givens, Arden, Bus.....	Chehalis
Glass, James M, Sci.....	Seattle
Glass, Martha B, LA.....	Ione
Gleaze, Nine M, Bus.....	Seattle
Gleason, Marian C, Sci.....	Seattle
Gleason, Richard F, LA.....	Montesano
Gleaser, Fern W, Sci.....	Palouse
Glen, Juliet, FA.....	Seattle
Glen, Philip, LA.....	Seattle
Glenn, Harry C, LA.....	Elma
Glenn, Wesley S, UD, LA.....	Seattle
Glerup, Marius, Bus.....	Spokane
Glynn, Win B, FA.....	Seattle
Gnagey, Marguerite, LA.....	Seattle
Godefroy, William, Sci.....	Spokane
Goehring, Viola, Bus.....	Seattle
Goerig, Elizabeth Marion, FA.....	Seattle
Goetz, Helen, LD, Sci.....	Seattle
Goetz, Jacob, FA.....	Spokane
Goff, Earl H, Engr.....	Seattle
Goldman, Erwin F, Sci.....	Seattle
Goldman, Jack, Grad.....	Seattle
Goldsmith, Louis C, LA.....	Seattle
Gonser, Harry D, Bus.....	Seattle
Gooch, Martha, Bus.....	Seattle
Good, Harold E, Bus.....	Mt Vernon
Good, Mary E, Grad.....	Corvallis, Ore
Goodell, William, LD, For.....	Lebam
Goodlick, Samson, Sci.....	Seattle
Goodlander, Millicent G, Sci.....	Parkdale, Or
Goodrich, H G, Ed.....	Seattle
Goodrich, H R, Min.....	Pt Townsend
Goodsell, Julia, Sci.....	Chelan
Goodwin, Frank S, UD, LA.....	Seattle
Goodwin, Marshall C, FA.....	Thorp
Goodwing, Lang M, Bus.....	Freewater, Or
Goon, Henry Farren, Bus.....	Seattle
Goon, John L, Bus.....	Seattle
Goon, Lillian, Ed.....	Seattle
Gorbovitzky, Max, Engr.....	Seattle
Gordon, Clair I, For.....	Seattle
Gordon, Johanna M, LA.....	Seattle
Gordon, Madeline C, Bus.....	Seattle
Gordon, Walter S, Engr.....	Seattle
Gorbovitzky, Maurice J, UD, Engr.....	Seattle
Gorham, Elizabeth, LA.....	Seattle
Gorham, Harlan W, Bus.....	Snohomish
Gorham, Helen Margaret, LA.....	Snohomish
Gornstein, S, FA.....	Seattle
Gorrell, W Genevieve, LA.....	Portland, Or
Gose, Thomas Phelps, Law.....	Walla Walla
Goss, E Lyle, LA.....	Sumner
Gottstein, Burton, Bus.....	Seattle
Gowen, Felicia Joyce, LA.....	Seattle
Grace, Robert H, LA.....	Seattle
Graefe, Margaret L, LA.....	Seattle
Graff, Else, LA.....	Seattle
Graff, John Paul, LA.....	Tacoma
Grafft, Clark F, LA.....	Everett
Grafft, Geo H, LA.....	Everett
Grafton, Arthur E, Bus.....	Tacoma
Graham, Albert E, Jour.....	Tacoma
Graham, Carroll K, Engr.....	Seattle
Graham, Donald, Engr.....	Seattle
Graham, Elizabeth E, LA.....	Bellingham
Graham, Evelyn Mae, Bus.....	Seattle
Graham, Helen, FA.....	Seattle
Grahn, Clarence A, LD, Bus.....	Seattle
Granton, Gregory A, Bus.....	Seattle
Grande, Howard, Bus.....	Southbridge, Mass
Grant, Allyn P, Bus.....	Seattle
Grant, Donald F, CE.....	Seattle
Grant, Helen, LA.....	Seattle
Grant, Jeanie, Bus.....	Seattle
Grant, Margaret Ann, LA.....	Wrangell, Alaska
Grant, Ruth A, Bus.....	Seattle
Grant, Vernon, Engr.....	Seattle
Grant, Wells, Fsh.....	Seattle
Grass, Loretta B, LA.....	Tacoma
Graves, Dorothy E, Grad.....	Presque Isle, Me
Graves, Francis D, UD, Bus.....	Bellingham
Graves, Hershel D, Engr.....	Clear Lake
Graves, Katherine H, LD, LA.....	Seattle
Graves, Marjorie Mae, LA.....	Edmonds
Graves, Wm S, Sci.....	Seattle
Gray, Chas W, Sci.....	Seattle
Gray, Emanuel A, LA.....	Seattle
Gray, Fluvia C, FA.....	Puyallup
Gray, Garold Claude, Bus.....	Tacoma
Graybill, Anita Joan, LA.....	Tacoma
Greason, Florence, Sci.....	Bothwell
Grobe, Edna J, FA.....	Spokane
Greely, Cyril R, Bus.....	Great Falls, Mt
Greely, Gilbert F, Bus.....	Seattle
Greely, Myril, LA.....	Great Falls, Mt
Green, Clarence C, Grad.....	Seattle
Green, Clifton D, Bus.....	Seattle
Green, Floyd C, LA.....	Carnation
Green, Mamie J, LD, LA.....	Seattle
Green, Marvel J, Sci.....	Seattle
Green, Silas H, Bus.....	Carnation
Greenbank, Herbert A, Law.....	Seattle
Greenberg, Abe, Phar.....	Seattle
Greene, Elizabeth, LA.....	Seattle
Greene, Hamilton L, Law.....	Seattle
Greene, John W, Engr.....	Seattle
Greenleaf, Joseph T, Bus.....	Seattle
Greenlee, John F, Bus.....	Seattle
Greenwich, Alexander, Unc, Fsh.....	Russia
Greer, Alfred J, Spc, Bus.....	Tacoma
Greer, Jean B, Sci.....	Seattle
Greguson, Judith, Grad.....	Seattle
Greiner, Mary, LA.....	Seattle
Greiner, Ruth H, Grad.....	Seattle
Gridaseff, Leonid, Unc, Engr.....	Russia
Grier, Mary C, Sci.....	Seattle
Griffin, DeWitt C, FA.....	Seattle
Griffin, Fredric P, LA.....	Tacoma
Griffin, Lois, Ed.....	Seattle
Griffin, Lottie, LD, LA.....	Spokane
Griffith, Hazel, LD, LA.....	Seattle
Griffin, Marie, LA.....	Seattle
Griffith, Chas H, Sci.....	Seattle
Griffith, Chester, LD, For.....	Seattle
Griffith, Rena, Ed.....	Cheney
Griffith, Ruth Armstrong, Grad.....	Seattle
Griffiths, Lois Wilfred, Grad.....	Seattle
Griffore, Bert, Sci.....	Seattle
Grimm, William H, Law.....	Centralia
Grindell, Virginia, LD, FA.....	Seattle
Grisim, Elizabeth, LA.....	Auburn
Griswold, Harlan B, Sci.....	Seattle
Griswold, Melba, Sci.....	Seattle
Gritsch, Anton, LD, Bus.....	Seattle
Groat, Elva Belle, Grad.....	Seattle
Grogan, William W, For.....	Seattle

Gross, Katherine J, Ed.....Seattle  
 Gross, Richard A, Bus.....Walla Walla  
 Gross, Wm C, For.....Newark, NJ  
 Grove, Mrs Clare M, Bus.....Seattle  
 Grove, Leon C, Eng.....Seattle  
 Grunbaum, Henry, Bus.....Seattle  
 Gufang, Pedro G, LA.....Philippines  
 Gullford, Madeline, Lib.....Westport  
 Guillen, Filomon, LA.....Philippines  
 Gullikson, Albert C, Engr.....Seattle  
 Gulliksen, Harold, LA.....Seattle  
 Gulliksen, Webster E, LA.....Everett  
 Gundlach, Betty L, FA.....Wallace, Ida  
 Gundlach, Ralph, LA.....Wallace, Ida  
 Gunnell, Molly, FA.....Seattle  
 Gunning, Alice, LA.....Spokane  
 Gurewitz, Meyer, Fsh.....Seattle  
 Gurewitz, Tirza, .....Seattle  
 Gust, Marian E, LA.....Walla Walla  
 Gustafson, Katherine, Sci.....Seattle  
 Gustafson, Marie, Phar.....Cosmopolis  
 Guthrie, L Edward, Bus.....Leavenworth  
 Guthrie, Iris B, LA.....Twin Falls, Ida  
 Gutormsen, George, LA.....Everett  
 Gwin, Ernest, Engr.....Seattle  
 Guthrie, Elton F, LA.....Seattle

Haan, Stella, UD, Educ.....Walla Walla  
 Haase, Albert Paul, Bus.....Clarkston  
 Haase, Edna L, Sci.....Seattle  
 Habicht, Helen M, LA.....Seattle  
 Hackett, Clara, Sci.....Tacoma  
 Haeske, Carroll M, Ed.....Bellingham  
 Hagar, Irene, LA.....Ollalu  
 Hagelbarger, Paul R, Law.....Seattle  
 Hagen, Richard O, Bus.....Seattle  
 Hager, Dorothy, Sci.....Vancouver, BS  
 Hager, Julia Marjory, FA.....Vancouver, BC  
 Hagerman, Marie C, FA.....Grandview  
 Hagerty, Donald W, Bus.....Olympia  
 Hagerty, Frank William, LA.....Gt Falls, Mt  
 Haggard, Mrs C E, LA.....Seattle  
 Haggard, Henry, Bus.....Maple Falls  
 Haggitt, Dorothy Gene, LA.....Seattle  
 Haglund, Ivar, LA.....Seattle  
 Haglie, C E, Grad.....Seattle  
 Hahn, Catherine, Bus.....Spokane  
 Hahn, Cathryn L, LA.....Skagway, Alaska  
 Halman, Lewis, For.....Lake Bay  
 Halmo, Myron B, Bus.....Seattle  
 Haines, Ruth R, LD, FA.....Seattle  
 Haire, Thyl L, Engr.....Seattle  
 Hale, Eleanor E, FA.....Seattle  
 Hale, Estle Wm, UD, Bus.....Bickleton  
 Hale, Grattan, Bus.....Seattle  
 Hale, Oron J, LA.....Bickleton  
 Hall, Amy Violet.....Seattle  
 Hall, Carroll J, LD, LA.....Seattle  
 Hall, David W, Bus.....Seattle  
 Hall, Elaine, FA.....Seattle  
 Hall, Edward B, Bus.....Seattle  
 Hall, Frank D, Bus.....Pomeroy  
 Hall, Helen M, Unc, FA.....Seattle  
 Hall, Lillian, LD, LA.....Seattle  
 Hall, Mary E, FA.....Snohomish  
 Hall, Ralph D, Bus.....Seattle  
 Hall, Robert C, Ed.....Montesano  
 Hall, Ruth V, LA.....Seattle  
 Hall, Vesper T, Ed.....Seattle  
 Hall, Wayne Lee, Bus.....Spokane  
 Hallen, Roy, LA.....Puyallup  
 Haller, Mary E, Ed.....Renton  
 Haller, Theodore, Engr.....Seattle  
 Hallett, John L, Engr.....Seattle  
 Halloran, Leroy J, Engr.....Edison  
 Hallowell, Harry, LA.....Bothell  
 Halpern, Nathan, Unc, Engr.....Seattle

Hallstrom, Irving Thorell, Engr.....Seattle  
 Halsan, Rachel, LA.....Seattle  
 Halstead, Elmer, Engr.....Seattle  
 Halton, Errold, Bus.....Tacoma  
 Haltom, Ramona, LA.....Tillamook, Or  
 Halverson, Edwin O, Bus.....Ferndale  
 Halverstadt, Dallas Cummings, LA.....Seattle  
 Hamada, Fred I, Bus.....Seattle  
 Hamblen, Ruth, LA.....Seattle  
 Hambleton, Edith, LA.....Seattle  
 Hamerly, L Merle, Bus.....Firesteel, SD  
 Hamilton, Dorothy, Bus.....Seattle  
 Hamilton, Grace, LD, FA.....Seattle  
 Hamilton, Mrs Laura H, Ed.....Seattle  
 Hamilton, Rachel E, Grad.....Echo, Ore  
 Hamm, Chas H, FA.....Seattle  
 Hamm, Geo R, Bus.....Puyallup  
 Hamm, Gladys, Grad.....Sheridan, Wyo  
 Hammack, James R, Law.....Mt Vernon  
 Hammond, Claude Kelly, For.....Seattle  
 Hammond, Lester Carolyn, Sci.....Everett  
 Hammond, Marguerite, Phar.....Seattle  
 Hampson, Floyd Frank, Bus.....Seattle  
 Hampson, Fred E, LA.....Tacoma  
 Hampton, James G, LA.....Salt Lake City, U  
 Hand, Hope, LA.....Seattle  
 Hand, Roger E, LA.....Seattle  
 Haner, Norman, LD, Engr.....Wickersham  
 Haner, Victor C, LD, Engr.....Wickersham  
 Hanks, Josephine, FA.....Seattle  
 Hanley, Edw B, LA.....Seattle  
 Hannah, Fred C, Phar.....Friday Harbor  
 Hannan, Merlin J, UD, Engr.....Kinston  
 Hannify, Maurice, LD, LA.....Yakima  
 Hannum, Clair A, Grad.....Seattle  
 Hansen, Doris, LA.....Seattle  
 Hansen, Estelle M, Grad.....Seattle  
 Hansen, Florence, FA.....Portland, Or  
 Hansen, Hannah A, Bus.....Tacoma  
 Hansen, Helen A, LA.....Snohomish  
 Hansen, Herman, Grad.....Spokane  
 Hansen, II F, Bus.....Seattle  
 Hansen, Ralph B, Engr.....Seattle  
 Hansen, Ted A, Engr.....Seattle  
 Hansen, Thorwald A, Engr.....Snohomish  
 Hansen, Mrs Wenonah, LD, LA.....Seattle  
 Hanson, Alice C, LA.....Seattle  
 Hanson, Harold W, For.....Enumclaw  
 Hanson, Harry A, LD, Engr.....Mt Iron, Minn  
 Hanson, Louise, FA.....Ketchikan, Alaska  
 Hanson, Mildred, Bus.....Seattle  
 Hanson, Oscar W, LD, Bus.....Blaine  
 Hanson, Russell M, Bus.....Bellingham  
 Hardinger, Annette, Phar.....Seattle  
 Hardwick, Donald G, Unc, Bus.....Everett  
 Hardwick, Emerson Clifford, Sci.....Everett  
 Hardwick, Francis Tiley, Ed.....Everett  
 Hardy, Gladys, LA.....Seattle  
 Hardy, Isobel Ray, LA.....Seattle  
 Harkness, A E, Bus.....Yakima  
 Harm, Frank D, Phar.....Centralia  
 Harman, Robt, LA.....Spokane  
 Harned, Worth, LD, Bus.....Seattle  
 Harold, Pearl, FA.....Seattle  
 Harper, Clarence P, Bus.....Ontario, Cal  
 Harper, Paul A, Engr.....Seattle  
 Harper, H Roland, Phar.....Seattle  
 Harris, Chas H, Bus.....Seattle  
 Harris, Edna, Bus.....Seattle  
 Harris, Edw W, Bus.....Seattle  
 Harris, Fred, LA.....Seattle  
 Harris, Gertrude, FA.....Seattle  
 Harris, Harry H, Engr.....Seattle  
 Harris, John David, Bus.....Ft Benton, Mt  
 Harris, John Henry, Bus.....Great Falls, Mt  
 Harris, Leland S, Sci.....Seattle  
 Harris, Parker E, Bus.....Seattle  
 Harris, Peggy Lena, Bus.....Seattle  
 Harris, Ralph H, For.....Seattle  
 Harris, Mrs Robt P, Lib.....Seattle

Harris, Roy H, LD, Engr.....	Ceres	Hefty, Emil A, Engr.....	Bellingham
Harris, Violet E, FA.....	Seattle	Hegg, Ralph, Bus.....	Sedro Woolley
Harrison, Frances, Jour.....	Seattle	Heldergott, Edna, Sci.....	Seattle
Harrison, May, LA.....	Richmond Beach	Helly, Robert G, UD, Bus.....	Spokane
Harrold, Vincent M, Sci.....	Seattle	Helman, Jeffrey, Law.....	Seattle
Hart, Edw G, For.....	Victoria, BC	Heiner, Arnold, FA.....	Ripon, Cal
Hart, Emma O, Grad.....	Seattle	Heltzman, Robt E, LA.....	Seattle
Hart, Harold S, Bus.....	Seattle	Held, June, LA.....	Seattle
Hart, Harriett Katharine, LA.....	Seattle	Hellens, Glory, LD, Sci.....	Seattle
Harter, Genevieve Wells, FA.....	Bellingham	Hellens, Lawrence W, Bus.....	Seattle
Hartert, Pearl, LA.....	Idaho Falls, Ida	Helliesen, Edith, LA.....	Seattle
Hartge, A Lena, Grad.....	Seattle	Helliesen, Harold S, Bus.....	Seattle
Harting, Raymond D, LA.....	Seattle	Helliesen, Margaret Ann, LA.....	Seattle
Hartle, Geo, For.....	Seattle	Helm, Jesse Allen, Bus.....	Boise, Ida
Hartley, Florence, Phar.....	Seattle	Helstrom, Gordon Louis, Sci.....	Willapa
Hartman, Jonathan E, Engr.....	Kirkland	Hemphill, Harriet, FA.....	Seattle
Hartnagel, Nelson, For.....	Seattle	Hemrich, Walter, LD, Bus.....	Aberdeen
Hartshorn, Dorothy E, LA.....	Seattle	Hemry, Alma L, Sci.....	Seattle
Hartt, Mrs Bertha M, Ed.....	Pt Angeles	Hendel, Oliver Douglas, Engr.....	Tacoma
Hartung, Olive M, FA.....	Seattle	Henderson, Esther, Sci.....	Seattle
Hartwig, Floyd, LD, Bus.....	Seattle	Henderson, James, Engr.....	Seattle
Hartzell, Lester J, Engr.....	Butte, Mt	Henderson, Margaret, LD, Bus.....	Hoquiam
Harvey, Earle A, UD, Sci.....	Arlington	Hendricks, Olive Mae, FA.....	Seattle
Harvey, Elizabeth, LA.....	Walla Walla	Hendricksen, Ruth, Sci.....	Seattle
Harvey, Lora, LA.....	Seattle	Henke, Harry, LA.....	Seattle
Harvey, Margaret, Ed.....	Medford, Or	Hennessey, Mabel A, LA.....	Spokane
Harvey, Maxine, LA.....	Seattle	Hepler, Carroll D, LD, Engr.....	Seattle
Harvey, Nellie Regina, LA.....	Seattle	Henricksen, Fred S, Ed.....	Tacoma
Harvey, Walter M, LA.....	Seattle	Henricksen, H Otto, Grad.....	Seattle
Harwood, Carroll, EE.....	Seattle	Henricksen, Thorwald, Bus.....	Tacoma
Haskell, Oliver Howard, LA.....	Tacoma	Henriot, Jane, LA.....	Buffalo, NY
Huskin, Emma Helen, LA.....	Olympia	Henry, Edwin W, Bus.....	Spokane
Hatch, Orville, LA.....	Seattle	Henry, Everett G, Unc, Engr.....	Everett
Hatfield, Olive Aurelia, Sci.....	Tacoma	Henry, Florence, LA.....	Tacoma
Hathaway, Ernest R, Sci.....	Seattle	Henry, Frank R, For.....	Tacoma
Hatley, Mamie C, Ed.....	Seattle	Henry, Hylas E, LA.....	Seattle
Hatton, Ruth G, LA.....	Seattle	Henry, Janet Aurelia, LA.....	Seattle
Haug, Andrew J, Grad.....	Seattle	Henry, Ruth H, FA.....	Tacoma
Haug, John, Unc, Bus.....	Bellingham	Hensel, Pauline, FA.....	Seattle
Haugan, Melvin, Uncl, LA.....	Seattle	Hensley, Olive J, LD, LA.....	Seattle
Hauge, Philip E, Grad.....	Parkland	Herb, Elmer, Bus.....	Spokane
Haugen, Olga, LD, FA.....	Seattle	Herbsman, Virginia, Bus.....	Seattle
Hauschel, Robt, Sci.....	Bremerton	Herdlick, Bertha, LA.....	Seattle
Hauschildt, Frank W, Bus.....	Seattle	Hermann, Helen, FA.....	Ritzville
Hausdorf, Ruth, LA.....	Seattle	Herman, Winfield, Unc, Bus.....	Seattle
Haven, George Jr, LD, For.....	Seattle	Hermanson, Stanley, Phar.....	Seattle
Haven, Jean, LA.....	Everett	Hernandez, S C, LD, Bus.....	Philippines
Havland, Wm, Sci (Pre-Med).....	Seattle	Herod, Mignon, FA.....	Zillah
Havlik, Mary Genevieve, FA.....	Scappoose, Or	Heron, Nellie, Sci.....	Seattle
Hawker, C C, Phar.....	Pasco	Heropoulos, Eustathios, Bus.....	Seattle
Hawkins, Cecil L, Bus.....	Napavine	Herr, Jewel, LA.....	Seattle
Hawkins, Hanford T, LD, Engr.....	Pt Ludlow	Herre, Kirk T, LA.....	Bellingham
Hawkins, T Hanford, EE.....	Pt Ludlow	Herren, W A, Law.....	Seattle
Hawkins, Hazel Marion, LA.....	Seattle	Herrett, Clarence H, Bus.....	Seattle
Hawkins, James W, Bus.....	Seattle	Herrick, Winifred, LA.....	Seattle
Hawkins, Jessie Kemp, LD, LA.....	Seattle	Herron, Leo F, Sci.....	Vancouver
Hawkins, Lewis, LA.....	Bellingham	Hertz, Stuart B, LA.....	Vancouver
Hawkins, J Walter, LA.....	Mt Vernon	Hervin, Carl H, Engr.....	Seattle
Hawley, Catherine L, LA.....	Seattle	Herzog, Harold, Bus.....	Holcomb
Hawley, Clarence, Engr.....	Seattle	Hesketh, R Bruce, LD, Bus.....	Seattle
Hawley, Mary, LA.....	Seattle	Hesseltine, Lee F, Grad.....	Seattle
Hay, Marjorie, Sci.....	Seattle	Heuple, Carl, LD, Engr.....	Lakebay
Hay, Muriel, LA.....	Seattle	Heyes, Katherine, LA.....	Seattle
Hayashi, Hisakichi, Bus.....	Japan	Hibbard, W McK, Engr.....	Seattle
Hayden, Geo B, For.....	Tacoma	Hickenbottom, Walter E, LD, Bus.....	Zillah
Hayden, Mary Dyer, LA.....	Seattle	Hicks, Eugene, LD, LA.....	Seattle
Hayes, Byron Howard, Bus.....	Seattle	Hicks, Ethel D, LA.....	Seattle
Hayes, Elizabeth Georgina, Bus.....	Seattle	Hiersch, Wilhelmina, LA.....	Burton
Haynes, Robert, LD, Bus.....	Seattle	Higgins, Wilma, Bus.....	Seattle
Hayward, Wm S, Bus.....	Seattle	Highland, Herman A, Phar.....	Seattle
Hazen, Kathryn, LA.....	Seattle	Hildebrand, Wm M, Bus.....	Tacoma
Hearne, Claude, LD, Bus.....	Seattle	Hildreth, Howard R, Sci.....	Seattle
Heath, Howard, Bus.....	Seattle	Hill, Alfred O, Phar.....	Vancouver
Heaton, William Dean, LD, Bus.....	Spokane	Hill, Arthur R, Bus.....	Seattle
Hebb, Paul H, LA.....	Seattle	Hill, Helena, LA.....	Seattle
Heberlein, Stanley H, Bus.....	Centralia	Hill, J R, Engr.....	Seattle
Hecht, Ruth E, LA.....	Seattle	Hill, Marie, FA.....	Seattle
Hedres, Elizabeth, FA.....	Waterville	Hill, Richard, LA.....	Seattle
Hedreen, Carl Adair, LA.....	Seattle	Hill, Ray H, LA.....	Bellingham
Hedrick, Frieda, FA.....	Seattle	Hill, Raymond J, Bus.....	Zillah

Hillman, Herbert, LA.....	Centuria, Wis	Hopkins, Eugenia, FA.....	Seattle
Hills, Autumn, FA.....	Seattle	Hopkins, Geo F, For.....	Seattle
Hills, Carlotta, Jour.....	Seattle	Hopkins, Herman F, Bus.....	Seattle
Hillyard, Carlton L, Jour.....	Seattle	Hopmann, Harry A, Engr.....	Puyallup
Hilscher, Herbert H, Bus.....	Seattle	Hopper, Clarence G, LA.....	Seattle
Hilstrom, John, Bus.....	Vancouver	Hopper, Edna, FA.....	Seattle
Hilton, Ian, Phar.....	Marysville	Hopper, Ellen F, FA.....	Spokane
Hilmes, Hazel F, Sci.....	Hoquiam	Horn, Erling, Engr.....	Seattle
Hilmes, Roy C, Bus.....	Centralia	Horn, Orlando G, Engr.....	Ridgefield
Hilmes, Velma V, LA.....	Hoquiam	Horn, Raymond, Engr.....	Ritzville
Hineckley, Elizabeth, Sci.....	Seattle	Hornbeck, Helen Marie, LA.....	Seattle
Hindley, Phillip M, LA.....	Seattle	Hornberg, Jalmer T, Bus.....	Newcastle
Hindmarsh, Albert E, LA.....	Seattle	Horne, Harold H, Bus.....	Seattle
Hinman, Chester, A, Bus.....	Lewiston, Id	Horning, A E, LD, Engr.....	Anchorage, Alas
Hinman, Grace, LD, Sci.....	Seattle	Hornstra, Fred, Ed.....	Auburn
Hinman, Isla, FA.....	Yakima	Horowitz, Chas. LA.....	Seattle
Hinsdale, Helen, FA.....	Seattle	Herr, John H, Bus.....	Seattle
Hiral, Takanaga, LA.....	Seattle	Horsfall, Frank, LA.....	Seattle
Hirata, H M, Bus.....	Japan	Horsley, Sears, Bus.....	Yakima
Hirose, Ruby, Phar.....	Auburn	Horst, Claude W, Ed.....	Seattle
Hitchings, Esther Louise, Lib.....	Seattle	Horst, J Hazel, Ed.....	Seattle
Hitchings, Geo H, LA.....	Seattle	Horton, Elizabeth E, LD, FA.....	Seattle
Hitchman, Betty, LA.....	Seattle	Hosner, Reba, FA.....	Seattle
Hitt, Edw G, Engr.....	Seattle	Houston, LeRoy W, Unc, Bus.....	Sumner
Hog, Clarice, LA.....	Seattle	Hovland, Harold, Bus.....	Coupeville
Hoard, Bert Verne, Engr.....	Seattle	Howard, Catherine Frances, LA.....	Seattle
Hoard, J Lynn, Engr.....	Seattle	Howard, Doris, LA.....	Everett
Hobl, Helen, LA.....	Aberdeen	Howard, Edwin L, LA.....	Stanwood
Hobert, Stephen C, LD, Bus.....	Vancouver	Howard, Florence A, FA.....	Seattle
Hobletzell, Austin B, Engr.....	Seattle	Howard, Frances H, LA.....	Seattle
Hodson, Dorothy, FA.....	Seattle	Howard, Helen Elena, LA.....	Stanwood
Hocking, Lillian K, LA.....	Seattle	Howard, Lole, LA.....	Seattle
Hodge, Laurance, LA.....	Seattle	Howard, Mabel Grace, Sci.....	Stanwood
Hodges, Frederick C, Engr.....	Juneau, Alaska	Howard, Rodney J, Bus.....	Seattle
Hodges, Mable B, LA.....	Enumclaw	Howard, Walter J, UD, Engr.....	Seattle
Hodges, Robt, Karl, LD, Bus.....	Seattle	Howard, G Wesley, LD, Engr.....	Seattle
Hodgins, Marie Lee, Grad.....	Seattle	Howe, Kendall L, Engr.....	Seattle
Ho, Fang, Unc, Bus.....	China	Howe, Paul Raymond, Bus.....	Fall City
Hoff, Alice, Bus.....	Seattle	Howe, Ramel E, UD, Educ.....	Olympia
Hoffman, Dorothy, LA.....	Seattle	Howe, Reuel T, LA.....	Edmonds
Hoffman, Florence, LD, LA.....	Olympia	Howe, Wilbur A, Engr.....	Seattle
Hoffman, Lawrence, Sci.....	Seattle	Howell, Iras Claudia, FA.....	Seattle
Hoffman, Marian, LA.....	Seattle	Howland, Earl L, Bus.....	Kirkland
Hofreiter, Lucille, LA.....	Seattle	Hoyt, Donald R, LA.....	Seattle
Hofst, Glen Ellis, Engr.....	Seattle	Hoyt, Dorothy A, Sci.....	Woodinville
Hogan, Louis B, For.....	Cosmopolis	Hoyt, Joseph B, Engr.....	Oroville
Hoggatt, Floyd L, Law.....	Seattle	Hoyt, Marguerite, LA.....	Oroville
Hohenberg, J S, LA.....	Seattle	Hoyt, Verna Margaret, Lib.....	Seattle
Holcomb, Vance R, Bus.....	Seattle	Hripko, Ludmila A, Unc, LA.....	Russia
Holden, Dudley B, Min.....	Seattle	Hrutford, Diana, LA.....	Duluth, Minn
Holden, James H, Grad.....	Seattle	Hu, Tao-Wel, LA.....	Seattle
Holden, John Harold, Bus.....	Seattle	Huang, Chi-Shan, Bus.....	China
Holland, Alfred Marshall, Sci.....	Aberdeen	Hubbard, Arelene, LA.....	Auburn
Hollomon, J Paul, Phar.....	Olympia	Hubbard, Ora E, Bus.....	Klickitat
Holloway, Lucille, LA.....	Seattle	Hubbard, J Proctor, LD, LA.....	Seattle
Holm, Ivan H, Spec, Bus.....	Tacoma	Hubbell, Helen J, Grad.....	New York, NY
Holman, Franklin J, Bus.....	Elma	Hubbell, Ruth, LA.....	Seattle
Holman, Harold E, For.....	Seattle	Hubert, Harry Engr.....	Montesano
Holmberg, L Wesley, LA.....	Seattle	Hudson, Dorothy Wilma, Sci.....	Seattle
Holmes, E M, LA.....	Seattle	Hudson, Roberts D, LA.....	Yakima
Holmes, Kathleen Eversely, Ed.....	Seattle	Hudwon, Mabel C, UD, Bus.....	Everett
Holmes, Henrietta, Sci.....	Seattle	Huff, Edyth B, LA.....	Yakima
Holmes, John H, LA.....	Seattle	Huffine, C Walter, Engr.....	Seattle
Holmes, Joseph Delaney, Law.....	Seattle	Hufford, Charles F, Bus.....	Tacoma
Holmes, Merton, LA.....	Centralia	Hughes, Anne Burke, LA.....	Seattle
Holmes, Wm J, Unc, Bus.....	Portland, Ore	Hughes, Annie E, LA.....	Seattle
Holt, Geo A, For.....	Tacoma	Hughes, Edwin A, Engr.....	Olympia
Holte, Lenore, LD, LA.....	Seattle	Hughes, Fred Lewis, Bus.....	Yakima
Holtzinger, Ruth Estelle, LA.....	Yakima	Hughes, Honoria, LA.....	Seattle
Holz, Eva Lucille, LA.....	Kapowsin	Hughes, Howard G, LD, Sci.....	Bellingham
Holzheimer, Catherine, FA.....	Seattle	Hughes, Joseph L, Bus.....	Wenatchee
Homada, Fred I, Bus.....	Seattle	Hughes, Margaret, LA.....	Tacoma
Hone, Walton, LD, Bus.....	Seattle	Hughes, Martha Ellen, LA.....	Seattle
Honner, Zula Grace, Sci.....	Wenatchee	Hughes, Ruby M, Grad.....	Seattle
Hook, Catherine J, Bus.....	Aberdeen	Hughes, Victor A, Bus.....	Bellingham
Hooper, Eugene F, Law.....	Seattle	Huguleit, Zellne, LA.....	Seattle
Hoover, Henry B, FA.....	Boise, Ida	Huhn, Gustave W, Bus.....	Ellensburg
Hopf, Edna Ellen, LA.....	Pt Angeles	Huhta, Elmer, Sci.....	Hoquiam
Hopgood, Walter, Bus.....	Morton	Huletz, Helen Marie, LA.....	Seattle
Hopkins, Agnes M, LA.....	Seattle		

Hull, Marjorie, LA.....Seattle  
 Hulshouser, Ruth, LA.....Selah  
 Hultgreen, Elart F, LA.....Sprague  
 Humes, Edmond, Phar.....Seattle  
 Hummel, Bertha Royce, Grad.....Seattle  
 Humphrey, Viola, FA.....Seattle  
 Hundal, Ikbail S, Engr.....Vancouver, BC  
 Hunt, A Leigh, Sci.....Seattle  
 Hunt, Beatrice, LA.....Kennydale  
 Hunt, Ernest R, LA.....Seattle  
 Hunt, Laurence W, Bus.....Seattle  
 Hunt, Norma, LA.....Kent  
 Hunt, Ruby H, LA.....Kennydale  
 Hunt, Thos A, Engr.....Kent  
 Hunt, Violet P, LD, LA.....Seattle  
 Hunter, Kerschel C, LA.....Seattle  
 Huntington, LeRoy W, For.....Hoquiam  
 Huntington, R Meredith, For.....Seattle  
 Huntington, Walter L, For.....Cushman Or  
 Huntley, Ralph Wm, Bus.....Spokane  
 Huntley, Clark V, Bus.....Seattle  
 Huntworth, John W, Bus.....Seattle  
 Hurlburt, Chas M, Min.Thompson Falls, Mt  
 Hurlburt, Frances, Sci.Thompson Falls, Mt  
 Hurlbut, Berniece, FA.....Seattle  
 Hurlbut, Clarence W, Engr.....Bellingham  
 Hurlbut, Elizabeth, Jour.....Seattle  
 Hurlbut, Wendell P, LD, Bus.....Spokane  
 Hurspool, Evelyn, LA.....Walla Walla  
 Hurst, Myrtle, LA.....Spokane  
 Huson, Wing, Bus.....Seattle  
 Hussey, Arthur E, Spec.....Seattle  
 Hussey, Edw T, Bus.....Seattle  
 Hutcheson, Austin, LA.....Montesano  
 Hutchings, Mundon, Bus.....Seattle  
 Hutchins, Lewis R, LA.....Seattle  
 Hutchinson, Alva T, Engr.....Vashon  
 Hutchinson, Mary Joy, FA.....Seattle  
 Hutchinson, Robt P, Engr.....Tacoma  
 Hutchinson, Ruby, Sci.....Mt Vernon  
 Hutchinson, Howard, Engr.....Seattle  
 Hutchinson, Nell, FA.....Seattle  
 Hutton, Grace, LD, LA.....Yakima  
 Hyde, Claire Virginia, LA.....China  
 Hwang, Thomas S, UD, LA.....China  
 Hyde, Kelga, Sci.....Seattle  
 Hyland, Edw Holmes, LA.....Seattle  
 Hyland, Katherine, LA.....Seattle  
 Hyland, Marianne, LA.....Seattle  
 Hyllegren, Henry, Bus.....Seattle  
 Hyslin, Thos, Sci.....Tacoma

Ibnch, Horace H, Min.....Seattle  
 Iddius, Earl T, Bus.....Sedro-Woolley  
 Ikeda, Jubel, LD, Bus.....Seattle  
 Ilett, Frank K, LA.....Seattle  
 Imes, Florence E, UD, LA.....Seattle  
 Impola, Eino John, Bus.....Cathlamet  
 Imus, H Jerard, LA.....Kalama  
 Inridson, H J, Fah.....Seattle  
 Ines, Narciso Y, LA.....Philippines  
 Ingersoll, Oliver R, LA.....Everson  
 Ingalls, Ralph L, Bus.....Seattle  
 Inkster, Harry, Sci.....Seattle  
 Iorns, Dean R, Bus.....Seattle  
 Ireland, Gertrude, LA.....Portland, Or  
 Irvine, Helen, Ed.....Seattle  
 Irving, Helen C, LA.....Seattle  
 Irwin, Howard H, Bus.....Okanogan  
 Isenberg, Benj L, Bus.....Seattle  
 Isom, M Dana, Bus.....Colville  
 Israel, Eli, UD, Bus.....Seattle  
 Itkin, Mildred, LA.....Seattle  
 Ives, Luella, LA.....Seattle  
 Ives, Waldo, LA.....Seattle  
 Ivey, Samuel, Bus.....Seattle

Jaccard, Paul A, Engr.....Malaga  
 Jacinto, Victorino, LA.....Philippines  
 Jackson, Alice, LA.....Seattle  
 Jackson, Betty, LA.....Seattle  
 Jackson, Clarence A, LD, Bus.....Castle Rock  
 Jackson, Davin, Bus.....Walla Walla  
 Jackson, Delfer H, LD, Bus.....Poulsbo  
 Jackson, Julia, LD, LA.....Black Diamond  
 Jackson, Jesse M, Bus.....Boise, Ida  
 Jackson, Harold O, Bus.....Portland, Or  
 Jackson, Paul Joseph, LA.....Seattle  
 Jackson, Lillian, LA.....Black Diamond  
 Jackson, Roy E, LA.....Portland, Or  
 Jackson, Virginia, LA.....Seattle  
 Jacobs, Bryan M, ME.....Seattle  
 Jacobs, D Bernard, Phar.....Seattle  
 Jacobs, Geo M, Grad.....Seattle  
 Jacobs, Josephine, LA.....Seattle  
 Jacobsen, H W, Bus.....Seattle  
 Jacobsen, J T, FA.....Des Moines  
 Jacobsen, P A, Engr.....Seattle  
 Jacobson, Duncan A, LD, Sci.....Everett  
 Jacobson, Olga G L, LA.....Seattle  
 Jacobson, Sam S, Bus.....Seattle  
 Jaeger, Bernice P, Sci.....Hawaii  
 Jaggard, R K, LA.....San Francisco, Cal  
 James, Alfred D, LD, Bus.....Seattle  
 James, Clara, Phar.....Seattle  
 James, Dorothy, Sci.....Tacoma  
 James, Flora, FA.....Seattle  
 James, Thurston, Bus.....Seattle  
 Jamison, Edmund J, Sci.....Seattle  
 Jamison, Marguerite, LA.....Manson  
 Janson, Ray, LA.....Seattle  
 Jaques, Guy Edw, Bus.....Pullman  
 Jardine, Nan T, LA.....Seattle  
 Jarvis, N D, Fah.....Pt Townsend  
 Jasper, Martin W, Min.....Seattle  
 Jeffers, Gordon B, Grad.....Olympia  
 Jeffers, Hazel Leola, Sci.....Olympia  
 Jeffers, Maxine, FA.....Olympia  
 Jeffery, Harold B, Engr.....Seattle  
 Jeffries, Wendell, Bus.....Seattle  
 Jenkins, Helen, LA.....Vancouver, BC  
 Jenkins, Louise A, LA.....Raymond  
 Jenks, Theodore C, Unc, Bus.....Seattle  
 Jennelle, Emily, LA.....Seattle  
 Jenner, Melvin Alfred, Engr.....Oso  
 Jenner, Cornelia E, Bus.....Seattle  
 Jenner, Evalene, LA.....Oso  
 Jennerson, H L, LD, Sci.....Seattle  
 Jensen, Andrew B, Unc, LA.....Walla Walla  
 Jensen, A S, Grad.....Seattle  
 Jensen, Charlotte, Bus.....Walla Walla  
 Jensen, Corrin C, Bus.....Keyport  
 Jensen, J Ebbe Engr.....Spokane  
 Jensen, Geo G, LD, Engr.....Bellevue  
 Jensen, Julie, LA.....Esmond, ND  
 Jensen, Helen M, FA.....Seattle  
 Jensen, Howard R, Bus.....Spokane  
 Jensen, Kai, LA.....Seattle  
 Jensen, Leo Severyn, LD, Bus.....Lynden  
 Jensen, G Leslie, Engr.....Ellensburg  
 Jensen, Marion, LD, LA.....Yakima  
 Jensen, Olive, LA.....Joplin, Mo  
 Jensen, Theodore J, Phar.....Bellingham  
 Jeremy, T E, Bus.....Salt Lake City, Utah  
 Jergensen, Emma L, LA.....Seattle  
 Jerome, W J, Ed.....Seattle  
 Jessup, Clara B, LA.....Bremerton  
 Jewell, Earle, Sci.....Granite Falls  
 Jewell, Mildred R, FA.....Hartline  
 Jewett, Elsie K, Sci.....Vancouver  
 Johnsen, Pauline, LD, Bus.....Spokane  
 Johanson, Nels E, Min.....Index  
 Johnson, Adella, Grad.....Minneapolis, Minn  
 Johnson, Adolph Edwin, Engr.....Enumclaw  
 Johnson, Allen F, Bus.....Charleston  
 Johnson, Anna E, LA.....Seattle  
 Johnson, Arthur, Sci.....Seattle

