

The Bulletin of the
UNIVERSITY of MINNESOTA

Class Schedule
Spring Quarter, 1950

Agriculture, Forestry, and Home Economics; Business Administration; Chemistry; Child Welfare; Education; General College; Library Instruction; Medical Departments serving other colleges; Military Science; Naval Science; Physical Education; and Science, Literature, and the Arts



Volume LIII, Number 4

January 23, 1950

Entered at the post office in Minneapolis as semi-monthly second-class matter, Minneapolis, Minnesota. Accepted for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized July 12, 1918

How to Use the Class Schedule

The *Class Schedule* lists hours and days and room schedules for courses offered by colleges of the University listed on the cover page. Brief course titles and prerequisites are also shown, as well as last-minute changes in course offerings.

Do not register from the *Class Schedule* alone. Your college bulletin is essential to getting full course descriptions, rules and requirements, and other information necessary for sound program planning.

The following information should appear on your registration blank:

1. The departmental abbreviation listed after each departmental heading (divisional headings are abbreviated in some instances).
2. The course and section numbers for each lecture, recitation or laboratory period for which you are registering.
3. The abbreviated course title listed in the *Class Schedule*.
4. The number of credits shown for the course.
5. The hours and days scheduled for the class.

A list of course fees, including courses requiring deposit cards, may be found on page 46.

Other information in the *Class Schedule* includes building abbreviations, a directory of departmental offices, maps of the St. Paul and Minneapolis campuses, the final examination schedule, registration tally procedures, and the calendar.

Courses in
BUSINESS AND DISTRIBUTIVE EDUCATION

FIRST TERM

- Ed.C.I.131. Advanced Course in Teaching the Technical Business Subjects.** Recent research and trends in teaching typewriting, shorthand, transcription, office and secretarial practice, and bookkeeping. 3 cred. Price
- Ed.C.I.137. Materials and Methods in Distributive Education.** Sources of instructional materials in distributive education and study of methods, including correlation of classroom work with on-the-job experience, demonstration sales techniques, visual aids, and case studies. 3 cred. Determan
- Ed.C.I.139. Coordination Techniques in Business Education.** Problems of the cooperative part-time program, including guidance and selection, work placement, assisting in work adjustments, development of the training program, and correlation of schoolwork and job experience. 3 cred. Meyer
- Ed.C.I.141. Cooperative Part-time Distributive Education.** A study of the cooperative part-time program including planning a program, curriculum building, promoting the program, plant and equipment, program evaluation. 3 cred. Meyer
- Ed.C.I.142.* Evening School Distributive Education.** Planning and promoting evening school distributive education classes, selecting and training evening school instructors, working out methods and materials adapted to evening school programs. 3 cred. Latterell
- Ed.C.I.154.* Materials and Methods in Evening Distributive Education Classes.** A three-week intensive course devoted to a survey of the content of various evening offerings, sources of teaching materials, teaching methods, and training of evening school instructors. 3 cred. Fairbrother
- Ed.C.I.156. Trends in Business Education.** Recent trends and developments in business education as related to general education, vocational education, guidance, and special institutions. 3 cred. Price
- Ed.C.I.238. Problems in Distributive Education.** Individual research and study. Cred. ar. Meyer
- Ed.C.I.239. Problems in Business Education.** Individual research and study. Cred. ar. Price

SECOND TERM

- Ed.C.I.133. Consumer Education in the Schools.** Problems of organizing a consumer education program, the scope and purpose of consumer education, the contribution of various subject matter areas to this field. For both secondary and elementary level. 3 cred. Price
- Ed.C.I.134. Materials and Methods in Consumer Education.** Significant areas in consumer education at elementary and secondary levels;
- development of teaching units; emphasis on teaching procedures and recent aids and materials including audio-visual aids. 3 cred. Price
- Ed.C.I.136. Organization and Supervision of Distributive Education.** Principles and practices of developing a program of distributive education, fitting the program to community needs, planning and in-

* 142 offered July 3-22; 154 offered June 12-30.

stalling cooperative part-time evening and