Johnson, Benj F, Bus.....	Aberdeen	Judd, Marie, LA.....	Tacoma
Johnson, Bertil E, Law.....	Tacoma	Judges, Bertha, Grad.....	Seattle
Johnson, Blanche M, LA.....	Seattle	Julayco, Juan J, Sci.....	Philippines
Johnson, Carl M, Bus.....	Seattle		
Johnson, Dorothea E, FA.....	Seattle		
Johnson, Edith Marian, Bus.....	Seattle	Kaiser, Fred H, Sci.....	Rolling Bay
Johnson, Edith Wiley, FA.....	Pt Angeles	Kaiser, Gladys G, Sci.....	Seattle
Johnson, Esther, LD, LA.....	Seattle	Kalal, Dan, Unc, LA.....	Seattle
Johnson, Eva Jane, LA.....	Seattle	Kulenius, Charles Oscar, Bus.....	Hoquiam
Johnson, Fletcher O, Bus.....	Seattle	Kalez, Marion M, Sci.....	Spokane
Johnson, Francis L, For.....	Everett	Kulk, Mary, FA.....	Seattle
Johnson, Frederick A, Engr.....	Seattle	Kallander, Victor, Fsh.....	Nooksack
Johnson, Gladys Irene, Sci.....	Tacoma	Kallgren, Philip A, Engr.....	Hall
Johnson, Harold A, Unc, Bus.....	Walla Walla	Kamb, Walter, LA.....	Mt Vernon
Johnson, Harvey A, Bus.....	Seattle	Kamps, Margaret E, LA.....	Seattle
Johnson, Helen Northrup, LA.....	Spokane	Kamusher, Marion June, LA.....	Kelso
Johnson, Herbert, Bus.....	Winslow	Kan, Yuo, For.....	China
Johnson, Hilding, Grad.....	Seattle	Kane, Kathleen, FA.....	Omak
Johnson, Isyl, LA.....	Tacoma	Kane, Margaret Marie, LA.....	La Center
Johnson, Jeanette E, LA.....	Everett	Kantner, Jean W, LA.....	Seattle
Johnson, Lester Munson, Engr.....	Pt Angeles	Kao, Tsi Yu, LD, Sci.....	China
Johnson, Lulla, LA.....	Seattle	Kardos, A E, Unc, Engr.....	San Francisco, Cal
Johnson, Martin W, Sci.....	Silvana	Karr, Herbert S, Engr.....	Seattle
Johnson, Melvin E, Engr.....	Spokane	Karrer, Lawrence E, Engr.....	Seattle
Johnson, Milton S, LA.....	Seattle	Karshner, Frances, LD, FA.....	Aberdeen
Johnson, Myrtle Adelpha, LD, Sci.....	Everett	Katayama, Elmer, Bus.....	Seattle
Johnson, Nora H, UD, Sci.....	Cle Elum	Kato, Makoto, Unc, Bus.....	Japan
Johnson, Norman, Sci.....	Seattle	Kaufman, Doris, Sci.....	Aberdeen
Johnson, Mrs Queenia G, LA.....	Seattle	Kaufman, Elsa, FA.....	Tacoma
Johnson, Paul W, Bus.....	Spokane	Kaul, S N, For.....	India
Johnson, Ralph C, Grad.....	East Seattle	Kautz, Edith, LA.....	Seattle
Johnson, Raymond A, LD, LA.....	Hoquiam	Kayser, Beatrice, Phar.....	Goldendale
Johnson, Raymond L, LA.....	Tacoma	Kean, James P, Bus.....	Mt Vernon
Johnson, Robt E, LA.....	Seattle	Keating, John E, LA.....	Astoria, Or
Johnson, Roberta, LA.....	Olympia	Keefe, Robert, Bus.....	Snohomish
Johnson, Roscoe R, LA.....	Heppner, Or	Keeler, Hammond George, Bus.....	Sequim
Johnson, Sylvia, Phar.....	Ilwaco	Keeney, H S, LA.....	Bothell
Johnson, Victor, Sci.....	Chester	Keeton, Lorraine, LA.....	Edmonds
Johnson, Victor E, Sci.....	Selah	Kelfer, L Beecher, FA.....	Wenatchee
Johnson, Victor H, Bus.....	Olympia	Kellholtz, Ralph, Engr.....	Seattle
Johnson, Arthur Wm, LA.....	Seattle	Kellholtz, Ruth W, FA.....	Seattle
Johnson, Fayette G, Ed.....	Seattle	Kelth, Allie H, Ed.....	Spokane
Johnson, Helen, LA.....	Victoria, BC	Kelth, Ted, Engr.....	Battle Ground
Johnson, James G, Min.....	Yakima	Keller, Bertha M, Sci.....	Spokane
Johnson, Joseph, LA.....	Seattle	Keller, Earl W, LA.....	Seattle
Johnstone, Robt O, Bus.....	Arlington	Kelley, Albert H, LA.....	Seattle
Jolliffe, John P, Engr.....	Tacoma	Kelley, Curtis, LA.....	Seattle
Jones, Dorothy, LA.....	Tacoma	Kelley, John Ellis, Bus.....	Tacoma
Jones, Ervin M, Bus.....	Seattle	Kelley, Lewis P, Bus.....	Walla Walla
Jones, Essie E, LA, LD.....	Wenatchee	Kelley, Warren Thomas.....	Seattle
Jones, Florence E, FA.....	Seattle	Kellie, Harold, Engr.....	Garfield
Jones, Gracia Ough, LA.....	Seattle	Kellogg, Leo P, Bus.....	Seattle
Jones, Ione Deane, Ed.....	Bellingham	Kellogg, Marion C, FA.....	Seattle
Jones, Ione Louise, LA.....	Hoquiam	Kellogg, Orlo, LA.....	Seattle
Jones, Ivan L, Sci.....	Seattle	Kellum, Jesse, Bus.....	Seattle
Jones, Jarrett C, Bus.....	Stevenson	Kelly, Kathryn, LA.....	Seattle
Jones, Luella E, LD, LA.....	Seattle	Kelly, Norman M, LA.....	Walla Walla
Jones, Mrs Marie M, Grad.....	Forks	Kelso, Kenneth K, LA.....	Seattle
Jones, Ray E, Engr.....	Leavenworth	Kemp, Fred D, LA.....	Prosser
Jones, Shepard F, Bus.....	Seattle	Kemper, Phyllis J, Bus.....	Seattle
Jones, Stanley Ernest, Bus.....	Spokane	Kennedy, Alice, FA.....	Clarkston
Jones, Stephen Barr, Sci.....	Seattle	Kennedy, Bernice, Ed.....	Seattle
Jones, Victor N, FA.....	Seattle	Kennedy, Doreen, UD, Educ.....	Seattle
Jones, Victoria, Sci.....	Seattle	Kennedy, Elizabeth, LA.....	Seattle
Jones, Wm K, Bus.....	Seattle	Kennedy, Lottie Ann, LA.....	Union City
Jones, Winston J, Bus.....	Tacoma	Kennedy, Margaret, LA.....	Seattle
Jones, W Worth, LA.....	Spokane	Kennedy, Russell, LD, Engr.....	Seattle
Jordan, C Paul, LA.....	Seattle	Kennedy, Ruth B, LD, LA.....	Tacoma
Jordan, Frances M, FA.....	Maryhill	Kenney, Helen Ann, Sci.....	Olympia
Jorgensen, Erna, LA.....	Seattle	Kenyon, George, Bus.....	Seattle
Jorgensen, Geo H, Bus.....	Seattle	Kenyon, G D, Bus.....	Seattle
Jorgensen, Harold M, Engr.....	Seattle	Kenyon, Hazel McBee, LA.....	Seattle
Joseph, H Burton, For.....	Seattle	Kenyon, Marcus M, Sci.....	Prosser
Joseon, Felicissimo C, Grad.....	Philippines	Keogh, Ruby, Sci.....	Seattle
Joubert, Edw R, LA.....	Seattle	Kepp, Karl, Engr.....	Seattle
Jower, Joseph A, Engr.....	Portland, Or	Kern, Charlotte H, FA.....	Seattle
Joy, Fay, Sci.....	Seattle	Kerns, Homer, LD, Engr.....	Seattle
Joy, Laura F, LA.....	Seattle	Keogh, Ruth, LD, LA.....	Chicago, Ill
Joyce, Wallace Robt, Engr.....	Seattle	Kerr, Caryl, LA.....	Seattle
Joyner, Myrtle, FA.....	Spokane	Kerr, Elizabeth, LA.....	Seattle

Kerr, William, LA.....	Spokane
Kerry, Albert, LA.....	Seattle
Kerwin, Mary Catherine, FA.....	Seattle
Kesterson, Kris, Bus.....	Satsop
Ketchum, Leland, LA.....	Enumclaw
Ketchum, Mary V, LD, LA.....	Seattle
Ketchum, Nadine Ruth, LA.....	Spokane
Kettenring, Elizabeth, Bus.....	Vancouver
Kettenring, Grace, Sci.....	Vancouver
Kettlestring, Joseph H, For.....	Seattle
Keyes, Donald C, Sci.....	Bellingham
Keyes, Howard C, Sci.....	Bellingham
Keys, Anna, LA.....	Seattle
Khlg, Vivian C, Bus.....	Seattle
Kidder, J D, Bus.....	Seattle
Kidwell, Wm L, Bus.....	Pomeroy
Kieburz, G H, Engr.....	Seattle
Kief, C W, Engr.....	Seattle
Kiefer, Frieda A, Grad.....	Dayton, O
Kiehl, Clarence L, Bus.....	Livingston, Mont
Kiehl, Corynn Phyllis, FA.....	Seattle
Klokenapp, Hortense, Ed.....	Seattle
Klenholz, Mabel L, UD, FA.....	Spokane
Kilgas, Carl A, Bus.....	Puyallup
Kilkenny, Mrs Mable E, Bus.....	Seattle
Kilkenny, W P, Bus.....	Seattle
Kilworth, Wesley, FA.....	Seattle
Kimball, Jessie M, FA.....	Seattle
Kimball, Stanley G, LD, LA.....	Methow
Kimball W M, LA.....	Tacoma
Kimball, W B, LA.....	Seattle
Kimble, Marion, LA.....	Seattle
Kimbro, George, Bus.....	Chehalis
Kimple, Wm A, Sci.....	Seattle
Kimura, Koreaki, LA.....	Seattle
King, Charles E, Unc, LA.....	Bellingham
King, Eleanor Virginia, Sci.....	Seattle
King, Jean Paul, LD, LA.....	Tacoma
King, John L, LA.....	Seattle
King, Robert M, LA.....	Merced, Cal
King, R W, Bus.....	Seattle
King, Winchester, Engr.....	Seattle
Kingman, W Kenneth, LA.....	Chelan
Kinkade, Russell W, Bus.....	Colby
Kinnane, Eileen, Unc, LD.....	Seattle
Kinne, Frances, FA.....	Seattle
Kinsey, Ronald C, LD, LA.....	Seattle
Kirby, Ruth Y, LA.....	Seattle
Kirk, Thomas B, Engr.....	Snoqualmie Falls
Kirner, John Fowler, LD, Engr.....	Sequim
Kirsch, John, Bus.....	Seattle
Kitzinger, Beatrice A, LA.....	Aberdeen
Kleinberg, Beatrice, FA.....	Seattle
Kleinberg, Lena, LA.....	Seattle
Kleinlein, Esther, LD, Sci.....	Seattle
Kline, Austin D, FA.....	Edmonds
Klingensmith, C E, Engr.....	Seattle
Klock, Lois Adele, LA.....	Seattle
Klug, Vivian C, Bus.....	Seattle
Knapp, J A, LA.....	Vancouver
Knaption, Florence, Sci.....	Seattle
Knickerbocker, F Floyd, LA.....	Seattle
Knivel, A J, Bus.....	Butte, Mt
Knight, Chas W, Bus.....	Spokane
Knight, Lowry, Bus.....	Seattle
Knighton, Blanche, Bus.....	Onak
Knipe, Hubert B, LD, Bus.....	Emmett, Ida
Kulsey, John, Engr.....	Seattle
Knoff, J Aubrey, LD, FA.....	Seattle
Knott, Mrs Emma Louise, UD, FA.....	Seattle
Knouse, Marjorie A, FA.....	Seattle
Knowles, Frank H, Bus.....	Portland, Or
Knudsen, B, Sci.....	Kennecott, Alaska
Knudson, Laura E, Sci.....	Spokane
Knudson, Pauline, Spec.....	Sturgeon Bay, Wis
Knuppenburg, Irva C, Bus.....	Seattle
Knuth, Wm E, LA.....	Spangle
Kocher, Virgil, UD, Bus.....	Elma
Kock, Fred C, LA.....	Ritzville
Kock, Samuel, Grad.....	Seattle
Koenig, John, LA.....	Nisqually
Koenig, Mildred L, LA.....	Boise, Ida
Koeppel, Charles A, Bus.....	Seattle
Koeppel, Karl K, Bus.....	Seattle
Koert, Peter, LA.....	Lynden
Koester, Anthony C, LA.....	Seattle
Kohagen, Walter M, Bus.....	Yakima
Koltabashi, Tom Y, LA.....	Seattle
Koivula, Elmer C, Min.....	Seattle
Kokko, Ida.....	Pearson
Kondo, P T, Engr.....	Seattle
Konstantinoff, Zena, Unc, Sci.....	Russia
Konzo, Seichi, Engr.....	Tacoma
Koo, Tai Yu, Engr.....	Seattle
Koppe, C W, LA.....	Vancouver
Koppel, Simon, LD, Bus.....	Salt Lake City, U
Korol, Alexander G, Unc, Engr.....	Russia
Korsakoff, Alek, For.....	Seattle
Kossiakoff, Ivan, Engr.....	Seattle
Kotick, Ottmar, Sci.....	Olympia
Krabge, H Mogens, Engr.....	Bellingham
Kraft, Edwin A, Engr.....	Seattle
Kraft, Marjorie G, Ed.....	Seattle
Krauss, Sophie M, Grad.....	Seattle
Krauter, Orlo W, For.....	Newport
Kreamer, Lena, UD, Educ.....	Seattle
Kreger, George H, Engr.....	Tacoma
Krengel, Walter, UD, LA.....	Seattle
Krups, Ruth Margaret, FA.....	Seattle
Kretschmann, Herbert F, LA.....	Seattle
Kretschmar, G G, Grad.....	Seattle
Kretschmar, Luella L, Sci.....	Seattle
Kretsinger, Helen M, LA.....	Seattle
Krieger, George Edward, Engr.....	Seattle
Kroetch, Catherine, Ed.....	Spokane
Krogstad, Elva, Grad.....	Seattle
Krogstad, Gladys, Sci.....	Seattle
Krull, Walter, LD, Sci.....	Tacoma
Krumm, Hulda Emily, FA.....	Woodman, Wis
Kumblad, W G, LD, Engr.....	Seattle
Kuhn, Edwin E, Bus.....	Spokane
Kuppler, Virginia, LA.....	Pt Angeles
Kuykendall, Berdina, LA.....	Olympia
Kunz, Eugene L, LD, LA.....	Seattle
Kurland, Geo J, LD, Engr.....	Butte, Mont
Kurz, Gertrude, Unc, Bus.....	Seattle
Kwapil, Dorothy, LD, LA.....	Seattle
Kwapil, Richard, Bus.....	Seattle
Kynell, Hildur Madeline, Bus.....	Anacortes
Kynell, Jurbon, LD, Bus.....	Anacortes
Lacy, Violet Dora, Sci.....	Los Angeles, Cal
Ladley, Frankie, LA.....	Seattle
La Follette, Marion B, Engr.....	Seattle
La France, Arthur C, Bus.....	Hamilton, Mt
La France, Elsie M, Sci.....	Hamilton, Mt
Lafrombolse, Clarence B, Bus.....	Enumclaw
Laing, Edward E, Unc, Bus.....	Anacortes
Laing, John Robert, LD, FA.....	Earlington
Laird, Frederick Wm, Grad.....	Vancouver, BC
Laird, Thelma L, LA.....	Seattle
Lake, Clark B, Engr.....	Seattle
Lamb, Lowell R, Min.....	Seattle
Lammers, Frieda, Sci.....	Pt Townsend
Lamont, Ralph H, Bus.....	Seattle
La Motte, James C, Sci.....	Seattle
Lamson, Joseph V, Engr.....	Seattle
Lamson, Mrs Maude H, Unc, LA.....	Seattle
Lancaster, Kirk G, LD, FA.....	Seattle
Lancaster, Leland, Bus.....	Elma
Lancaster, Lyle, Bus.....	Elma
Landeon, Herbert, Bus.....	Seattle
Landis, Ora I, Grad.....	Spokane
Lane, Glen L, Engr.....	Seattle
Lane, Kathryn, LA.....	Seattle
Lane, Ralph B, Engr.....	Bellingham
Lane, W Byron, LA.....	Seattle
Laney, Audrey B, LA.....	Lamona
Lang, Joseph Wm, LD, Eng.....	Seattle



Lange, Bernice, LA.....	Seattle
Lange, Theodore W, Bus.....	Wenatchee
Langhorne, Clifford M, Law.....	Tacoma
Langlie, Arthur B, Law.....	Seattle
Langlie, J Winfield, Bus.....	Seattle
Langlow, Wesley A, Law.....	Tacoma
Langosy, Alejandro, LD, LA.....	Philippines
Lanigan, Edw J, Bus.....	Seattle
Lanig, Oscar D, Engr.....	McCleary
Lansdowne, Elizabeth, FA.....	Everett
Lant, J Glen, Engr.....	Toppenish
Lapham, Kathryn E, LD, LA.....	White Bluffs
La Plant, Josephine, Phar.....	Colville
La Plant, Mary, LA.....	Sedro Woolley
Large, J G, CE.....	Seattle
Larkin, Frances E, LA.....	Seattle
Larkin, Jack Allen, LA.....	Spokane
Larkin, William J, Engr.....	Seattle
La Roque, Rene, For.....	Kellogg, Ida
Larsen, Christian A, Bus.....	White Salmon
Larsen, Lloyd, Engr.....	Portage
Larson, David Raleigh, Bus.....	Seattle
Larson, Edwin E, UD, Eng.....	South Prairie
Larson, Gustav, LA.....	Seattle
Larson, Lars Oscar, LD, LA.....	High Point
Larson, Luella Clair, LA.....	Seattle
Lasater, Wythel, LA.....	Seattle
Lathrop, Alice P, LA.....	Vancouver
Latimer, Vernon G, LA.....	Seattle
Latimer, Walter B, UD, LA.....	Seattle
Latta, Robt N, Bus.....	Seattle
Laube, Florence M, LA.....	Seattle
Laudy, H A, Bus.....	Everett
Laue, Ewart S, Bus.....	Wapato
Lavery, Earl J, UD, Phar.....	Seattle
La Vigne, J L, Law.....	Chewelah
La Vigne, Naomi, LA.....	Seattle
La Vine, Gladys, LA.....	Seattle
Lavroff, Laura, LA.....	Tacoma
Lavroff, Lillian, LA.....	Tacoma
Law, Chas H, Law.....	Bellevue
Lawler, Loretta, LA.....	Raymond
Lawton, Louise, LA.....	Cheney
Lawton, Muriel, LD, FA.....	Cheney
Lawton, Winona, Bus.....	Seattle
Lawvill, A Llewellyn, Phar.....	Montesano
Lea, Chas W, FA.....	Seattle
Lea, Dorothy M, LA.....	Spokane
Lea, William O, Bus.....	Olympia
Leach, Shirley W, FA.....	Olympia
Leaf, Helen Veva, FA.....	Seattle
Leamon, D Thos, LA.....	Seattle
Learned, Allan, Engr.....	Hadlock
Less, Donald R, Engr.....	Index
Leathers, Arthur L, LA.....	Seattle
Leatherwood, William F, LD, LA.....	Burlington
Lebedeff, Y, Min.....	Japan
Lee, Agnes Jean, Sci.....	Everett
Lee, Artrudoe L, Law.....	Seattle
Lee, Elsie, Unc, Sci.....	China
Lee, Hop Ping, Engr.....	China
Lee, Mrs Judith, LA.....	Seattle
Lee, Laughlin, LA.....	Outlook
Lee, Percy M, FA.....	Tacoma
Lee, Robt E, Min.....	Seattle
Leeper, Agnes, LA.....	Seattle
Leeper, Marion, LA.....	Lewiston, Ida
Leevors, Harold, Engr.....	Everett
Lehde, Raymond C, Engr.....	Seattle
Lehman, Arnold, Phar.....	Seattle
Leighton, Roy Sewell, Bus.....	Seattle
Leitch, Marjorie, FA.....	Seattle
Leith, Jessie, LD, LA.....	Seattle
Lemenager, Raymond, Bus.....	Seattle
Lemley, M Elizabeth, LA.....	Tacoma
Lemon, Gertrude H, Bus.....	Seattle
Lemon, Harry E, Grad.....	Carnation
Le Neve, Nina, LA.....	Seattle
Lennon, Archie C, Unc, Engr.....	Elma
Lent, Harold D, Sci.....	Bremerton
Lensrud, Mabel E, LD, LA.....	Seattle
Leonard, LeRoy, LD, LA.....	Naches
Leonard, William C, LD, Sci.....	Naches
Leong, K F, Engr.....	Vancouver, BC
Leonhardt, Hortense, LA.....	Seattle
Lernmond, Helen, LA.....	Seattle
Le Roy, H Wade, For.....	Seattle
Leslie, Anna, LD, Sci.....	Seattle
Lesh, Chester A, Law.....	Walla Walla
Letsinger, Gertrude S, LD, Sci.....	Seattle
Levin, Myer, Phar.....	Spokane
Levinson, Eugene, Unc, LA.....	Seattle
Levinson, Herbert A, Bus.....	Seattle
Levinson, Jack, LA.....	Seattle
Levinson, Sam L, Law.....	Tacoma
Levitin, Morris, Engr.....	Seattle
Levy, David P, LA.....	Seattle
Levy, Harry M, Unc, LA.....	Seattle
Levy, James M, Bus.....	Seattle
Levy, Melvin P, LA.....	Seattle
Levy, Tony W, Ed.....	Spokane
Lewarch, Alma, LD, LA.....	Seattle
Lewis, Chas Henry, Phar.....	Seattle
Lewis, Edith, Bus.....	Roundup, Mt
Lewis, Ernest, Unc, Bus.....	Oakdale
Lewis, Eileen, LA.....	Twin Falls, Ida
Lewis, Fred A, Bus.....	Ritzville
Lewis, Helen F, LA.....	Raymond
Lewis, Hubert P, Bus.....	Seattle
Lewis, James W, Engr.....	Seattle
Lewis, Josephine, LA.....	Seattle
Lewis, Leon, Sci.....	Seattle
Lewis, Margaret, LA.....	Seattle
Leyman, Garnett V, FA.....	Seattle
Liang, C C, Bus.....	China
Licorenko, A, Engr.....	Seattle
Lighthouse, Henry A, Bus.....	Seattle
Lightle, Leo J, LA.....	Seattle
Lillis, Don C, Engr.....	Tacoma
Lillis, Jack, LA.....	Wenatchee
Lilly, Donald R, Engr.....	Bridgeport
Lim, James K, Bus.....	China
Limbach, Dorothy, LA.....	Seattle
Lincoln, Annie Eleanor, Sci.....	Snohomish
Lincoln, Zaida, Sci.....	Seattle
Lind, Andrew W, LA.....	Seattle
Linder, Gertrude, Uncl, LA.....	Omak
Lindholdt, A, LA.....	Seattle
Lindsay, Arthur W, LD, Bus.....	Seattle
Lindsey, C Abbott, Law.....	Seattle
Lindsay, Ralph, LD, For.....	Olympia
Lindstrom, Gertrude, Sci.....	Seattle
Linn, Harold A, LA.....	Seattle
Linn, Robt D, Bus.....	Aberdeen
Lindstrom, Edmund, LD, Eng.....	Seattle
Linrud, Margaret, LA.....	Ferndale
Lippmann, Edith, LA.....	Seattle
Lippy, John Emmett, FA.....	Harper
Lipsky, Beth M, LA.....	Seattle
Lister, George, LD, Bus.....	Seattle
Liston, Edward J, UD, LA.....	Orillia
Littell, Max E, Bus.....	Scottsburgh, Ind
Little, A B, Bus.....	Kelso
Little, Earl B, LD, Bus.....	Chelan
Little, Marjorie, LD, LA.....	Seattle
Littlefield, Lena, FA.....	Seattle
Liu, Shun-Tsung, Bus.....	China
Lively, James W, Engr.....	Seattle
Lively, Philip M, Bus.....	Seattle
Livingood, Joe, LA.....	Seattle
Llloyd, Helen A, Lib.....	Seattle
Lloyd, Katherine, Engr.....	Seattle
Lloy, Percy, Bus.....	Everett
Loacker, W J, LA.....	Seattle
Lochbaum, Maxine, Sci.....	Sumas
Lochow, Wm, Engr.....	Kent
Lochte, William A, LD, Engr.....	Seattle
Lockart, Bert, Bus.....	Seattle
Lockhart, Russell, Bus.....	Marysville

Loewer, Charles H., Bus.....	Seattle	MacBain, Keith, Bus.....	Everett
Logren, Frederick, V. Phar.....	Seattle	MacBeth, Jessie A., Lib.....	Vancouver, BC
Logan, Eittle, Ed.....	Tacoma	MacClain, A. Lewis, Grad.....	Seattle
Logan, George A., Grad.....	Walla Walla	MacCurdy, Clarice, FA.....	Seattle
Logan, Loran, LA.....	Seattle	MacDonald, A. Lyall, Sci.....	Tieton
Logan, Mead, Phar.....	Seattle	MacDonald, Archibald N., Law.....	Seattle
Loken, Clarice, FA.....	Seattle	MacDonald, Aristelle, FA.....	Seattle
Lombardine, H. C., Sci.....	Seattle	MacDonald, Barbara J., FA.....	Tieton
Lomheim, Alton, Bus.....	Everett	MacDonald, Ellzabeth, Grad. Eau Claire, Wis	
Lonctat, H. Melvin, Sci.....	Yacolt	MacDonald, Gordon, LA.....	Hoquiam
Loneragan, Thyra, LA.....	Seattle	MacDonald, Louise, LA.....	Seattle
Long, Gladys M., Bus.....	Pt. Angeles	MacDonald, Rachel Isabel, LA.....	Kent
Long, Rill H., Engr.....	Montpelier, Ida	MacDonald, Rene, FA.....	Seattle
Long, Stanley B., LA.....	Chehalis	MacDonald, M. Ruth, LA.....	Seattle
Longhead, Eleanore, LA.....	Seattle	MacDonald, Willard, Bus.....	Buckley
Lonke, Lillian, Sci.....	Seattle	MacDonell, Ruby, Sci.....	Vancouver
Loosanoff, Victor, Unc, Fsh.....	Russia	MacDougall, Maude, LA.....	Seattle
Lonseth, Herbert C., Sci.....	Seattle	MacEwan, John D., LD, LA.....	Tukwila
Lopez, R. E., Bus.....	Seattle	MacFarlane, Lorna E., LA.....	Caldwell, Ida
Lorah, James R., Grad.....	Seattle	MacFarlane, Margretta, FA.....	Seattle
Lord, Helen, LA.....	Olympia	MacFarlane, Zora, Sci.....	Seattle
Loree, Hazel, UD, LA.....	So Bellyingham	MacGregor, Ellen, LA.....	Kent
Lorenzo, Louis A., Bus.....	Seattle	MacKay, Herndon, Bus.....	Spokane
Louden, Russell, Ed.....	Centralia	MacKechnie, Russell H., Bus.....	Pt. Angeles
Loudenback, Ivan, Spec.....	Seattle	MacKenzie, D. H., Bus.....	Rossland, BC
Loudenback, Mildred, LD, LA.....	Wenatchee	MacKenzie, Helen, LA.....	Colfax
Loughary, Jack B., UD, Bus.....	Sedro-Woolley	MacKinnon, Anabel, FA.....	Spokane Bridge
Loughlen, P. E., Bus.....	Puyallup	MacKinnon, D. I., LD, Bus.....	Juneau, Alaska
Louis, Lillian G., LA.....	Benton, Ill	MacKintosh, D. C., LA.....	Seattle
Lovejoy, Eugene O., Bus.....	Coupeville	MacLaughlin, Margaret, Sci.....	Seattle
Loving, Frank E., Bus.....	Seattle	MacLaughlin, Mrs W. L., FA.....	Wenatchee
Loving, Marianne, LA.....	Haines, Alaska	MacLean, Duncan, Engr.....	Seattle
Low, Josephine, Sci.....	Dayton	MacLean, W. W., Engr. N Westminster, BC	
Lowe, Helen Y., LA.....	Victoria	MacLeod, Don, Min.....	Calgary, Alta
Lowrie, Ruth Almira, Phar.....	Seattle	MacLeod, Raymond, Phar.....	Seattle
Lowy, Lewis, Engr.....	Seattle	MacMurray, Douglas, Sci.....	Seattle
Lucas, Clarence R., Fsh.....	Seattle	MacNaught, Donald, Sci.....	Seattle
Lucas, Eustaquir, Engr.....	Philippines	MacNaughton, B. Leslie, Sci.....	Seattle
Lucas, Harriet, FA.....	Everett	MacTaggart, Eunice, LA.....	Seattle
Lucas, Marian, LA.....	Seattle	McAbee, Grace, LA.....	Seattle
Lucas, William, Bus.....	Yakima	McAllister, Geraldine, LA.....	Seattle
Luce, Daisy Adeline, Sci.....	Seattle	McAllister, Josephine, LA.....	Seattle
Luce, Erma, LA.....	San Francisco, Cal	McAnally, Bonnie, Bus.....	Yakima
Luckerath, Carl B., Sci.....	Seattle	McAneny, John Engr.....	Seattle
Lucus, Helen M., LA.....	Bremerton	McArthur, Joe A., LD, LA.....	Seattle
Ludwig, Eugene, Engr.....	Seattle	McAssey, Dollie, Sci.....	Seattle
Luft, Max, UD, Engr.....	Bremerton	McAulay, John H., LD, Engr.....	Yakima
Luthlen, Murella M., LD, LA.....	Seattle	McBee, Alfred, Law.....	Seattle
Lukens, Fred M., Min.....	Seattle	McBee, Marian, LD, LA.....	Seattle
Lumbard, Roy M., LA.....	Seattle	McBride, Kathleen, Unc, Educ.....	Seattle
Lund, John Grant, LA.....	Seattle	McCabe, Helen D., LA.....	Seattle
Lund, John V., Jour.....	Seattle	McCahren, Leo F., Min. Devils Lake, ND	
Lundell, Signe, LA.....	Issaquah	McCallum, Donald S., Bus.....	Summer
Lungreen, Rolfe P., For.....	Seattle	McCane, Ames, UD, Engr.....	Seattle
Lunke, James Richard, LD, Engr.....	Seattle	McCann, Gertrude, LA.....	Everett
Luna, Donna, Bus.....	Seattle	McCann, Helen R., LA.....	Edmonds
Lunnum, Anna Joan, LA.....	Silvana	McCannel, Kenneth C., Engr.....	Victoria, BC
Lurie, David, Engr.....	Seattle	McCart, Ethel M., LA.....	Pt. Angeles
Lurie, Elsie M., LD, LA.....	Seattle	McCarthy, Corriane E., LA.....	Kelso
Lurie, Manuel, LA.....	Seattle	McCarthy, Donald F., Engr.....	Seattle
Lust, Harold W., Min.....	Tacoma	McCarthy, E. J., Grad.....	Kelso
Luthy, Marion S., LA.....	Seattle	McCarthy, Grace A., LA.....	Seattle
Lyette, Edythe E., FA.....	Spokane	McCarthy, Francis J., Bus.....	Seattle
Lyette, John P., Law.....	Seattle	McCarthy, Margaret, LA.....	Seattle
Lyette, Mrs Julia L., Law.....	Seattle	McCartney, John F., Bus.....	Seattle
Lyle, William, LD, Sci.....	Seattle	McCarty, Frances, LA.....	Seattle
Lynch, D. R., LD, Sci.....	Houston, Mo	McCarty, Marguerite, LA.....	Seattle
Lynch, Elizabeth, LA.....	Seattle	McCarty, Ruth E., LA.....	Seattle
Lynch, Herbert C., Sci.....	Yakima	McCaughy, D. A., Bus.....	Seattle
Lynch, James L., Bus.....	Seattle	McCauley, G. W., Bus.....	Seattle
Lynch, Joseph H., Ed. Bonners Ferry, Ida		McCausland, Erwin R., Engr.....	Pt. Townsend
Lynch, Paula G., LA.....	Seattle	McClain, Dorothy, LD, FA.....	Seattle
Lynch, Thomas C., Grad.....	Seattle	McClarren, Arthur E., Engr.....	Seattle
Lynn, Irma, Lib.....	East Seattle	McClearey, Howard C., Bus.....	Seattle
Lyons, Anne, LA.....	Seattle	McCloud, Walter, LD, Bus.....	Seattle
Lyons, James F., Bus.....	Seattle	McClung, Olney, Sci.....	Seattle
MacAdams, William B., Bus.....	Seattle	McClure, Charles Willard, LA.....	Yakima
MacAulay, Verna, LA.....	Seattle	McClure, Frank B., UD, Bus.....	Seattle
		McComas, Stanley, For.....	Anacortes
		McConihe, Ruth Noyes, Ed.....	Seattle

McConnell, Avis J, LA.....	Seattle
McConnell, Delwin Elfor, Min.....	Taylor
McCormick, George P, Min.....	Portage
McCormick, Grace, Sci.....	Pinehurst
McCormick, William, Bus.....	Seattle
McCormick, William Earl, Sci.....	Seattle
McCoy, Elizabeth P, LA.....	Seattle
McCoy, Fred B, For.....	Seattle
McCoy, Helen, LA.....	Spokane
McCoy, John W, Phar.....	Seattle
McCoy, Mark L, Bus.....	Seattle
McCoy, Newton C, Grad.....	Seattle
McCoy, William Nell, Bus.....	Onkesdale
McCracken, J Cresap, LD, Bus.....	Seattle
McCracken, Willis F, Engr.....	Seattle
McCrary, Alfred, Bus.....	Seattle
McCrimmon, Norman, Bus.....	Aberdeen
McCroskey, Jean, LA.....	Colfax
McCroskey, Mary Lee, LA.....	Colfax
McCroskey, Wendell H, Bus.....	Seattle
McCulloch, Mrs Alice, Spec.....	Seattle
McCulloch, Allen J, Phar.....	Orting
McCulloch, Lloyd, Sci.....	Everett
McCush, Lillian, FA.....	Bellingham
McDermid, Don C, Bus.....	Seattle
McDermott, Paul, LD, LA.....	Pateros
McDonagh, William James, Bus.....	Seattle
McDonald, Charles J, Spec.....	Yakima
McDonald, Donald T, Bus.....	Seattle
McDonald, John H, LD, For.....	Clippier
McDonald, Ruth C, Bus.....	Pasco
McDonnell, Audrey, LA.....	Seattle
McDonnell, E L, Grad.....	Seattle
McDonnell, Marion E, LA.....	Seattle
McDonough, Beaudette, Bus.....	Seattle
McDonough, Raphael, LA.....	Seattle
McDowell, Frances, LA.....	Seattle
McDowell, Marion, LD, FA.....	Seattle
McEachern, Gertrude, LA.....	Seattle
McEachern, Marian, LA.....	Seattle
McElhiney, Jack, Engr.....	Bremerton
McElreath, Viola, FA.....	Seattle
McElroy, Jean B, Bus.....	Seattle
McElvain, Ernest E, FA.....	Spokane
McEntyre, Alice, LA.....	Seattle
McEntyre, George M, LD, Engr.....	Seattle
McFadden, Alpha, LA.....	Chehalis
McFadden, David J, LD, LA.....	Bremerton
McFarland, Charles, For.....	Mt Vernon
McFee, Bertha L, Phar.....	Seattle
McFee, Louisa, LA.....	Seattle
McGary, Frank L, Bus.....	Seattle
McGary, O, Engr.....	Seattle
McGee, Albert J, Engr.....	Seattle
McGibbon, Donald, Bus.....	Seattle
McGill, Eleanor, LA.....	Seattle
McGill, Edwin, LD, Bus.....	Seattle
McGill, Merrle P, Grad.....	Seattle
McGill, Winifred, Grad.....	Yambler, O
McGinnis, Mary A, FA.....	Seattle
McGirr, Marian J, LA.....	Seattle
McGlickrick, Jack H, Bus.....	Vancouver
McGovern, Florence, FA.....	Spokane
McGovern, Lucile, LA.....	Spokane
McGowan, Edward, Bus.....	Bremerton
McGowan, John H, LA.....	Boise
McGrath, Doris, LA.....	Walla Walla
McGrath, Helen L, Sci.....	Seattle
McGrath, J Winton, Bus.....	Seattle
McGuinness, Charles D, LA.....	Snohomish
McGuire, Grace A, Unc, FA.....	Seattle
McGuire, Louis H, Min.....	Seattle
McGuire, Wilbur L, LA.....	Olympia
McHarrie, Lindsay, LA.....	Seattle
McHugh, J C, LD, Bus.....	San Francisco, Cal
McKay, Annie Laurie, LA.....	Seattle
McHenry, T Edwin, Bus.....	Harrison, Ida
McIlravy, Lowell C, Bus.....	Seattle
McInroe, Lloyd G, Bus.....	Walla Walla
McIntire, Mabel, UD, LA.....	Helena, Mont
McIntosh, Edith A, LA.....	Seattle
McKay, Douglas, LA.....	Sumas
McKay, Francis H, UD, FA.....	Spokane
McKay, Helen, LA.....	Seattle
McKendrick, Marjorie, LA.....	Butte, Mt
McKensle, B Lucile, FA.....	Seattle
McKensle, Edward, FA.....	Vancouver, BC
McKensle, Frank W, Engr.....	Seattle
McKensle, Kenetnh D, Bus.....	Seattle
McKensle, W A, Engr.....	Seattle
McKinney, Jessie D, Spec.....	Seattle
McKinney, Waldo Emerson, FA.....	Seattle
McKinstry, C H, Bus.....	Seattle
McKnight, Edwin T, Sci.....	Seattle
McKnight, John T, UD, Sci.....	Cle Elum
McKnight, Merrill, LA.....	Seattle
McLachlan, Hugh J, Unc, Engr.....	Sumner
McLaren, Arnold, Bus.....	Seattle
McLaurin, Hugh D, Sci.....	Lafayette, La
McLean, Allan G, LA.....	Seattle
McLean, George, Engr.....	Seattle
McLean, Martin Jr, LD, LA.....	Seattle
McLees, Kenneth, Bus.....	Meedowdale
McLellan, Hazel, Bus.....	Spokane
McLellan, Margaret, LA.....	Seattle
McLellan, Maxine K, Grad.....	Seattle
McLellan, R D, Grad.....	Tacoma
McLeod, Cleo Ruth, FA.....	Everett
McLeod, Gwendolyn E, FA.....	Cascadia, Ida
McLeod, Horace, LD, LA.....	Seattle
McLeod, Howard W, LD, LA.....	Seattle
McLeod, Jean Keith, UD, LA.....	Portland, Ore
McLeod, Neil K, LA.....	Seattle
McManus, E Mildred, FA.....	Vancouver, BC
McMeekin, Florence, LA.....	Seattle
McMonaonle, Alberta, LA.....	Seattle
McMorrin, Jean P, Grad.....	Seattle
McMullen, Joseph Edward, Bus.....	Seattle
McMullen, Robert B, Engr.....	Seattle
McNally, Vincent P, LA.....	Seattle
McNamara, Harold, Bus.....	Olympia
McNamara, Mary, LA.....	Edmonds
McNamara, Robert, Phar.....	Seattle
McNary, Catherine, LA.....	Pendleton, Or
McNaughton, James W, LA.....	Juneau, Alaska
McNeal, Ervin D, LA.....	Bend, Or
McNeill, Kathleen, LD, LA.....	Seattle
McNeill, Harold E, Engr.....	Tacoma
McPhee, Alex S, FA.....	Auburn
McPhee, E Jean, LA.....	Seattle
McPhee, Jack, LA.....	Seattle
McPherson, Allen, Bus.....	Seattle
McPherson, Kenneth, Engr.....	Brewster
McQuaid, Thelma, FA.....	Hawaii
McRae, Edwin, For.....	Seattle
McRae, Ruth, LA.....	Seattle
McVay, Irwin Iles, Bus.....	Saltan
McVay, John, Sci.....	Seattle
Ma, Chang-Zan, Bus.....	Swaton, China
Mabee, Clifford O, Bus.....	Multnomah, Or
Madden, Helen I, Ed.....	Caldwell, Ida
Magbanna, Maning Parcon, LA.....	Philippines
Mage, Jack D, LD, Eng.....	Seattle
Magee, John Homer, LA.....	Seattle
Magel, Conrad, jr, Bus.....	Twin Falls, Ida
Maginnis, William J, LD, Bus.....	Seattle
Magsombol, Norberta, Sci.....	Seattle
Maher, Marian F, LA.....	Sequim
Maher, Maybelle, Sci.....	Two Harbors, Minn
Mahnken, Carl H, Bus.....	Seattle
Mahoney, Katharine, LA.....	Seattle
Mahoney, Philip, LA.....	Heppner, Or
Makino, Megumu, Unc, Bus.....	Seattle
Malakoff, Freda, Unc, LA.....	Seattle
Malinao, Delfin, LA.....	Philippines
Malloy, Kathleen J, LA.....	Seattle
Malone, A P, Bus.....	Seattle
Malone, Coe, Bus.....	Monroe
Malone, Walter W, Law.....	Tacoma

Maloney, Edward C, LD, LA...	Skykomish
Maloney, Gilbert, UD, Sci.....	Everett
Maloney, Percy O, Phar.....	Bothell
Maloney, Pete, jr, LA.....	North Bend
Maloney, Thelma, LD, Sci.....	Skykomish
Manard, Lucille, LA.....	Seattle
Manca, Eugene T, Bus.....	Seattle
Manca, Milo J, LA.....	Seattle
Manchester, A R, For.....	Almira
Manfred, Nicholas, Unc, Engr.....	Irvin
Manley, Catherine B, LA.....	Seattle
Manley, Marlon, LA.....	Tacoma
Manley, Paul O, Grad.....	Seattle
Manluco, Alfonso, Engr.....	Philippines
Manling, Clare, FA.....	Seattle
Manning, Edward, Bus.....	Seattle
Manning, Harold C, EE.....	Seattle
Manning, Jane, LA.....	Helena, Mt
Mansfield, Allan H, FA.....	Everett
Mansur, Howard H, ChE.....	Ellensburg
Manthey, Isabel W, LD, Sci.....	Seattle
Mantor, G Crosby, Bus.....	Seattle
Maples, Elmer R, Bus.....	Portland, Or
Mar, Shu Tong Reginald, LA.....	Seattle
Maran, Leo J, Bus.....	Helena, Mt
March, James H, Unc, Bus.....	Seattle
Marchand, Ernest, LA.....	Seattle
Marchand, Morgan, Sci.....	Seattle
Marcus, Fred, Bus.....	Seattle
Marcus, Samuel W, LD, Bus.....	Seattle
Marine, William R, Bus.....	Seattle
Marino, Frank, Fsh.....	Seattle
Maring, Helen, Emma, LA.....	Seattle
Marion, Armand, LA.....	Seattle
Marlon, Lucien F, LA.....	Seattle
Markewitz, Ernest, LA.....	Portland, Or
Markay, Wm Charles, ME.....	Seattle
Markham, Blanche E, Grad.....	Seattle
Markusen, Grace, LA.....	Seattle
Marland, Frances, LA.....	Seattle
Marlatt, John H, LA.....	Spokane
Marmont, Helen M, Bus.....	Seattle
Marple, Warren H, LA.....	Seattle
Marquis, Ralph W, UD, LA.....	Bellingham
Marrin, Mrs Adriana V D, Ed.....	Seattle
Marrlott, Ethel B, Sci.....	Bremerton
Marrlott, Frances, LA.....	Bremerton
Marrlott, George, UD, Bus.....	Seattle
Mars, Annice, LD, Bus.....	Snohomish
Marsh, Earl R, LA.....	Vancouver
Marsh, Jessie Gale, FA.....	Kent
Marsh, Ruth I, Sci.....	Seattle
Marsh, Paul F, Unc, LA.....	Seattle
Marsh, Shirley R, LA.....	Kelso
Marshall, Burt W, Bus.....	Seattle
Marshall, Charles C, Jr, CE.....	Seattle
Marshall, H L, LD, Engr.....	Seattle
Marshall, Iris, Bus.....	Dungeness
Marshall, Roy S, Bus.....	Seattle
Marshall, Zelma, LA.....	Seattle
Martens, Aleda, Phar.....	Seattle
Martin, Albert W Jr, Engr.....	Seattle
Martin, Alfred E, LD, Bus.....	Seattle
Martin, Bertha, Bus.....	Seattle
Martin, Ernest S, LA.....	Seattle
Martin, E W, LD, Bus.....	Seattle
Martin, G Emily, LA.....	Seattle
Martin, John R, LA.....	Seattle
Martin, M K, Phar.....	Bothell
Martin, O Harry, LA.....	Seattle
Martin, Paul M, UD, Engr.....	Puyallup
Martin, Rowland J, Bus.....	Seattle
Martin, Seth Keir, LA.....	Spokane
Martin, Trula, FA.....	Seattle
Martin, W Stanton, Engr.....	Seattle
Martina, John, LD, Bus.....	Seattle
Martincivic, Patricia, Unc, FA.....	Seattle
Martinson, Esther, Grad.....	Genesee, Ida
Maryott, Howard, LA.....	Seattle
Maschke, Dorothy D, LA.....	Republic
Massar, Anna, Bus.....	Mt Vernon
Massar, Marjorie, Bus.....	Mt Vernon
Mason, Earl C, UD, Engr.....	Seattle
Mason, Lella L, LA.....	Spokane
Masurda, Thomas, LA.....	Ellensburg
Matchett, Earl, Bus.....	Spokane
Matheson, Johanna B, FA.....	Seattle
Matheson, Margaret J, LA.....	Seattle
Matheson, Marjery, LA.....	Seattle
Mathews, Elizabeth J, Sci.....	Seattle
Mathis, Clinton, LA.....	Seattle
Mathis, Hortense, LA.....	Seattle
Mathis, Jean, Bus.....	Granger
Matlock, Orin, Bus.....	Spokane
Matsen, Roy, LD, Sci.....	Seattle
Matsumoto, Takashi, FA.....	Japan
Matsumura, Shigeo, Bus.....	Seattle
Matthews, Corwin D, Bus.....	Spokane
Matthews, Dorothy H, FA.....	Seattle
Matthews, Gwladys, LA.....	Seattle
Matthews, James, LD, Bus.....	Seattle
Matthews, Julian O, Law.....	Seattle
Matthews, Paul R, LA.....	Seattle
Mattila, Walter, LA.....	Woodland
Mattson, John I, FA.....	Hoquiam
Mattson, Ray, Sci.....	Portage
Matzner, Martha, Bus.....	Spokane
Maughan, Maxey, Bus.....	Seattle
Maulsby, Dent, For.....	Everett
Mauren, Sigee, LA.....	Seattle
Maurier, D A, Bus.....	Seattle
Maydahl, Bergette, Sci.....	Spokane
Maxson, Ruth, Sci.....	Seattle
Maxwell, Willard, LD, Bus.....	Seattle
Mayer, Alexander, Bus.....	Seattle
Mayer, H E, Engr.....	Seattle
Mayes, Evelyn, Sci.....	Seattle
Mayes, Virgil, LD, Engr.....	Seattle
Maylor, Marc L, Bus.....	Seattle
Maynard, Jack E, Engr.....	Morse, Sask
Maynard, M G, LD, Bus.....	Sioux City, Ia
Mayrand, Anita, FA.....	Seattle
Mazna, George J, Bus.....	Spokane
Mead, Lawrence, Bus.....	Wenatchee
Meade, Archie, Bus.....	Auburn
Meagher, Vivian A, Bus.....	Seattle
Meeker, Marian E, Sci.....	Seattle
Meckstroth, C W, Bus.....	Seattle
Medica, Walter L, LD, LA.....	Seattle
Medler, Louisa, LA.....	Seattle
Medved, Hugo P, Bus.....	Nez Perce, Ida
Meekhoff, Mynerd, LA.....	Everett
Meeks, Anastasia, LA.....	Great Falls, Mt
Meeker, Herbert, LD, LA.....	Spokane
Mehan, McCormick, LD, Sci.....	Seattle
Mehner, Esther, LA.....	Bremerton
Mehner, Gertrude, Sci.....	Bremerton
Melch, Fern M, Sci.....	Seattle
Melson, Ray C, LD, Bus.....	Bowden, Alta
Melstest, Kenneth, Bus.....	Seattle
Melang, Bjorn L, Engr.....	Seattle
Melby, Mildred Ellen, LA.....	Seattle
Melcher, Bernice, LA.....	Seattle
Melder, F Eugene, Bus.....	Seattle
Mendenhall, J R, Bus.....	Boise, Ida
Mendham, Bessie, Sci.....	Seattle
Menke, Henry, LA.....	Merced, Cal
Mentzer, Cyrus J, Law.....	Tacoma
Mercer, Walter Edgar, Bus.....	Montesano
Mercy, Frederick, LD, Bus.....	Yakima
Meris, Francisco, LD, Engr.....	Philippines
Mero, Ralph M, Engr.....	Seattle
Merrifield, Lee, LA.....	Kent
Merrill, Elliott, Engr.....	Seattle
Merrill, Grant W, Grad.....	Seattle
Merrill, John E, Bus.....	Seattle
Merrill, Marion S, LD, FA.....	Seattle
Merritt, Dorothy E, FA.....	Seattle
Merritt, Kenneth G, Bus.....	Auburn
Merritt, William H, Sci.....	Seattle

Meserve, Kenneth A, Bus....	Grays Harbor
Mesher, Mose, LA.....	Seattle
Metcalfe, Bernice, LA.....	Yakima
Metcalfe, K A, Bus.....	Tacoma
Metcalfe, Kathryn, LA.....	Yakima
Metcalfe, G E, LA.....	Seattle
Metsker, Edith, FA.....	Seattle
Mettel, Evelyn, Bus.....	Seattle
Mettler, Gordon, Unc, LA.....	Rexford, Mont
Metz, J Ernest, Bus.....	Post Falls, Ida
Metz, Reas L, LD, LA.....	Hatton
Metz, W Willard, Bus.....	Hatton
Metsger, Frank D, Engr.....	Wenatchee
Meyer, Grant E, Bus.....	Chehalis
Meyer, Herman H, LA.....	Seattle
Meyer, Ivan W, FA.....	Walla Walla
Meyer, Wilhelm H, LD, LA.....	Seattle
Meyers, Fred, LD, Bus.....	Seattle
Meyers, Liv Alice, LA.....	Seattle
Meyers, Sheldon C, Phar.....	Seattle
Meyring, Eugene A, Engr.....	Seattle
Miche, Ethel, LA.....	Seattle
Mickelson, Paul W, Bus.....	Camas
Middleton, Campbell, Sci.....	Seattle
Middleton, Maurine, LA.....	Seattle
Mielke, Clara Helen, LA.....	Seattle
Mielke, Grace, Ed.....	Seattle
Mielke, Helen Evelyn, FA.....	Spokane
Mielke, Marie E, Bus.....	Spokane
Miles, Edward, Unc, Engr.....	Seattle
Miles, J George, LD, LA.....	Seattle
Miles, John Hunter, Bus.....	Chehalis
Miles, Norris, LA.....	Seattle
Miley, John, Engr.....	Bremerton
Miley, Louise, LA.....	Everett
Milford, James W, Bus.....	Seattle
Miller, Abe, Bus.....	Seattle
Miller, Adelalde Lavina, FA.....	Seattle
Miller, Alma, FA.....	Seattle
Miller, Arthur A, Spec.....	Seattle
Miller, Beatrice K, LA.....	Yakima
Miller, Caleb W, Engr.....	Union City
Miller, Carl F, Law.....	Juanita, Pa
Miller, Cecil M, Engr.....	Seattle
Miller, Charlotte, Sci.....	Seattle
Miller, Clarice D, LD.....	Tacoma
Miller, Clemens M, Bus.....	Seattle
Miller, Edwin Theodore, Engr.....	Buckley
Miller, Eloise, LA.....	Seattle
Miller, Ernest, LA.....	Seattle
Miller, Florence A, LD, LA.....	Omak
Miller, Fred Allen, LD, Engr.....	Datsy
Miller, George L, LD, Bus.....	Seattle
Miller, Isidor, Bus.....	Seattle
Miller, John E, Bus.....	Seattle
Miller, Keith, Bus.....	Seattle
Miller, Laura A, LA.....	Seattle
Miller, Lecil C, Sci.....	Seattle
Miller, J Lyle, Bus.....	Seattle
Miller, Marie, LA.....	Seattle
Miller, Marjorie, LA.....	Startup
Miller, Martha E, LA.....	Pe Ell
Miller, Mervyn Bernard, LA.....	Seattle
Miller, Paul H, Bus.....	Yakima
Miller, Posey, LA.....	Alderwood Manor
Miller, Robert E, Engr.....	Puyallup
Miller, S Ernest, LD, LA.....	Cle Elum
Miller, Theo H, Bus.....	Kallispell, Mt
Miller, Vera Winona, LA.....	Seattle
Miller, Vivian, Sci.....	Vancouver
Miller, Zelma, LA.....	Goldendale
Miller, Zephorina, LA.....	Seattle
Millett, Lowell, Sci.....	Seattle
Millican, Harold A, Grad.....	Seattle
Milligan, Donald A, Bus.....	Seattle
Millman, Leonard F, LD, LA.....	Seattle
Millman, Wendell A, Sci.....	Seattle
Millon, Carroll, Bus.....	Seattle
Mills, Archibald R, LA.....	Curtis
Mills, Elizabeth, LA.....	Seattle
Mills, George, Bus.....	Olympia
Mills, Mrs Gertrude R, LA.....	Seattle
Mills, Mabel, LA.....	Seattle
Mills, Merritt G, LA.....	Olympia
Mills, Paul A, Engr.....	Seattle
Mills, Russell, Grad.....	Seattle
Mills, Victor, Engr.....	San Jose, Cal
Millot, John A, Law.....	Seattle
Minard, George, Bus.....	Elma
Miner, Eva Lee, Sci.....	Seattle
Mineta, Mokichi, LA.....	Japan
Mingit, William F, Bus.....	New York City
Minor, Isabelle Nealand, LA.....	Portland, Or
Minter, Donald A, Bus.....	Tacoma
Minter, Laurabelle, LA.....	Tacoma
Mironoff, Nicholas E, Unc, Engr.....	Russia
Mischler, James J, Bus.....	Seattle
Misener, Louis A, EE.....	Tacoma
Misra, Ben, LA.....	India
Mitchell, Caroline, FA.....	Seattle
Mitchell, Dorla, Sci.....	Snohomish
Mitchell, Dorothy, Sci.....	Seattle
Mitchell, Dwight S, Bus.....	Seattle
Mitchell, Lawrence F, Sci.....	Ft Casey
Mitchell, Mary, LA.....	Seattle
Mitchell, S Carson, Bus.....	Eureka, Cal
Mitchell, Verne H, Bus.....	Kennewick
Milton, Leslie, Engr.....	Pt Townsend
Miyamoto, Sanji, LA.....	Hawaii
Miyashita, Yasuo, Grad.....	Tokio
Moawad, George M, Bus.....	Kalama
Moffet, John W, Spec.....	Victoria, BC
Moffett, Alston, Unc, Engr.....	Colby
Moffitt, Dwight, Sci.....	Seattle
Mohler, Harry A, For.....	Seattle
Mohoney, Wm V, Bus.....	Minot, ND
Mohr, Jennie, LA.....	Seattle
Mojonnier, Claire, FA.....	Walla Walla
Mojonnier, Harold, Bus.....	Walla Walla
Moldstad, Harold A, Law.....	Mt Vernon
Mollestad, Marie, LA.....	Seattle
Moll, Phyllis, Bus.....	South Bend
Molledy, Marie, FA.....	Korskie, Ida
Moncrief, Lester, LD, For.....	Guler
Monroe, George Henry, LA.....	Ferndale
Monroe, Paul A, Phar.....	Okanogan
Monson, Geo M, UD, Bus.....	Greenacres
Monson, Karl C, Unc, Bus.....	Seattle
Monson, Theodore.....	Seattle
Montalban, H R, Grad.....	Philippines
Monteith, Homer, Engr.....	Kirkland
Montgomery, Earl F, FA.....	Seattle
Montgomery, Lelah, LA.....	Colville
Montilla, Francisco R, Bus.....	Philippines
Montilla, Jose R, Fsh.....	Philippines
Mooney, Georgia, LD, LA.....	Mukilteo
Moore, Birdie Maria, LD, LA.....	Tacoma
Moore, Bryant W, LD, LA.....	Seattle
Moore, Charles S, Engr.....	Seattle
Moore, Dorothy G, LD, FA.....	Seattle
Moore, Ellwood B, Grad.....	Seattle
Moore, Eloise W, Sci.....	Chewelah
Moore, Eugene G, Bus.....	Seattle
Moore, Harold W, Bus.....	Seattle
Moore, Janice, LA.....	Seattle
Moore, Katherine, LD, LA.....	Seattle
Moore, Knox D, Bus.....	Seattle
Moore, Lenna, FA.....	Bellingham
Moore, Marguerite E, LA.....	Seattle
Moore, Otto Eugene, LA.....	Snoqualmie
Moore, Vivien M, FA.....	Washougl
Moran, Charlotte, LA.....	Seattle
Moran, Elizabeth M, LD, FA.....	Seattle
Moran, Halbert S, Bus.....	Seattle
Moran, Leo J, Bus.....	Seattle
Moran, Wendell, LD, Engr.....	Seattle
Moran, Wm G, Bus.....	Seattle
Morcony, Herbert, Bus.....	Seattle
Mordovsky, Nicolay, Unc, Engr.....	Seattle
More, David, Engr.....	Tacoma
More, Katharine F, Sci.....	Tacoma

Morehodoff, John A, Unc, Engr.....	Russia
Morehouse, Helen G, FA.....	Spokane
Morford, H James, Bus.....	Seattle
Morford, S Harold, Law.....	Seattle
Morgan, Alvin, For.....	Seattle
Morgan, Ethel, LD, FA.....	Snohomish
Morgan, Frances, Sci.....	Houliam
Morgan, Jewell A, LA.....	Seattle
Morgan, Mary, LA.....	Seattle
Morgan, Miles, Grad.....	Seattle
Morgan, Walter T, LA.....	Seattle
Morhouse, D M, Engr.....	Seattle
Morlarity, Vance E, Phar.....	Seattle
Morimoto, Takiji, Grad.....	Japan
Moriwake, Ernest K, LA.....	Honolulu
Morrell, Lucille, LA.....	Seattle
Morris, David Norton, Engr.....	Buckley
Morris, Gregory S, Bus.....	Seattle
Morris, John Robt, Spec.Minneapolis, Minn	
Morris, Katharine W, Sci.....	Seattle
Morris, Ruby A, Sci.....	Seattle
Morrison, Anna Kathryn, LA.....	Seattle
Morrison, Clayton W, LA.....	Seattle
Morrison, Edwin R, LA.....	Ellensburg
Morrison, J Alene, FA.....	Seattle
Morrison, Marion E, LD, Sci.....	Seattle
Morrison, Pliny G, Engr.....	Seattle
Morrison, Robert, Sci.....	Seattle
Morrison, Wendell W, UD, Bus.....	Buena
Morrison, J William, LA.....	Seattle
Morrow, Ralph J, Bus.....	Seattle
Morrow, Velda, Law.....	Seattle
Morse, Florence, Grad.....	Seattle
Morse, Roy W, Engr.....	Seattle
Morton, Donald Henry, FA.....	Seattle
Morton, J A, LA.....	Seattle
Moseley, Evelyn A, Phar.....	Seattle
Moseley, Maud L, YA.....	Seattle
Moseley, R D, Bus.....	Seattle
Moses, Curtiss J, Engr.....	Seattle
Moses, Clemewell Loraine, FA.....	Seattle
Mott, Edwin, Bus.....	Yakima
Mott, Laurence, Engr.....	St John
Mcttelson, Mayer, LA.....	Seattle
Moulton, Helen, LA.....	Seattle
Moulton, Morris E, Bus.....	Seattle
Moultrie, Roy, Phar.....	Everson
Mowat, Helen Frances, Phar.....	Seattle
Mcwry, Rachel, LA.....	Seattle
Mudge, John S, Bus.....	Portland, Or
Muehler, Violet, LA.....	Tacoma
Mueller, Frank A, LD, Engr.....	Wenatchee
Mueller, John A, Engr.....	Tacoma
Muench, Emma, LA.....	Olympia
Muhomme, Wall, Spec.....	India
Muir, Mary, LA.....	Bellingham
Mulhern, Helen, Sci.....	Seattle
Mulhern, J W, Sci.....	Seattle
Mulledy, Marie, FA.....	Seattle
Mullen, Lorna Doone, LA.....	Okannogan
Mullin, Alma, Unc, Bus.....	Everett
Mullin, Sam E, LA.....	Bellingham
Mumford, Clarence B, Unc, Sci.....	Seattle
Munn, Bertha Jane, Bus.....	Spokane
Munro, Kathleen, FA.....	Seattle
Munson, Richard, UD, Educ.....	Seattle
Muntzer, Maude V, Ed.....	Butte, Mt
Murphine, Gael, LD, LA.....	Seattle
Murphy, Agnes Kathryn, Sci.....	Seattle
Murphy, Mary E, Sci.....	Philippines
Murphy, Robt G, Sci.....	Olympia
Murphy, Wilfrid R, LD, Engr.....	Seattle
Murray, Allene, LD, Bus.....	Spokane
Murray, Clarence M, Engr.....	Seattle
Murray, Lillian H, LA.....	Renton
Murton, Clarence C, LA.....	Seattle
Murton, M Ethelwynne, LA.....	Portland, Or
Musgrave, Dorothy, LA.....	Seattle
Muth, Lawrence, Engr.....	Seattle
Myers, Carlyle G, Sci.....	Seattle
Myers, Harry L, Bus.....	Seattle
Myers, Jack Wallace, Law.....	Seattle
Myers, Jean, FA.....	Seattle
Myers, Margaret E, Grad.....	Everson
Myers, Mark, LA.....	Outlook
Myers, Percy L, Bus.....	Seattle
Myers, Phil W, Phar.....	Seattle
Myers, Thomas F, LA.....	Outlook
Myhre, Clara, FA.....	Seattle
Myhre, Ida E, Grad.....	Seattle
Myhre, Leslie L, LA.....	Seattle
Nachant, Virginia, LA.....	Seattle
Nadeau, Mrs Eleanore, FA.....	Seattle
Naden, Edwin T, Engr.....	Olympia
Nagamatsu, Geo R, Engr.Snoqualmie Falls	
Nagamine, Frank M, FA.....	Seattle
Nagel, J A, LD, Sci.....	Seattle
Nagley, Lois, LA.....	Seattle
Nagtalon, Melchor, Fsh.....	Philippines
Nahhas, Emmeline, LA.....	Seattle
Nakashima, Geo, For.....	Seattle
Nanney, Albert M, LA.....	Vancouver
Nardin, Alphonse C, LA.....	Seattle
Nash, John W, LD, LA.....	Seattle
Nash, Lou, LA.....	Brewster
Natoli, Bennie, Engr.....	Seattle
Nau, Hermine Helen, FA.....	Portland, Or
Nau, Thomas P, Bus.....	Seattle
Navone, Anna, Phar.....	Seattle
Neal, Richard K, LD, LA.....	Ocean Park
Near, Maxine, FA.....	Seattle
Needham, Geo H, Grad.....	Seattle
Neely, C Bertis, LA.....	Spokane
Neely, J Ralph, LA.....	Spokane
Neer, Harry, Engr.....	Seattle
Neerland, Ruth, LA.....	Seattle
Neft, Anna, Bus.....	Seattle
Neft, Tillie, Bus.....	Seattle
Neldert, Louis J, Ed.....	Cheney
Neighbor, J Wallace, Sci.....	Kirkland
Neikirk, Claire E, Unc, LA.....	Seattle
Neiman, Walter J, LA.....	Kalama
Nejely, Bertha, Sci.....	Seattle
Nelson, Adelaide K, Sci.....	Seattle
Nelson, Anna A, Uncl LA.....	Lynden
Nelson, Clifford F, LA, LD.....	Spokane
Nelson, David A, Phar.....	Spokane
Nelson, Earl, Bus.....	St Havre, Mt
Nelson, Edw Lloyd, Bus.....	Seattle
Nelson, Edna, LA.....	Seattle
Nelson, Ethel, LA.....	Seattle
Nelson, Everett J, LA.....	Rolling Bay
Nelson, Hilmer B, Min.....	Sedro Woolley
Nelson, Irene, FA.....	Juneau, Alaska
Nelson, Josephine, LD, LA.....	Seattle
Nelson, Louie, Bus.....	Seattle
Nelson, Malcolm E, Bus.....	Seattle
Nelson, Norman M, LD, Bus.....	Pt Angeles
Nelson, Ralph B, Engr.....	Winslow
Nelson, Robert B, LD, For.....	Seattle
Nelson, Valley, Sci.....	Tacoma
Nelson, Vernon W, Spec.....	Chehalis
Nelson, W A, Engr.....	Seattle
Nerland, Arthur L, Bus.....	Seattle
Nessly, Dorothy E, FA.....	Seattle
Nestor, Bernard D, LA.....	Seattle
Nestor, Ruth E, Sci.....	Seattle
Neubecker, Delbert E, Bus.....	Everett
Neumann, Janet, LD, Bus.....	Seattle
Neumann, Russell A, Engr.....	Seattle
Neville, Betty, LA.....	Walville
Neville, Goff B, Bus.....	Seattle
Neville, Laura M, LA.....	Walville
Newberry, Mrs Amelia E, LA.....	Kirkland
Newbury, Earl F, FA.....	Portland, Or
Newcomb, Muriel R, FA.....	Olympia
Newell, Aaron, Grad.....	Seattle
Newgard, Henry, LA.....	Seattle
Newland, Helene Jane, LD, Sci.....	Seattle
Newman, Lee L, LA.....	Seattle

Newton, Charles A, For.....	Auburn
Niblock, Catherine Grey, FA.....	Seattle
Nicholas, Mrs Winifred M, Grad.....	Seattle
Nichols, Amelle, LA.....	Seattle
Nichols, Jane, LA.....	Seattle
Nichols, Mary, LA.....	Seattle
Nichols, Robt, FA.....	Seattle
Nicholson, Leo, Law.....	Yakima
Nicholson, R Sinclair, Bus.....	Seattle
Nicholson, Thomas E, Min.....	Seattle
Nicholson, Walter, Bus.....	Seattle
Nicholson, William R, Phar.....	Spokane
Nickel, Lucille F, LA.....	Monroe
Nickell, George T, LA.....	Seattle
Nicol, James D, UD, LA.....	Seattle
Nicolai, Florice, Bus.....	Sunnyside
Nielsen, Maurice L, LA.....	Madison, Wis
Nielsen, Robert L, Fsh.....	Westport
Niemela, Jennie Marie, Sci.....	Kent
Niemela, L W, Grad.....	Centerville
Niemeyer, Harold E, LD, Bus.....	Seattle
Niemeyer, John M, Engr.....	Seattle
Niesen, Helene, LA.....	Tacoma
Niesz, Ralph M, Engr.....	Seattle
Nievinski, Joseph, Law.....	Seattle
Nightingale, Wm T, Sci.....	Seattle
Nims, Frederick D, LD, LA.....	Seattle
Nims, Helen B, Sci.....	Seattle
Ninias, Elroy E, Unc, Eng. Juneau, Alaska	
Nishimoto, Y James, Bus.....	Seattle
Nishinoiri, John I, LA.....	Japan
Nishio, F M, LA.....	Seattle
Nitta, Tsutomu, Sci.....	Philippines
Noble, Mildred A, Sci.....	Seattle
Noce, Oliver W, LA.....	Mt Vernon
Noel, Lionel S, Engr.....	Snohomish
Noftainger, Edith Jeanne, LA.....	Mt Vernon
Nohr, E Marjorie, LA.....	Spokane
Nolan, Michael J, Engr.....	Seattle
Noll, Pauline, Grad.....	Seattle
Nollan, Fred, Unc, Bus.....	Kirkland
Nolte, Clara, Bus.....	Bellingham
Norberg, Clarence F, Engr.....	Seattle
Norberts, Magrumbol, Sci.....	Philippines
Nordahl, John G, EE.....	Seattle
Nordale, Anita M, LD, LA, Fairbanks, Alas	
Nordgren, Hannah, LA.....	Bellingham
Nordquist, Carlos Gustave, LA.....	Seattle
Nordquist, Elsie E, LA.....	Seattle
Nordstrom, Elmer, Bus.....	Seattle
Norfolk, Genevieve, FA.....	Los Angeles, Cal
Norie, J L, LA.....	Seattle
Norie, Mary Elizabeth, LA.....	Seattle
Norling, Dorothy Anne, LD, FA.....	Auburn
Norman, Chas G, Grad.....	Seattle
Norman, Mrs Lilla C, LA.....	Seattle
Norquist, Melvin A, LD, Bus.....	Seattle
Norquist, Robert W, Engr.....	Seattle
Norris, Calvin A, FA.....	Dayton
Norris, Carl L, LD, LA.....	Seattle
Norris, Ivan W, Bus.....	Goldendale
Norwood, Anne, Grad.....	Seattle
Notkin, James, Engr.....	Seattle
Notkin, Mrs Natalie B, LA.....	Seattle
Nourse, S A, Bus.....	Tacoma
Nozaki, Kiyoshi, Grad.....	Japan
Nuckolls, Virginia, LA.....	Ketchikan, Alaska
Nuckols, John A, Grad.....	Seattle
Nuguld, Alfonso, UD, Engr.....	Philippines
Null, J Edward, LA.....	Seattle
Nunan, Dorothy, Bus.....	Ketchikan, Alaska
Nusbaum, Dean E, LA.....	Seattle
Nyman, Andrew D, LD, Engr.....	Custer
Nyman, Rose M, Unc, FA.....	Seattle
Oakes, Eleanor A, Bus.....	Seattle
O'Brien, John, Law.....	Seattle
O'Brien, Marjorie, LA.....	Tacoma
O'Brien, Mary, Ed.....	Seattle
Ocampo, Jose, LD, Engr.....	Philippines
Ocampo, Pedro V, Bus.....	Philippines
Ochs, Clyde, Bus.....	Seattle
Ochs, Harry L, LD, Bus.....	Seattle
Ochs, Martha E, LA.....	Seattle
O'Connell, C W, Bus.....	Seattle
O'Connor, Clinton J, Bus.....	Tacoma
O'Connor, Edward M, Bus.....	Kelso
O'Connor, Rom Ed, Grad.....	Seattle
O'Connor, Walter B, LD, Bus.....	Seattle
O'Dale, Claude L, Bus.....	Coeur D'Alene, Ida
Odani, Juichi, Bus.....	Seattle
Odegard, Paul N, CE.....	Seattle
Odgers, Geo Allen, Grad.....	Davenport
O'Donnell, Helen, Bus.....	Seattle
Oertel, Anna Mary, FA.....	Seattle
Oestreich, Roy, Bus.....	Ritzville
Ogawa, Elmer, LD, LA.....	Seattle
Ogino, Rinzro, Grad.....	Japan
O'Keane, Mary C, LA.....	Vancouver
O'Keefe, V Jessie, Sci.....	Seattle
Okerlund, Gerda M, Grad.....	Los Angeles, Cal
Olberg, Leon, Engr.....	Pt Townsend
Oldfield, Willis C, LA.....	Everett
O'Leary, Hazel, LA.....	Seattle
O'Leary, Helen Kathleen, LA.....	Seattle
O'Leary, Kathleen LeNor, FA, Gt Falls, Mt	
O'Leary, Margaret, LA.....	Seattle
O'Leary, M Elleen, LA.....	Seattle
Oleson, Thos R, LA.....	Seattle
Olin, Chas Herbert, LA.....	Seattle
Olin, Thos H, Bus.....	Seattle
Olliphant, J Orin, Grad.....	Seattle
Olliphant, Willard E, LA.....	Puyallup
Oliver, Esther T, LA.....	Seattle
Oliver, Orno, Bus.....	Seattle
Olmsted, Joel B, LA.....	Seattle
Olney, Dorothy, LA.....	Seattle
Olson, Blanche A, Bus.....	Seattle
Olson, Franklin E, Bus.....	Tacoma
Olson, Frederick, LA.....	Zillah
Olson, Luther N, Bus.....	Portland, Or
Olson, Reidar H, Bus.....	Port Blakely
Olson, Selma, Grad.....	Chinook
Olson, C Sylvan, FA.....	Havre, Mt
Olson, Thos L, Bus.....	Seattle
Olson, Alice W, LA.....	Seattle
Olson, Ashjorne B, EE.....	Elma
Olson, Beatrice Mildred, Grad.....	Seattle
Olson, Carl, LD, Bus.....	Seattle
Olson, Earl Stanley, Engr.....	Seattle
Olson, Genevieve, LA.....	Raymond
Olson, Hjalmar, Grad.....	Seattle
Olson, John G, LA.....	Tacoma
Olson, Marie Theresa, Sci.....	Walla Walla
Olson, Olaf Ebert, Ed.....	Seattle
Olson, Olga Claudia, LA.....	Madras, Or
Olson, Percy, Phar.....	Everett
Olson, Ronald LeRoy, LA.....	Seattle
Olson, Roy L, For.....	Monroe
Olson, Theodore L, Bus.....	Rolling Bay
Olts, Donald, LD, Engr.....	Seattle
Olwell, Kathleen, LA.....	Seattle
Olwell, Murray M, Bus.....	Seattle
O'Neill, Henry Clay, Engr.....	Seattle
O'Neill, Muriel R, LA.....	Spokane
O'Neill, Wm T, Bus.....	Mt Home, Ida
Oppenheimer, Henry, LD, Bus.....	Spokane
Opperman, Albert, Bus.....	Tacoma
Opsing, Louis P, Engr.....	Seattle
Orford, Phyllis E, Unc, LA.....	Seattle
Orkney, James W, Bus.....	Hoquiam
Orkney, R Woolston, Bus.....	Hoquiam
Ornduff, Robert, Bus.....	Seattle
Orr, Dwight, Bus.....	Tacoma
Orr, Gilbert M, For.....	So Brownsville, Pa
Orr, Phil C, Unc, Sci.....	Dillon, Mont
Orr, Robert L, Engr.....	Seattle
Orr, Tom Clinton, LD, Min.....	Spokane

Orth, Maurice Wm, Law.....	Seattle	Patric, Walter F, LA.....	Seattle
Orton, Helen C, LA.....	Aberdeen	Patrick, Doris, UD, Sci.....	Seattle
Osborn, H Ross, LD, Sci.....	Spokane	Patrick, Harry, Bus.....	Seattle
Osgood, Ernest W, FA.....	Seattle	Patrick, W H, Bus.....	Seattle
Osgulach, J Augustine, Grad.....	Lacey	Patten, Eugene L W.....	Seattle
O'Shea, Eleanor, Sci.....	Spokane	Patten, Mrs Glen L, Grad.....	Spokane
Osterman, Henrietta, FA.....	Walla Walla	Patterson, Ira E, LD, Bus.....	Seattle
Osterman, Hugo Wm, FA.....	Walla Walla	Patterson, Viola Hansen, Grad.....	Seattle
Ostrom, Eleanor, FA.....	Medina	Patton, Edward, Bus.....	Seattle
Otis, Birgil B, Bus.....	Olympia	Paul, J Jane, LA.....	South Bend, Ind
Ottenheimer, Albert M, LA.....	Tacoma	Paulhamus, Dwight R, Bus.....	Sumner
Otto, Robert H, Bus.....	Everett	Paulik, A E, Engr.....	Tacoma
Ouren, Marian, Ed.....	Leavenworth	Paulsen, Paulino A, Sci.....	Seattle
Overton, Guy R, Bus.....	Winchester, Ill	Paulson, Stina, LA.....	Edmonds
Owens, George, Engr.....	Seattle	Paup, Everett O, Bus.....	Ketchikan, Alaska
Owens, Marjorie, Sci.....	Wenatchee	Payette, Cedric, Engr.....	Seattle
Oxman, J Donald, Law.....	Seattle	Payne, Frances, LD, LA.....	Seattle
Oyen, Penelope, LA.....	Everett	Payne, Harry Anson, Phar....	Walla Walla
		Payne, M Caroline, LA.....	Seattle
		Payne, Sylvan, Bus.....	Seattle
Pace, Roy W, Engr.....	Seattle	Payne, William D, Bus.....	Milan, Mo
Packard, Dexter R, Engr.....	La Conner	Paysee, Doris, LA.....	Seattle
Padeiford, M G, LA.....	Seattle	Peabody, Emery F, Bus.....	Seattle
Page, Harold E, Bus.....	Seattle	Peach, Helen A, LA.....	Pt Townsend
Pahl, Marie, FA.....	Pendleton, Or	Peach, Julia A, LA.....	Seattle
Palacio, Apolonio, Engr.....	Philippines	Peacock, Marion, LA.....	Portland, Or
Palacol, Augustine P, Jour.....	Philippines	Pearce, Marion, LA.....	Seattle
Palla, W F, Bus.....	Spokane	Pearce, R J, FA.....	Seattle
Palmer, Burton E, Min.....	Portland, Or	Pearl, Charles J, LA.....	Prosser
Palmer, Carolyn, Grad.....	Tacoma	Pearl, Gertrude Edith, Bus.....	Pt Angeles
Palmer, Cecil, Bus.....	Rosalia	Pearson, Benjamin J, Engr.....	Gig Harbor
Palmer, Delight, LA.....	Chehalis	Pearson, E Holger, Engr.....	Seattle
Palmer, Dorothy, FA.....	Seattle	Pearson, J H, Bus.....	Seattle
Palmer, James H, Law.....	Seattle	Pearson, Lenora, Bus.....	Seattle
Palmer, Laurence, Engr.....	Centralia	Pearson, Merrill J, LA.....	Seattle
Palmer, Margaret, Sci.....	Tacoma	Pease, Aldridge C, UD, Eng.....	Tacoma
Palpallatoc, C V, LA.....	Philippines	Pease, Estelle E, Sci.....	Seattle
Palpallatoc, Paul P, Phar.....	Philippines	Pease, R O, LA.....	Seattle
Pampel, George, LA.....	Seattle	Peaslee, G Monroe, UD, Eng.....	Seattle
Panchot, Dwight H, Ed.....	Seattle	Pedersen, Sara, FA.....	South Bend
Pantages, Rodney A, LD, Bus.....	Seattle	Peebles, O E, Law.....	Hoquiam
Pape, Karl R, Engr.....	Edmonds	Peel, Marian, LA.....	Seattle
Paradis, Ernest J, Engr.....	Seattle	Peers, Rose Frances, LD, Sci.....	Wenatchee
Parthen, Juanita, LA.....	Grandview	Pelcos, Frances G, Sci.....	Seattle
Pardo, Jess A, Engr.....	Seattle	Pellegrini, Angelo M, LA.....	McCleary
Parent, Amand, Engr.....	Tacoma	Pellegrini, Frank A, LD, LA.....	Seattle
Parent, Ruley E, Engr.....	Elma	Pellegrini, Rosalie L, LA.....	Seattle
Park, Allyne, FA.....	Seattle	Pelto, Walter E, For.....	Tieton
Park, Walter, Engr.....	Seattle	Peiz, Gladys, LA.....	Seattle
Parke, Chas, Ed.....	Bellingham	Peiz, Irma M, Grad.....	Seattle
Parker, Agnes F, Ed.....	Seattle	Pemberton, Joseph T, LA.....	Olympia
Parker, Arline, LD, Bus.....	Seattle	Pender, Ralph A, LD, LA.....	Seattle
Parker, Chester H, Engr.....	Kalama	Pendleton, Francis, Bus.....	Everett
Parker, David L, UD, Bus.....	Seattle	Pendleton, Lois, Sci.....	Seattle
Parker, Frances B, Sci.....	Spokane	Penewell, Marion F, Sci.....	Seattle
Parker, Helen M, LA.....	Portland, Or	Penhall, Elizabeth, LA.....	Seattle
Parker, Jennison Bohem, Bus.....	Spokane	Penington, Ruth, FA.....	Seattle
Parker, Lester T, Law.....	Elma	Penn, Sarah, FA.....	Seattle
Parker, Louise, Grad.....	Clinton, Wis	Pennell, Geneva E, FA.....	Seattle
Parker, Ralph, Engr.....	Colfax	Percival, Dorothy L, LA.....	Seattle
Parker, Ted, FA.....	Seattle	Perkins, Dorris E, FA.....	Seattle
Parkhouse, Russell E, Bus.....	Tacoma	Perkins, Melville F, Grad.....	Tacoma
Parks, Clarence T, Fsh.....	Pt Angeles	Perkins, Sam H, Bus.....	Montesano
Parks, Dorris B, LA.....	Seattle	Perrello, Chas W, LD, Engr.....	Juneau, Alas
Parmeter, Eugene S, LD, LA.....	Spokane	Perrenoud, W P, Engr.....	Seattle
Parrish, Karl B, Bus.....	Seattle	Perrin, Julia M, LA.....	Seattle
Parry, Geo S, Law.....	Coulee City	Perrine, Charles S, Jour.....	Twin Falls, Ida
Parry, Jane, Ed.....	Seattle	Perring, Norman C, LA.....	Olympia
Parry, Lloyd, LD, Bus.....	Richmond Beach	Person, Henry A, LA.....	Tacoma
Parson, Maude, Sci.....	Seattle	Personous, Lewis H, Engr.....	Seattle
Parsons, William B, LA.....	Seattle	Pece, Catherine, LA.....	Seattle
Partee, Raymond A, LA.....	Seattle	Pesce, Lawrence, Sci.....	Seattle
Pascual, Eduardo F, Ed.....	Philippines	Peters, Evan R, LD, LA.....	Zillah
Pascual, F Felix, Ed.....	Philippines	Peters, Henry W, LA.....	Tonasket
Paslay, Corine, FA.....	Aberdeen	Peters, J Albert, LD, Bus.....	Seattle
Patch, E W, Bus.....	Prosser	Peters, Jenning D, Engr.....	Spokane
Paterson, G B, Bus.....	Seattle	Peters, Laura B, FA.....	Seattle
Paton, Harold, Bus.....	Cashmere	Peters, Louis C, UD, Bus.....	Seattle
Paton, Kenneth D, Engr.....	Cashmere	Petersen, Irene, LA.....	Seattle
Patric, John, Jour.....	Snohomish	Peterson, Alvin A, Phar.....	Seattle
		Peterson, Amy, Sci.....	Monroe



Peterson, Clarence C, Engr.....	Hoquiam	Ponder, R L, Law.....	Chehalis
Peterson, Floyd W, Bus.....	Seattle	Pongala, Carl E, LD, Engr.....	Tieton
Peterson, Grace H, Ed.....	Seattle	Pool, Esson J, UD, Bus.....	Wenatchee
Peterson, Howard H, Engr.....	Walla Walla	Poole, Abigail, Phar.....	Seattle
Peterson, Howard J, Engr.....	Sunnyside	Poole, Bonnie, LA.....	Seattle
Peterson, Hugo A, Bus.....	Tacoma	Poole, Florence, Ed.....	Seattle
Peterson, Inez H, LA.....	Seattle	Pooley, Frank B, Engr.....	Spokane
Peterson, Jennings, LD, Law.....	Seattle	Poolman, Peter Carl, Bus.....	Sumner
Peterson, John, LD, Bus.....	Seattle	Poolton, Frederick A, LA.....	Seattle
Peterson, Juanita, LD, FA.....	Seattle	Poplack, Essie, Unc, Sci.....	Bellingham
Peterson, Juliette, LA.....	Seattle	Porop, Helen, LA.....	Seattle
Peterson, Katherine W, Grad.....	Spokane	Porter, Barton F, Bus.....	Thorp
Peterson, Oscar L, Bus.....	Seattle	Porter, Chas A, Engr.....	Wenatchee
Peterson, Thelma, FA.....	Granger	Porter, Dorothy I, LA.....	Wenatchee
Peterson, Wendell F, Bus.....	Seattle	Porter, Edith M, FA.....	Seattle
Petrie, James, Engr.....	Seattle	Porter, John C, Engr.....	Seattle
Petrie, Roy A, Bus.....	Seattle	Porter, Lloyd W, Bus.....	Seattle
Pettingill, Floyd G, Phar.....	Auburn	Porter, Mary E, FA.....	Seattle
Pettifer, Mildred, Bus.....	Seattle	Porter, Mary Helen, LA.....	Remington
Pettit, Hamilton G, LD, For. Welland, Ont.		Post, Eleanor V, LA.....	Pasadena, Cal
Pfau, Mrs Dorothy L, LA.....	Seattle	Post, John P, Sci.....	Spokane
Pfeifer, Ralph H, Bus.....	Greenacres	Postlewaite, M A, UD, Engr.	San Antonio, Tex
Pfeifer, Mrs Mary N, Spec.....	Selah	Potgreter, Jennie, Grad.	Steamboat Rock, In
Pfeiffer, June L, LD, LA.....	Seattle	Potter, Donald, Unc, LA.....	Spokane
Pfeuffer, Phillip P, Grad.....	Seattle	Potter, Helen, LD, LA.....	Spokane
Phelph, Walter V R, LD, Bus.....	Seattle	Potter, Henry, Sci.....	Seattle
Phelps, Ellen, LA.....	Seattle	Potter, Herbert B, Ed.....	Blaine
Phelps, Howard R, Engr.....	Tacoma	Potter, Paul S, UD, Min.....	Quinton
Phelps, Saralette, LA.....	Seattle	Potter, Willis A, LA.....	Kalama
Phifer, Lyman D, Bus.....	Seattle	Powell, Alexander S, Engr.....	Seattle
Phillbin, John, Grad.....	Seattle	Powell, Chas L, Law.....	Selah
Phillips, A B, LA.....	Seattle	Powell, Evangeline, LA.....	Vancouver
Phillips, Clinton G, Bus.....	Seattle	Powell, Franklin, Engr.....	Seattle
Phillips, Constance, FA.....	Seattle	Powell, Glen R, For.....	Seattle
Phillips, Deral E, Ed.....	Cheney	Powell, Pearl G, LA.....	Puyallup
Phillips, Earl A, LD, LA.....	Seattle	Power, O Stanley, Bus.....	Spokane
Phillips, Earl A, Spec.....	Seattle	Power, James Miles, LD, Bus.....	Tacoma
Phillips, Harry J, Min.....	Seattle	Powley, Verna M, Ed.....	Seattle
Phillips, Jessie W, UD, FA.....	Seattle	Poy, William J, Sci.....	Seattle
Phillips, Julius B, Psh.....	Fairfax	Poyneer, Almeda M, LA.....	Bverett
Phillips, Olive E, LA.....	Seattle	Prager, Wm A, Jour.....	Seattle
Phillips, P M, Engr.....	Seattle	Pratt, Helen, Phar.....	Seattle
Phillips, Phyllis, FA.....	Seattle	Pratt, Ivan S, Spec, Bus.....	Seattle
Phillips, Walter T, LA.....	Tacoma	Predmore, Alice E, LA.....	Seattle
Phlips, Edson, Bus.....	Mt Vernon	Preiss, Julia E, Ed.....	Spokane
Pickering, Orr, FA.....	Seattle	Prentice, Dudley, Bus.....	Auburn
Pidduck, Marjorie, FA.....	Seattle	Preppernan, Chas, For.....	Kent
Pierce, C W, Law.....	Seattle	Frescott, J E, Engr.....	Seattle
Pierce, Dorothy A, LA.....	Seattle	Frescott, Maurine, LA.....	Seattle
Pierce, R O, Bus.....	Seattle	Frescott, Nellie, FA.....	Seattle
Pierson, Helen G, LA.....	Billings, Mt	Preston, M E, Engr.....	Seattle
Pigott, Lucinda C, Ed.....	Wapato	Preston, Rachel, LA.....	Seattle
Pipard, Florence, LA.....	Kent	Pretlow, Clotilde, Ed.....	Seattle
Pinkerton, Lloyd, Engr.	Fairbanks, Alaska	Prevost, Albert, Bus.....	Seattle
Pinkham, Mrs Ada K, LA.....	Seattle	Price, Edna, LD.....	Waitsburg
Pinney, Catherine Adell, FA.....	Seattle	Price, Harry J, Engr.....	Seattle
Pitcher, Helen D, FA.....	Pt Madison	Price, May M, UD, LA.....	Dillon
Pitt, Mildred Esther, Grad.....	Seattle	Price, Rachel, LA.....	Seattle
Pittack, Arthur H, Bus.....	Bremerton	Price, W W, For.....	Seattle
Pitts, Edna C, Jour.....	Seattle	Price, Zetta, Ed.....	Govan
Place, L Howard, For.....	Tacoma	Prichard, Lewis G, Bus.....	Seattle
Plank, Ellis W, Sci.....	Pierce, Ida	Priebe, Lloyd H, Engr.....	Earlington
Planke, Faye M, LA.....	Seattle	Priest, Constance, LA.....	Seattle
Playter, C Gray, Bus.....	Seattle	Prim, John E, Law.....	Seattle
Plechner, Alfred J, Bus.....	Seattle	Pringle, Wm H, LD, LA.....	Seattle
Plechner, Babette, LA.....	Seattle	Pritchard, Stanley E, LA.....	Greenacres
Plemon, Gladys M, LA.....	Wallula	Proelss, Maurine, LA.....	Seattle
Plont, Milo B, Bus.....	Bellingham	Provan, Fern Alice, LA.....	Seattle
Poe, Earl B, LD, Bus.....	Puyallup	Pruessman, Margaret, Bus.....	Seattle
Poeth, John F, LD, Bus.....	Kalama	Pruessman, Will, Engr.....	Seattle
Polacheck, Edna G, LA.....	Yakima	Pruner, C E, Sci.....	Blaine
Polkinghorn, Lee M, For.....	Storm Lake, Ia	Puette, Raymond V, Bus.....	Seattle
Polley, Maude M, Grad.....	Chehalis	Pugh, Anne C, UD, Educ.....	Seattle
Kollock, Barbara, LA.....	Seattle	Pugh, Venetia, FA.....	Juneau, Alaska
Kollock, Herbert W, Engr.....	Seattle	Purcell, J William, Sci.....	Seattle
Kollock, Robert, Engr.....	Seattle	Puymbroeck, Lena, FA.....	Oswego, Or
Kollom, Arta, LA.....	Chehalis	Pyle, Mary, UD, Engr.....	Wenatchee
Kollom, De Vere A, Law.....	Chehalis		
Kollom, Lois, FA.....	Chehalis		
Kolton, W Dean, LA.....	Bedford, Ia		
Pomeroy, Allan, Sci.....	Seattle		

Quanstrom, Ellen M, Bus.....	Seattle	Reld, Frances, LA.....	Seattle
Quarry, Ruth M, LA.....	Spokane	Reld, Melvin D, LA.....	Seattle
Quass, Mabel M, Ed.....	Spokane	Relly, John E, LA.....	Seattle
Quast, Otto E, Engr.....	Seattle	Reinelt, Herbert R, LA.....	Valler, Mt
Quast, Thos, Engr.....	Marysville	Reisdorf, Mary Elizabeth, LA.....	Seattle
Quevill, Kathryn, Sci.....	Tacoma	Relse, Herman A, LD, Engr.....	Puyallup
Quigle, Helen, LA.....	Seattle	Reisig, Rhea, FA.....	Seattle
Quigley, Helen, LA.....	Seattle	Reiter, Bernard, LA.....	Seattle
Quigley, Ruth M, LA.....	Yakima	Reizenstein, Melba, LA.....	Seattle
Quilliam, Harold J, Bus.....	Seattle	Relf, Eugenia, Ed.....	Seattle
Quimosing, D, UD, Engr.....	Philippines	Remington, Cecil G, Bus.....	Selah
Quinday, Francisco, Engr.....	Philippines	Remley, Miriam, Grad.....	Dryden
Quinlivan, Quentin, L.....	Everett	Renfro, H E, LD, Engr.....	Seattle
Rabel, Leigh W, Bus.....	Seattle	Renhard, Julius A, Engr.....	Aberdeen
Raber, Ruth M, LA.....	Tacoma	Renn, Ruth Lucile, LA.....	Chelau
Rademaker, Lee A, Sci.....	Tacoma	Rennie, Wesley F, Grad.....	Seattle
Rader, Melvin, LA.....	Walla Walla	Renny, Frances, LA.....	Seattle
Radford, Zilpha F, LA.....	Seattle	Renny, Margaret, LD, LA.....	Seattle
Rae, Francis H, Bus.....	Seattle	Renshaw, Harold B, Bus.....	Seattle
Rafiah, Yetta, LA.....	Butte, Mt	Renshaw, Robert, Bus.....	Seattle
Rafu, Harold, Sci.....	Puyallup	Requa, Earl Francis, LA.....	Seattle
Raichle, Marcus S, LA.....	Yakima	Requa, J Harold, Bus.....	Everett
Raine, Margaret M, Grad.....	Seattle	Requa, Lulu Mildred, FA.....	Seattle
Ramm, Aubrey G, Engr.....	Seattle	Reas, Eugene P, Engr.....	Philippines
Ramm, John, LA.....	Seattle	Reaurreccion, Jose N, Spec.....	Philippines
Ramos, Manuel S, LA.....	Seattle	Rettig, Marie, Bus.....	Spokane
Ramsay, John Finlay, Sci.....	Seattle	Retzer, Lawrence, Bus.....	Seattle
Ramsden, Ray W, Bus.....	Aloha	Reusch, Dorothy, Sci.....	Yakima
Ramsey, Rachel, Sci.....	Sandpoint, Ida	Revelle, Helen, LA.....	Seattle
Randolph, Preston B, Engr.....	Seattle	Reyes, Benigno T, FA.....	Philippines
Randolph, Sarah, LA.....	Seattle	Reynnells, Lois K, FA.....	Tekoa
Rankin, James H, Bus.....	Seattle	Reynolds, Alice Louise, FA.....	Portland, Or
Rasmussen, Alice I, Bus.....	Mt Vernon	Reynolds, Elliott, Law.....	Seattle
Rasmussen, Chas A, Engr.....	Tacoma	Reynolds, Myron E, Sci.....	Seattle
Rasmussen, Fred N, Engr.....	Seattle	Rhodes, Fred H, Engr.....	Seattle
Rasmussen, Irving, FA.....	Prosser	Rhodes, Leonard, Phar.....	Seattle
Rathbun, John H, Engr.....	Seattle	Rhotin, Walter G, LA.....	Seattle
Ravelli, Henri, UD, Engr.....	Seattle	Rice, Chas A, Bus.....	Eagle, Ida
Raven, Ruth, LD, FA.....	Monroe	Rice, Gordon Glenn, LA.....	Chehalis
Rawson, Charlotte, LA.....	Seattle	Rice, Phillip R, Ed.....	Finley
Ray, Harold, Unc, Bus.....	Seattle	Rice, Raymond A, LD, LA.....	Kennewick
Raymond, Elizabeth Mac, Sci. Hannibal, Mo		Richards, Edgar G, Bus.....	Tacoma
Raymond, Ethel G, Grad.....	Seattle	Richardt, Erick, Unc, Bus.....	Seattle
Raymond, Foy, LA.....	Seattle	Richards, Frederick, LA.....	Seattle
Rea, Russell M, Engr.....	Bellingham	Richards, H H, LA.....	Tacoma
Read, Edsall, For.....	Hoquiam	Richards, John S, Bus.....	Spokane
Read, Leo Paul, Bus.....	Shelton	Richards, Leon, Phar.....	Seattle
Reagh, Mayme L, Sci.....	Portland, Or	Richards, Lois N, LA.....	Seattle
Reardon, Wm Keiron, LA.....	Monroe	Richards, Ruth, Sci.....	Spokane
Records, Lola E, Ed.....	Seattle	Richards, Thelma, LA.....	Chinook, Mt
Redfield, Ben, UD, Bus.....	Spokane	Richards, W C, For.....	Seattle
Redford, Walter, Ed.....	Seattle	Richards, W Gordon, Bus.....	Prosser
Redich, Harry H, Fsh.....	Seattle	Richards, William, Engr.....	Seattle
Redington, Bernice O, FA.....	Seattle	Richards, Wm S, Sci.....	Seattle
Redpath, Harry S, LA.....	Seattle	Richardson, Dallas, Unc, LA.....	Seattle
Redpath, Lindley, Bus.....	Seattle	Richardson, Edwin R, FA.....	Marysville
Reed, Donald L, Engr.....	Centralia	Richardson, L H, Spec.....	Harlem, Mt
Reed, Genevieve E, LA.....	Redmond	Richardson, Wm A, Bus.....	Astoria, Or
Reed, Helen Van Alen, Sci.....	Seattle	Richardt, Preciosa, LA.....	Seattle
Reed, Jennie M, Ed.....	Tacoma	Riches, Marjorie Donna, LA.....	Silverton, Or
Reed, Lorraine, LA.....	Bremerton	Richmond, Mabel, FA.....	Seattle
Reed, Marjorie, Sci.....	Seattle	Richter, Leo, Phar.....	Puyallup
Reed, Sol S, For.....	Shelton	Richkard, Richard M, LA.....	Seattle
Reeder, Ardis Harold, Bus.....	Tacoma	Rickerts, Helen Louise, LA.....	Seattle
Reeder, Thos A, LD, FA.....	Seattle	Rickles, Abe L, FA.....	Seattle
Reedy, Franklin A, LD, LA.....	Seattle	Rickles, Dave N, Engr.....	Seattle
Reekie, Richard, Phar.....	Seattle	Riddle, Mrs Margaret C, Sci.....	Seattle
Reekie, Jean, Grad.....	Seattle	Rider, Maurice Averil, LA.....	Yakima
Reep, Ellen, UD, Educ.....	Everett	Rider, Nellie, LA.....	Seattle
Reese, Bendy M, Engr.....	Blaine	Rieben, Samuel Ed, Law.....	Seattle
Reese, Mary Elizabeth, Phar.....	Cle Elum	Rieger, Erwin, LA.....	Seattle
Reeve, Stanley, Bus.....	Chico	Riese, Bertha M, FA.....	Duvall
Reeves, James A, Bus.....	Seattle	Riggs, Margaret, Grad.....	Seattle
Refling, Arnold, Law.....	Snohomish	Riggs, Katherine, LA.....	Seattle
Refling, Norman A, LA.....	Snohomish	Riley, Helen, Ed.....	Everett
Regan, Frank T, For.....	Boise, Ida	Ring, Ivan N, For.....	Seattle
Regan, Willard P, Bus.....	Boise, Ida	Ringstad, Emery T, UD, Bus.....	Seattle
Rehbock, Donald, LD.....	Yakima	Ringstad, Myron Henry, Grad.....	Parkland
Reid, Beatrice, Jour.....	Seattle	Risinger, Helen, LA.....	Seattle
		Ripley, Cecil, Bus.....	Seattle
		Risley, Dudley B, Bus.....	Seattle

Riss, Arthur H, LA.....	Seattle
Riste, Clara E, LA.....	Seattle
Riste, Ida G, LA.....	Seattle
Ritter, John Edw, For.....	Republic
Ritz, Ruthleanor, Sci.....	Tacoma
Rivera, Andres, Engr.....	Philippines
Rivera, Simeon, Sci.....	Philippines
Rivers, Ralph J, LA.....	Seattle
Rivers, V C, LD, Engr.....	Seattle
Roach, Robt R, LA.....	Seattle
Roach, Rnsel, Bus.....	Yakima
Roaney, Marland B, Ed.....	Bellingham
Robb, Marian, LA.....	Seattle
Robbins, Floyd D, Engr.....	Seattle
Robbins, Frances Rowena, Lib.....	Spokane
Roberson, Leonard N, Engr.....	Vancouver
Roberson, Ray, Engr.....	Everett
Roberts, Ellis A, Engr.....	Seattle
Roberts, Freeman A, LA.....	Seattle
Roberts, Helen L, LA.....	Seattle
Roberts, Lillian, LD, LA.....	Seattle
Roberts, Margaret, LA.....	Seattle
Roberts, R Raymond, LD, Engr.....	Tacoma
Roberts, Roberta, LA.....	Seattle
Roberts, Virginia, Phar.....	Seattle
Robertson, Donald A, LD, Bus.....	Seattle
Robertson, J C H, For.....	Spokane
Robertson, James, Engr.....	Seattle
Robertson, Loring C, Bus.....	Payette, Ida
Robbins, Wm E, Unc, For.....	Olympia
Robinson, Alden J, Fsh.....	Marysville
Robinson, Chas H, Bus.....	Seattle
Robinson, Chas R, LA.....	Bremerton
Robinson, Clyde A, LA.....	Everett
Robinson, D S, Lib.....	Seattle
Robinson, Helen, Sci.....	Edmonds
Robinson, H Gerald, Engr.....	Seattle
Robinson, John S, Bus.....	Seattle
Robinson, Movelyn, Sci.....	Spokane
Robinson, Nelson George.....	Seattle
Robinson, Rose, LA.....	Centralia
Robson, Alice, Unc, Sci.....	Seattle
Robson, Mrs Edith M K, Spec.....	Bremerton
Robson, Wesley, LA.....	Spokane
Roche, Philip, Sci.....	Spokane
Rocheater, James M, Bus.....	Tacoma
Rock, Betty, FA.....	Santa Rita, N Mex
Rockwitz, Alice, LA.....	Seattle
Rodgers, Elizabeth Jane, Grad.....	Prescott
Roe, Muriel, LA.....	Dillon, Mt
Roehr, Dorothy E, Sci.....	Seattle
Roehr, Martha J; LD, Sci.....	Seattle
Roemer, Albert J, Bus.....	Seattle
Roen, Martha E, Unc, Bus.....	Seattle
Rogers, Agnes, FA.....	Anacortes
Rogers, Catherine, LA.....	Seattle
Rogers, Cecil E, Sci.....	Petersburg, Alaska
Rogers, Eleth A, LA.....	Bellingham
Rogers, Ellen K, LA.....	Skagway, Alaska
Rogers, Mrs Lillian M, Ed.....	Tacoma
Rogers, Mary Lupen, FA.....	Everett
Rogers, Julia W, FA.....	Auburn
Rogers, Leroy J, For.....	Seattle
Rogers, Melna, Bus.....	Seattle
Rogers, Russell, LD, Bus.....	Spokane
Rogers, Violet P, LD, Sci.....	Seattle
Rognam, Esther, UD, LA.....	Seattle
Rognon, Norman Nelle, LA.....	Seattle
Rohowits, Edythe K, LA.....	Seattle
Rohowits, Gerald M, LA.....	Seattle
Rohrbeck, Catherine, LA.....	Seattle
Rohrer, Harvey V, Bus.....	Abelene, Kan
Rollison, C J, Bus.....	Pasco
Roll, Dorothy Bates, LA.....	Seattle
Rollins, Paul R, Phar.....	Bremerton
Romain, Henry Geo, Engr.....	Seattle
Romlscher, Wm, Min.....	Seattle
Roney, Ward Wm, LA.....	Duvall
Rood, Sidney, LA.....	Seattle
Rooney, Joseph B, Bus.....	Seattle
Roose, Clarence N, LA.....	Arlington
Root, Helen M, LA.....	Seattle
Roper, Otis, LD, Engr.....	Yacolt
Roscoe, Theodore, Engr.....	Edmonds
Rose, Dorothy, FA.....	Olympia
Rose, Edith Mae, Bus.....	Prosser
Rose, Marvel Gray, FA.....	Pt Angeles
Rosebaugh, Theodore, Engr.....	Harrington
Rosene, Hilda F, Grad.....	Monroe
Rosene, Johanna J, Sci.....	Monroe
Rosenberg, Anita, Bus.....	Seattle
Rosenberg, Hoda A, FA.....	Seattle
Rosendahl, Ily S, LA.....	Seattle
Rosete, Francisco A, Sci.....	Philippines
Rosewater, Charlotte W, Grad.....	Seattle
Ross, Anne, LA.....	Kallispell, Mt
Ross, Bruce W, Engr.....	Missoula, Mt
Ross, Donald L, Engr.....	Bellingham
Ross, Doreen F, Bus.....	Seattle
Ross, Earl Raymond, Engr.....	Monroe
Ross, Evelyn Parks, Sci.....	Seattle
Ross, Geo William, LA.....	Spokane
Ross, Grant D, Engr.....	Edmonds
Ross, Harry L, Engr.....	Hawaii
Ross, Lemuel, Bus.....	Woodland
Ross, Margaret, LA.....	Seattle
Rossell, Franklin F, LA.....	Mt Vernon
Roth, Robt, Sci.....	Seattle
Rothe, Louis A, LD, Sci.....	Seattle
Rothwell, Cyrella, Phar.....	Seattle
Rouner, Thos J, Engr.....	Smith Center, Kan
Rourke, R Karl, Engr.....	Seattle
Rovig, Bernice, LA.....	Seattle
Rovig, Helen L, LA.....	Seattle
Rowell, Fenton C, Grad.....	Seattle
Rowell, Irving, LD, Engr.....	Seattle
Rowlands, T McK, Engr.....	Victoria, BC
Rowntree, R Henry, Bus.....	Seattle
Rowse, Wm, For.....	Seattle
Royal, Lloyd A, Fsh.....	Olympia
Royster, Helen, LA.....	Seattle
Rozell, Joshua Hayes, LA.....	Seattle
Rozema, Paul, Engr.....	Seattle
Rucker, Gladys, Sci.....	Seattle
Rucker, Jasper, LA.....	Everett
Ruddell, Hazel, LA.....	Seattle
Rudisill, Joanna, LD, Sci.....	Spokane
Rue, Wm, Bus.....	Bellingham
Ruffcorn, Geraldine, FA.....	Seattle
Rumbaugh, Edwin Ross, LA.....	Tacoma
Rummel, Edwin Bartlett, Law.....	Tacoma
Runciman, Geo, Engr.....	Seattle
Runtz, Geo, LD, Engr.....	Seattle
Russell, A D, Engr.....	Oakesdale
Russell, Dorothy, FA.....	Seattle
Russell, Geo C, Engr.....	Monroe
Russell, Ruth, LA.....	Seattle
Rustia, Manuel S, Grad.....	Philippines
Rutherford, Trammell, LD, LA.....	Seattle
Rutledge, Ralph M, Grad.....	Seattle
Rutschaw, Florence, LA.....	Aberdeen
Rutter, Beatrice, UD, Educ.....	Spokane
Ryan, Ben, Engr.....	Mukilteo
Ryan, Carol Ross, Sci.....	Bryn Mawr
Ryan, Florence, LA.....	Seattle
Ryan, Frederick A, Bus.....	Seattle
Ryan, Hale E, Bus.....	Seattle
Ryan, Helen, Sci.....	Seattle
Ryan, Homer N, Law.....	Seattle
Ryan, Maurice F, Bus.....	Seattle
Ryder, Edmund, Engr.....	Seattle
Ryder, Maude, LA.....	Seattle
Ryder, Grant H, Engr.....	Seattle
Ryus, Emmett H, LD, Bus.....	Seattle
Sadler, Mrs Estella, LA.....	Tacoma
Sahl, Ida, LA.....	Hoquiam
Sallor, Lols, FA.....	Marblemount
Sakuma, Yasuharu, LA.....	Japan
Salazar, Felino O, Sci.....	Philippines
Salmous, Arlie, Grad.....	Columbia, Mo

Sammis, Lowden, Law.....	Seattle	Schnitzlein, Anita, Sci....	Long Beach, Cal
Sample, Geo C, LD, Bus.....	Seattle	Schofield, Alfred G, Min.....	Seattle
Samsel, Howard, Bus.....	Seattle	Schofield, R M, LA.....	Seattle
Samsel, Ted, Bus.....	Seattle	Schoenfeld, L Kenneth, LD, Bus.....	Seattle
Sanchez, Isabelo G, Sci.....	Philippines	Schofield, Gwendolyn, LA.....	Seattle
Sandall, Loretta, LA.....	Seattle	Scholen, Hanna, LA.....	Seattle
Sandborg, Harold, Sci.....	Seattle	Scholl, Suzanne B, Bus.....	Seattle
Sanders, Carrie, LA.....	Eaton	Scholz, Ernest H, Spec.....	LaCrosse
Sanders, Elva, Bus.....	Seattle	Schooley, Herbert, Fsh.....	Seattle
Sanders, John E, Unc, LA.....	Seattle	Schooley, John M, Bus.....	Zillah
Sanders, John C, Engr.....	Seattle	Schram, Alberta, UD, LA.....	Seattle
Sanders, Leslie, For.....	Seattle	Schram, Katherine, LA.....	Seattle
Sanderson, Doris, LA.....	Wenatchee	Schreiber, Paul R, LA.....	Colville
Sandifur, C Paul, LA.....	Aberdeen	Schreuder, L, LA.....	Seattle
Sandner, Lucile, Spec.....	Tacoma	Schroeder, Fred W, Grad, Warrenton, Mo	
Sandstrom, Loreutz, Bus.....	Seattle	Schroeder, Marvin L, LA.....	Seattle
Sandusky, O E, Grad.....	Spokane	Schubert, Helen, LA.....	Seattle
Sanford, David J, Bus.....	Seattle	Schuett, Henryetta, LA.....	Seattle
Sanford, Marcus, Engr.....	Pomeroy	Schultz, J Frank, Bus.....	Wilson Creek
Sanford, R H, Bus.....	Seattle	Schulz, Katherine Louise, LA.....	Hawaii
Sanwick, Emma, LA.....	Seattle	Schumacher, Walter C, FA.....	Shelton
Sanwick, J, UD, LA.....	Seattle	Schuman, Sara, FA.....	Bellingham
Sargent, Charles W, R, LA.....	Seattle	Schumer, Anne, Bus.....	Seattle
Sarin, Arthur, LD, Engr.....	Pt Blakely	Schuss, Albert G, LA.....	Kelso
Sarro, Nicholas, Sci.....	Seattle	Schwager, Helen Louise, LD, FA.....	Seattle
Sather, Edgar W, Bus.....	Seattle	Schwald, Patrick J, Spec.....	Walla Walla
Sather, Norton Clyde, Unc, For.....	Seattle	Schwartz, Ben, LA.....	Bellingham
Sato, T, Bus.....	Japan	Schwartz, Gene, LA.....	Burns, Or
Satoris, Fred P, Bus.....	Seattle	Schwarz, Eleanor, FA.....	Seattle
Sauers, John Conley, Fsh.....	Seattle	Schweizer, Carl A, Unc, Bus.....	Seattle
Saunders, Mary C, LA.....	Wenatchee	Scofield, Susan Ada, FA.....	Tacoma
Saunders, Walton, Bus.....	Seattle	Scoones, Phyllis E, LA.....	Seattle
Saupe, Ethel, LA.....	Sanborn, Ia	Scott, Barbara, Sci.....	Seattle
Saupe, Lora, LA.....	Sanborn, Ia	Scott, Clayton A, LA.....	Ashland, Ky
Savage, Anthony, Law.....	Seattle	Scott, Elsie Margaret, LA.....	Twisp
Savage, Geo M, Bus.....	Tacoma	Scott, Frances, Sci.....	Seattle
Savery, Barnett, LA.....	Seattle	Scott, Harlan, LA.....	Spokane
Savery, Wm, LA.....	Seattle	Scott, Herbert J, Engr.....	Kelso
Sawhill, Mary Louise, LA.....	Seattle	Scott, Hilda I, Sci.....	Seattle
Saylor, C D, LA.....	Vivian, S DAK	Scott, James L, FA.....	Redmond
Sayle, Eda A, LA.....	Coeur d'Alene, Ida	Scott, Jessie W, LA.....	Seattle
Sayre, Elinore, FA.....	Seattle	Scott, J T, Bus.....	Seattle
Sayre, Harold, For.....	Seattle	Scott, Marion Snow, LA.....	Mukilton
Scarborough, Dorothea, LD, LA.....	Olympia	Scott, Marjorie, LD, Sci.....	Seattle
Schaal, Norbert J, Grad.....	Seattle	Scott, Morris F, Bus.....	Twisp
Schacht, Ronald W, LA.....	Burlington	Scott, Myron A, Engr.....	Mukilton
Schade, Elizabeth A, LD, LA.....	Seattle	Scott, Neil D, UD, Bus.....	Wenatchee
Schaefer, Isador, LA.....	Seattle	Scott, R M, Engr.....	Seattle
Schaefer, Oscar, Bus.....	Seattle	Scott, Robert W, Ed.....	Woodland
Schaeffer, C E, For.....	Cincinnati, O	Scott, Thomas E, UD, Bus.....	Seattle
Schaffer, Donald A, LA.....	Anacortes	Scott, Wallace Wendell, UD, LA.....	Tacoma
Schaffer, Norwood, Sci.....	Seattle	Seoville, R R, Engr.....	Seattle
Schall, Clayton M, Sci.....	Seattle	Scriven, Lewis E, Sci.....	Seattle
Schaller, Marie, FA.....	Okanogan	Scroggin, Alladeen, LA.....	Tacoma
Scharr, Freeman C, LA.....	Seattle	Scurry, Rebecca, LA.....	Seattle
Schechtman, L, Sci.....	Dayton, O	Seabury, Esther, FA.....	Seattle
Scheffer, Theo, Engr.....	Puyallup	Seabury, Jessie, LA.....	Seattle
Scheibler, Perry, Bus.....	Tacoma	Seagraves, Hal E, Engr.....	Seattle
Scheitlin, Frieda M, LA.....	Glendive, Mt	Sealls, Margaret, UD, LA.....	Seattle
Schenk, Edward R, Sci.....	South Bend	Seamons, Joe, Engr.....	Tacoma
Schenken, Robert, LA.....	Seattle	Sears, Katherine, Sci.....	Seattle
Schermer, Jack M, LD, LA.....	Seattle	Sebree, Dorothy, Sci, Huntington Beach, Cal	
Scheuch, Carl W, Bus.....	Zenith	Secord, Isabel, LA.....	Seattle
Scheyer, Kenneth, LD, Eng, Sedro-Woolley		Secrest, Ruth Viola, LD, FA.....	Seattle
Schickling, Richard, LD, Engr.....	Seattle	Seddon, Stanley, Law.....	Roalyn
Schindler, Ruth, LA.....	Pt Gamble	Seecamp, John F, Engr.....	Seattle
Schirmann, Ella, LA.....	Sultan	Seeley, James Selby, Sci, Anchorage, Alaska	
Schlagaster, Frederick, Engr.....	Bremerton	Seeley, J Selby, LD, Sci., Anchorage, Alas	
Scheuerman, Ruby, LA.....	Seattle	Seeley, Lawlor J, Sci., Anchorage, Alaska	
Schlarb, Elizabeth, LA.....	Seattle	Seeley, Mildred L, FA.....	Seattle
Schlarb, Jack, LA.....	Tacoma	Seeley, Paul W, Bus.....	Seattle
Schlossstein, Clifford T, LA.....	Yakima	Seeley, Edwin, LA.....	Seattle
Schmidt, Calvin F, LA.....	Seattle	Seeley, Helen L, LA.....	Seattle
Schmidt, Val H, Bus.....	Seattle	Selbert, Mrs D A, Spec.....	Seattle
Schmitt, Margaret Frances, Jour.....	Seattle	Selbert, Philip J, Bus.....	Seattle
Schmitt, Mildred Mary, LA.....	Seattle	Seldell, Albert S, LD, Bus.....	Sedro-Woolley
Schmitt, Tessie, Law.....	Seattle	Seldenfeld, Morton, LD, Phar.....	Seattle
Schmitz, Ferdinand, For.....	Seattle	Selfert, Helen, LA.....	Bremerton
Schnasse, Gertrude, LA.....	Walla Walla	Seltzick, Ida, LA.....	Seattle
Schneider, George, UD, Engr.....	Seattle	Seltzick, Jerome K, LA.....	Seattle
Schneider, Vivian, Bus.....	Billings, Mt	Selby, Harold K, Bus.....	Seattle

Selby, Howard P, Bus.....Pt Townsend	Shinkal, T Tsuguo, Engr.....Seattle
Selby, Kenneth B, UD, Educ.....Bellingham	Shinoda, Akira, Engr.....Tacoma
Sells, John A, Sci.....Bellingham	Shiomi, Roy, Engr.....Seattle
Seltzer, Harry David, LA.....Seattle	Shippey, Helen Hall, LA.....Seattle
Seltzer, Lawrence, Law.....Spokane	Shipton, Mildred J, LA.....Lake Chelan
Selvidge, Lewis, LA.....Olympia	Shipton, A Pauline, LA.....Chelan
Semb, Balwen A, LA.....Puyallup	Shively, Luella, Unc, Sci.....Seattle
Semon, Darrell, Engr.....Seattle	Shoemaker, H A, Grad., New Ringgold, Pa
Sensenig, Kathryn Viola, LA.....Boise, Ida	Shoemaker, Harry E, FA.....Seattle
Seraphin, Lelli, Bus.....Puyallup	Shollenberger, J W, Bus.....Seattle
Serrano, Bartolome, Sci.....Philippines	Shone, Hugh James, Bus.....South Bend
Setzer, Geo F, Engr.....Daley	Shore, Beatrice, Bus.....Seattle
Sevener, Bernard C, Sci.....Seattle	Shore, Margaret Julia, LA.....Underwood
Sever, Louis M, Engr.....Steptoe	Shorett, John B, Bus.....Seattle
Sexsmith, Hazel, LA.....Spokane	Shorrock, Paul, Bus.....Seattle
Sex, Martha, LA.....Seattle	Short, Katharine, LA.....Ellensburg
Shafer, Hergert, LA.....Tacoma	Short, Kathryn, LA.....Portland, Or
Shafer, Katherine A, LA.....Seattle	Shoup, Frederic, Engr.....Puyallup
Shafer, Lloyd N, Ed.....Seattle	Showell, Gwendoline, LA.....Bryn Mawr
Shaffner, Mrs Mary M, Sci.....Tacoma	Showell, Philip S, Sci.....Bryn Mawr
Shager, Grant H, Sci.....Seattle	Shreeve, Clarence G, LA.....Seattle
Shain, Julius, LA.....Tacoma	Shrewsbury, H H, Bus.....Sedro-Woolley
Shake, Lola Josephine, Bus.....Seattle	Shryock, Antoinette, Jour.....Seattle
Shank, Chas Howard, Sci.....Seattle	Shuler, Beryl, Sci.....Seattle
Shank, Edward, LA.....Long Beach, Cal	Shull, Helen E, LA.....Missoula, Mt
Shanks, Clyde W, Bus.....Payette, Ida	Shumway, Alfred, Ed.....Seattle
Shannon, Henry, A.....Opportunity	Shumway, Helen L, LD, LA.....Omak
Shannon, James F, Grad.....Opportunity	Shumway, Mrs Orpha V, Grad.....Seattle
Shannon, Margaret J, Sci.....Anacortes	Shure, Sallo Lee, Grad.....Seattle
Shaposhnikoff, Anatole, Unc, Engr.....Seattle	Shuttleworth, Lloyd D, Bus.....Seattle
Sharnbroch, Lorraine W, LA.....Pt Angeles	Sickler, B J, Bus.....Yakima
Shattuck, Margaret, LA.....Seattle	Siegrist, Herbert H, Bus.....Seattle
Shaughnessy, Algert, Engr.....Auburn	Sievers, Harold, Bus.....Everett
Shaw, Clayton B, LA.....Spokane	Sievers, Roy, Bus.....Everett
Shaw, F N, Bus.....Seattle	Siggelko, Marguerite, LA.....Seattle
Shaw, F W, LD, Bus.....Seattle	Silke, Harold W, Phar.....Colville
Shaw, Harry A, LA.....Seattle	Sill, Chas F, LA.....Seattle
Shaw, Helen, LA.....Seattle	Silliman, H G, Engr.....Seattle
Shaw, H M, Phar.....Seattle	Silliman, Marietta, Bus.....Seattle
Shaw, Marian B, LD, FA.....Seattle	Sillman, Grace E, Sci.....Spokane
Shaw, Mary Francis, LA.....Loleta, Cal	Silva, Julio W, Bus.....Tacoma
Shaw, Mlachen Slang, Bus.....China	Silverstone, Eugene, Phar.....Seattle
Shaw, Richard P, LA, San Francisco, Cal	Sim, Ida Grace, Sci.....Wilkeson
Shaw, Robt A, Engr.....Seattle	Simcoe, P S, LD, For.....Port Townsend
Shea, Emmet, Bus.....Seattle	Simmonds, Dorothy P, FA.....Seattle
Shea, Ruth B, Sci.....Mt Vernon	Simmons, Thorwald C, Bus.....Everett
Sheahan, Geo C, Bus.....Los Angeles, Cal	Simmons, William O, For.....Olympia
Sheehan, Paul, LA.....Everett	Simonson, Charles, LD, Phar.....Stanwood
Shaw, Thelma W, LA.....Prescott	Simonson, Rasmus, LA.....Anchorage, Alaska
Sheets, Hilma I, LD, FA.....Seattle	Simpson, Donald, LA.....Seattle
Shellenberger, John A, Engr.....Seattle	Simpson, Ellene V, FA.....Spokane
Shellum, Adelbert J, Engr.....Seattle	Simpson, Leonard, Bus.....Seattle
Shelton, Arthur L, LA.....Pomeroy	Simpson, Lurline V, Grad.....Seattle
Shelton, Carrie F, LA.....Pomeroy	Simpson, Ted, Phar.....Everett
Shepherd, Mrs Esther, Grad.....Seattle	Simson, Louis, Bus.....Seattle
Shepherd, Kathryn, LA.....Seattle	Sinclair, Edythe, LA.....Naches
Shepherd, Percy N, Bus.....Victoria, BC	Sinclair, Robert W, Bus.....Vancouver
Shera, Brian L, Engr.....Tacoma	Singh, Mohan, Bus.....India
Sherbrooke, Margaret A, LD, Bus.....Kirkland	Siprille, Helen, LA.....Seattle
Sheridan, Helen C, LA.....Spokane	Sirjord, Mea F, LA.....Bejou, Minn
Sheridan, Mary A, LD, FA.....Bend, Ore	Sisler, Dorothy, FA.....Seattle
Sheriff, Joseph M, Engr.....Seattle	Sisler, Sara, LA.....Seattle
Sherman, G. Corlas, LD, LA.....Portland, Ore	Sister Leonella Bolt, Sci.....Seattle
Sherman, Leslie A, Bus.....Seattle	Sister Mary Floretta, LA.....Seattle
Sherman, Perry G, For.....Kelso	Sister Mary Estelle, Grad.....Seattle
Sherrer, Helen M, Sci.....Seattle	Sister Mary Matthew, LA.....Seattle
Sherrick, Hazel L, Grad.....Seattle	Sister Pamratius Kearney, Grad.....Seattle
Sherrill, Harold D, Engr.....Tacoma	Sjaastad, Helga, LA.....Tegus, ND
Sherrill, Kenneth, LD, LA.....Tacoma	Skeith, Anastasia, LA.....Alberta, Canada
Sherson, Grace W, LA.....Seattle	Skewis, Mary, FA.....Tacoma
Shervling, Chas E, Engr.....Renton	Skewis, Ruth G, FA.....Tacoma
Shiach, Florence, FA.....Ephrata	Skidmore, Samuel A, Bus.....Tacoma
Shidler, Harold, Bus.....Seattle	Slack, Forrest W, Bus.....Pacific
Shidler, Roger L, Law.....Seattle	Slade, Douglas, LD, Bus.....Lynden
Shidler, Ruth, LA.....Seattle	Slade, Janet S, FA.....Husum
Shields, Josephine E, UD, LA.....Seattle	Slane, Harold A, LA.....Seattle
Shields, Josephine R, LD, LA.....Seattle	Slater, Helen, Sci.....Seattle
Shigaki, Geo M, FA.....Seattle	Slauson, Celeste, LA.....Seattle
Shigemura, Chieko, Bus.....Port Blakely	Slavin, Jacob, LD, Sci.....Seattle
Shigechi, Fushimi, Bus.....Japan	Slawson, Charles S, Bus.....Spokane
Shimizu, Frank, Bus.....Seattle	Slawson, E G, FA.....Seattle

Sletmore, Albert M, Engr.....	Seattle	Sopwith, Ed, Engr.....	Seattle
Slipper, Marianne L, LA.....	Seattle	Sorensen, Andrew, Bus.....	Ellensburg
Slipper, Thomas A, LA.....	Hamilton	Sorenson, Gladys, FA.....	Belleveue
Slusher, Charlotte B, LA.....	Seattle	Sossaman, Gretchen, LA.....	Everett
Sly, Lillian, FA.....	Tacoma	Soude, Isabelle Christene, FA.....	Everett
Smart, William, FA.....	Seattle	Souliere, Edna Marie, LA.....	Anacortes
Smetheram, Francis E, Bus.....	Spokane	Southard, Mrs Edna Lutz, LA, Pt Townsend	
Smith, Alton G, Bus.....	Seattle	Southard, Lloyd C, LA.....	Cambridge, Kans
Smith, Alverna Rowena, LA.....	Morton	Southern, Vinton, LA.....	Seattle
Smith, Arthur B, Engr.....	Seattle	Southwick, Charles, LA.....	Chelan
Smith, Bernice, Sci.....	Enumclaw	Sowers, Lucile, Ed.....	Chehalis
Smith, Bertha M, Ed.....	Centralia	Sowle, Jack, Engr.....	Seattle
Smith, Charles J, Bus.....	Seattle	Spaeth, Alleen, Sci.....	Ketchikan, Alaska
Smith, Mrs Christina D, Grad.....	Seattle	Sparkman, James H, LD, Bus.....	Seattle
Smith, Doris L, FA.....	Alberta, Canada	Sparks, Harold B, Bus.....	Seattle
Smith, Dorothy L, FA.....	Seattle	Sparling, Donald, Bus.....	Hoquiam
Smith, Edna B, Bus.....	Chicago, Ill	Sparling, Geo W, For.....	Seattle
Smith, Ethel Elizabeth, Grad.....	Seattle	Sparling, Margaret Jane, Bus.....	Hoquiam
Smith, Frederic, Spec.....	Seattle	Spaulding, David L, Bus.....	Seattle
Smith, George Eldon, Bus.....	Seattle	Speaken, Walter L, LA.....	Duvall
Smith, G F, Ed.....	Vancouver	Spelman, Francis C, Sci.....	Edmonds
Smith, Gerald, LD, Bus.....	Miller River	Spence, Douglas H, Engr.....	Edmonds
Smith, Greta, LD, LA.....	Vancouver	Spencer, Dean, LA.....	Seattle
Smith, Hall, UD, Bus.....	Seattle	Sperling, Otto F, Grad.....	Spokane
Smith, Harry, Bus.....	Bellingham	Sperry, Florence W, Grad.....	Seattle
Smith, Helene H, LA, Mountain Home, Ida		Sples, Dorothy Preston, LA.....	Seattle
Smith, Herbert H, Engr.....	Elma	Sporseen, E Dagny, LA.....	Sequim
Smith, Hjoridis, FA.....	Seattle	Sprague, A M, Engr.....	Seattle
Smith, Ilce V, LD, FA.....	Seattle	Sprague, Dorothy, LA.....	Yakima
Smith, Irving M, UD, Engr, San Miguel, Cal		Sprague, Joan, UD, FA.....	Seattle
Smith, James G, Law.....	Seattle	Spratlin, Allen, Law.....	Seattle
Smith, Janet S, Sci.....	Auburn	Spriesterbach, Alice, FA.....	Everett
Smith, Jeanne, LA.....	Yakima	Springer, Alice, LA.....	Olympia
Smith, Jessie C, UD, LA.....	Portland, Ore	Springer, Eleanor Alice, Sci.....	Seattle
Smith, Jessie E, LA.....	Seattle	Springer, Hestell, LD, Sci.....	Seattle
Smith, John C, Engr.....	Bellingham	Springsteen, Gordon, Bus.....	Seattle
Smith, Joseph Byron, Law.....	Seattle	Springsteen, Margaret, LA.....	Seattle
Smith, Louise, LA.....	Mt Vernon	Sprinkle, Frances M, LA.....	Tacoma
Smith, Lloyd B, Bus.....	Seattle	Spuhn, Fred W, For.....	Medford, Or
Smith, Lucella Elouise, Sci.....	Brewster	Squier, C E, Phar.....	Seattle
Smith, Maud M, Ed.....	Seattle	Spurgeon, Gwendolyn, LD, LA.....	Everett
Smith, Mildred, LA.....	Seattle	Stacy, Virginia, FA.....	Clarkston
Smith, Neil M, LA.....	Duvall	Stager, Helen E, Sci.....	Seattle
Smith, Orville Laverne, Bus.....	Naches	Stalberg, Vera, LA.....	Everett
Smith, Paul R, LA.....	Seattle	Standard, Alta V, FA.....	Seattle
Smith, Quentin S, LA.....	Puyallup	Stanley, Emery R, For.....	Seattle
Smith, Ralph L, Sci.....	Miller River	Stanley, Evelyn M, LA.....	Seattle
Smith, Ralph R, LA.....	Seattle	Stansbery, Douglas, Bus.....	Seattle
Smith, Raymond F, LD, LA.....	Spokane	Stapleton, Henry B, LD, Bus.....	Seattle
Smith, Raymond C, Engr.....	Merritt	Stapleton, Margaret L, UD, LA.....	Seattle
Smith, R A, Bus.....	Mountain Home, Ida	Starin, Edward, Law.....	Seattle
Smith, Richard W, LD, Engr.....	Ellisport	Stark, Eugene E, Law.....	Seattle
Smith, Roy M, Engr.....	Spokane	Stark, Jeannette, LA.....	Seattle
Smith, Ted A, Sci.....	Seattle	Starkey, Wm E, Bus.....	Prosser
Smith, Thad O, Min.....	Grandview	Starr, Geraldine, LA.....	Seattle
Smith, Tremaine J, Law.....	Colbert	Starr, James, Unc, Min.....	Camp Lewis
Smith, Trueman T, Engr.....	Seattle	Staten, Francis A, UD, Bus.....	Seattle
Smith, Vernetta T, LA.....	Hoquiam	Staten, Mildred, LA.....	Seattle
Smith, Virgil, Grad.....	Seattle	Stedman, Lewis, Law.....	Seattle
Smith, Wayne C, UD, Bus.....	Lynden	Stedman, Vera, Sci.....	Seattle
Sneed, Marie F, Grad.....	Seattle	Steele, Coralee, LD, LA.....	Seattle
Snelling, Lewis B, Sci.....	South Bend	Steele, Charles Egbert, LA.....	Seattle
Snider, Claude, Engr.....	Kent	Steele, Helen D, LA.....	Seattle
Snider, Floyd, Engr.....	Seattle	Steele, Kathryn J, FA.....	Seattle
Snidow, Harriet, Phar.....	Willamette, Or	Steln, Ben L, Engr.....	Russia
Snoddy, Roy J, Engr.....	Arlington	Steiner, Griffith D, Bus.....	Okanogan
Snodgrass, Ansel N, Unc, Bus.....	Wenatchee	Stellmon, Earl H, Bus.....	Seattle
Snyder, Harold C, UD, LA.....	Seattle	Stendal, Orville L, LA.....	Sedro-Woolley
Snyder, Hart, Law.....	Seattle	Stensland, Ben, Sci.....	Redmond
Snyder, Ida Mae, Ed.....	Rochester, Minn	Stensland, Theodore, LA.....	Redmond
Snyder, James L, Sci.....	Seattle	Stephens, Inga, Sci.....	Seattle
Snyder, Lloyd T R, LA.....	Seattle	Stephens, Irene Nina, LA.....	Seattle
Snyder, Otha Bery, Bus.....	Seattle	Stephens, L E, Bus.....	Centralia
Soderquist, Albert, LD, Engr.....	Seattle	Stephens, Lillian M, Sci.....	Monroe
Soderstrom, Harry, Bus.....	Spokane	Stephens, Mildred, LA.....	Seattle
Sofe, Tony, P, Bus.....	Pt Townsend	Sterling, Elizabeth C, Grad.....	Vancouver
Sogard, Albert, Bus.....	Culdesac, Ida	Sterling, Thomas B, Law.....	Walla Walla
Soliven, D Donato, Feh.....	Philippines	Stern, Edward F, Bus.....	Seattle
Soller, Telesforo G, Sci.....	Philippines	Stetson, John E Jr, Sci.....	Seattle
Sommerce, Buford, Sci.....	Spokane	Stevens, Belle Alice, Grad.....	Maltby
Sonju, Norman, For.....	Seattle	Stevens, Edward G, LD, LA.....	Tacoma

Stevens, George, Engr.....	Everett	Sullivan, Ora, FA.....	Seattle
Stevens, Guy E, Bus.....	Seattle	Sully, Charles D, Bus.....	Seattle
Stevens, Richard, Bus.....	Seattle	Sulz, A M, LD, Eng.....	Seattle
Stevens, Richard F, Engr.....	Seattle	Summers, Wayne M, Bus.....	Seattle
Stevens, Robt R, Bus.....	Seattle	Sumner, Richard J, LA.....	Toppenish
Stevenson, Harold, Bus.....	Seattle	Sun, Hsieh Chee, Bus.....	China
Stevenson, R La Rue, LA.....	Seattle	Sundstrom, Elizabeth, LA.....	Dupont
Stevenson, Robert John, LA.....	Seattle	Sundstrom, Roy, Engr.....	Hoquiam
Stevenson, Roy, LA.....	Thorp	Sundstrom, William J, Bus.....	Dupont
Stewart, Chester F, Min.....	Seattle	Suomela, Arnie J, Fsh.....	Ilwaco
Stewart, Harold A, Min.....	Seattle	Suomela, George E, LA.....	Ilwaco
Stewart, Lyle P H, LA.....	Seattle	Sutherland, Alice W, LA.....	Seattle
Stewart, Malcolm, Bus.....	East Seattle	Sutherland, Jean, Sci.....	Seattle
Stewart, Oliver, Engr.....	Seattle	Sutter, Carl F, Bus.....	Seattle
Stewart, Paul Revere, LA.....	New York City	Sutter, V F, Bus.....	Seattle
Stewart, Richard H, Sci.....	Seattle	Sutton, Elizabeth, LA.....	Seattle
Stewart, Ruth, LA.....	Seattle	Swalle, George, Bus.....	San Diego, Cal
Stickney, Amy E, LA.....	Bothell	Swale, Douglas G, Sci.....	Seattle
Stickney, Lyman B, LA.....	Bothell	Swan, Clara Louise, LA.....	Shelton
Stiles, Dean F, Bus.....	Seattle	Swan, John W, Bus.....	Seattle
Stillman, Allyn P, For.....	Spokane	Swanberg, Amy, Bus.....	Seattle
Stillman, Frances, LA.....	Spokane	Swanberg, Arthur, Fsh.....	Seattle
Stillwell, Edward M, Grad.....	Seattle	Swangerg, Roy, Min.....	Seattle
Stinton, Alfred, Bus.....	Fairfield, Ida	Swanson, Clarence W, Bus.....	Seattle
Stirrat, James R, Bus.....	Seattle	Swanson, Florence Lillian, Sci.....	Troy, Mt
Stixrud, Louise, LA.....	Seattle	Swanson, Gustave, Phar.....	Edmonds
Stixrud, Lydia E, LA.....	Seattle	Swanson, Myrtle, Bus.....	Troy, Mt
St John, C Harold, Bus.....	Chehalis	Swanson, Verne J, Engr.....	Seattle
Stokwell, R P, Bus.....	Aberdeen	Swanson, Walter V, Jr, LA.....	Seattle
Stoddard, Harold, FA.....	Seattle	Swart, Gilbert, Engr.....	Seattle
Stolts, George David, Bus.....	Colville	Swearingen, Francis D, Bus.....	Seattle
Stone, Edward Thoburn, LA.....	Vancouver	Sweeney, Frank E, Law.....	Seattle
Stone, Helen B, LA.....	Cosmopolis	Sweeney, Frank M, Bus.....	Seattle
Stone, Howard C, Engr.....	Seattle	Sweeney, Mary Elizabeth, LA.....	Seattle
Stone, Samuel, FA.....	Seattle	Sweet, Marie, LA.....	Seattle
Stonecipher, Blanche, FA.....	Waitsburg	Sweet, Marion L, FA.....	Okanogan
Stoneman, Argus V, LA.....	Seattle	Swenson, Elaine Isabelle, FA.....	Seattle
Stoody, Helen M, Phar.....	Seattle	Swezea, Florence K, UD, Educ.....	Seattle
Storey, Eunice, LA.....	Seattle	Swezey, Mildred L, LA.....	Sumner
Storey, Guinevere, Sci.....	Kirkland	Swift, E A, Law.....	Seattle
Stott, Donald D, Engr.....	Seattle	Swift, Ida Frances, LA.....	Seattle
Stout, Daniel M, Engr.....	Malott	Sycour, Charles Oliver, Sci.....	Seattle
Stout, Maxine, LD, LA.....	Vancouver	Sykes, Iris H, FA.....	Tacoma
Stover, Leona, LD, Sci.....	Seattle	Szymkowiak, E A, For.....	Milwaukee, Wis
Stover, Merrill, Engr.....	Seattle		
Stover, Miriam, LA.....	Seattle		
Stoves, Margaret L, LA.....	Roslyn	Tadije, Emiliano, Engr.....	Seattle
Stowell, Ralph J, Engr.....	Seattle	Taft, Marion, LA.....	Hoquiam
St Peter, Mathilde, Bus.....	Seattle	Taggart, Geo M, LD, Bus.....	Seattle
St Peter, Neva M, FA.....	Seattle	Tai, Frances, LA.....	China
Strachan, Gertrude, FA.....	Kent	Takai, Sumi-Ko, FA.....	Vashon
Strain, Kenneth, LD, Bus.....	Seattle	Takahashi, Theodore, Bus.....	Seattle
Strand, Erling, LA.....	Petersburg, Alaska	Takahashi, Voshion, LA.....	Seattle
Strand, Robert, UD, Bus.....	Great Falls, Mt	Talbot, E Reeve, LA.....	Seattle
Strandberg, H V, Engr.....	Seattle	Talbot, Katherine, LA.....	Seattle
Stratton, Harold M, Engr.....	Seattle	Tanaka, William U, FA.....	Seattle
Stratton, Irving R, Law.....	Seattle	Tang, Nien Yee, Sci.....	China
Strauss, Herman A, Sci.....	Colfax	Tang, Sik Pui, Bus.....	Winkelman, Ariz
Strecker, Burr Well, FA.....	Spokane	Tanguay, Emmett L, Engr.....	Seattle
Street, Francesca, Sci.....	Seattle	Tanner, Frances J, FA.....	Seattle
Street, S Merl, LD, LA.....	Omak	Tanner, Raymond, LA.....	St John
Strena, Nadine, LA.....	Seattle	Tanzer, Max, Bus.....	Seattle
Strickland, Norman R, Sci.....	Seattle	Tappe, Kenneth H, For.....	Bremerton
Strizek, Paul J, Sci.....	Seattle	Tappe, L B, Phar.....	Bremerton
Strobach, Nettina Louise, Grad.....	Yakima	Tapping, Margaret E, LA.....	Seattle
Strohn, L Nell, FA.....	Seattle	Tapping, Mary Beth, LA.....	Seattle
Strong, Gladys D, Grad.....	Pasadena, Cal	Tarleton, Julia, Bus.....	Winlock
Strong, Mary Frances, LA.....	Seattle	Tarr, Juanita K, Ed.....	Seattle
Strong, Richard S, LA.....	Seattle	Tashima, Hideo, Sci.....	Los Angeles, Cal
Stroud, Rollin C, For.....	Seattle	Taugner, Conrad, Unc, Sci.....	Seattle
Stroud, Warren, Phar.....	Seattle	Taylor, Anna Kathryn, LA.....	Seattle
Strouse, Margaret, FA.....	Seattle	Taylor, Rev Chester Alban, LA.....	Seattle
Struthers, Selma, LA.....	Walla Walla	Taylor, Don A, Sci.....	Everett
Stryker, Gretchen, FA.....	Everett	Taylor, Dorothea L, Phar.....	Kent
Stucky, Phillip Paul, Engr.....	Monroe	Taylor, Elizabeth W, LD, For.....	Seattle
Standley, James D, For.....	Seattle	Taylor, Helen L, LA.....	Seattle
Staht, Bernich, LD, LA.....	Spokane	Taylor, Elizabeth W, For.....	Seattle
Stankard, Russell, Bus.....	Seattle	Taylor, Irene, Bus.....	Seattle
Stargile, Isabel, LA.....	Seattle	Taylor, Irvine P, Bus.....	Seattle
Sugiyama, Frank, Engr.....	Kent	Taylor, James G, Bus.....	Idaho Falls, Ida
Sullivan, Marie, Bus.....	Seattle	Taylor, Judith, LA.....	Seattle

Taylor, Lucile, LA.....	Seattle	Thrallkill, B Lou, Bus.....	Seattle
Taylor, Mildred M, FA.....	Sokane	Thrallkill, W L, Engr.....	Seattle
Taylor, Raymond F, For.....	Caldwel, NJ	Thurlow, N B, Bus.....	Seattle
Taylor, Robert Dinsmore, Law.....	Spokane	Thurston, Bashor, LA.....	Kelso
Taylor, Robert E, FA.....	Blaine	Thurston, Robert C, LA.....	Yakima
Taylor, Robert W, Bus.....	Seattle	Thwing, Clayton F, Bus.....	Puyallup
Taylor, William, Spec.....	Bryn Mawr	Tibbits, Erva, Grad.....	Cashmere
Taylor, Wm D, Bus.....	Seattle	Tikjonivroff, Sergei T, Unc, Bus.....	Seattle
Teed, Howard M, LD, Bus.....	Seattle	Tilbury, Percy, Bus.....	Nooksack
Tegland, Nellie M, Grad.....	Yelm	Tiller, Arnt, LA.....	Seattle
Teig, Ralph, Engr.....	Seattle	Tilton, K Elwood, UD, For.....	Seattle
Tejeda, Emiliano, Law.....	Philippines	Tinkcom, Lucile, FA.....	Seattle
Tellason, Vladimir T, Engr.....	Seattle	Tipton, George, Sci.....	Seattle
Teller, Harry C, Engr.....	Hogquam	Tobey, Lono W, Bus.....	Elma
Templeton, F E, Sci.....	Seattle	Todd, Charles S L, LA.....	Seattle
Tennant, Hugh, Phar.....	Pasco	Togo, Yone, Engr.....	Seattle
Tenney, E Paul, Sci.....	Seattle	Toles, Martha Esagelle, FA.....	Centralia
Tenney, Madeleine, Sci.....	Seattle	Toles, Martha I, LD, LA.....	Centralia
Terrell, Agnes N, LA.....	Billings, Mt	Tollicksen, Leslie B, Engr.....	Seattle
Terry, Mrs Opal, Spec.....	Seattle	Tompkins, Chester E, Bus.....	Seattle
Terzish, John, Engr.....	Seattle	Tompkins, Wesley D, Bus.....	Boise
Terzick, Peter E, LD, Bus.....	Rossland, BC	Toner, George M, Bus.....	Sunnyside
Tesreau, Elmer L, Bus.....	Chehalis	Tonkin, Kathryn, LD, LA.....	Seattle
Tesreau, Lewis, LD, Bus.....	Chehalis	Too, Che Pin, LA.....	Seattle
Teters, Bonny, LA.....	Spokane	Toole, Margaret, Sci.....	Seattle
Thatcher, Evelyn, LA.....	Portland, Or	Torgerson, Uilta, LA.....	Seattle
Thatcher, Virginia, LA.....	Portland, Or	Turney, Jack, LA.....	Seattle
Thayer, John M, Grad.....	Seattle	Towey, Orul M, LA.....	Olympia
Theel, Helen, Bus.....	Seattle	Townsend, Howard G, Bus.....	Seattle
Therrow, Alfred C, Bus.....	Gibbs, Ida	Townsend, James Rellly, Fsh.....	Seattle
Thielman, Edith May, FA.....	Seattle	Townsend, Lorita M, LA.....	Seattle
Thies, Roland K, LA.....	Seattle	Townsend, Lucile E, LA.....	Seattle
Thiry, Paul, LD, FA.....	Seattle	Townsend, Paul, LA.....	Seattle
Thode, Elizabeth, Sci.....	Boise, Ida	Tozier, Payson V, Engr.....	Seattle
Thode, Helen Virginia, LA.....	Boise, Ida	Tramill, Glen, Bus.....	Seattle
Thole, Marjorie F, LA.....	Seattle	Travis, Fredericka, LA.....	Eugene, Or
Thoman, Ira C, Fsh.....	Cle Elum	Travis, Virginia, LA.....	Seattle
Thomas, Dorothy, Phar.....	Seattle	Trethewey, B Lauren, LD, Bus.....	Seattle
Thomas, Emily Alice, FA.....	Cedar Falls	Treize, Wm Norman, LA.....	Toit
Thomas, Earl B, Spec.....	Port Townsend	Tribett, La Neta, LA.....	Seattle
Thomas, Frank E, LA.....	Ellensburg	Trice, Richard H, LD, LA.....	Seattle
Thomas, Jack R, Bus.....	Sumas	Trimble, Edwin S, LD, Sci.....	Seattle
Thomas, James C, Spec.....	Agullan, Colo	Troch, Earl E, LA.....	Vancouver
Thomas, Letty K, LA.....	Seattle	Troch, Sylvia, FA.....	Vancouver
Thomas, Margaret C, Grad.....	Bellingham	Trotter, Georgia E, Spec.....	Marysville
Thomas, Roscoe G, LA.....	Seattle	Trow, Florence, Bus.....	Seattle
Thome, Helen, LA.....	Granger	Trowbridge, K S, For.....	Augusta, Ga
Tholme, Randi, FA.....	Seattle	Troy, Ruth, Phar.....	Olympia
Thompson, Dorothy E, LA.....	Aberdeen	Troy, Thomas B, LA.....	Havre, Mt
Thompson, Adelle, LA.....	Enumclaw	Truitt, Muriel, Unc, Bus.....	Seattle
Thompson, Alfred, LA (Pre Law) Raymond		Trullinger, J T, Bus.....	Olympia
Thompson, Allen Emmett, For.....	Seattle	Trumbull, J Jonathan, LA.....	Chile
Thompson, Browder J, Engr.....	Seattle	Trumbull, John T, Law.....	Pt Angeles
Thompson, Doris W, LA.....	Portland, Or	Tsai, Hsiao Chih, Unc, Bus.....	China
Thompson, Earl G, Engr.....	Seattle	Tsai, Titi Shaan, Bus.....	China
Thompson, Gordon W, LD, Bus.....	Centralia	Tsang, Hsien-Tsun, Bus.....	China
Thompson, Irene, LA.....	Everett	Tucker, A Nesbit, Engr.....	Seattle
Thompson, Katherine, Sci.....	Seattle	Tucker, Dorothy, LD, Bus.....	Couler
Thompson, Keith, Bus.....	Pt Angeles	Tucker, Marvyn, LD, Bus.....	Toppenish
Thompson, Lois, UD, LA.....	Olympia	Tucker, Roy Francis, Sci.....	Butte, Mt
Thompson, Margaret, LD, LA.....	Seattle	Tucker, Ellen, Bus.....	Seattle
Thompson, Marguerite, LA.....	Seattle	Tucker, W S, Law.....	Seattle
Thompson, P L, LD, For.....	Seattle	Tuell, J Irving, Engr.....	Tacoma
Thompson, Robert, Bus.....	Centralia	Tupper, Cecil C, Bus.....	Spokane
Thompson, Seton H, LD, Fsh.....	Seattle	Turnaciff, W Dudley, Phar.....	Seattle
Thompson, Suzanne, LD, FA.....	Tacoma	Turnbull, Don M, Bus.....	Skykomish
Thompson, Walter W, FA.....	Seattle	Turner, Alice G, LA.....	Seattle
Thompson, Wilbur, Unc, Bus.....	Seattle	Turner, Alma R, Spec, Bus.....	Seattle
Thomson, Esther, LA.....	Sedro Woolley	Turner, Arthur F, Engr.....	Seattle
Thomson, Ernest Duncan, LA.....	Seattle	Turner, Cecelia H, LA.....	Everett
Thomson, Rhea, Sci.....	Seattle	Turner, Charles F, LD, For.....	Everett
Thomson, Vela E, Phar.....	Gold Bar	Turner, Ernest Ray, Spec.....	Seattle
Thordarson, Thodur, Bus.....	Blaine	Turner, James Clark, LA.....	Seattle
Thoreson, Wallace, Grad.....	Seattle	Turner, Mary, LA.....	Woodinville
Thorne, Joseph, Law.....	Granger	Turner, Otis L, LA.....	Melborne
Thorne, Thelma M, LA.....	Renton	Turner, Robert E, Grad.....	Seattle
Thornton, J C, LD, Engr. San Francisco, Cal		Turpin, Mrs Marguerite, Ed.....	Spokane
Thornton, Geo, LA (Pre Jour).....	Seattle	Turtle, Alice, FA.....	Boise, Ida
Thornton, Ross C B, Sci.....	Seattle	Tweed, Earl A, Bus.....	Olympia
Thostenson, Clarence H, FA.....	Seattle	Tyler, Charles P, Jour.....	Olympia
Thostenson, George H, LD, Bus.....	Seattle	Tyler, Wilson, LD, LA.....	Olympia



Typer, Linn M, Bus.....Spokane

Ude, William W, Bus.....Spokane  
 Ubungen, Sabas, LD, Sci.....Philippines  
 Uhlinger, Mildred A, Bus.....Spokane  
 Uhlen, Eather D, LA.....Seattle  
 Uhlmann, Martha M, LA.....Centralia  
 Uhlmann, W Paul, Law.....Centralia  
 Ulbricksen, Alvin M, Bus.....Seattle  
 Ulrich, Amos Robt, Engr.....Index  
 Umphrey, Edward L, Grad.....Algany, Or  
 Underhill, Julia A, Spec.....Seattle  
 Underhill, Walter Morton, Ed.....Seattle  
 Unruh, Muriel, LD, FA.....White Salmon  
 Upcraft, Winfield S, LA.....Seattle  
 Upton, George, Sci.....Seattle  
 Upton, Ralf W, LD, Bus.....Seattle  
 Ura, Jutaro, LA.....Japan  
 Urbanek, Eugene, Engr.....Seattle  
 Ure, Lawrence, LD, Bus.....Seattle  
 U'Renn, Dorothy, LA.....Seattle  
 Urquhart, Irene, LD, LA.....Seattle  
 Usharoff, Dometry D, Unc, Bus.....Seattle  
 Utike, Albert A, LA.....Bellingham  
 Utley, Willa, FA.....Seattle  
 Utter, John, Bus.....Boise, Ida

Valentine, Haddon P, Engr.....Tacoma  
 Vallean, Verna, Grad.....Deer Park  
 Valmonte, Leonard A, LD, Engr.....Philippines  
 Van Arsdol, Maurice D, Eng.....Clarkston  
 Van Buskirk, Adelbert C, LD, Sci.....Edmonds  
 Van, Eric Preston, Bus.....Seattle  
 Van de Putte, Genevieve, LA, Gt Falls, Mt  
 Van de Walker, Dale H, Bus.....Seattle  
 Van de Weter, Marlon G, FA.....Spokane  
 Van Gasken, Harriette, Sci.....Des Moines  
 Van Gilder, Florence, LA.....St Helens, Or  
 Van Gilder, John F, FA.....Centralia  
 Van Gorder, Lynn S, Bus.....Seattle  
 Van Horn, Esther, Grad.....Seattle  
 Van Horn, Margaret, LA.....Tacoma  
 Van Horn, Theodora, LA.....Tacoma  
 Vannoy, Mrs Louise, Grad.....Seattle  
 Van Orsdall, Otie Pearl, LA.....Seattle  
 Van Orsdall, Otie P, LD, LA.....Seattle  
 Van Petten, Frank, Bus.....Spokane  
 Van Santen, James, Engr.....Seattle  
 Van Stralen, Francis J, LD, Bus.....Manette  
 Van Tilborg, Elizabeth, Sci.....Seattle  
 Van Tilborg, L D, Sci.....Seattle  
 Van Voris, Cecil S, Bus.....Seattle  
 Van Winkle, Barak, LA.....Puyallup  
 Van Woert, Joe, Bus.....Puyallup  
 Vann, H K, Ed.....Seattle  
 Vassar, John Arthur, Bus.....Seattle  
 Vaughn, Charles A, LD, Bus.....Hoquiam  
 Vaughan, Russell, Bus.....Pendleton, Or  
 Vaughn, Max, Engr.....Sedro Woolley  
 Veak, Margaret Thelma, FA.....Seattle  
 Veltech, A H, Engr.....Seattle  
 Verd, Wesley E, LA.....Seattle  
 Verhamme, Evelyn M, LA.....Seattle  
 Verrinder, H W Ford, Engr.....Seattle  
 Vetter, George B, Grad.....Machias  
 Veysey, Lyle W, Bus.....Montesano  
 Vick, Marie, LA.....Seattle  
 Victor, Frank J, jr, Bus.....Seattle  
 Villamin, Manuel, LD, Bus.....Seattle  
 Villegas, Andres P, Engr.....Philippines  
 Vincent, Chester, Bus.....Seattle  
 Vincent, Russell, LD, Engr.....Seattle  
 Vincent, Will P, UD, Min.....Puyallup  
 Vining, J Orrin, Law.....Seattle  
 Vining, Maurice N, Bus.....Seattle  
 Vinson, Carol J, LA.....Tacoma  
 Virtue, Norma, LA.....Missoula, Mt  
 Visser, William R, Engr.....Seattle

Vlasich, William P, Bus.....Seattle  
 Voelker, Claude B, Bus.....Spokane  
 Voerge, Julius E, Sci.....Seattle  
 Volfin, Morris, Engr.....Siberia  
 Von Presentin, Alice, Sci.....Bellingham  
 Von Presentin, Laura, LA.....Bellingham  
 Von Presentin, Wilhelmina, FA.....Seattle  
 Voorhees, Melvin B, LA.....Seattle

Waage, Robert, Bus.....Thomas  
 Wabrauske, Doris, LD, LA.....Seattle  
 Waechter, Florence, LA.....Seattle  
 Wafer, Barbara, Grad.....Seattle  
 Waggener, Harold, LA.....Seattle  
 Wagley, Lois, LA.....Seattle  
 Wahl, Evelyn Ann, LA.....Bellingham  
 Wahlstrom, Nelson A, Bus.....Seattle  
 Waemer, Kenneth, LA.....Vancouver  
 Wahl, Berntena, UD, LA.....Seattle  
 Wait, Thelma C, LA.....Seattle  
 Walby, Eugene V, Bus.....Seattle  
 Walck, Ida, Sci.....Tacoma  
 Waldo, Arthur H, FA.....Raymond  
 Waldo, Cornelius T, LA.....Seattle  
 Walker, Adele, FA.....Seattle  
 Walker, Edward S, Bus.....Tacoma  
 Walker, Gile H, For.....Tacoma  
 Walker, J C E, For.....Seattle  
 Walker, Margery, LA.....Belfair  
 Walker, Richard D, Engr.....Seattle  
 Walker, R R, Engr.....Seattle  
 Walker, Roger A, UD, Engr.....Tacoma  
 Walker, Ronald P, Bus.....Seattle  
 Walker, William Burwell, Law.....Seattle  
 Wallace, Florence B, LA.....Helena, Mt  
 Wallace, Genelle, Sci.....Seattle  
 Wallace, Jean M, Sci.....Tieton  
 Wallace, Roderick A, UD, Educ.....Seattle  
 Waller, Lillian, LA.....Seattle  
 Waller, Ruth, LA.....Seattle  
 Waller, Vern, Sci.....Redwood City, Cal  
 Wallgren, Lloyd E, Engr.....Everett  
 Walling, Dow, LD, LA.....Bellingham  
 Wallis, Opha, FA.....Boulder, Colo  
 Walsh, Bernice, FA.....Everett  
 Walsh, B L, LD, Engr.....Seattle  
 Walter, G A, Grad.....Seattle  
 Walters, Chalmer, Law.....Everett  
 Walters, E C, Bus.....Everett  
 Walter, Ellery E, Unc, LA.....Seattle  
 Walters, Helen, LA.....Seattle  
 Waltersdorph, Frances, FA.....Seattle  
 Walthew, John F, Law.....Seattle  
 Walthew, Margaret, LA.....Olympia  
 Walton, Genevieve H, FA.....Everett  
 Walton, Peter T, For.....Everett  
 Waltz, Margaret E, FA.....Seattle  
 Wang, Jennings, LA.....China  
 Wang, T S, Bus.....China  
 Wann, Arva W, Bus.....Walla Walla  
 Wann, Mrs Lennis M, Spec.....Walla Walla  
 Waples, Mildred, Sci.....Lynden  
 Ward, Alfred H, Grad.....Seattle  
 Ward, Alma M, Ed.....Seattle  
 Ward, Austin L, Sci.....Seattle  
 Ward, Francis John, LA.....St Paul, Minn  
 Ward, Henry B, LD, LA.....Seattle  
 Ward, George F, Law.....Seattle  
 Ward, Lois, LA.....Seattle  
 Ward, Merrill, UD, Sci.....Vashon  
 Ward, Theodore W, Bus.....Seattle  
 Wardman, Emily, Grad.....Alhambra, Cal  
 Wardrum, Lillie B, LD, Bus.....Snohomish  
 Ware, Janet, Ed.....Kirkland  
 Ware, Joannette H, LA, Couer d'Alene, Ida  
 Warn, Brenda, LA.....Spokane  
 Warner, Betty, FA.....Seattle  
 Warner, Genevieve, Ed.....Medical Lake  
 Warner, Grace, LA.....Seattle  
 Warner, Kenneth, LA.....Seattle

Warner, N E, Phar...	Traverse City, Mich
Wartes, Lloyd L, LA (PreLaw).....	Seattle
Wascher, Kathryn, Sci.....	Seattle
Wascher, Spriggs, For.....	Seattle
Washburn, Charlotte, LD, LA.....	Seattle
Washburn, Janet, Uncl, LA.....	Seattle
Washizuka, Selichl, FA.....	Seattle
Wassberg, Clarence E, Grad.....	Seattle
Watanage, Iwao, LD, Sci.....	Seattle
Waters, Aaron P, Sci.....	Sultan
Waters, Ellen, Sci.....	Seattle
Waters, Mildred, LA.....	Seattle
Watkins, Dorothy, FA.....	Seattle
Watkins, Eula May, LA.....	Seattle
Watkins, Ina-Ree, Ed.....	Seattle
Watkins, Minnie Jane, Ed.....	Seattle
Watne, Ed M, Engr.....	Seattle
Watson, Evelyn, FA.....	Seattle
Watson, Kathryn, FA.....	Belfry, Mt
Watson, Lella B, LA.....	Seattle
Watson, Maud, LA.....	Seattle
Watson, Percy H, LD, Bus.....	Seattle
Watt, George S, Bus.....	Seattle
Watt, Harold B, Grad.....	Yakima
Watt, Vernon Smalls, Engr.....	Seattle
Waugh, Robert, LD, Bus.....	Seattle
Waxman, Marie J, Ed.....	Seattle
Wayland, C V, FA.....	Tacoma
Wayland, Elizabeth, FA.....	Seattle
Wayman, Josephine, Grad.....	Emmett, Ida
Wage, Ruth, LA.....	Seattle
Weatherly, Clayton W, Sci.....	Seattle
Weaver, Howard, LD, LA.....	Tacoma
Weaver, Osa Bernice, FA.....	Seattle
Weaver, William H, Sci.....	Seattle
Webb, Lillian E, LA.....	Seattle
Webb, Vernon, LD, LA.....	Portland, Ore
Weber, George, LD, Bus.....	Ritzville
Webber, Albert Hughes, Engr.....	Seattle
Weber, Donald W, Engr.....	Tacoma
Webster, Adrian A, LA.....	Seattle
Webster, Chas N, UD, LA.....	Port Angeles
Wedeborg, S M, Bus.....	Tacoma
Wchnes, Dorothy, LA.....	Tacoma
Weiermuller, Louise Harriet, LA.....	Seattle
Weigeld, M J Lehmann, Ed.....	Seattle
Well, Charles F, Engr.....	Seattle
Weinstein, Arthur, Bus.....	Seattle
Weinstein, Harry H, Bus.....	Portland, Or
Weir, Hugh, LA.....	Centralia
Weir, John M, Engr.....	Tacoma
Weiser, John H, LD, Sci.....	Bellingham
Weiss, H Carl, Bus.....	Seattle
Weissenborn, Howard, Bus.....	Seattle
Weich, Roy E, LA.....	Spokane
Weld, Alice C, Jour.....	Rolling Bay
Weld, Theodore, For.....	Rolling Bay
Weller, Lawrence L, Phar.....	Seattle
Wells, Dorothy Brownlow, LA, Mt Vernon	
Wells, Gordon, Engr.....	Spokane
Wells, Ina, LA.....	Ft Collins, Colo
Wells, James, Bus.....	Okanogan
Wells, John W, Bus.....	Kalama
Welsh, Gertrude Katherine, LA.....	Seattle
Welsh, Helen E, LA.....	Raymond
Welsh, Rac, Phar.....	N Westminster, BC
Welsh, William J, Engr.....	Tacoma
Welts, Edith B, LA.....	Mt Vernon
Welts, Richard, UD, LA.....	Mt Vernon
Welty, John Laurence, Engr.....	Decatur, Ill
Wendler, Gladys, Ed.....	Cheney
Wentworth, Margaret, LA.....	Seattle
Wenz, Ruth O, LA.....	Seattle
Wertemberger, Richard E, Phar.....	Ritzville
Wesley, Ray, Engr.....	Seattle
West, Cecil R, Sci.....	Seattle
West, Constance, Grad.....	Seattle
West, John Hamilton, Unc, Bus.....	Seattle
West, John Talbot, Bus.....	Leavenworth
West, Lucile, Sci.....	Seattle
West, Marie, FA.....	Wenatchee
West, Wendell Bruns, Sci.....	Okanogan
Westberg, Alfred J, LA.....	Seattle
Westby, George Newton, Engr.....	Lagrange
Westfall, Virginia, LA.....	Seattle
Westgard, Blake, Engr.....	Great Falls, Mt
Westgate, Margaret, LA.....	Vancouver
Westland, Jack, Law.....	Everett
Westrom, Fred, Bus.....	Everett
Wetherell, Ernest, LA.....	Spokane
Weurmiller, Louise H, LA.....	Seattle
Weymouth, Allen, Sci.....	Seattle
Weythman, Ida, LD, FA.....	Cashmere
Wheatman, Marion, LA.....	Seattle
Wheaton, Harry J, Bus.....	Seattle
Wheeler, Beulah P, LD, Bus.....	Seattle
Wheeler, Edward B, UD, Bus.....	Seattle
Wheeler, James C, Unc, Bus.....	Seattle
Wheeler, Robert F, LD, LA.....	Montesano
Whipple, A Paul, UD, LA.....	Rochester, NY
Whipple, Charles R, For.....	Northbend, Or
Whitcomb, Rollo R, LA.....	Bellingham
White, Alfred W, LA.....	Olympia
White, Dorothy E, LD, LA.....	Monroe
White, Dorothy E, LA.....	Monroe
White, Dorothy E, FA.....	Redmond
White, Dykeman, Bus.....	Seattle
White, Elizabeth, Sci.....	Camp Lewis
White, Helen, LA.....	Yakima
White, Helen K, Bus.....	Seattle
White, Homer B, LA.....	Bremerton
White, Jessie J, Ed.....	Seattle
White, Lorna, FA.....	Seattle
White, Louise, Sci.....	Snoqualmie Falls
White, Myrtis, LA.....	Sedro Woolley
White, Rosalind, LD, LA.....	Seattle
Whitehead, Bernice E, LA.....	Seattle
Whiteley, Ernest D, Phar.....	Seattle
Whiteley, John D, Unc, Bus.....	Grandview
Whitesides, Norma, FA.....	Seattle
Whitfield, George M, LA.....	Tacoma
Whiting, Grace, LD, LA.....	Vancouver, BC
Whitlock, Victor, Bus.....	Hayre, Mt
Whitman, Avard, Grad.....	Burton
Whitman, D S, LA.....	Burton
Whitmore, Doris, Ed.....	Buckley
Whitner, Chester, LA.....	Seattle
Whitner, George, Bus.....	Seattle
Whitney, Hobart W, Spec, Bus.....	Seattle
Whitney, Willard, LD, LA.....	Aberdeen
Whittle, W B, Bus.....	Seattle
Wicker, Gertrude B, Sci.....	Sedro Woolley
Wicker, Jessie, LA.....	Sedro Woolley
Widell, Hilda L, LA.....	Centralia
Widrig, Thos M, Engr.....	Seattle
Wiegel, Dorothy, Bus.....	Tacoma
Wiel, Helge, Bus.....	Seattle
Wiel, Kurt, For.....	Seattle
Wienand, C Marcus, Grad.....	Seattle
Wiestler, Clarence, FA.....	Greenacres
Wiestling, Francesca, LA.....	Seattle
Wilcox, Claire, FA.....	Seattle
Wilde, Drummond, LA.....	Seattle
Wilder, Ronald, Engr.....	Olympia
Willey, Wilmer W, Engr.....	Seattle
Wilhelm, Ralph, Bus.....	Seattle
Wilke, Shirley, FA.....	Seattle
Wilkes, Maxine, Grad.....	Seattle
Wilkeson, Marion Hazzard, LA.....	Pasco
Wilkins, Earle A, Bus.....	Seattle
Wilkins, Helen G, Ed.....	Grand Mound
Willard, Clara M, Unc, FA.....	Willard
Willard, Dudley W, Grad.....	Seattle
Willard, Harrison E, Engr.....	Seattle
Willard, Lee, Bus.....	Everett
Willards, Edmeades, Sci.....	Portland, Or
William, Herbert, Sci.....	Sumner
Williams, Mrs Beulah M, Grad.....	Seattle
Williams, Berwyn R, Bus.....	Chinook
Williams, Caroline, FA.....	Centralia
Williams, David J, Law.....	Tyler
Williams, Eda, UD, Educ.....	Bellingham

Williams, Edith V, LA.....	Seattle	Wong, James M, LD, Bus.....	Sacramento, Cal
Williams, Eleanor G, LA.....	Yakima	Wong, Sam Herbert, Engr.....	Seattle
Williams, Evelyn, LA.....	Seattle	Wong, Violet, LD, Sci.....	Vancouver, BC
Williams, Hugh Paul, LD, Engr.....	Seattle	Wong, Wah Chin, Bus.....	China
Williams, Genevieve Allie, Bus.....	Seattle	Wong, W H, Bus.....	China
Williams, Harold Guy, LA.....	Seattle	Wong, Yee, Bus.....	China
Williams, Hayden, Bus.....	Yakima	Wong Yue Kuei, Engr.....	China
Williams, Helen C, LA.....	Seattle	Woo, Chin-Ming, Engr.....	China
Williams, Hermon P, Grad.....	Seattle	Wood, Carl E, Grad.....	Meadowdale
Williams, James, Engr.....	Seattle	Wood, Hazel B, LA.....	Seattle
Williams, Joseph Lloyd, LA.....	Seattle	Wood, Lewis C, Engr.....	Meadowdale
Williams, Kenneth, Sci.....	Seattle	Wood, Merna E, FA.....	Shelton
Williams, Mentor Lee, LA, Miles City, Mt		Wood, R E, Bus.....	Seattle
Williams, Oscar, Spec.....	Port Orchard	Wood, Wm, LD, Bus.....	Vancouver, BC
Williams, Roberts F, LA.....	Seattle	Woodell, Otis, Engr.....	Seattle
Williams, Ronald C, Bus.....	Sprague	Woodcock, Lou A, Sci.....	Dungeness
Williams, Ruth Helen, LA.....	Seattle	Woodmansee, Jack I, LD, LA.....	Mesa, Ida
Williams, Thos A, Law.....	Seattle	Woods, Lorin, LD, LA.....	Spokane
Williamson, James T, LA.....	Tacoma	Woodworth, Claude, Law.....	Eastsound
Williamson, Julia, Ed.....	Seattle	Woodworth, John Wm, Engr.....	Concrete
Williamson, Ralph K, LA.....	Seattle	Workman, Nadine, LA.....	Seattle
Williamson, Robert L, LA.....	Seattle	Worswick, Luella Anne, Bus.....	Seattle
Williamson, Rupert W, Unc, LA, Flier, Ida		Wortham, Bob, LD, Bus.....	Seattle
Willis, Robert J, LA.....	Seattle	Worthington, Norman P, Bus.....	Quilcene
Willoughby, Beryl, UD, Sci.....	Seattle	Wotherspoon, Gavin, Sci.....	Seattle
Willoughby, Elizabeth, Sci.....	Grandview	Worthley, Chas B, UD, Eng.....	Tacoma
Willis, Grace, LA.....	Mayview	Wotherspoon, Gordon, LD, Sci.....	Seattle
Wilson, Edward, Engr.....	Everett	Wray, Francis B, For.....	Seattle
Wilson, Abe Y, Bus.....	Everett	Wren, Harper C, LA.....	Seattle
Wilson, Albert W, LA.....	Seattle	Wright, Ansel J, Bus.....	Snoqualmie Falls
Wilson, Bernadine, Sci.....	Tacoma	Wright, Berry G, Bus.....	Stanwood
Wilson, Boland, LA.....	Seattle	Wright, Calvert C, LD, Eng.....	Victoria, BC
Wilson, Burdette G, Ed.....	Seattle	Wright, Donald, Fsh.....	Anacortes
Wilson, Clothilde M, LA.....	Seattle	Wright, George P Jr, Bus.....	Tacoma
Wilson, E Faye, Grad.....	Toppensish	Wright, Jack Willis, Ed.....	Tacoma
Wilson, Gale E, Sci.....	Ridgefield	Wright, Lorine, Sci.....	Seattle
Wilson, George S, Bus.....	Everett	Wright, Ralph G, UD, Educ.....	Dillon, Mont
Wilson, George W, LA, Kennecott, Alaska		Wright, Richard T, LA.....	Seattle
Wilson, Grace, LA.....	Seattle	Wright, Stanley J, Engr.....	Seattle
Wilson, Howard W, Bus.....	Portland, Or	Wright, Thelma A, Bus.....	Snohomish
Wilson, Leard, Sci.....	Seattle	Wright, William, FA.....	Seattle
Wilson, Lewis Otis, Engr.....	Seattle	Wright, Wilma, LA.....	Tacoma
Wilson, Mary, LA.....	Seattle	Wu, Andrew Y, Bus.....	China
Wilson, Thelma, LA.....	Seattle	Wu, Chow Shing, LA.....	China
Wilson, Tyler, LA.....	Olympia	Wurdman, Walter, LD, LA.....	Bremerton
Wilson, William, Grad, Sand Coulee, Mont		Wuthenow, Arthur Jr, Bus.....	Seattle
Wilson, William G, Grad.....	Spokane	Wyckoff, Walter L, Bus.....	Spokane
Wimmer, Lyle G, Engr.....	Spokane	Wyers, Marie, Sci.....	White Salmon
Winchell, Vincent, Bus.....	Centralia	Wyers, Tounis J, Law.....	White Salmon
Winchester, Mabelle, Sci.....	Butte, Mt	Wyde, Edmund, Sci.....	Seattle
Windham, James, LA.....	Seattle	Wyman, Thornton D, Law.....	Seattle
Winn, Burdett A, Min.....	Juneau, Alaska	Wynne, Ardla, LA.....	Seattle
Winograd, Simon, LA.....	Seattle	Wynne, Noel H, UD, Educ.....	Ferndale
Winston, Carey, Bus.....	Seattle	Wynne, Vivian E, Sci.....	Ferndale
Winter, Bryan, LA.....	Seattle		
Wintermantle, Pearl, FA.....	Seattle	Yamaoka, Otto, Unc, LA.....	Seattle
Winther, S K, Grad.....	Seattle	Yamooka, George, LA.....	Seattle
Wirth, Ralph, Bus.....	Seattle	Yarbrough, Elian, LD, Engr.....	China
Wise, Joseph W, Bus.....	Vancouver	Ybojos, Marcelina, Bus.....	Philippines
Wise, Leslie V, Bus.....	Vancouver	Yeung, Pak-cheung, Bus.....	China
Wiseman, Mrs Lillian W, FA.....	Seattle	Yonemoto, H R, Unc, Bus.....	Vancouver, BC
Wiseman, Orville Rupp, LA.....	Seattle	York, Arthur F, Unc, Law.....	Tacoma
Wisen, Byron F, Law.....	Seattle	Yoshimura, Tamekichi, UD, Bus.....	Japan
Witcomb, Douglas A, Bus.....	Seattle	Yoshiloka, Fusako, Bus.....	Seattle
Witham, Ray, Bus.....	Seattle	Yoshiloka, Jesse, Sci.....	Seattle
Witherby, Lester, Engr.....	Ferndale	Yocell, Thomas, LA.....	Seattle
Withrow, Faye, LA.....	Seattle	Youlden, C S, Bus.....	Seattle
Witney, Leelan E, Bus.....	Everett	Youlden, Martha, LA.....	Spokane
Wittenberg, Eva, Phar.....	Seattle	Youle, Gretchen, LA.....	Seattle
Witting, Arthur F, Engr.....	Tacoma	Young, Amie O, Ed.....	Milwaukie, Or
Wohlgamuth, Esther L, LA.....	Seattle	Young, Betty, Sci.....	Seattle
Wojack, Frank, LD, Mines.....	Enumclaw	Young, G Everett, Sci.....	San Francisco, Cal
Wolf, Harold Baxter, LA.....	Seattle	Young, G A, Min.....	Lethbridge, Alta
Wolfe, John B, Bus.....	Tacoma	Young, George Wendell, LA.....	Seattle
Wolfe, Merle, Bus.....	Seattle	Young, Karl E, LA.....	Seattle
Wolff, Thelma, Bus.....	Seattle	Young, Mae Alice, FA.....	Charleston
Wolff, Wanda Marie, Ed.....	Ellensburg	Young, Mrs Viva Eckert, LA.....	Seattle
Wolfe, Dael L, Sci.....	Seattle	Young, Wayne L, Bus.....	Seattle
Wollaston, F, UD, Eng.....	Victoria, BC	Young, W F, Bus.....	Centralia
Wolthausen, Ray, Sci.....	Buena		
Wong, Fred C, Sci.....	China		

Young, Wesley G, Grad.....	Seattle	Zelher, Honora S, LA.....	Seattle
Ystrom, John Bernard, Engr.....	Seattle	Zelasko, Helen, Bus.....	Aberdeen
Yuan, Chang Pei, Bus.....	China	Zener, Galen, Bus.....	White Salmon
Yulle, Beline, Spec.....	Seattle	Zener, Robert G, Engr.....	White Salmon
Yuni, Richard V, LA.....	Hoquiam	Ziel, Frederick L, Engr.....	Pt Townsend
Yun, Chang Hai, LA.....	China	Zillman, Lawrence John, LA.....	Tacoma
		Zimmerman, Philo R, Bus.....	Seattle
		Zimmerman, R C, Bus.....	Portland, Or
Zamora, Lorenzo L, LA.....	Philippines	Zintheo, Clarence J, LD, Engr.....	Seattle
Zander, Marcellus Delbert, Bus.....	Haller Lake	Zobrist, Herbert E, Engr.....	Acme
Zane, Simeon L, LA.....	Seattle	Zumwalt, H O, Phar.....	Yakima
Zarkodas, K, Bus.....	Seattle	Zurbrick, John W, LD, Bus.....	Vancouver, BC

## SUMMER QUARTER STUDENTS—1923

Aalond, Carolina B, Sp, FA.....Tacoma	Baker, Alta, Unmat.....Halley, Ida
Abogadie, A Maria, UD, Phar..Philippines	Baker, Charity, Grad.....Seattle
Acena, Jacinta, LD, Sci.....Philippines	Baker, Hazel L, Unmat.....Seattle
Adams, Donnie F, Unc, LA..Little Rock, Ark	Baker, Irene, LD, LA.....Seattle
Adams, J H, UD Educ.....Touchet	Baker, Mildred E, Grad.....Seattle
Adams, John Orn, Sp, Bus.....Seattle	Baker, Willard O, Grad..New Plymouth, Ida
Adams, Oroville D, UD, Educ.....Seattle	Bakken, Myrtle, Unmat, LA..Valley City, ND
Adams, Rosamond, Grad.....Sunnyside	Balet Albert .....
Agnew, May, Unmat, LA.....Globe, Ariz	Baldwin, Clarence R, Unc, Bus..Anahelm, Cal
Alken, Emily R, Unmat, LA..Phoenix, Mich	Balle, Alfred, UD, Sci.....Seattle
Alme, Adah H, Grad.....Seattle	Balzer, Walter W, UD, Bus.....Spokane
Alkin, Cecilia, UD, Educ.....Seattle	Bancroft, Cecyl, UD, LA.....Everett
Akin, Margaret, UD, Educ.....Seattle	Barber, H Marguerite, LD, LA.....Kent
Alambra, Rufo Z, UD, Bus.....Philippines	Bardanson, Otto, Grad.....Blaine
Alben, Archie, Grad.....Seattle	Barlow, L Leland, UD, LA.....Seattle
Alben, Albert A, UD, Bus..Rossland, BC	Barnest, Dorothy MacP, LD, FA.....Seattle
Alben, N Edna, Grad.....Vancouver	Barnett, Nell M, Grad.....Seattle
Albers, Alvina M, Grad.....Northfield, Minn	Barnwell, Cecile K, UD, Educ.....Albia, Ia
Alexander, Frank E, UD, Sduc.....Lynden	Barrett, Alice A, Grad.....Wendell, Ida
Alexander, Merle L, UD, Educ.Oil Hill, Kan	Barrett, Mrs E C, UD Educ.....Spokane
Allan, Helen Q, UD, LA.....Seattle	Bartholomew, Wayne, UD, Bus.....Seattle
Allen, Barbara, UD, LA.....Yakima	Barton, Charles H, Unmat, LA.....Yakima
Allen, Ina Pearl, Grad.....Amity, Ore	Bassett, Florine, Unmat, LA.....Seattle
Allen, Louise B, Umat.....Seattle	Bassett, Samuel B, UD, Law.....Seattle
Allen, Mabel D, Grad.....Vancouver, BC	Batdorf, Beryl, UD, Educ.....Bellingham
Alm, Reuben A, UD, Educ.....Bellingham	Bateman, A Rachel, LD, LA.....Seattle
Alway, Harrison G, UD, LA.....Turner	Bateman, Winifred, Auditor.....Seattle
Amesbury, Jean, UD, Bus.....Seattle	Bates, Edwin, Und, Bus...Summerfield, O
Amy, Lorna A, Umat, LA.....Berkeley, Cal	Bateson, Florence E, UD, Sci.....Olympia
Andersen, Frances B, Grad.....Seattle	Battle, Wm T, Unmat.....Vancouver, BC
Anderson, Adolph, UD, Eng.....Battle	Baumgartner, Grace, Grad.....Seattle
Anderson, Edward, LD, Bus.....Seattle	Bayley, Mildred, Unc, FA.....Seattle
Anderson, Eva (Mrs L O), Grad.Wenatchee	Bayley, Nancy, Grad.....The Dalles, Ore
Anderson, Evelyn M, Grad.....Seattle	Bayley, Nettie, LD, LA.....Seattle
Anderson, Georgia, LD, LA.....Seattle	Beach, Leota M, UD, Sci.....Seattle
Anderson, Hallie B, LD, LA.....Waterville	Beach, Seth R, Sp, Bus.....Seattle
Anderson, Helen D, Grad.....Mabana	Beal, Esther P, LD, LA.....Kent
Anderson, Ida B, Unc, LA.....Onelda	Bechtel, Albert N, Sp, Bus.....Seattle
Anderson, Jessie J, Grad.....Vancouver, BC	Becker, Gladys, Grad.....Seattle
Anderson, Margaret C, Umat, LA..Van, BC	Bell, Alice G.....
Anderson, Stanley J, UD, Bus.....Seattle	Bell, Otis E, LD, LA.....Idaho Falls, Ida
Anderson, Theresa E, LD, FA.....Kent	Belstad, Walter C, Grad.....Seattle
Andresen, Margrit, LD, FA...Port Angeles	Bench, Stella L, Grad.....Galena, Ill
Andrew, D H, Umat, LA..Three Forks, Mt	Bennett, Dwight G, LD, LA.....Seattle
Andrew, Winona F, Unmat, LA..Denver, Col	Bennett, Merrill W, LD, Bus.....Bremerton
Andrews, Elizabeth M, Grad.....Echo, Ore	Bennett, Richard F, Grad.....Seattle
Andrews, Roy G, LD, LA.....Seattle	Bennick, May A G, LD, LA.....Everett
Angel, John P, Sp, Bus.....Seattle	Benson, Ella M, UD, Educ.....Seattle
Angst, Ernest, Grad.....Chehalis	Benson, Richard, Unmat.....Seattle
Anselm, D R, Grad.....Seattle	Berbano, Marcos, Unmat.....Seattle
Armstrong, Grace, Grad.....Bellingham	Berg, Gunnar H, Grad.....Kelso
Arnold, John A, UD LA.....Tacoma	Berg, Ida B, UD, Educ.....Seattle
Arnold, Philbrook, LD, Eng.....Seattle	Berg, Mrs Margaret, UD, Educ.....Seattle
Aseman, Margaret R, UD, LA..Stanford, Mt	Berger, Louetta V, LD, LA..El Dorado, Kan
Ash, Harriet A, Unmat, LA..Calgary, Alta	Bergman, Eunice, LD, Sci..Breckneridge, Col
Ash, Simon H, UD, Mines.....Seattle	Berquist, Fred E, Grad.....Seattle
Ashley, Paul P, UD, LA.....Seattle	Best, Erie C, Unc, Law.....Seattle
Atkin, Ella M, Unmat, LA.....Lalama	Bethel, Virginia R, UD, LA.....Seattle
Atkins, Harry T, Sp, Bus.....Seattle	Bickel, Wm D, Sp, Bus.....Mt Home, Ida
Attebery, Hester J, UD, LA.....Seattle	Billster, Paul E, Unmat....Portland, Ore
Atwood, Stanley F, UD, LA.....Prosser	Birchner, D O, Unc, Eng..Minneapolis, Minn
Auld, Ina B, Grad.....Fremont, Ia	Birkett, Frances G, Unmat..South America
Auld, W R, UD, Bus.....Seattle	Birney, Frances, UD, FA.....Everett
Aumann, Dorothy, LD, LA.....Port Angeles	Bjorkquist, Enoch J, Grad.....Spokane
Axtelle, George E, UD, Sci...Parkdale, Ore	Black, Wm P, Grad.....Seattle
	Blackburn, Richard L, UD, LA.....Seattle
	Blair, Cleo A, Grad.....Friday Harbor
	Blaine, Louisa, UD, LA.....Seattle
Baer, Alma M, Unmat.Steamboat Spgs, Col	Bloxom, John M, LD, LA.....Seattle
Bailer, Warren, Grad.....Snyder, Okla	Boedcher, Hazel A.....Seattle
Bailley, Dorothy B, UD, Sci.....Seattle	Bobannan, L H, Sp, Bus...Farmington, Ill
Bailor, Wallace F, UD, Educ.....Randle	Bohn, Mrs Catharine, Unc, LA.....Seattle
Baird, Lloyd T, LD, LA.....Seattle	Boland, Margaret W, Unmat.....Seattle
Balsden, Zula D, LD, LA.....Seattle	Boldman, Chester L, Sp, Bus.....Seattle
Balsinger, H. M., Unmat.....McKenna	Bollinger, Morris A, 2d Law.....Methow
Bakeman, Frances, UD, LA.....Snohomish	

Bolstad, Bernard, LD, Bus.....	Seattle
Bolton, Edwin L, Grad.....	Redmond
Bomar, Ralph L, Sp, Bus.....	Seattle
Bond, Charles A, UD, Eng.....	Seattle
Bond, Ulysses S, Sp, Bus.....	Seattle
Boonman, Adolph, LD, Eng.....	Seattle
Bonner, Pearl, Grad.....	Seattle
Bonner, Ethelyn W, Unmat.....	Spokane
Booker, Fay, UD, Educ.....	Seattle
Booker, Paul E, LD, Eng.....	Seattle
Booman, Albert, Grad.....	Lynden
Boone, Julia, UD, Sci.....	Edmonds
Booth, Edwin C, Sp, Bus.....	Seattle
Booser, Marjorie, LD, FA.....	Seattle
Borquist, Bertha, LD, FA.....	Bothell
Borland, Gretchen, LD, FA.....	Seattle
Borzell, John, Sp, Bus.....	Seattle
Bosworth, Donald W, Sp, Bus.....	Seattle
Boten, Julia M, Unmat, LA.....	Seattle
Boudin, Lillian M.....	Seattle
Bourgette, Ralph.....	Seattle
Bourns, Philip W, LD, LA.....	Seattle
Boyce, Edna, Unmat, LA.....	Ritzville
Bowen, Albert H, Sp, Eng.....	Brockton, Mass
Bowen, Alice, Unmat, LA.....	Seattle
Bowen, Beth, LD, Sci.....	Seattle
Bowers, Hames B, Grad.....	Vader
Bowles, Allan, Grad.....	Seattle
Bowman, Conrad H, Grad.....	Seattle
Bowman, D Louis, Grad.....	Quinter, Kan
Bowman, Ward S, Grad.....	Arlington
Boyd, Esther, UD, LA.....	Seattle
Boyd, Laurel F, Sp, Bus.....	Clarkston
Bruden, Howard H, LD, Bus.....	Sandpoint, Ida
Bradley, Edith A, Unmat, LA.....	Helena, Mt
Brandriff, Herman, UD, Sci.....	Seattle
Branshaw, Guy W, UD, Educ.....	Hogquam
Bras, Clarice C, UD, Sci.....	Seattle
Brazel, Charles C, Sp, Bus.....	Olympia
Brennan, Robert A, UD, Bus.....	Seattle
Breenahan, K, Unmat, LA.....	Lanesboro, Minn
Brethnot, Alice B, Grad.....	Seattle
Brethorst, Marguerite, Unmat, LA.....	Seattle
Brewer, Vincent R, Sp, Bus.....	Seattle
Brewer, Wilma E, Unmat, LA.....	Tacoma
Briggs, Dorothy E, UD, Educ.....	Spokane
Briggs, W S, Unmat.....	Coeur D'Alene, Ida
Brinck, Stephen M, Grad.....	Seattle
Brink, Herbert, UD, Bus.....	Kent
Brink, Ralph O, Sp, Bus.....	Seattle
Briscoe, J W, LD, Bus.....	Grangeville, Ida
Britt, Harold, LD, For.....	Everett
Britt, Maurice E, Sp, Bus.....	Seattle
Broder, Percy, UD, LA.....	Seattle
Brooks, Alice, UD, Educ.....	Port Angeles
Broby, Eva, LD, LA.....	Madison, SD
Brown, Adelaide G, UD, LA.....	Seattle
Brown, Amy, Unmat, FA.....	Seattle
Brown, Edith O, Grad.....	Friday Harbor
Brown, E T, Grad.....	Salem, Ore
Brown, Ethyl, Unc, Bus.....	Spokane
Brown, Horace C, Sp, Bus.....	Seattle
Brown, Imogene, UD, Educ.....	Sumas
Brown, Jas E, Grad.....	Vancouver, BC
Brown, Leland P, Grad.....	Olympia
Brown, Mrs Lida F, Grad.....	Salem, Ore
Brown, Minnie J, UD, LA.....	Seattle
Brown, Perl A, UD, Educ.....	Glendive, Mont
Brown, Robert T, LD, Bus.....	Snokomish
Brown, Sarah, UD, LA.....	Seattle
Brown, Stephen D, Sp, Law.....	Seattle
Brown, West M, UD, Educ.....	Brooklyn, NY
Bruce, Irene, Grad.....	Kalispell, Mont
Bruff, Ettie J, UD, Educ.....	Yakima
Bruner, Mary E.....	W Sulph Spgs, Mont
Bruner, A, Unc, LA.....	W Sulph Spgs, Mont
Bryan, Collis C, LD, Engr.....	Dayton
Bryan, Maude, Unmat.....	Greenville, Miss
Bryant, Charles M, Sp, Sci.....	Yakima
Bryant, Mrs Grace, Unmat.....	Seattle
Bublitz, Cora E, UD, LA.....	Dickinson, ND
Bublitz, Wm F, Grad.....	Dickinson, ND
Buchanan, Bethesda B, Grad.....	Seattle
Buchanan, Victor, Grad.....	Seattle
Budde, Chas A, Unmat.....	Skykomish
Bugger, Edith M, Unc, FA.....	Seattle
Buhl, Frances H, UD, Educ.....	Seattle
Buls, Agnes, Unmat.....	Kansas City, Mo
Buls, Evalina, Unmat.....	Kansas City, Mo
Bullock, Cecil, Grad.....	Seattle
Bundy, Margaret, UD, LA.....	Seattle
Burgess, David J, Sp, Bus.....	Boise, Ida
Burgess, Henrietta, Grad.....	Seattle
Burkman, Joel A, UD, Educ.....	Seattle
Burkman, Orpha, UD, Educ.....	Seattle
Burligh, Bess M, UD, Educ.....	Seattle
Burmahin, E F, Unmat.....	Kiel, Wis
Burmeister, Elizabeth M, UD, FA.....	Seattle
Burnett, Alta H, UD, Educ.....	Pomeroy
Burnett, J A, UD, Engr.....	Seattle
Burns, Thos L, Grad.....	Menlo
Burris, Frances A, Unmat.....	St Joseph, Mo
Burrows, Eleanor W, Grad.....	Seattle
Burton, Clara B, LD, LA.....	Colby
Busby, Carrie M, Unmat.....	Spokane
Busby, Lurena L, UD, LA.....	Spokane
Bush, Elizabeth P, UD, FA.....	Seattle
Butt, F H, UD, LA.....	Seattle
Butt, Wm H, UD, Bus.....	Seattle
Butterworth, Harry C, LD, Engr.....	Seattle
Byers, Maryhelen, UD, FA.....	Seattle
Cady, Osman H, Grad.....	Seattle
Calder, Mary E, Unc, LA.....	Seattle
Caldwell, Derrald, UD, Bus.....	Seattle
Calhoun, Charles E, UD, LA.....	Seattle
Callahan, Arthur H, Unc, Law.....	Seattle
Callison, Prince G, Unmat.....	Eugene, Ore
Callow, Doris, UD, FA.....	Seattle
Calvin, John T, UD, LA.....	Seattle
Cameron, Donald P, LD, Bus.....	Victoria, BC
Campbell, Archibald, LD, LA.....	Seattle
Campbell, Florence B, Grad.....	Chelan
Campbell, Helen D, LD, FA.....	Seattle
Campbell, Jean, UD, Educ.....	Spokane
Campbell, Jno E, Unmat.....	Chimacum
Campbell, Marjorie M, Unmat.....	Portland, Ore
Campbell, Veronica, Grad.....	Seattle
Capeu, Donald F, UD, Bus.....	Yelm
Capes, D Elwood, 2d Law.....	Vancouver
Carey, Vincent, Unmat.....	Lacey
Carlisle, Isabelle, Grad.....	Everett
Carlson, John A, LD, Sci.....	Seattle
Carlson, Julia, UD, LA.....	Everett
Carlson, Olga, Unmat.....	Logan, Utah
Carmichael, Ruth F, UD, LA.....	Seattle
Carr, John C, Unmat.....	Portland, Ore
Carroll, Emmett R, Grad.....	Seattle
Carroll, Geneva, Grad.....	Seattle
Carroll, J D, Grad.....	Centerville
Carroll, Murrell J, LD, Bus.....	Seattle
Cass, Eliz, Unmat.....	Seattle
Cattle, Edith A, UD, Sci.....	Colville
Caulkins, Grace, Unmat.....	Duluth, Minn
Cavanaugh, Edith, UD, Educ.....	Spokane
Cavanaugh, Esmer, UD, Educ.....	Spokane
Cayle, Mary A, Unc, LA.....	Seattle
Cekada, Emil B, Grad.....	Tacoma
Chadwell, John T, Unmat.....	Seattle
Chadwick, Edna R, Grad.....	Seattle
Chalaire, Donald, UD, LA.....	New York, NY
Chamberlain, Dorothy, Grad.....	Seattle
Chamberlain, Helen D, Grad.....	Seattle
Chambers, Edw V, Grad.....	Seattle
Chambers, Lucile, UD, LA.....	Seattle
Chambers, L May, Grad.....	Seattle

Chan-Yam, Victor, Sp, LA.....China  
 Chapman, Florence, LD, LA.....Spokane  
 Chapman, Stella M, Unc, LA.....Seattle  
 Chappell, Claribel C, Unmat.....Seattle  
 Chen, Duang B, Unc, Engr.....China  
 Cheng, Pao-Yuan, Grad.....China  
 Chesley, Dorothy H, Grad.....Seattle  
 Chester, Paul, Grad.....Warrensburg, Mo  
 Chilson, Claude M, Grad.....Odessa  
 Chilton, Floyd D, Sp, Bus.....Seattle  
 Christensen, M, UD, Educ.....Brownsville, Ore  
 Christensen, Valborg, UD, LA.....Seattle  
 Church, Ruth M, UD, Educ.....LaConner  
 Churney, Otto L, UD, Sci.....Deming  
 Chute, Ernest E, Grad.....Peshastin  
 Chute, Esther H, Unc, Educ.....Peshastin  
 Clark, Alta M, UD Sci.....Seattle  
 Clark, Celia L, UD, LA.....Mt Vernon  
 Clark, Ena, Grad.....Palmyra, Mo  
 Clark, Herald R, Grad.....Provo, Utah  
 Clark, Marjorie E, LD, LA.....Seattle  
 Clark, Paul B, UD, Engr.....Bellingham  
 Clarke, Loretta L, Grad.....Auburn  
 Clarke, Stanley J, LD, LA.....Seattle  
 Classic, Ralph F, UD, Fsh.....Portland, Ore  
 Clausen, Chester K, UD, Engr.....Seattle  
 Clausen, Emma, UD, Educ.....The Dalles, Ore  
 Clausen, John H, Sp Bus.....Seattle  
 Clausen, Charlotte, UD, Sci.....McKenna  
 Cleveland, Carl, LD, Bus.....Tacoma  
 Click, J E, Bus.....Seattle  
 Cloetta, Blanche, LD, LA.....Seattle  
 Cloud, Bettie, LD, LA.....Baker, Ore  
 Clyne, Edna G, Unmat.....Seattle  
 Coblentz, Geo W, Sp, Bus.....Seattle  
 Cochran, Edw L, Grad.....Kent  
 Cochran, Roy, UD, Educ.....Seattle  
 Cohen, Fannie S, UD, Educ.....Seattle  
 Cohen, Joseph, Unmat.....Seattle  
 Cole, Eva L, Unmat.....Bellingham  
 Cole, Sylpha J, Unc, LA.....Bellingham  
 Coleman, J Sidney, Unc, Educ.....Helena, Mt  
 Conlan, Cecile M, LD, LA.....Spokane  
 Conlee, Carolyn J, Grad.....Bellingham  
 Conner, Cora, Sp LA.....Seattle  
 Connors, Gertrude, Unmat.....Seattle  
 Connor, Alleen M, LD, LA.....Seattle  
 Connors, Cardine, Grad.....Seattle  
 Conrick, Mande, Unmat.....Seattle  
 Constable, John H, UD, LA.....Gig Harbor  
 Conway, Zelma, Unmat.....Toppenish  
 Cook, Lois F, Grad.....Snohomish  
 Cook, Richard E, LD, Phar.....Seattle  
 Cooke, Amy T, LD, FA.....Seattle  
 Cooper, Edwin V, LD, Sci.....Polk County, Mo  
 Cope, Harvey F, Grad.....Medford, Ore  
 Coplen, Donald, LD, Mines.....Seattle  
 Copley, C Blanche, Unc, LA.....Manette  
 Corbally, John E, Grad.....Seattle  
 Cornelius, Roland, UD, Bus.....Seattle  
 Corson, Kenneth P, UD, Min.....Seattle  
 Council, Elizabeth, Grad.....Seattle  
 Covei, Walter P, Unmat.....Corvallis, Ore  
 Crain, Leota, Grad.....Tacoma  
 Cramlet, Clyde M, Grad.....Seattle  
 Cramlet, Theodore, Grad.....Newberg, Ore  
 Crawford, Edw I, Grad.....Seattle  
 Crim, Dorothy, LD, LA.....Seattle  
 Crofoot, Mentha, UD, Educ.....Seattle  
 Crofoot, Vanita, Grad.....Seattle  
 Cronan, May, Unmat.....Spokane  
 Cronin, Anna, Unmat.....Butte, Mont  
 Crowder, Harriet, Grad.....Seattle  
 Crowell, Rennie W, Sp, Bus.....Seattle  
 Cruzier, J L, Grad.....Seattle  
 Crommett, Ella, UD, Sci.....Conway  
 Cullen, Ray R, Grad.....Seattle  
 Cullen, Ray R, Grad.....Okanogan

Cummings, Kathryn, UD, LA.....Tacoma  
 Cunningham, B Theresa, Grad.....Seattle  
 Cunningham, John P, LD, LA.....Seattle  
 Cunningham, Mae, Unmat.....Charles City, Ia  
 Curtis, C, Grad.....Edison  
 Curtis, Donald D, Gra.....Iowa City, Ia  
 Curtiss, Verne E, Grad.....Grand Dalles  
 Cutts, Beatrice T, Grad.....Seattle

Dage, Harold M, UD, Bus.....Seattle  
 Dahl, Bernice I, UD, LA.....Seattle  
 Dahl, Florence, UD, Educ.....Seattle  
 Dahlstrom, Esther, Unmat.....Seattle  
 Dalgity, Jean, UD, Educ.....Seattle  
 Daly, Wm T Jr, 2d Lav.....Pt Townsend  
 Damerell, Vivian, LD, Sci.....Earlington  
 Darrt, Pearl V, Unmat.....Seattle  
 Danberspeck, Marlon, UD, LA.....Seattle  
 Davies, Charlotte V, Unmat.....Puyallup  
 Davies, Enid, UD, LA.....Seattle  
 Davies, T D, UD, Bus.....Seattle  
 Davies, Violet, Grad.....Tacoma  
 Davis, Elwood C, UD, Educ.....Seattle  
 Davis, Grace H, Unmat, LA.....Alaska  
 Davis, Herbert F, UD, Educ.....Seattle  
 Davis, Laura, Unmat.....Seattle  
 Davis, Niell J, UD, Bus.....Seattle  
 Davis, Ray N, UD, Educ.....Twin Falls, Ida  
 Dawson, Charles Wm, Grad.....Seattle  
 Dawson, Chester, LD, Bus.....Seattle  
 Deaderick, Kelly D, UD, LA.....Seattle  
 Dean, Belle, LD, LA.....Bellingham  
 De Force, Helen J, UD, LA.....Spokane  
 de Forest, Marion R, Grad.....Seattle  
 de Heus, Margaret R, UD, LA.....Seattle  
 Deits, Harry L, UD Educ.....Seattle  
 De Jacoby, Arthur D, Grad.....Seattle  
 DeKray, Raymond W, Unmat.....Seattle  
 Dellinger, Sarah I, UD, Educ.....Everett  
 Denny, Eleanor M, Unmat.....Kansas City, Mo  
 Denny, Mrs Josephine C, Unmat.....Seattle  
 DeRiemer, Robert P, UD, Sci.....Spokane  
 DeShazo, Melvin G, LD, LA.....Seattle  
 DeShon, Marguerite, LD, Sci.....Seattle  
 Desmond, Ethel J, LD, LA.....Seattle  
 Devin, Mary E, Grad.....Seattle  
 DeSoto, Alex, LD, LA.....Seattle  
 Dewey, Myrtle, Unmat.....Spokane  
 Dick, Agnes C, Unmat.....Seattle  
 Dick, Bessie M, UD, Educ.....Seattle  
 Dick, Gordon W, LD, LA.....Seattle  
 Dickinson, Joyce M, Unc, Sci.....Spokane  
 Dickinson, Leah, Unc, Sci.....Spokane  
 Dickson, Allie R, Unmat.....Dickinson, ND  
 Dickson, John C, Grad.....Seattle  
 Dickson, Robert W, UD, LA.....Portland, Ore  
 Didzun, O J, LD, LA.....Wichita Falls, Tex  
 Dillabough, Helen, UD, LA.....Okanogan  
 Dimmitt, Lorris M, UD, LA.....Eatonville  
 Dinsmore, Stephen S, UD, Jour.....Seattle  
 Dix, Marion E, LD, LA.....Seattle  
 Dixon, Frank N, UD, Bus.....Sand Springs, Ok  
 Doane, Lucile, UD, LA.....Sparta, Wis  
 Dobson, Geo, UD, Engr.....Renton  
 Dodd, Hamlet P, 1st Law.....Wapato  
 Dodd, Martha W, UD, Sci.....Bellingham  
 Doheny, Geraldine, LD, LA.....Seattle  
 Donahue, Agnes, Grad.....Rosalia  
 Donahue, Alfred B, LD, LA.....Ellensburg  
 Donahue, M Alice, Grad.....Ellensburg  
 Donough, Helen J, UD, LA.....Seattle  
 Dore, Esther, Grad.....Seattle  
 Douglas, John F, LD, Bus.....Seattle  
 Down, Andrew, Grad.....Lacey  
 Downes, Marjory, Unmat.....Seattle  
 Drew, Newton, UD, Bus.....Seattle  
 Driftmiller, Rosa M, Grad.....Mt Vernon

Drotning, Theodore M, Grad.....Seattle  
 Drus, Peter P, Unmat. Coeur D'Alene, Ida  
 Dunmore, Blanche, UD, LA.....Seattle  
 Dunn, Helen M, Grad.....Waterville  
 Dupuis, Margaret, LD, LA.....Seattle  
 DuRae, Berenice, UD, Jour.....Bellingham  
 Dustan, Laura, UD, FA.....Clarkston  
 Dustin, Lillian D, Unmat.....Seattle

Earnest, Robert R, UD, Educ.....Bothell  
 Ebeling, Walter W, UD, Sci....Burlington  
 Edin, Christine E, Unmat.....Kalama  
 Edinger, Carter W, UD, Bus.....Seattle  
 Edson, Emily H, Grad.....Bellingham  
 Edwards, Artha E, LD, LA.....Seattle  
 Edwards, Geo W, UD, For.....Seattle  
 Edwards, Thelma L, Grad.....Seattle  
 Ehelm, Helen, UD, Phar.....Seattle  
 Ehret, Arthur W, Grad.....Selah  
 Eikenberry, Alta, Unc, Sci.Cedar Rapids, Ia  
 Elde, Dagny M, UD, LA.....Mt Vernon  
 Elder, Raymond, LD, LA.....Pasco  
 Eldridge, Ferris E, Grad. Alta Vista, Kan  
 Eldridge, Mrs Lena, Grad....El Paso, Tex  
 Elford, Marion, LD, LA.....Seattle  
 Eller, Willard H, Grad.....Seattle  
 Ellinghouse, Bertha E, Grad. Missoula, Mt  
 Elliott, Barbara C, Unmat....Walla Walla  
 Elliott, Mary E, UD, Sci....Walla Walla  
 Elliott, Maxine B, UD, Jour.....Seattle  
 Elliott, Minnie P, Unc, LA...Redstone, Mt  
 Ellis, Gertrude B, UD, Educ....Snoqualmie  
 Elmer, Maud V, Unmat.....Seattle  
 Elrey, Florence M, UD, LA.....Asotin  
 Elwick, Andrew, Grad.....Seattle  
 Elyea, Winifred, UD, LA.....Tacoma  
 Emerson, Donald A, UD, Educ....Spokane  
 Emerson, Florence S, UD, Educ....Spokane  
 Emmett, Cordelia M, Unc, LA...Waitsburg  
 Encarnacion, Marcelina, LD, LA.Philippines  
 Enders, Lols, Unmat, LA.....La Crosse  
 English, Gertrude, Unmat.....Wenatchee  
 Engstrom, W R, LA, Engr....Gt Falls, Mt  
 Ensley, Talitha B, Grad.....Alaska  
 Erickson, Alfred C, UD, Bus...Oak Harbor  
 Erickson, Ella S, Sp, Sci.....Seattle  
 Estepa, Sotero, Unmat.....Philippines  
 Ethel, Garland, UD, LA.....Seattle  
 Evans, Frank O, Grad.....Mt Vernon  
 Evans, Irene, LD, Bus.....Bellingham  
 Evans, Lacey H, LD, Sci....Vancouver, BC  
 Evans, Walter G, Sp, Bus.....Seattle  
 Evenson, Theo, Grad.....Seattle

Fabico, Emilio, LD, Bus.....Philippines  
 Failor, John W, Unc, Educ.....Auburn  
 Fahrenwald, Alice, Unmat, Educ....Seattle  
 Fairbank, Adelaide S, Grad.....Seattle  
 Falk, Winona, UD, LA.....Seattle  
 Farr, James E, Sp, Bus.Minneapolis, Minn  
 Faulkner, Don R, UD, Bus.....Olympia  
 Faulkner, Jack H, Sp, Engr.....Seattle  
 Faussett, Mrs Madge G, UD, Educ...Seattle  
 Ferguson, Katherine, LD, LA.Yonkers, NY  
 Fick, Nelle M, Unc, LA.....Seattle  
 Ficks, Amanda, UD, Educ.....Seattle  
 Fields, Alice L, Grad.....Salem, Ore  
 Fillotrault, Blanche, Unmat.Bay City, Mich  
 Finseth, Karen D, Unc, Sci.Brush Prairie  
 Fischer, Grace, Unmat.....Tacoma  
 Fish, Kenneth G, Sp, Sci.....Seattle  
 Fisher, Clide O, Unmat.....Seattle  
 Fitzgerald, Florence M, UD, Bus...Seattle  
 Flack, Lena, Grad.....Seattle  
 Fleming, James P, LD, Bus....Butte, Mont  
 Fletcher, Blanche, LD, FA.....Seattle

Fletcher, Custer, Sp Bus..St Anthony, Ida  
 Flower, Alfred R, LD, Bus.....Mabton  
 Floyd, S, Loline, LD, LA....Greenville, Ill  
 Fockler, Edmund R, Grad.....Albany, Ore  
 Folsom, Flossie, Unmat.....Sprague  
 Foote, J Herbert, UD, Bus.....Seattle  
 Foran, Lester, UD, Bus.....Seattle  
 Ford, Katherine D, LD, LA.....Seattle  
 Forrest, Veda, UD, LA.....Bellingham  
 Foss, Mary L, UD, FA.....Seattle  
 Foster, Chas J, Grad.....Seattle  
 Foster, Fred S, UD, Bus.....Hoquiam  
 Foster, Josephine, Unmat.....Seattle  
 Foster, Philip R, UD, Educ....Coviche  
 Foster, W Texas, LD, LA.....Seattle  
 Fouts, Marie, Grad.....Seattle  
 Fowler, Thomas N, Unc, Law.....Seattle  
 Franklin, Alice V, Grad.....Seattle  
 Franklin, Pearl W, Unmat...Phoenix, Ariz  
 Fraser, Edmund S, UD, Bus.....Seattle  
 Frazier, Enid A, Grad.....Pocatello, Ida  
 Frederick, Paul W, Unmat.....Seattle  
 Frederiksen, Chester S, Unc, Sci...Yakima  
 Freeman, Mrs Arvilla, Unmat..Nampa, Ida  
 Freeman, Geo, Grad.....Nampa, Ida  
 French, Mabelle, UD, Bus.....Seattle  
 French, Merle C, Grad.....Vancouver  
 Friesenecker, Emma K, UD, LA.Galena, Ill  
 Fromm, Edith P, LD, FA.....Bellingham  
 Frudenfeld, Mildred, LD, LA.....Seattle  
 Fry, Chas A, UD, LA.....Portland, Ore  
 Fryer, Grace M, Unmat.....Spokane  
 Fuller, Wm David, Grad.....Modesto, Cal  
 Fulton, Grace, Grad.....Asotin  
 Fulton, H R, Unmat.....Asotin  
 Fulton, Nina B, Grad.....Pullman

Gagan, Hannah D, LD, LA....Denver, Colo  
 Gallagher, Lena, Unmat....Cass City, Mich  
 Gallahan, Clyde A, Sp, Bus...Portland, Ore  
 Ganders, Mary L, UD, LA.....Seattle  
 Gannon, Edw, UD, LA.....Bellingham  
 Garden, Kathryn L, Unc, LA...Charleston  
 Garred, Max, Grad.....Coulee  
 Garrott, Jane, Grad.....Seattle  
 Garrott, Jean, Unmat.....Seattle  
 Gartin, Electa, Unc, Educ....Caldwell, Ida  
 Garver, Robert W, UD, Law....Outlook  
 Gates, Altha V, Unmat.....Pratt, Kan  
 Gatewood, Van, UD, LA.....Asotin  
 Gattson, Dorothy, UD, Educ.....Seattle  
 Gaylord, Clair E, Grad.....Spokane  
 Geisness, Evelyn, LD, LA....Pt Angeles  
 Gellerman, Louis W, Grad.....Seattle  
 Gellerman, Mildred P, Grad...White Bluffs  
 Gellerman, Mildred W, LD, FA.....Seattle  
 Gellerman, Wm, Grad.....White Bluffs  
 Gendron, Noella A, UD, LA....Yakima  
 German, Cornelio, UD, Eng....Philippines  
 Ghiselin, Alexander D, UD, Sci...Spokane  
 Gibson, Edw B, UD, LA.....Eastsound  
 Griffin, Ruth, LD, FA.....Eastsound  
 Gifford, Annie L, Unmat.....Seattle  
 Gilbert, Cyrus L, Unmat.....Rainier  
 Gilbert, Mrs Helen S, Grad.....Seattle  
 Gillette, Cora M, LA.....Seattle  
 Glingrich, Pearl, UD, LA....Olympia  
 Gleason, Marian C, LD, Sci....Seattle  
 Gleditsch, Mildred A, Unmat...Seattle  
 Glenn, Nancy E, Unc, LA.....Seattle  
 Glover, Allen R, Grad.....Union City, Pa  
 Goehring, Viola, Unc, Bus.....Seattle  
 Goldsmith, Louis C, LD, LA...Caldwell, Ida  
 Goodlander, Millicent, UD, Sci.Parkdale, Or  
 Goodwyn, Rosabelle, Unmat.....Seattle  
 Goon, Lillian, Unc, FA.....Seattle  
 Gordon, Johanna, UD, LA.....Seattle



Gorham, Marguerite, LD, LA.....Seattle  
 Gould, Bertha, Unmat.....Tacoma  
 Gowell, Prudentia B, Unmat.....Tacoma  
 Graft, Geo H, UD, LA.....Seattle  
 Grafton, Marlea, UD, LA.....Spokane  
 Gralton, Gregory A, Sp, Bus.....Seattle  
 Gray, Howard B, Grad.....Seattle  
 Graybeal, Mattie F, Grad.....Damascus, Va  
 Grebe, Louisa E, UD, LA.....Spokane  
 Green, Floyd C, UD, LA.....Carnation  
 Green, Mamie, LD, LA.....Seattle  
 Green, Stella, LD, Bus.....Carnation  
 Greene, G, Grad.....Buckley  
 Greenough, Roger W, UD, Bus.....Spokane  
 Gregory, Wm C, Grad.....Stevenson  
 Gretzinger, Saira C, Unmat.....Minot, ND  
 Griest, Mary R, Unmat.....Omaha, Neb  
 Griffen, Kizzie B, LD, LA.....Seattle  
 Griffith, Ruth A, Grad.....Seattle  
 Griffith, Wm, Grad.....Seattle  
 Gifford, Bert, Unmat.....Everett  
 Grimes, Gertrude, Unmat.....Seattle  
 Grimth, Margaret P, UD, LA.....Tacoma  
 Grimes, Versa, UD, Educ.....Yakima  
 Groat, Elva B, Grad.....Seattle  
 Gross, Katherine J, UD, Educ.....Seattle  
 Grossen, Tilda F, Grad.....Seattle  
 Grove, Clare M, Unmat.....Alaska  
 Grove, Leon C, Unmat.....Alaska  
 Groves, Mary L, Grad.....Seattle  
 Guild, Gertrude M, LD, FA.....Seattle  
 Gunderson, Geo B, Grad.....Hardin, Mont  
 Gundlach, Ralph, UD, LA.....Wallace, Ida  
 Gundlach, Wilford R, Grad.....Seattle  
 Gurewitz, Meyer.....Seattle

Hagerty, Nellie, UD, FA.....Seattle  
 Hahner, Ruth, UD, LA.....Spokane  
 Halberstadt, Elizabeth H, UD, LA.....Seattle  
 Hall, Amy V, Grad.....Vancouver, BC  
 Hall, Edw B, UD, Bus.....Seattle  
 Hall, Frank D, Sp, Bus.....Pomeroy  
 Hall, Lucia E, Grad.....Underwood  
 Hall, Suma, Grad.....Pottlatch, Ida  
 Halliday, Robert, Sp, Bus.....Seattle  
 Lambert, Nona C, UD, Educ.....Spokane  
 Hambleton, Edith, LD, LA.....Seattle  
 Hamilton, Laura, UD, Educ.Hutchinson, Ks  
 Hammarberg, Agnes, Grad.....Seattle  
 Hammerlin, Roy N, UD, Bus.....Tacoma  
 Hammond, Marguerite, LD, Phar.....Seattle  
 Hanawalt, Paul B, Grad.....Puyallup  
 Hand, Hope, Unmat.....  
 Hand, Roger E, LD, LA.....Kalispell, Mont  
 Haney, Gersha V, UD, Educ.....Puyallup  
 Hannan, Mirian, UD, LA.....Seattle  
 Hansen, Alvda, UD, LA.....Tacoma  
 Hansen, Augusta, UD, Educ.Middleport, NY  
 Hansen, Harry F, UD, Bus.....Seattle  
 Hansen, Herman, UD, LA.Menominee, Wis  
 Hansen, Ralph B, LD, Engr.....Seattle  
 Hansen, Ted, UD, Engr.....Seattle  
 Hanson, Ethel, Grad.....Seattle  
 Hanson, Rainhardt S, UD, Bus.....Bellingham  
 Harader, Q Percy, Grad.....Puyallup  
 Hardwick, Francis T, Grad.....Everett  
 Hardwick, F Phyllis, Grad.....Everett  
 Harkness, A E, UD, Bus.....Yakima  
 Harper, Clarence, UD, Bus.....Seattle  
 Harper, Paul A, UD, Engr.....Seattle  
 Harris, Elizabeth W, Unmat.....Seattle  
 Harris, Georgia B, Grad.....Yakima  
 Harrison, Elizabeth, Grad.....Seattle  
 Harrison, Ella W, Sp, Sci.....Seattle  
 Harrison, May, UD, LA.....Richmond Beach  
 Harrison, Roneta O, UD, LA.....Seattle  
 Hart, Emma C, Grad.....Seattle

Hart, Katherine, LD, LA.....Everson  
 Hartman, Howard, UD, Educ.....Selah  
 Hartman, Nell, Unmat.....Durand, Ill  
 Harritt, Bertha M.....Pt Angeles  
 Haruko, Sato, Unmat.....Seattle  
 Harvey, Isobel, Grad.....Vancouver, BC  
 Hassenmiller, Kenneth L, Grad.....Seattle  
 Hatlen, Charles B, UD, Educ.....Everett  
 Hatley, Mamie C, UD, Educ.....Colfax  
 Hauck, Hazel M, Grad.....Seattle  
 Hang, Minnie, Unmat.....Buxton, ND  
 Hauge, Phillip B, Grad.....Parkland  
 Haulk, Mary G, Unc, FA.....Scappoose, Ore  
 Hawkes, Helen S, Grad.....Caldwell, Ida  
 Hawley, Edna T, Grad.....Corvallis, Ore  
 Hayner, Miriam M, Grad.....Kirkland  
 Hazen, Hattie W, Sp, Educ.....Pendleton, Ore  
 Hazen, Kathryn, LD, FA.....Seattle  
 Healy, Warren C, LD, Sci.....Seattle  
 Heffernan, John T Jr, LD, Engr.....Seattle  
 Helner, Arnold, LD, LA.....Seattle  
 Helntz, Laurella, Unmat.....Hewitt, Wis  
 Helse, Irvin, Unmat.....Edgar, Wis  
 Helliesen, Edith, Unc, LA.....Seattle  
 Helm, Myrtle, UD, LA.....Klamath Falls, Ore  
 Hemphill, Elizabeth, UD, Educ.....Seattle  
 Henderlite, Claude E, Grad.....Seattle  
 Henry, Hylas, LD, LA.....Seattle  
 Henry, Ruth S, UD, LA.....Edmonds  
 Henson, Ethel M, LD, FA.....Seattle  
 Hepler, Helen, UD, FA.....Seattle  
 Hepperle, Hulda, Grad.....Dubuque, Ia  
 Herelm, Mrs O N, LD, FA.....Spokane  
 Herelm, Christen N, Unmat.....Spokane  
 Hermann, Ida M, UD, LA.....Seattle  
 Hermans, Christine, UD, Educ.....Puyallup  
 Herne, H H, LD, Bus.....Seattle  
 Herod, Mignon, LD, FA.....Zillah  
 Herr, Jewel, UD, LA.....Seattle  
 Herren, William A, Unc, Law.....Seattle  
 Herrmann, Kurt D, Unmat.New York, NY  
 Heyes, Alice D, Grad.....Seattle  
 Heyes, Katherine, LD, LA.....Seattle  
 Hibarger, L Pearl, LD, Sci.....Yakima  
 Hibbert, Ralph W, Grad.N Westm'r, BC  
 Hickenbottom, Walter E, LD, Bus.Zillah  
 Higgie, Mable I, UD, FA.....Seattle  
 Hill, Claudia O, Unmat.....Tacoma  
 Hill, Frances W, Unmat.....Seattle  
 Hillard, Thelma, UD, Educ.....Seattle  
 Hillmann, Blanche E, Unmat.Richm'd Beh  
 Hilton, Maude H, LD, FA.....Seattle  
 Hilton, Omega, Grad.....Seattle  
 Hilzinger, Julia M, UD, Educ.....Seattle  
 Hinckley, Elizabeth, UD, Sci.....Seattle  
 Hindley, Phillip N, LD, LA.....Seattle  
 Hine, Marie L, Unmat.....Du Quoin, Ill  
 Hiner, Eliz, Grad.....Fort Collins, Col  
 Hinman, Chester A, UD, Bus.Lewiston, Ida.  
 Hinthorn, G L, LD, LA.....Hartline  
 Hjertoos, Gurina, Grad.....Tolt  
 Hoch, Irene C, Unmat.....Modesto, Cal  
 Hodge, Katharine J, Unmat.....Fargo  
 Hohn, Sister Mary Paul, Unmat.....Seattle  
 Hoffman, Ural N, Grad.....Tacoma  
 Holden, James H, Grad.....Seattle  
 Hollan, Wm V, LD, LA.....Butte, Mont  
 Hollenbeck, Dale G, UD, Bus.....Seattle  
 Holloway, A Cecil, UD, LD.....Fairfax  
 Holman, Harold E, Unc, For.....Seattle  
 Holmes, Grace J, Unmat.Grand Forks, BC  
 Holt, Flora M, UD, Educ.....Auburn  
 Hooper, Mary V, Grad.....Seattle  
 Hootman, Mary R, UD, Educ.....Seattle  
 Hopkins, Anna E, Unmat.....Tacoma  
 Hopper, Edna L, LD, FA.....Seattle  
 Hornstra, Fred H, UD, Educ.....Auburn  
 Horsley, Sears, UD, Bus.....Yakima

Horst, Claude W, UD, Educ.....Seattle  
 Horst, J Hazel, UD, Educ.....Madison, Neb  
 Horton, Helen, LD, LA.....Seattle  
 Horton, Leah L, UD, Educ.....Dalkena  
 Hotson, Jean I, Grad.....Viking, BC  
 How, Jessie K, UD, Educ.....Bellingham  
 Howard, Frances H, LD, LA.....Seattle  
 Howard, Frank M, Unc, LA.....Corvallis, Ore  
 Hubble, Else C, Grad.....Seattle  
 Hubbell, Ruth, UD, LA.....Seattle  
 Hudson, George E, Unc, Law.....Seattle  
 Huggett, Ralph A, Grad.....Seattle  
 Hughes, Anne B, UD, LA.....Seattle  
 Hughes, Cecil L, Grad.....Seattle  
 Hughes, Clara, Unmat.....Topeka, Kan  
 Hughes, Honoria L, LD, LA.....Seattle  
 Hughes, Ruby M, Unmat.....Seattle  
 Humes, Edmond, Sp, Phar.....Seattle  
 Humphrey, Edna, UD, Educ.....Africa  
 Hunt, Ernest R, UD, LA.....Seattle  
 Hunt, Laurence W, UD, Bus.....Seattle  
 Hursh, Mable, Unmat.....Portland, Ore  
 Hurspool, Evelyn, UD, LA.....Walla Walla  
 Huston, Estelle, Unmat.....Seattle  
 Huston, J V, Unc, LA.....Princeville, Ore  
 Hutchinson, Forrest S, Sp, Bus.....Seattle  
 Hutchinson, Ruby, UD, Sci.....Mt Vernon  
 Hutchinson, Zoe B, UD, Sci.....Vancouver, BC  
 Hyman, Norton B, UD, Bus.....Seattle

Ikeda, Jubel, LD, Bus.....Seattle  
 Ingham, H, 2nd Law.....Des Moines, Ia  
 Ingison, Lottie M, Unmat.....Hope, ND  
 Inkster, Harry, UD, Sci.....Seattle  
 Iorns, Dean R, Sp, Bus.....Seattle  
 Irwin, Olive B, Unmat.....Seattle  
 Isenberg, Benj L, LD, Bus.....Seattle  
 Israel, Eli, UD, Bus.....Seattle

Jackson, Betty, UD, LA.....Seattle  
 Jackson, Dorothea, LD, LA.....Seattle  
 Jacobson, Olga G, LD, LA.....Seattle  
 Jaeger, Ethel F, Grad.....Spokane  
 Jaeger, Julius P, Grad.....Spokane  
 James, Dorothy, UD, Sci.....Tacoma  
 James, Marjorie, Grad.....Tacoma  
 James, Thurston, UD, Bus.....Seattle  
 Jaques, Guy E, UD, Bus.....Pullman  
 Jarrell, Elsie, Unmat.....Seattle  
 Jefferson, Dorothy, Sp, Sci.....Vancouver BC  
 Jeffrey, Blanche, Unmat.....Gifford  
 Jenner, Cornelia, UD, Bus.....Seattle  
 Jenness, J C, UD, Bus.....Seattle  
 Jennings, Theresa, Unmat.....Baker, Ore  
 Jensen, Irene M, Unmat.....Emmett, Ida  
 Jensen, Jens W, Sp, Bus.....Seattle  
 Jensen, Marian G, Grad.....Everett  
 Jensen, Olive, Unmat.....Joplin, Mont  
 Jerome, Margaret R, Unmat.....Seattle  
 Jerome, Vincent B, Grad.....Seattle  
 Jerome, Wm J, UD, LA.....Cashmere  
 Johnson, Adella, Unmat.....Minneapolis, Minn  
 Johnson, Berkeley G, UD, Educ.....Long Bch  
 Johnson, Dorothea, LD, FA.....Seattle  
 Johnson, Edith M, Grad.....Lewistown, Mont  
 Johnson, Eva J, UD, LA.....Seattle  
 Johnson, Gladys I, UD, Sci.....Tacoma  
 Johnson, A Herbert, Unmat.....Lawrence  
 Johnson, Herbert W, UD, Sci.....Everett  
 Johnson, Hilding, Grad.....Seattle  
 Johnson, Jessie A, Unmat.....Lovilia, In  
 Johnson, Kenneth A, UD, Sci.....Seattle  
 Johnson, Leslie W, Unc, LA.....Granger  
 Johnson, Marion, LD, FA.....Sacramento, Cal  
 Johnson, Milton S, LD, LA.....Seattle  
 Johnson, Nora H, UD, Sci.....Cle Elum

Johnson, Paul, Unmat.....Ellensburg  
 Johnson, Queenia G, LD, LA.....Seattle  
 Johnson, Raymond L, UD, LA.....Tacoma  
 Johnson, Vernon B, UD, Sci.....Everett  
 Johnston, Daniel H, Grad.....Portland, Ore  
 Johnston, B Helen, UD, LA.....Victoria, BC  
 Johnston, Houston M, Unmat.....Seattle  
 Johnston, Violet, Grad.....Ritzville  
 Johnstone, Annabel, Grad.....Seattle  
 Jones, Ada S, UD, Educ.....Cashmere  
 Jones, Charles, Unmat.....Beatrice, Neb  
 Jones, David J, Grad.....Columbus, Mont  
 Jones, Ella K, Grad.....Seattle  
 Jones, Ervin M, Sp, Bus.....Seattle  
 Jones, Hattie, Unc, LA.....Richmond Beach  
 Jones, Ione D, UD, Educ.....Bellingham  
 Jones, Mrs Mallie D, Unmat.....Seattle  
 Jones, Marjorie, Grad.....Seattle  
 Jones, Nancy E, Grad.....Seattle  
 Jones, Richard, Sp, Bus.....Seattle  
 Jones, S H, Sp, Sci.....Manteca, Cal  
 Josenhans, Sarah C, LD, LA.....Seattle  
 Jule, Swanhild, LD, FA.....Seattle

Kahn, Helen, Grad.....Seattle  
 Kaiser, Fred H, Sp, Sci.....Rolling Bay  
 Kalk, Mary, LD, FA.....Seattle  
 Kan Yun, Unc, For.....China  
 Kane, Arthur T, UD, Engr.....Edison  
 Kangley, Lucy, Grad.....Seattle  
 Kaufman, Gretchen, Grad.....Bellingham  
 Keith, Allie H, UD, FA.....Spokane  
 Keller, Bertha M, UD, Sci.....Spokane  
 Keller, Earl W, LD, LA.....Spokane  
 Keller, Mrs R W, Grad.....Edwall  
 Keller, Ralph W, Unmat.....Edwall  
 Kelley, Curtis, LD, LA.....Seattle  
 Kellogg, Geo A, Grad.....Seattle  
 Kellogg, Leo P, Sp, Bus.....Seattle  
 Kelsey, M Lucille, Unmat.....Seattle  
 Kennedy, Helen, Unmat.....Phillipsburg, Mont  
 Kennett, Homer M, UD, Educ.....Seattle  
 Kenyon, Geo D, UD, Bus.....Seattle  
 Kerchen, Joseph V, LD, LA.....Kirkland  
 Kessler, Geo, UD, LA.....Lacey  
 Ketcham, Laura, UD, LA.....Seattle  
 Keyes, Donald C, UD, Sci.....Bellingham  
 Keyes, Howard C, UD, Sci.....Bellingham  
 Keys, Anna, LD, LA.....Seattle  
 Kibbe, Lynus A, Grad.....Bellingham  
 Kidder, Hazel I, Unc, LA.....Yakima  
 Kief, C Ward, UD, Engr.....Seattle  
 Klekenapp, Hortense, UD, Educ.....Seattle  
 Kilkeny, Reynolds M, Unmat.....Seattle  
 Klme, Clarence W, UD, Educ.....College Place  
 Kimura, Koreaki, LD, LA.....Seattle  
 Kling, James G, LD, LA.....Ashford  
 Kling, John L, LD, LA.....Seattle  
 Kling, June L, UD, LA.....Nampa, Ida  
 King, Lois E, Unmat.....Trinidad, Col  
 King, Malle A D, Grad.....Seattle  
 King, Ottis S, UD, Bus.....Seattle  
 Kinkade, Lucille, UD, LA.....Seattle  
 Kinkade, Russell W, LD, Bus.....Colby  
 Kinzie, Henry C, Unmat.....Pt Orchard  
 Kipp, Pearl V, Grad.....Seattle  
 Kirk, Bessie L, Unmat.....Everett  
 Kirsch, Agatha, Unmat.....Seattle  
 Kittredge, Marguerite E, Grad.....Seattle  
 Klossner, Mildred M, Unmat.....Pullman  
 Knapp, Elizabeth L, Unc, LA.....Seattle  
 Knapp, Frederick B, Sp, Bus.....Seattle  
 Knapton, Florence M, UD, Sci.....Seattle  
 Knight, Chas W, LD, Bus.....Spokane  
 Knight, Minnie E, Unmat.....Mackay, Ida  
 Knowles, E W, Sp, Bus.....LaGrande, Ore  
 Knowles, F H, Sp, Bus.....Portland, Ore

Knowlton, Richard P, Unc, Sci.....Seattle  
 Knox, Elizabeth, Grad...Fort Morgan, Col  
 Knox, Elsie, Unmat.....Leon, Kan  
 Knox, Wm A, Grad.....Ferndale  
 Knudson, Gertrude, Unc, LA..Sherwood, ND  
 Knudson, Oscar M, Grad.....Sherwood, ND  
 Kobler, Anna H, Grad.....Seattle  
 Kongale, Edw, Grad.....Port Angeles  
 Koppe, Clifford W, LD, LA.....Vancouver  
 Kosuga, Zenichi, Aud.....Japan  
 Kraft, A W, Unmat.....Absawker, Mont  
 Kraft, Louise G, Unmat.....Absawker, Mont  
 Kraft, Marjorie, UD, Educ.....Seattle  
 Kravik, Alfild V, Grad.....Everett  
 Krelsher, Harold C, UD, Bus.....Seattle  
 Kretschmar, Geo, Grad.....College Place  
 Kretschmar, Luella, UD, Sci.....College Place  
 Kroeck, Catherine, UD, Sci.....Spokane  
 Krogstad, Elva, Grad.....Seattle  
 Krogstad, Gladys, UD, Sci.....Seattle  
 Kucera, John P, Grad.....Lacey  
 Kunej, Edith C, Unmat.....Tacoma  
 Kuppler, Virginia, LD, LA.....Pt Angeles  
 Kynoch, W M C, Unmat..N Vancouver, BC

LaBrash, Ruth M, LD, LA.....Fall City  
 LaFerty, Loretta, Unc, LA...Pt Townsend  
 LaFrance, A C, UD, Bus..Hamilton, Mont  
 Laird, Frank B, Unmat.....Seattle  
 Lambert, Helen M, Unmat.....Seattle  
 Lambert, Mrs Rebecca K, UD, LA..Seattle  
 Lammers, Frieda, UD, Sci.....Pt Townsend  
 Landeen, Herbert A, LD, Bus.....Seattle  
 Lanej, Sara A, Unmat.....Spokane  
 Lapham, Margaret A, UD, Educ.....Tacoma  
 Larrabee, Emma D, Unmat.....Seattle  
 Larsen, Elizabeth, Unmat.....Bickleton  
 Larsen, Josephine, UD, Educ.....Seattle  
 Larson, Ben E, Unmat.....Yakima  
 Larson, Gustav, UD, LA.....Seattle  
 Larson, L Claire, UD, LA.....Seattle  
 Larson, Victor B, Grad.....Seattle  
 LaRue, Pearl, UD, LA.....Seattle  
 Lash, Fred M, UD, LA.....Stevenson  
 Lathers, O Gladys, Grad.....Seattle  
 Laurence, Alice, Grad.....Fairmont, Neb  
 Lautzenheser, Minnie D, Grad.....Yelm  
 Laux, Mary M, Grad.....Kallispell, Mont  
 LaVigne, J Leon, Unc, Law.....Chewelah  
 Lavroff, Laura, LD, Jour.....Tacoma  
 Lavroff, Lillian, LD, LA.....Tacoma  
 Law, Charles, Unc, Law.....Seattle  
 Lawrence, Arta F, UD, Educ.....Everson  
 Lawson, Jesse E, Sp, Educ.....Creston, Ia  
 Lawton, Winona, UD, Bus.....Seattle  
 Leach, Frances M, Unc, FA.....Olympia  
 Leader, Rose E, Unmat.....Seattle  
 Leaf, Alice, UD, Educ.....Seattle  
 Lechner, Leslie A, Grad.....Seattle  
 Lee, Frank A, Grad.....Seattle  
 Lee, Mrs Judith, LD, LA.....Seattle  
 Leeper, Helen, Grad.....Seattle  
 Legg, Helen, UD, LA.....Seattle  
 Lemon, J Francis, Grad.....Seattle  
 Leslie, Eleanor M, Unmat.....Seattle  
 Levitin, Isaac, LD, Bus.....Seattle  
 Levy, James M, LD, Bus.....Seattle  
 Levy, Melvin P, UD, LA.....Seattle  
 Levy, Tony W, Unmat.....Spokane  
 Lewis, Henry, Unmat.....Seattle  
 Lewis, Josephine, LD, LA.....Seattle  
 Libbee, Freda A, Unmat.....Seattle  
 Lim, James K, UD, Bus.....Seattle  
 Lind, Andrew W, UD, LA.....Seattle  
 Lindblad, Ellen R, Sp, Sci.....Seattle  
 Lindley, John W, Auditor.....Cheney

Lindquist, Irene, UD, LA.....Seattle  
 Lindsay, Elizabeth, Sp, Sci.....Seattle  
 Lindsay, Mazie P, UD, Bus.....Seattle  
 Liston, V Mary, LD, LA.....Orillia  
 Livingston, Louis S, Unmat.....Winlock  
 Lloyd, Margaret, Unmat.....Seattle  
 Lochte, Wm A, LD, Engr.....Seattle  
 Loe, Ralph H, Unmat.....Seattle  
 Logan, Bettie, UD, LA.....Portland, Ore  
 Long, Lena E, Unmat.....Seattle  
 Long, Ruby O, Grad.....Cashmere  
 Long, Samuel D, Unmat.....Seattle  
 Lorch, Rose T, Unmat.....Alexandria, Ind  
 Loughlen, Paul E, UD, Bus.....Puyallup  
 Love, Grover A, UD, Educ.....Snohomish  
 Lovejoy, Albert R, Unmat.....Seattle  
 Lovejoy, Eugene A, UD, Bus.....Coupeville  
 Lowe, Caroline, Unc, Educ..Blackfoot, Ida  
 Lowry, Lorna, UD, Sci.....Chehalis  
 Lowry, Stella, Unc, Sci.....Chehalis  
 Lucas, Martha, UD, LA.....Seattle  
 Luccock, Harriett, Grad.....Seattle  
 Ludwigs, Flora E, Grad.....Walla Walla  
 Lundell, Berger J O, Grad.....Issaquah  
 Luten, Miriam, Grad.....Seattle  
 Lycette, Mrs Julia, Law.....Seattle  
 Lyman, Betty M, Unmat.....Seattle  
 Lynch, J H, UD, Educ..Binney Ferry, Ida  
 Lyons, James F, LD, Bus.....Seattle  
 Lyons, Margaret A, LD, FA..Bay City, Mich

McAdoo, Mrs Mary E, Unmat.....Seattle  
 McAllister, Josephine, UD, LA.....Seattle  
 McBee, Alfred, Law.....Seattle  
 McBride, Kathleen, Unc, LA.....Seattle  
 McCabe, Clair, UD, Bus.....Seattle  
 McCabe, Helen D, LD, LA.....Seattle  
 McCabe, Lucile M, Grad.....Seattle  
 McCall, Edith A, UD, LA.....Bremerton  
 McCarthy, Julia, Unmat.....Seattle  
 McCarthy, Wm G, Grad.....Seattle  
 McCausland, Beth, Grad.....Seattle  
 McClanahan, Ellen, UD, Educ.....Algona  
 McClellan, Jerome, Sp, Bus.....Seattle  
 McClure, Chas W, UD, LA.....Yakima  
 McClure, Frank B, UD, Bus.....Seattle  
 McCorkill, Minnie, UD, Educ.....Spokane  
 McCorkle, Mae D, Grad.....Kelso  
 McCormick, Mary, LD, LA..Black Diamond  
 McCoy, Edw M, UD, Educ.....Carbonado  
 McCoy, Mark L, Sp, Bus.....Seattle  
 McCrea, Mary H, Grad.....Spokane  
 McCulloch, Flora, UD, LA.....Darrington  
 McCullough, Ada L, Unmat.....Seattle  
 McDonagh, Wm James, UD, Bus.....Seattle  
 \*MacDonald, Archibald, Unc, Law.....Seattle  
 McDonald, Darrell W, UD, LA.....Seattle  
 Macdonald, Elizabeth, Grad.Eau Claire, Wis  
 MacDonald, Rachel, LD, LA.....Kent  
 MacDonell, Ruby, LD, Bus.....Vancouver  
 McDonnell, Edw L, Grad.....Seattle  
 McElroy, Jean B, LD, Bus.....Seattle  
 McElvain, Jasson N, Unmat.....Potlatch  
 Macfarlane, Lorna, LD, LA..Caldwell, Ida  
 McGibbon, Eileen, Unc, LA.....Seattle  
 McGowan, John H, Unc, Law....Boise, Ida  
 McGregor, Jessie, Unmat.....Portland, Ore  
 McGuire, Stella V, Grad.....Vancouver, BC  
 McHenry, Mildred, Unc, LA.....Spokane  
 McInroe, Lloyd G, UD, Bus.....Walla Walla  
 McIntyre, Harry J, Grad.....Seattle  
 McKay, Helen, LD, LA.....Seattle  
 McKenzie, Winfred, LD, Sci.....Everett  
 McKibbin, Wilbur, Grad.....Colville  
 McKinney, Edith, Unmat.Coeur d'Alene, Ida  
 McKnight, John T, UD, Sci.....Cle Elum

\* Federal Board Student.

McLain, Ada E, UD, Educ.....	St John
MacLaughlin, Gay E, UD, Sci.....	Seattle
MacLaughlin, Margaret, UD, Sci.....	Seattle
MacLean, Duncan G, LD, Engr.....	Seattle
MacLean, W W, LD, Engr..N Westm'r, BC	Seattle
MacLellan, Winifred H, Grad.....	Everett
McLeod, Beatrice, Grad.....	Seattle
McLeod, Mildred M, LD, LA.....	Seattle
McMoon, Ruth F, UD, Educ.....	Seattle
McMillan, May Ross, UD, LA.....	Seattle
McMonagle, Alberta, LD, LA.....	Seattle
MacMurray, Douglas, LD, Sci.....	Seattle
McNally, Sadie K, Unmat.....	Vancouver, BC
McNamara, Harold, Unc, Bus.....	Olympia
McPhee, Aletha S, Grad.....	Seattle
McQuaid, Alice, UD, LA.....	Seattle
McQuaid, Thelma, UD, FA.....	Seattle
McRae, Florence, LD, LA.....	Seattle
McSorley, M Lillian, UD, LA..Delavan, Wis	Seattle
Maakestad, Carrie E, Unc, Sci..Randell, Ia	Seattle
Maakestad, Emily B, Unmat.....	Randell, Ia
Machin, Geo L, Sp.....	Bellingham
Macy, Perry D, Grad.....	Newberg, Ore
Madison, Viola, Grad.....	Seattle
Mahaffey, Audley F, Grad.....	Seattle
Malcolm, Etta, Unmat.....	Vancouver, BC
Mallery, Joseph A, UD, LA.....	Silver Lake
Mallery, Mildred M, UD, Educ..Silver Lake	Seattle
Mallett, Isabelle, Unmat.....	Ontario, Ore
Malterner, Lochlan, Unmat.....	Canton, NY
Manard, Lucille, UD, LA.....	Seattle
Manley, Paul O, Grad.....	Pittsburgh, Pa
Manlucu, Alfonso, LD, Engr.....	Philippines
Mapes, Carl P, Grad.....	Bremerton
Mapes, Wm, UD, LA.....	Cosmopolis
*Maples, Elmer R, Sp.....	Portland, Ore
Marchand, Leslie A, Grad.....	Seattle
Mardon, Hazel, Unc, LA.....	Seattle
Marquis, Wm J, Grad.....	Seattle
Marsh, Gordon W, UD, For.....	Seattle
Marshall, Violet, Unc, FA.....	Seattle
Martin, Dorothy, Unmat..Salt Lake City, U	Seattle
Martin, Earl B, UD, LA.....	Tacoma
Martin, Marguerite, Unmat.....	Roseland, New
Masel, Virginia, UD, LA.....	Butte, Mont
Mason, Edith P, Grad..Mountain Home, Ida	Seattle
Massie, Dorothy, UD, Educ.....	Brewster
Matterson, Mary C, Unmat.....	Tacoma
Matheson, Charles W, Unmat.....	Victoria, BC
Matheson, Jennie R, LD, LA.....	Seattle
Matheson, Marjory G, Unc, LA.....	Seattle
Matheson, Roy G, Grad.....	Seattle
Mathews, Elizabeth J, UD, Sci.....	Seattle
Mathias, Rose S, Unmat.....	Seattle
*Mathis, Earl D, Sp.....	Broughton, Ill
*Matthews, Paul R, LD, LA.....	Seattle
Mattox, Clifford J, UD, Educ.....	Ellensburg
Meade, Emily H, Grad.....	Seattle
Meaker, Marian E, UD, Sci.....	Seattle
*Medved, Hugo P, Spec.....	Seattle
Meehan, Vina M, LD, LA.....	Seattle
Mehner, Margaret, UD, Educ.....	Bremerton
Melcher, Clara B, UD, LA.....	Loomis
Mendenhall, Ethel, Unc, LA.....	Burden, Kan
Merchant, Jessie H, Grad.....	Mt Vernon
Merriam, S Lee, UD, Educ.....	Seattle
Merritt, Fred S, 3rd Law.....	Seattle
Merryman, Mrs Lillian, Unmat.....	Ellensburg
Messer, LaVerne T, Sp.....	Dixon, Ill
Metz, J Ernest, UD, Bus.....	Post Falls, Ida
Meyer, Ambrose, Grad.....	Auburn
Meyer, Walter C, UD, Bus.....	Seattle
Meyer, Wm H, Unc, LA.....	Seattle
*Mickelson, Paul W, LD, Bus.....	Camas
Miles, J Hunter, UD, Bus.....	Chehalis
Miller, Olive C, UD, Educ.....	Seattle
*Miller, Cecil M, Sp.....	Seattle
Miller, Mrs Elsie M, Grad.....	Seattle
Miller, Elvona, Grad.....	Seattle
Miller, Ethel T, Grad.....	Cle Elum
Miller, Iva E, Unmat.....	Seattle
Miller, Keith, UD, Bus.....	Seattle
Miller, Lecl C, LD, Sci.....	Seattle
Miller, Lucy L, Unmat.....	Caldwell, Ida
Miller, Paul L, LD, LA.....	Seattle
Million, Carroll, LD, Bus.....	Seattle
Mills, Archibald R, LD, LA.....	Curtis
Mills, Victor, Unc, Engr.....	San Jose, Cal
Milton, Mrs Nellie S, Unc, LA.....	Bow
Milton, C, Unmat.....	Reads, Minn
Miner, Eva Lee, UD, Sci.....	Seattle
Mineta, Mokichi, UD, LA.....	Japan
Mingst, Wm F, Sp, Bus.....	New York, NY
Minnis, Marjorie B, Grad.....	Seattle
Mitchell, Dorothy, LD, Sci.....	Seattle
Mitchell, Lynwood G, LD, Bus.....	Seattle
Mitchell, MaBelle V, Grad.....	Spokane
Mitchell, Mary, UD, LA.....	Seattle
Mitchell, Verne H, UD, Bus.....	Kennewick
Mitchell, Walter, LD, LA.....	Seattle
Miyashita, Yasuo, Grad.....	Japan
Moackrud, Grace I, Grad.....	Galesburg, N.D.
Moawad, Sarah, Unc, LA.....	Kalama
Moffett, Edith, Grad.....	Woodville
Mohr, Jennie, LD, LA.....	Seattle
Monda, Geo O, UD, LA.....	Lacey
Monroe, Geo H, UD, LA.....	Ferndale
Moody, Ruth, Grad.....	Everett
Moore, Georgia, UD, Educ.....	Spokane
Moore, Gerald E, Grad.....	Seattle
*Moore, Harold W, UD, Bus.....	Seattle
Moore, Joseph R, Grad.....	Concrete
Moore, Knox D, UD, Bus.....	Billings, Mont
Moorhead, Rachel, LD, LA.....	Parkland
Morehouse, Gertrude, UD, Educ.....	Seattle
Morgan, Frances L, UD, Sci.....	Hoquiam
Morgan, John H, Unmat.....	Ellensburg
Morgan, Miles, Grad.....	Seattle
Moriwake, Ernest K, LD, LA..Honolulu, TH	Seattle
Morris, Alene G, Unmat.....	Corning, Ia
Morrow, Ralph J, UD, Bus.....	Asotin
Morse, Alice A, Unmat.....	Seattle
Moseley, Maud L, UD, LA.....	Seattle
Moseley, Robert D, LD, Bus.....	Seattle
*Moses, Curtiss J, UD, Engr.....	Langley
Mott, Francelle A, UD, LA.....	St John
Moulthrop, Lena V, UD, LA.....	Walla Walla
Mount, James N, Grad.....	Snohomish
Moy, Lola A, Unmat.....	Seattle
Mozorosky, Edith, Grad.....	Portland, Ore
Mullin, Mae, Unmat.....	LaGrande, Ore
Munro, Kathleen, UD, FA.....	Seattle
Muns, Ada L, Unmat.....	Zillah
Muns, Zola F, UD, Educ.....	Zillah
Munson, Richard, LD, LA.....	Seattle
Murakami, Suye, Sp.....	Seattle
Murphey, Caroline, Unmat.....	Boise, Ida
Murphy, Pearl, Grad (Prov)..Glendive, Mt	Seattle
Murray, Dottie E M, Grad.....	Yakima
Murray, Mildred, UD, LA.....	Seattle
Murton, Clarence C, UD, LA.....	Seattle
Murton, M Lucile, Grad.....	Portland, Ore
Myer, Charles, Grad.....	Synnyside
Myer, Edna M, Grad.....	Seattle
Myer, Thelma A C, Grad.....	Spokane
Myer, Wilhelm H, Unc, LA.....	Seattle
Myers, Anale M, UD, Educ.....	Spokane
Myers, Bernice L, Unc, LA.....	Seattle
Myers, Carlyle G, LD, Sci.....	Seattle
Myers, Dicie, Grad.....	Everson
Myers, Elmer W, LD, Engr.....	Seattle
Myers, Jack W, 2d Law.....	Seattle
Myers, Jean J, LD, FA.....	Seattle
Myhre, Ida E, Grad.....	Rolette, ND

\* Federal Board Student.

Nagel, Frances, UD, Educ.....Enumclaw  
 Nagley, John H, Unmat.....Eatonville  
 Nash, Lulu M, Grad.....Spokane  
 Nave, Samuel A, Grad.....Silverdale  
 Neal, Russell L, LD, LA.....Washtucna  
 Neary, Raymond, UD, Sci.....Lacey  
 Neely, Charles B, UD, LA.....Seattle  
 Neidert, Louis J, Unc, LA.....Cheney  
 Nell, Dolores A, Grad.....Seattle  
 Nelson, Beulah M, Grad.....Cashmere  
 Nelson, Everett J, UD, LA.....Rolling Ray  
 Nelson, Hulds, UD, Sci.....Lynden  
 Nelson, Kathryn, Unmat.....Seattle  
 Nelson, Walter A, UD, Engr.....Seattle  
 Nerland, Arthur L, UD, Bus.....Seattle  
 Ness, Helen, UD, LA.....Harrington  
 Ness, Sever W, UD, Educ.....Yakima  
 Neterer, Elizabeth, Grad.....Seattle  
 Neubauer, Greta, Unmat.....Hildreth, Neb  
 \*Neubecker, Delbert, Sp.....Everett  
 Newcomb, Muriel, UD, FA.....Olympia  
 Newdall, Clifford O, UD, FA.....Leavenworth  
 Newman, Anne, UD, LA.....Everett  
 Neylon, Mary T, UD, LA.....Olympia  
 Nichols, Laura, Grad.....Seattle  
 \*Nichols, Roy E, Sp.....Seattle  
 Nichols, Walter R, Grad.....Vashon  
 Niederjohn, Anna, LD, LA.....California, Mo  
 Nielsen, Anna C, Unmat.....Seattle  
 Nishinoiri, John I, LD, LA.....Japan  
 Noble, Mildred A, LD, Sci.....Seattle  
 Noblitt, Dewey I, UD, LA.....Willapa  
 Noll, Pauline, UD, Educ.....Seattle  
 Nordale, Anita M, LD, LA.....Alaska  
 Nordeen, Alida J, Unmat.....Seattle  
 Nordquist, Carlos G, UD, Bus.....Seattle  
 Norfolk, Genevieve, LD, FA.....Los Angeles, Cal  
 Norman, Evelyn M, Grad.....Seattle  
 Norman, Lilla C, LD, LA.....Seattle  
 Norton, Edna, Unmat.....Yakima  
 Norton, Mamie, Grad.....Seattle  
 Nugent, Margaret, Sci.....Portland, Ore

Oakes, Eleanor A, LD, Bus.....Seattle  
 Oakley, Earl A, Unmat.....Auburn  
 O'Bar, Blanche, Grad.....Charleston, Ark  
 O'Brien, Alice I, Unmat.....Nova Scotia  
 O'Brien, John, Unc, Law.....Tacoma  
 O'Connell, Charles, UD, Bus.....Seattle  
 O'Connell, James M, Grad.....Seattle  
 O'Connor, Miles J, Unmat.....Seattle  
 Odegard, Paul N, UD, Engr.....Seattle  
 Odell, Ruth M, UD, Educ.....Spokane  
 Odgers, Geo A, Grad.....Davenport  
 Odle, M Frank, UD, Educ.....Bellevue  
 \*O'Donnoghue, Don, Sp.....Bremerton  
 Oertel, Anna M, LD, FA.....Seattle  
 Ogden, Mary, Unmat.....Tacoma  
 Ogilvie, Edith J, UD, Educ.....Everett  
 Okazaki, Sumire, LD, LA.....Seattle  
 O'Keefe, Ruth, Grad.....Seattle  
 Okerlund, Gerda, UD, Educ.....Los Angeles, Cal  
 Oldfield, A A, Unmat.....Tacoma  
 Oliver, Mary C, UD, Educ.....Silver City, NM  
 \*Olson, Luther N, Sp.....Portland, Ore  
 Olson, Bertine, Unmat.....Toledo, Ore  
 Olson, Marie T, LD, Sci.....Seattle  
 Olson, Mary, Grad.....Moorhead, Minn  
 Olson, Marguerite, Grad.....Tacoma  
 Olson, Ronald LeR, LD, LA.....Seattle  
 Olson, Olaf E, UD, Educ.....Minneapolis, Minn  
 Omeg, Ida.....Portland, Ore  
 Orrell, Jessie, Grad.....Seattle  
 Osgnack, J Augustine, Grad.....Seattle  
 Osmon, Gladys, Grad.....San Antonio, Tex  
 Osten, Winnifred, Unc, Educ.....Seattle

Ostrom, Milton C, Unmat.....Seattle  
 Ouren, Marian, UD, Educ.....Leavenworth  
 Overton, Guy R, LD, Bus.....Winchester, Ill  
 Oxman, J Donald, Unc, Law.....Seattle

Packard, Dexter R, UD, Educ.....LaConner  
 Page, Annie C, UD, FA.....Mataqui, BC  
 Paine, Carol M, Grad.....Boise, Ida  
 Palacio, Apolonio, LD, Engr.....Philippines  
 Palacol, Augustine P, UD, Jour.....Philippines  
 Palmer, M Delight, LD, LA.....Chehalis  
 Palmer, Dewey, LD, LA.....Seattle  
 Panchot, D Harrison, UD, Educ.....Seattle  
 Pariseau, Eugenia B, UD, Educ.....Seattle  
 \*Parke, Chas G, UD, Educ.....Bellingham  
 Parker, Ivy R, Unmat.....Kansas City, Mo  
 Parker, Mary A, Unc, LA.....Seattle  
 \*Parker, Perry, Sp, Bus.....Mt Vernon  
 Parks, C E, UD, LA.....San Francisco, Cal  
 Parks, Dorris B, LD, LA.....Seattle  
 Parks, Theodora W, Unc, LA.....Huron, SD  
 Parry, Jane, UD, Educ.....Seattle  
 Parsons, Elvey T, Grad.....Seattle  
 Patch, Della J, UD, Educ.....Pullman  
 \*Patrick, Wm H, Unc, Bus.....Seattle  
 Patton, Clotilde, UD, Educ.....Seattle  
 \*Patrick, Wm H, Unc, Bus.....Seattle  
 Patty, Virginia C, Unmat.....Seattle  
 Pauly, Marguerite, Unmat.....Seattle  
 Payne, M Caroline, LD, LA.....Seattle  
 Pearson, Mabel B, LD, LA.....Kennewick  
 Pebbles, Helen E, UD, Educ.....Fall City  
 Peery, Clara M, Unmat.....Seattle  
 Pels, Gladys, LD, LA.....Seattle  
 Pennell, Geneva E, UD, FA.....Seattle  
 Pepper, Echo D, Grad.....Seattle  
 Perrin, Julia M, LD, LA.....Seattle  
 Peterman, Florence, Unc, Sci.....Kallispell, Ida  
 Peters, Elizabeth V, Unmat.....Kennewick  
 Peterson, Abbie, Unmat.....Seattle  
 Peterson, Anita, Grad.....Tacoma  
 Peterson, Celia H, Unc, Sci.....Seattle  
 Peterson, Edw J, UD, Law.....Seattle  
 Peterson, Gladys, Grad.....Seattle  
 Peterson, Helena C, Sci.....Sumner  
 Peterson, Howard H, UD, Engr.....Walla Walla  
 Peterson, Ivy C, Unmat.....Beaverton, Ore  
 Peterson, Katherine, UD, FA.....Spokane  
 Peterson, Ole T, Grad.....Enumclaw  
 Peterson, Richard F, UD, Bus.....Tacoma  
 Peterson, Wendell F, UD, Bus.....Seattle  
 Petrie, Roy A, LD, Bus.....Seattle  
 Pettit, Helen, UD, Sci.....Seattle  
 Peyton, Eleanor L, Unmat.....Spokane  
 Phelps, Grace M, Grad.....Dryad  
 Philbin, John, Grad.....London, Eng  
 Phillips, Birdine, UD, Sci.....Seattle  
 Phillips, Constance, LD, FA.....Seattle  
 Phillips, Earl A, Sp.....Seattle  
 Phipps, Alice M, Unmat.....Seattle  
 Phipps, Frank A, Unmat.....Kent  
 Phipps, Guy F, UD, LA.....Deer Lake  
 Pierce, Allene, Grad.....Seattle  
 Pierce, Pearl A, LD, LA.....Seattle  
 Pierren, Richard P, UD, LA.....Bellingham  
 Pigott, Valeria, UD, LA.....Seattle  
 Pitts, Edna C, LD, LA.....Seattle  
 Platt, Lucila B, Grad.....Seattle  
 Plechner, Babette, LD, LA.....Seattle  
 Pletke, Flora M, Unmat.....Tacoma  
 Pokel, Nelda R, Unmat.....Ladysmith, Wis  
 Pollard, Jean, UD, LA.....Seattle  
 Pollock, Dorothea, UD, Sci.....Seattle  
 Pooley, Frank B, Sp.....Spokane  
 Post, John P, Grad.....Spokane  
 Potgieter, Jennie, Grad.....Steamboat Rock, Ia

Powell, Francis L, Grad.....Cashmere  
 Powell, Mary D, Grad.....Selah  
 Powers, Anna M, Grad.....Seattle  
 Powers, Francis F, UD, LA.....Tacoma  
 Prager, Wm, UD, Jour.....Seattle  
 Presley, Grace, UD, FA.....Newport, Ore  
 Pretlow, Clotilde L, Unmat.....Seattle  
 Pretlow, Isabella, Unmat.....Lewiston, Mont  
 Price, Mary J, LD, FA.....Seattle  
 Price, Ruth, Unmat.....Seattle  
 Prim, John E, UD, LA.....Seattle  
 Pryde, Joel J, Grad.....Hoquiam  
 Puckett, Carl E, UD, Educ.....Seattle  
 \*Puette, Raymond V, LD, LA.....Seattle  
 Purcell, Mary, Aud.....Sedro-Woolley  
 Purcell, J Wm, UD, Sci.....Seattle  
 Purves, Nell H, UD, LA.....Arlington

Quanstrom, Marie E, UD, Bus.....Seattle  
 Quass, Mabel, UD, Educ.....Spokane  
 Quast, Florence Anne, Grad.....Marysville  
 Quesinberry, Addie O, Unmat.Troutdale, Or  
 Quigle, Helen, UD, LA.....Seattle

Raasch, Leonard O, Unmat.....Seattle  
 Rademaker, Lee, UD, Sci.....Tacoma  
 Raine, Margaret M, Grad.....Seattle  
 Ramsey, Ida L, Grad.....E Liverpool, O  
 Rapp, Elizabeth, LD, LA.....Spokane  
 Rasmussen, Fred N, UD, Engr.....Seattle  
 Raymond, Ethel G, Grad.....Seattle  
 Raynaldo, Delfin, Unmat.....Capiz  
 Records, Lola E, UD, Educ.....Seattle  
 Redford, Walter, LD, LA.....Kirkland  
 \*Redpath, Harry S, 3rd Law.....Seattle  
 Reed, Clyde L, UD, Educ.....Seattle  
 Reed, Florence, Unmat.....Lincoln, Neb  
 Reed, Harold A, Grad.....Tacoma  
 Reed, Jennie M.....Tacoma  
 Reed, Jessica, Unmat.....Seattle  
 Regan, Frank T, UD, For.....Boise, Ida  
 Regan, Willard P, UD, Bus.....Boise, Ida  
 Regier, Emil, Grad.....Hover  
 Rehbock, R H, Unmat.....Yakima  
 Reid, Alice T, Unmat.....Vancouver, BC  
 Reid, Elizabeth J, UD, LA.....Tacoma  
 Reiter, Bernard, LD, LA.....Seattle  
 Renshaw, Harold B, UD, Bus.....Spokane  
 Renshaw, Unc, Educ.....Duvall  
 Reusch, Dorothy, LD, Sci.....Yakima  
 \*Reynolds, Chas W, Sp.....Seattle  
 Rhodes, Josephine V, Unc, LA.....Winslow  
 Rhodes, Leonard, LD, Phar.....Seattle  
 Rhodes, Omer E, Unc, LA.....Aberdeen  
 Rice, Chas M, Unc, FA.....Snohomish  
 Rice, Edith A, Grad.....Riverside, Cal  
 \*Rice, Philip R, UD, LA.....Seattle  
 Richards, Catherine M, UD, LA.....Spokane  
 Richardson, Dio, Grad.....Seattle  
 Richardson, Jennie, UD, Educ.Portland, Ore  
 Richardson, Otis D, Grad.....Portland, Ore  
 Richmond, Bessie M, UD, Educ.....Seattle  
 Richmond, Mrs Gertrude, Unmat.Helent, Mt  
 Riddle, Mrs Margaret C, LD, Sci.....Seattle  
 \*Rieben, Samuel E, 1st Law.....Seattle  
 Rigg, Margaret, Grad.....Seattle  
 Riggs, Grace I, UD, Educ.....Seattle  
 Riggs, Katherine, LD, LA.....Seattle  
 Ringstad, Emery T, UD, Bus.....Seattle  
 Roaney, Mariand B, UD, Educ..Bellingham  
 Robbins, Nellie, Unmat.....Seattle  
 Robe, Cecil F, Grad.....Davenport  
 Roberson, Maude C, UD, Educ.....Olympia  
 Roberts, Katherine E, UD, LA.....Seattle  
 Roberts, Lucile H, Grad.....Oakesdale

Robertson, Howard P, Grad.....Montesano  
 \*Robertson, James, Jr, LD, Engr..Seattle  
 Robinson, Bessie M, Grad.....Portland, Ore  
 Robinson, Elliza, Grad.....Townsand, Mont  
 Robinson, B Veryl, Grad.....Centralla  
 Rochester, James M, LD, Bus.....Tacoma  
 Rodgers, Elizabeth J, Grad.....Prescott  
 \*Roe, Merle J, LD, Bus.....Auburn  
 Roemer, Albert J, LD, Bus.....Seattle  
 Rogers, Elth A, LD, LA.....Bellingham  
 Rogers, Henry E, UD, Educ.....Castle Rock  
 Rohowitz, Edythe K, LD, LA.....Seattle  
 Rohrbacker, Mrs Chas A, Sp.....Seattle  
 Rohrer, Harvey V, LD, Bus..Ablene, Kan  
 Roll, Dorothy B, LD, LA.....Seattle  
 \*Rollins, Jesse L, Sp.....Bremerton  
 Rose, Frances D, UD, LA.....Fairmont, W Va  
 Roseburg, Clara M, UD, LA.....Cle Elum  
 Rosen, Martha, UD, Sci.....Seattle  
 Rosendahl, Ruth R, Grad.....Walla Walla  
 Rottman, Ethel, Grad.....Seymour, Ind  
 Rowe, Adeline L, Grad.....Seattle  
 Rowe, Edith M, UD, Educ.....Ritzville  
 Rowse, Helena B, UD, LA.....Seattle  
 Royer, Catherine, UD, Sci.....Seattle  
 Royster, Helen C, LD, LA.....Seattle  
 Rucker, Gladys, LD, Sci.....Seattle  
 Ruddy, Gladys, Unc, LA.....Butte, Mont  
 Rude, Hazel, UD, Educ.....Seattle  
 Runnings, Gladys, UD, Sci.....Tacoma  
 Russell, Beulah H, Grad.....Seattle  
 Russell, Flora W B, Grad.....Welser, Ida  
 Russell, Florence M, Grad.....Seattle  
 Russell, Ruth, UD, LA.....Seattle  
 Ruziki, Henry John, Grad.....Lacey  
 Ryan, Frederick A, UD, Bus.....Seattle  
 Ryan, Helen T, UD, Sci.....Seattle  
 Ryan, John E, LD, Sci.....Seattle

Sadler, Mrs Estella, UD, LA.....Tacoma  
 Saemon, Marie C, Grad.....Seattle  
 Salladay, Ruth, UD, FA.....Seattle  
 Sandell, Inez F, Unmat.....Spokane  
 \*Sandborg, Harold, LD, Sci.....Seattle  
 Sanderson, Doris L, LD, LA.....Wenatchee  
 Sanderson, Joseph P, Unmat.Vancouver, BC  
 Sandusky, Lawrence, Grad.....Spokane  
 Sandusky, Oris, UD, LA.....Spokane  
 \*Sandvig, Arnold C, Sp, Bus.....Seattle  
 Santee, Eva, UD, LA.....Vancouver  
 Santee, Joseph F, Sp, Educ.....Vancouver  
 Sarro, Nicholas, LD, Sci.....Seattle  
 Sater, Julia, Grad.....Seattle  
 Sate, Haruka, Unmat.....Seattle  
 Satoris, Fred P, LD, Bus.....Seattle  
 Satterlee, Lena D, UD, Educ.....Sunnyside  
 Savage, Joseph, UD, Bus.....Seattle  
 Sawyer, Dalza, UD, LA.....Tacoma  
 Sawyer, Ruth E, Unmat..Menominee, Mich  
 Spedico, Mrs Ida J, Sp, FA.....Seattle  
 Scallen, Agnes, Unmat.....Seattle  
 Scallon, Anna, Unmat.....Anaconda, Mont  
 Scanzon, Anna V, Unmat.....Tacoma  
 Scates, Ivan G, Grad.....Dayton  
 Schaefer, Isadore, LD, LA.....Seattle  
 Schaefer, Oscar, LD, Bus.....Seattle  
 Scharr, Freeman C, UD, LA.....Seattle  
 Schaul, Letha Grace, Unmat.Walla Walla  
 Schechtman, Lazar, LD, Sci.....Dayton, O  
 Schertol, Max, UD, Educ.....Seattle  
 Schlipin, Louise, Unc, LA.....Seattle  
 Schmid, Calvin F, LD, LA.....Seattle  
 Schmidt, Lulu A, UD, LA.....Edmonds  
 Schmidtko, Henry J, Unmat.Coeur d'Alene  
 Schmitt, Margaret F, UD, Jour.....Seattle  
 Schmitt, Tessie, 1st Law.....Seattle

\* Federal Board Student.

Schnasse, Gertrude, UD, LA..Walla Walla  
 Schofield, Marguerite O, Grad.....Seattle  
 Scholten, Gertrude, UD, Educ.....Doon, Ia  
 Schoonover, Ruth G, Unmat.....Osage, Ia  
 Schroeder, Carl, Unmat.....Milwaukee, Ore  
 Schroeder, Louise, LD, LA.....Geddes, SD  
 Schweer, Cora, Unmat.....Monette  
 Scott, Agnes R, Unc, Educ.....Omak  
 Scott, Anna E, Unmat.....Olympia  
 Scott, Byron D, 3d Law.....Tacoma  
 Scott, Clara A, Grad.....Tacoma  
 Scott, Elizabeth G, LD, LA.....Seattle  
 Scott, Frank W, UD, Bus.....Seattle  
 Scott, Geo O, Unc, Bus.....Seattle  
 Scott, James G, UD, Engr.....Seattle  
 Scott, Marion S, UD, LD.....Mulyteo  
 Scott, Marjorie, LD, Sci.....Roslyn  
 Scott, Morrie R, UD, Bus.....Twisp  
 Seagraves, Hal E, UD, Engr.....Seattle  
 Sealls, Margaret C, LD, LA.....Seattle  
 Sears, Ruth B, UD, Educ.....Seattle  
 Second, Isabel, UD, LA.....Seattle  
 Seddon, Stanley, 2d Law.....Roslyn  
 Selby, Howard P, LD, Bus..Pt Townsend  
 Sell, Myrtle May, UD, Educ.....Seattle  
 Sexton, Lucile, Unmat.....Rupert, Ida  
 Shackelford, Martha W, LD, LA.....Tacoma  
 Shafer, Herbert, LD, LA.....Tacoma  
 Shafer, Lloyd N, UD, Educ.....Seattle  
 Shafer, Lulu, UD, Educ.....Seattle  
 Shaffner, Mary M, LD, Sci.....Tacoma  
 Shain, Julius, LD, LA.....Tacoma  
 Shank, Jack O'r, UD, For.....Alton, Ill  
 Sharnbreick, Mildred, Unc,LA.....Pt Angeles  
 Sharp, Mrs Mary C, Sp.....Seattle  
 Sharpe, Eldon D, UD, Educ.....Woodinville  
 Sharpe, Katherine, Unmat.....Spokane  
 Shaw, Tieh Chin, Unmat.....China  
 Shaw, Avid J, Unmat.....Seattle  
 Shaw, John, Jr, Grad.....Spokane  
 Shawler, Grade, UD, Educ.....Seattle  
 Sheckels, Amy Grace, Unmat.....Winslow  
 Shelden, Marialys, Unmat.....Alzada, Mont  
 Shellman, Amy F, Unmat.....Asotin  
 Shelton, Arthur L, LD, LA.....Pomeroy  
 Shelton, Carrie A, Unmat.....Pomeroy  
 Shepherd, Eve L, UD, Educ.....Seattle  
 Shepherd, Marjory, LD, LA.....Seattle  
 Shepherd, W Mentry, Grad.....Bellingham  
 Sheridan, Dewey F, Unmat.....Nampa, Ida  
 Sheridan, Helen C, LD, LA.....Spokane  
 Sherck, Elnor L, UD, LA.....Roseburg, Ore  
 Sherrer, Vena, Sp, Sci.....Lacombe, BC  
 Sherrick, Hazel L, Grad.....Seattle  
 Sherrick, Johnson, Grad.....Seattle  
 Shidler, Will L, Grad.....Seattle  
 Shigemura, Chick, LD, Bus.....Fort Blakely  
 Shirley, Marguerite D, Grad.....Weiser, Ida  
 Shoemaker, H A, Grad.....New Ringgold, Pa  
 Shuler, Baryl, LD, Sci.....Seattle  
 Shultz, Celia B, UD, LA.....Cosmopolis  
 Siegel, Anna, Unmat.....Keystone  
 Sielk, Henry, UD, Bus.....Spangle  
 Siggelko, Marguerite A, LD, LA.....Seattle  
 Silver, Marie C, UD, LA.....Lamar, Col  
 Silverstone, Eugene M, UD, Phar.....Seattle  
 Simmons, Anne L, UD, Educ.....Seattle  
 Simpson, Anne, UD, Sci.....Seattle  
 Simpson, Justus R, Sp.....Seattle  
 Simpson, Lurline V, Grad.....Seattle  
 Simpson, Mabel A, Unc, LA.....Seattle  
 Sims, Louise, Unmat.....Denver, Col  
 \*Sinclair, Robert L, Unc, Bus.....Seattle  
 Sipple, Helen, UD, LA.....Butte, Mont  
 Sirjord, Mea F, UD, LA.....Beljou, Minn  
 Sister M Ambrosia, Unc, LA.....Tacoma  
 Sister Catherine C, Unmat.....Seattle

Sister Dorothea C, UD, LA.....Seattle  
 Sister Elizabeth Clare, UD, Educ.....Seattle  
 Sister M Hyacinth, Unmat.....Seattle  
 Sister M Josepha, Unc, FA.....Tacoma  
 Sister M Louise, LD, LA.....Tacoma  
 Sister M Lourдина, LD, LA.....Tacoma  
 Sister M Margaret, Unc, LA.....Tacoma  
 Sister Marietta, Unc, LA.....Seattle  
 Sister Mary Alexandra, LD, LA.....Seattle  
 Sister Mary Alicia, UD, LA.....Seattle  
 Sister Mary Aquin, Unmat.....Tacoma  
 Sister Mary Austin, UD, Educ.....Everett  
 Sister M Clementine, OSD, UD,Ed.....Seattle  
 Sister Mary Dolores, LD, LA.....Seattle  
 Sister Mary Dominic, LD, LA.....Tacoma  
 Sister Mary Edwardine, LD, LA.....Tacoma  
 Sister Mary Estelle, Grad.....Seattle  
 Sister Mary Floretta, UD, LA.....Seattle  
 Sister Mary Frances, Unmat.....Seattle  
 Sister Mary Joseph, Unmat.....Seattle  
 Sister Mary Lewis, Unmat.....Seattle  
 Sister Mary Matthew, UD, LA.Oswego, Ore  
 Sister Mary Michael, Unmat.....Tacoma  
 Sister Mary Paul H, Unmat.....Seattle  
 Sister Pancratius Kearney, Graw.....Seattle  
 Sister M Rose A, UD, LA.....Seattle  
 Sister M Rose de Lima, OSD,UD,Ed.....Seattle  
 Sister M Rosena, LD, Sci.....Tacoma  
 Sister M Theresa of the Cross, Grad.Seattle  
 Sister M Veronica M, UD, LA.....Seattle  
 Sister M Veronica, OSD, UD, LA.....Seattle  
 Sister M Vincentia, UD, LA.....Tacoma  
 Sjaastad, Anna O, Unmat.....Tagus, ND  
 Sjaastad, Helga, Unmat.....Tagus, ND  
 Skalley, Kathleen, UD, Educ.....Everett  
 Skartvedt, Agnes E, UD, FA.....LaCenter  
 Skewis, Mary, UD, FA.....Tacoma  
 Slawson, Maude, UD, FA.Plainview, Minn  
 Slinson, Harry L, LD.....Yakima  
 Sloan, Bessie A, Grad.....Yakima  
 Slusher, Charlotte, UD, LA.....Seattle  
 Smith, Alice E, Unmat.....Seattle  
 Smith, Alma A, Grad.....Prescott  
 Smith, Charles J, UD, Bus.....Seattle  
 Smith, Dorothea F, Unmat.....Longbranch  
 Smith, Dorothy A, UD, LA.....Chewelah  
 Smith, L Emmett, LD, LA.....Startup  
 Smith, Ethel, Grad.....Seattle  
 Smith, Ferguson G, Unmat.....Seattle  
 Smith, Florence, Unmat.....Medicine Hat, BC  
 Smith, Gertrude, Grad.....Seattle  
 Smith, Grace M, Unmat.....Helena, Mont  
 \*Smith, Guy W, Unc, Law.....Okanogan  
 Smith, Harry Jr, LD, Bus.....Bellingham  
 Smith, Howard T, Unmat.....Helena, Mont  
 Smith, James G, Unc, Law.....Seattle  
 Smith, Lila, Unmat.....Spokane  
 Smith, Luella E, UD, Sci.....Seattle  
 Smith, Martha E, Sp.....Seattle  
 Smith, Mary A, UD, LA.....Seattle  
 Smith, Mary Cooke, LD, FA.....Brooklyn  
 Smith, Pearl E, Unmat.....Seattle  
 \*Smith, Thad O, LD, Min.....Grandview  
 Smith, Thora, Unmat.....Medford, Ore  
 Smith, Vernette T, UD, LA.....Hoquiam  
 Smith, Walter A, UD, Bus.....Seattle  
 Smith, Wm A, Unmat.....Independence, Mo  
 Smith, Wm W, Unmat.....Seattle  
 Smyth, Russell D, LD, LA.....Yakima  
 Snodgrass, Harriet, Unc, Educ.....Baird  
 Snyder, Ida M, UD, Educ.....Rochester, Minn  
 Snyder, James P, Unmat.....Tacoma  
 Solberg, Elizabeth, Grad.....Brookings, SD  
 Solladay, Ruth, UD, FA.....Seattle  
 Solomon, Abe H, UD, LA.....Seattle  
 Sorensen, Harry D, UD, Educ.....Nooksack  
 Sorenson, Gladys, LD, FA.....Bellevue

\* Federal Board Student.

Sowers, Evangeline, LD, LA.....	Chehalis
Sowers, Lucile, UD, LA.....	Chehalis
Sparling, Robert, UD, Educ. Vancouver, BC	
*Spaulding, David L, LD, Bus.....	Seattle
Spaulding, Katherine M, Unmat.....	Seattle
Spaulding, E Temple, UD, Bus.....	Yakima
Speck, Anna M, Unmat.....	Victor, Ia
Speer, Ernest D, Grad.....	Seattle
Speer, Pearl S, Grad.....	Seattle
Spellman, Lorette, UD, LA.....	Anaconda, Mt
Sperling, Otto F, Grad.....	Spokane
Spleske, Winnie, Grad.....	Seattle
*Spratlin, Allen, Unc, Law.....	Seattle
Stack, Marie M, Unmat.....	Starbuck
Stalnbrook, Jessie W, Unmat.....	Nampa, Ida
Stannard, Elizabeth S, Grad.....	
Stansfield, Joseph W, Unmat.....	Alaska
Stapleton, Margaret L, UD, LA.....	Bellingham
Stark, Jeannette, LD, LA.....	Seattle
Stark, Marie M, Unmat.....	Seattle
Starks, Elva W, Unmat.....	Coupeville
Starr, Geraldine, LD, LA.....	Seattle
Steeke, Josephine K, LD, LA.....	Spokane
*Stedman, Lewis L, Unc, Law.....	Seattle
Steele, Charles, LD, LA.....	Seattle
Steele, Kathryn J, UD, FA.....	Seattle
Steele, Susie F, UD, Sci.....	Seattle
Steelman, Charlotte, Grad.....	Seattle
Steelman, Mildred, Grad.....	Salt Lake, Utah
Steeves, B P, Grad.....	Salmon, Arm, BC
Steeves, Neata A, Grad.....	Salmon Arm, BC
Steinberg, Amy J, UD, Educ. Monmouth, Ore	
Steinman, Rose G, Unc, LA.....	Seattle
Stenberg, Betsy P, UD, LA.....	Bellingham
Stephens, Mildred, LD, LA.....	Seattle
Stevens, Dora, Grad.....	Caldwell, Ida
Stevens, Richard F, UD, Engr.....	Seattle
Stevens, Theodore G, UD, Educ.....	Langley
Stevenson, Mary F, Unmat.....	Medford, Ore
Stewart, Clare D, Grad.....	Seattle
Stewart, Cathryn W, Unmat.....	Seattle
Stewart, Edgar I, Grad.....	Granite Falls
Stewart, Isabel B, LD, LA. Vancouver, BC	
Stewart, Paul R, UD, LA.....	Seattle
Stewart, Richard H, LD, LA.....	Seattle
Stewart, Theodosia, Unmat. Minneapolis, Min	
Stickney, Amy E, UD, LA.....	Bothell
Stillwell, Edw M, Grad.....	Seattle
Stinson, Harry L, LD, LA.....	
Stirrat, James R, LD, Bus.....	Seattle
Stixrud, Louise T, UD, LA. Litchville, ND	
Stixrud, Lydia E, UD, LA. Litchville, ND	
Stoddard, Orren D, Grad.....	Seattle
Stollar, Mable, Unmat.....	Salem, Ore
Stone, Elizabeth, Grad.....	Seattle
Stone, Emma D, LA, LA.....	Seattle
Stone, Hazel, Unmat.....	Sunset
Stone, Martha E, Grad.....	Thornton
Stone, Nellie C, UD, Educ.....	Thornton
*Stone, Samuel, Sp.....	Seattle
Stone, E Viola, Unc, LA.....	Sunset
Stoner, June, UD, Educ.....	Spokane
Storer, Leslie R, Unmat.....	Nelson, New
Storlie, Carl J, Grad.....	Tacoma
Storms, James W, Unmat.....	Kansas City, Mo
Stout, Imogene, UD, LA.....	Portland, Ore
Stowasser, Frances, UD, LA.....	Tomah, Wis
Strachan, Gertrude, LD, FA.....	Kent
Straight, Robert, UD, Educ. Vancouver, BC	
Strand, Sophie, Unmat.....	Lancaster, Minn
Strase, Anna E, Grad.....	Granite Falls
Strate, Johanna, Grad.....	Seattle
Strite, Adelaide, UD, Educ.....	Spokane
Strock, Burton B, Grad.....	Medford, Ore
Strong, Alice E, Unmat.....	Tacoma
Sullivan, Marie, LD, Bus.....	Seattle
Sullivan, Nell, Unc, Educ.....	Seattle
Sullivan, Richard F, Grad.....	Seattle
Sullivan, Robert E, UD, Educ.....	Seattle
Sundahl, Albert H, Unmat.....	Spokane
Sunnell, Bertha, UD, Educ.....	Mt Vernon
Sutherland, Josephine, Unmat.....	Spokane
Sutton, Carrie J, Unc, Educ.....	Arco, Ida
Sutton, Dorothy J, UD, Bus.....	Seattle
Swalle, Geo, LD, Bus.....	San Diego
Swan, Nora J, Unmat.....	St Cloud, Minn
Swanson, Clarence W, LD, Bus.....	Seattle
Swearingen, Hazel M, Grad. Gt Falls, Mont	
Sweet, Marion L, UD, FA.....	Okanogan
*Sycour, Chas O, LD, Sci.....	Seattle
Sykes, Iris H, UD, FA.....	Tacoma
*Szymkowiak, E A, Sp.....	Milwaukee, Wis
*Taber, Wm D, Sp, Bus.....	Bellevue
Tack, Bernhard A, Grad.....	Walla Walla
Tack, Helen C, Grad.....	Walla Walla
Takata, Ichitaro, Unmat.....	Japan
Talbot, Mira, UD, LA.....	Seattle
Tanner, Josephine W, Grad.....	Seattle
Tarr, Juanita K, Unc, LA.....	Seattle
*Taylor, Irvine P, Sp, Bus.....	Seattle
Taylor, Jane E, Unmat.....	Everett
Taylor, Margaret S, Grad. Missoula, Mont	
Taylor, Minnie B, Unc, LA.....	Yakima
Tejada, Emiliano, 2nd Law.....	Seattle
Terrill, Elizabeth, UD, Educ. Phoenix, Ariz	
Terrill, Frances, UD, Educ. Phoenix, Ariz	
Tesreau, Elmer L, LD, Bus.....	Chehalis
Thayer, Harriet, Unmat.....	Portland, Ore
Thayer, John M, UD, LA.....	Seattle
*Therrow, Alfred C, Sp.....	Seattle
Thomas, Letty K, Unc, LA.....	Seattle
Thomas, Margaret C, UD, Sci.....	Bellingham
Thompson, Aletha, Grad.....	Seattle
Thompson, Lois M, Grad.....	Spokane
Thomson, A C, Grad.....	Seattle
Thornton, John C, LD, LA. San Francisco, Cal	
Thornton, Ross C, UD, Sci.....	Seattle
Thorpe, Gladys, LD, Sci.....	Victoria, BC
Thorsett, Henry L, Unmat.....	Sumner
Thune, Elmer T, Grad.....	Edmonds
Tiffany, Martha J, Unmat.....	Bremerton
Tilbury, Percy, UD, Bus.....	Nooksack
Tompkins, Chester E, LD, Bus.....	Seattle
*Tompkins, Wesley D, Sp.....	Boise, Ida
Topping, Willard F, UD.....	
Townsend, Howard G, UD, Bus.....	Seattle
Treblcock, Jane, Unmat.....	Tacoma
Trumbull, Addie, Unmat.....	Spokane
Trumbull, Fannie, UD, LA.....	Portland, Ore
Trumbull, J Jonathan, LD, LA.....	Seattle
Tsui, Tit Shaan, LD, Bus.....	China
Tucker, Ellen, UD, Bus.....	Seattle
Tucker, Wilmon S, UD, LA.....	Seattle
Turinsky, Angeline, UD, Sci.....	Seattle
Turnbull, F Archie, UD, Educ.....	Skykomish
Turnbull, Donna M C, Unmat.....	Skykomish
Turner, Cecelia, UD, LA.....	Everett
*Turner, Ernest R, Sp.....	Seattle
Turner, Laura A, Grad.....	Seattle
Turner, Robert E, Grad.....	Seattle
Tuttle, Birdeena L, Grad.....	Tacoma
Tyler, Wm P, Unmat.....	Naches
Uhden, Esther D, LD, LA.....	Seattle
Uhlman, Gertrude M, UD, Sci.....	Seattle
Underhill, Julia A, Sp, LA.....	Seattle
*Underhill, Walter M, UD, Educ.....	Seattle
Upercraft, Winfield, LD, Bus.....	Seattle
Ure, Lawrence, Unc, Engr.....	Seattle
Urquhart, Irene, LD, LA.....	Seattle

\* Federal Board Student.



Utley, Albert A, UD, Educ.....Bellingham  
 Utley, Willia, UD, FA.....Seattle  
 Utterback, Clinton, Grad.....Seattle

Vallean, Verna, UD, LA.....Deer Park  
 Vallery, Dorothy, Unc, LA...Fruitdale, SD  
 \*Van Arsdol, M D, Unc, Engr...Clarkston  
 Van de Wetering, Geo, LD, LA.....Lynden  
 Van Duzee, Jeannette E, Grad.Portland, Ore  
 Van Horn, Esther, Grad.....Seattle  
 Vannoy, Louise H, Grad.....Seattle  
 Van Orsdall, Otie P, LD, LA.....Seattle  
 Van Winkle, Edith, Grad.....Seattle  
 Van Winkle, Helena, Sp.....Seattle  
 Van Zandt, Ruth, UD, LA.....Bellingham  
 Verhamme, Evelyn M, LD, LA.....Seattle  
 Vernon, Eleanor, Grad.....Chelan  
 \*Vestal, LeRoy J, Sp.....Seattle  
 Vetter, Geo B, Grad.....Seattle  
 Veysey, Mary, UD, LA.....Montesano  
 Vidgoff, J Jack, Grad.....Seattle  
 Vincent, Chester, UD, Bus.....Seattle  
 Vining, Orrin, Snd Law.....Seattle  
 Vinson, Carol J, LD, BA.....Tacoma  
 Voight, Edna E, Grad.....Seattle  
 von Pressentin, Alice, LD, Sci.Sedro-Wolley  
 Voss, Mabel A, UD, Sci.....Spokane

Wachter, Virginia, UD, LA...Texarkana, Tex  
 Wafer, Barbara, Grad.....Seattle  
 Wahl, Leonora M, UD, LA.....Seattle  
 Wait, Wallace T, Unmat.....South Bend  
 Waite, Nettie L, Grad.....Ellensburg  
 Wakiko, Fukada, Unmat.....Seattle  
 Walker, Bessie M, Grad.....Seattle  
 Walker, Chas D, LD, Bus.....Seattle  
 Walker, F D L, UD, LA...Los Angeles, Cal  
 Walker, Glen S, Grad.....Enumclaw  
 Walker, Ronald P, UD, Bus.....Seattle  
 Walker, Troy D, Unmat.....Seattle  
 Wallace, Genelle, UD, Sci.....Seattle  
 Wallis, Melbe, Unmat.....Seattle  
 Walsh, Eleanor, UD, LA...Benkelman, Neb  
 Walsh, Frances C, Unmat.....Seattle  
 Walsh, John H, Grad.....Wilder, Ida  
 Walter, G Avery, Grad.....Sunnyside  
 Walthev, John F, UD, LA.....Seattle  
 Wanamaker, Frank, Unc, Sci...Pt Townsend  
 Wang, Jen-ling, UD, LA.....China  
 \*Wann, Arva W, UD, Bus...Walla Walla  
 Ward, Alma M, UD, LA.....Seattle  
 Ward, Geo F, Unc, Law.....Seattle  
 Ward, Marguerite M, LD, Bus.....Seattle  
 \*Warner, Marion F, Bus.....Seattle  
 Warren, Tryphena, FA.....Bellingham  
 Wash, Marian H, Grad...Minneapolis, Minn  
 Wassberg, Clarence E, Grad.....Seattle  
 Waterburg, Geo L, Unmat.....Seattle  
 Waterbury, Margaret E, Unmat.....Seattle  
 Watson, Wm H, Unmat.....Seattle  
 Watts, Archie, UD, Jour...Billings, Mont  
 Waxmann, Marie J, Unmat.....Seattle  
 Wayland, Elisabeth, LD, FA.....Seattle  
 Weaver, J E, Unmat.....Walla Walla  
 \*Weaver, Newton C, Sp, Bus.....Seattle  
 Weed, Gertrude, Unmat.....Portland, Ore  
 Weeks, Patricia, Unmat...Minneapolis, Minn  
 Weigeld, Josephine M, Unmat.....Seattle  
 Wells, Ernest, Grad.....Seattle  
 Welsh, Gertrude, UD, LA.....Seattle  
 Wentzel, Minnie B, Unmat...Nova Scotia  
 Weby, Helena J, Grad.....Seattle  
 Werby, Mamie, Grad.....Seattle  
 Wergeldt, Lehmann.....Seattle  
 Westervelt, H W, UD, LA...Winnemucca, Nev  
 Wheeler, Cathryn W.....Seattle  
 Wheeler, Edw B, LD, Bus.....Seattle

Whillans, Ellen, UD, Educ.....Seattle  
 Whitcomb, Alice E, UD Educ.....Seattle  
 White, Bertha P, Grad.....Centralia  
 White, Eugenia D, UD, LA.....Seattle  
 White, Fern N, Grad.....Seattle  
 White, Rosalind, LD, LA.....Seattle  
 Whiteside, Norma, UD, FA.....Seattle  
 Whitmore, Doris, UD, Educ.....Buckley  
 Whitner, Geo A, UD, Bus.....Seattle  
 Whittaker, Jack E, UD, Educ...Bryn Mawr  
 Whittier, Carrie, Unmat.....Stanwood  
 Wiestling, Annette, Aud.....Seattle  
 \*Wilkins, Earle A, Sp, Bus.....Seattle  
 Wilkinson, Madge W, Grad.....Seattle  
 Willard, Donald F, Unmat.....Seattle  
 Williams, Mrs Elsie, Unc, Sci.....Seattle  
 Williams, Ruth J, LD, LA.....Kirkland  
 Williams, Weldon M, UD, LA...Opportunity  
 Williams, Winifred, UD, Sci.....Seattle  
 \*Williamson, Rupert Wm, Unc, Law.Seattle  
 Willis, Arza McC, Grad.....Fall City  
 Williston, Frank G, Grad.....Buckley  
 Willoughby, Beryl, UD, Sci.....Seattle  
 Wills, Grace O, LD, LA.....Mayview  
 Willsey, Reta N, Grad...Minnewaukan, ND  
 Wilson, Alexis, Unmat, LA.....Seattle  
 Wilson, S Bertha, Grad.....Seattle  
 Wilson, Emma J, Grad.....Seattle  
 Wilson, Grace, LD, LA.....Seattle  
 Wilson, G Marion, LD, LA...St. Joseph, Mo  
 Wilson, Thelma, LD, LA.....Seattle  
 Windhusen, Anne E, UD, LA...Medical Lake  
 Wing, Esther E, UD, FA.....Seattle  
 Winn, Bertha.....Seattle  
 Winwood, Ralph F, UD, Bus.....Seattle  
 \*Wirth, Ralph, Unc, Bus.....Portland, Ore  
 Wisdom, Preston, Sp.....Glide, Ore  
 Wise, Ruth E, Unmat.....Mabton  
 Wise, Vera, Grad.....Sunnyside  
 Wolfe, John B, UD, Bus.....Tacoma  
 Wong, Fred C, UD, Sci.....China  
 Woo, Lonnie M, Unmat.....Seattle  
 Wood, Carl E, Grad.....Seattle  
 Wood, Everett P, UD, Bus...Helena, Mont  
 Wood, Hazel E, UD, LA.....Seattle  
 Wood, Irene B, Unmat.....Bremerton  
 Woods, Rachel A, Grad.....Seattle  
 Woodward, Sibylla A, UD, LA...Granite Falls  
 Woolston, Katharine, Grad.....Seattle  
 Worthen, Clifton B, Grad.....Cheney  
 Wright, Earl C, Grad.....Seattle  
 Wright, Harriet I, Unc, Sci.....Spokane  
 Wright, Parke A, UD, Educ...Prosser  
 Wright, Rev T H, Unmat, Grad.Vanc'r, BC  
 Wu, Andrew Y, LD, Bus.....China  
 Wu, C K Wm, LD, LA.....China  
 Wynne, Vivian, UD, Sci.....Ferndale  
 \*Wysocki, Raymond, Sp.....Everett

Yaemitsu, Sugmachi, UD, LA.....Seattle  
 Yager, Mrs Nina W, UD, Educ...Spokane  
 Yancey, Della M, Grad.....Seattle  
 Yingst, Wm J, Sp.....Seattle  
 Yoshimura, Tamekichi, UD, Bus...Japan  
 Youle, Gretchen, LD, LA.....Seattle  
 Young, Amle O, UD, Educ...Portland, Ore  
 Young, Clara H, Unmat.....Tacoma  
 Young, Ecile F, Grad.....Boise, Ida  
 \*Young, G Everett, LD, Sci.....Seattle  
 Young, Wesley G, Grad.....Seattle  
 Young, Wm W, UD, LA.....Renton

Zehle, Emma, LD, FA.....Lowell  
 Zeller, John D, Unc, LA.....Walla Walla  
 Zill, Meta H, LD, LA.....Billings, Mont  
 Zimmerman, Rosa, Unc, FA.....Everett  
 Zinn, Vivian, UD, LA.....Seattle

\* Federal Board Student.

## PUGET SOUND BIOLOGICAL STUDENTS—1923

Albertson, Herma.....Blackfoot, Ida  
 Altman, Luther Clare.....Bellingham  
 Anderson, Philena M.....Mt Vernon  
 Axelson, Helen.....Mt Vernon  
 Baker, Wm Roy.....New Plymouth, Ida.  
 Bauer, Harry L.....Tacoma  
 Berger, Jean I.....Omaha, Neb  
 Brennan, B.....Bellingham  
 Buck, Ruth.....Columbia, Mo  
 Carter, Mary F.....Anacortes  
 Chambers, Ava L.....Seattle  
 Charroin, Ida R.....Bellingham  
 Chenoweth, Iris M.....Woodburn  
 Clutter, Lella T.....Salem, Ore  
 Cobb, Genevieve.....Seattle  
 Cooper, Ruth L.....The Dalles, Ore  
 Crow, Selma.....Oakesdale  
 Cunningham, J A.....Victoria, BC  
 Daugherty, Anna M.....Newport, Ore  
 Dickey, Margaret M.....Portland, Ore  
 Druley, Mary.....Boston, Ind  
 Durrant, Dorothy A.....Seattle  
 Edmiston, Alta M.....Sherwood, Ore  
 Edwards, Eleanor B.....Seattle  
 Elliott, Edith A.....Seattle  
 Engdahl, Selma.....Mt Vernon  
 Frye, Elizabeth A.....Seattle  
 Griffiths, Lois W.....Seattle  
 Hannum, Clair A.....Seattle  
 Hartge, Lena A.....Seattle  
 Hays, Bertha M.....Portland, Ore  
 Holt, Vesta.....Eugene, Ore  
 Humbert, Geo C.....Monmouth, Ill  
 Johnson, Martin W.....Silvana  
 Jones, Stephen B.....Seattle  
 Kautz, Bernice.....Hoquiam  
 Kautz, Beryl.....Port Angeles  
 Lane, Helen C.....Omaha, Neb  
 Leibbrand, Rose.....Milton, Ore  
 Lewis, Mabel A.....Seattle  
 Logan, George A.....Washtucna  
 Macnab, Mrs J A.....Lincoln, Neb  
 Macnab, James A.....Lincoln, Neb

Mayes, Evelyn.....Seattle  
 Mayhew, Roy L.....Urbana, Ill  
 Mellem, Ethel M.....Renton  
 Meyer, George A.....Snohomish  
 Miles, Lois.....Port Angeles  
 Miller, Pierre A.....Portland, Ore  
 Montgomery, Lois.....Red Lodge, Mont  
 Murphy, Mary E.....Seattle  
 Myers, Margret E.....Everson  
 Nissen, May.....Portland, Ore  
 Peterson, Estella C.....Seattle  
 Phillips, May A.....Seattle  
 Pollock, Barbara.....Seattle  
 Rahskopf, Carol E.....Portland, Ore  
 Ramaley, Ralph E.....Yakima  
 Rhinesmith, O L.....Monmouth, Ore  
 Rosene, Hilda F.....Monroe  
 Rubie, Harry.....Johnson  
 Schenk, Florence S.....Kennewick  
 Sess, Herbert H.....Denver, Col  
 Shamp, Gladys J.....Omaha, Neb  
 Sherwood, Vida P.....Portland, Ore  
 Shourek, Julia A.....Seattle  
 Smith, Catharine W.....Puyallup  
 Smith, Marcia D.....Tacoma  
 Stenger, Margaret.....Morris, Minn  
 Stevens, Belle A.....Maltby  
 Sundquist, Ida E.....Mt Vernon  
 Sundquist, Leona.....Mt Vernon  
 Talbot, Virgilinus.....Friday Harbor  
 Towler, E D.....LaGrande, Ore  
 Warner, Edith Ruth.....Poulsbo  
 Way, Louis Edith.....Seattle  
 Wells, Dorothy B.....Mt Vernon  
 Wells, Wayne W.....Marcola, Ore  
 Wentworth, Margaret.....Seattle  
 Whitmer, Harriet M.....Burr Oak, Mich  
 Wiseman, B Evangeline.....Seattle  
 Wolcott, Emily A.....Lincoln, New  
 Wolfe, Katharine A.....Lincoln, New  
 Yeend, Esther A.....Walla Walla  
 Yound, Kate Elizabeth.....Portland, Ore

## SHORT COURSE IN FISHERIES—1924

Anderson, Herman.....Seattle  
 Ausman, J N.....Seattle  
 Bell-Irving, Duncan.....Vancouver, BC  
 Berube, Louis.....Carleton, Quebec, Can  
 Bowden, W E.....Seattle  
 Cole, A P.....Seattle  
 Colussi, A.....Seattle  
 Dybwad, P F.....Seattle

Fassett, John G.....Tacoma  
 Forsythe, Emmett.....Vancouver  
 Graham, Guy V.....Seattle  
 Roth, Alexander.....Seattle  
 Schwartz, Henry H.....Seattle  
 Schwartz, J.....Seattle  
 Suzuki, T.....Japan  
 Waxman, Charles A.....Seattle

## SHORT COURSE IN FORESTRY—1924

Brown, H E D.....Seattle  
 Bunker, Stanley.....Seattle  
 Demko, Paul.....South Prairie  
 Hammond, Claude K.....Seattle  
 Hendrickson, Lance E.....Seattle

Huston, Orage.....Eagle Point, Ore  
 Little, Carman E.....New Westminster, BC  
 Southcott, Albert J.....Seattle  
 Wang, Alfred I.....Guler

## WINTER MINING COURSE—1924

Campbell, James Patrick.....Tadanac, BC  
 Copland, William A.....Scotland  
 Johnson, Frederick R.....Seattle

Roberts, John.....Republic, Mich  
 Tarbill, V V.....Seattle

**SUMMARY OF ENROLLMENT**

**1923-1924**

## SUMMARY OF ENROLLMENT—1923-1924

BY SCHOOLS AND COLLEGES

SCHOOLS AND COLLEGES	SUMMER QUARTER			AUTUMN QUARTER	WINTER QUARTER	SPRING QUARTER	TOTAL
	1st T.	2nd T.	TOTAL				
	1	2	3	4	5	6	7
Graduate . . . .	523	422	560	272	250	238	352
Men . . . .	203	108	215	157	137	133	101
Women . . . .	320	224	345	115	113	105	161
Liberal Arts. . .	603	470	648	1612	1636	1570	1819
Men . . . .	158	150	170	616	630	610	709
Women . . . .	445	320	478	996	997	960	1110
Science . . . .	153	134	166	566	523	492	673
Men . . . .	47	56	51	232	235	215	302
Women . . . .	106	78	115	334	288	277	371
Bus. Admin. . . .	242	228	261	1106	1126	947	1345
Men . . . .	221	212	238	975	997	829	1178
Women . . . .	21	16	23	131	129	118	167
Education . . . .	217	196	233	147	153	150	168
Men . . . .	65	61	70	52	54	50	58
Women . . . .	152	135	163	95	99	109	110
Engineering . . .	41	41	44	578	594	495	692
Men . . . .	41	41	44	578	594	495	692
Women . . . .					1		1
Fine Arts. . . .	95	84	102	456	433	428	550
Men . . . .	4	4	4	83	76	79	109
Women . . . .	91	80	98	373	357	349	441
Fisheries . . . .				32	54	26	52
Men . . . .				31	54	26	51
Women . . . .				1			1
Forestry . . . .	8	8	8	111	122	109	148
Men . . . .	8	8	8	110	122	109	147
Women . . . .				1			1
Journalism . . . .	13	13	13	35	26	38	42
Men . . . .	6	6	6	14	12	23	22
Women . . . .	7	7	7	21	14	15	20
Law . . . .	50	40	56	127	124	120	143
Men . . . .	46	38	53	123	120	124	138
Women . . . .	4	2	3	4	4	5	5
Library Sci. . . .	7	4	7	20	10	14	20
Men . . . .	7	4	7	18	9	12	18
Women . . . .							
Mines . . . .	3	2	3	42	53	35	53
Men . . . .	3	2	3	42	53	35	53
Pharmacy . . . .	7	7	8	117	106	104	133
Men . . . .	7	7	8	82	77	74	94
Women . . . .				35	29	30	39
TOTAL . . . .	1962	1649	2109	5221	5210	4793	6190
Men . . . .	809	783	870	3097	3170	2804	3745
Women . . . .	1153	866	1239	2124	2040	1989	2445

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—1923-1924

## BY CLASSES

	SUMMER QUARTER			AUTUMN QUARTER	WINTER QUARTER	SPRING QUARTER	TOTAL
	1st T.	2nd T.	TOTAL				
	1	2	3				
Graduates ...	546	437	587	323	288	282	405
Men .....	225	213	242	202	174	171	238
Women .....	321	224	345	121	114	111	167
Seniors .....	344	305	370	636	749	820	702
Men .....	163	162	174	383	423	465	416
Women .....	181	143	196	253	326	355	286
Juniors .....	511	466	549	835	740	853	902
Men .....	165	168	179	486	470	514	552
Women .....	346	298	370	349	270	339	410
Sophomores .....	232	211	249	1192	1271	1251	1388
Men .....	96	95	103	721	773	710	863
Women .....	136	116	146	471	498	541	525
Freshmen .....	215	137	231	2075	2031	1513	2513
Men .....	70	65	75	1209	1229	887	1528
Women .....	145	72	156	866	802	626	990
Special .....	114	93	123	160	131	74	215
Men .....	90	80	97	96	101	57	148
Women .....	24	13	26	64	30	17	67
TOTALS .....	1962	1649	2109	5221	5210	4793	6190
Men .....	809	783	870	3097	3170	2804	3745
Women .....	1153	866	1239	2124	2040	1989	2445

## TOTAL STUDENTS IN RESIDENCE

During regular academic year.....	6,190
During summer quarter.....	2,109
	8,299
Deduct summer quarter duplicates.....	455
	7,844

## EXTENSION STUDENTS

Correspondence .....	484
Men .....	208
Women .....	276
Extension Classes.....	1724
Men .....	482
Women .....	1242
Total Extension.....	2208

NOTE.—The Extension Service enrolls students at any time during the twelve months. The figures given indicate the number actually studying correspondence, or in extension classes during some part of the year beginning May 15, 1923.

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.

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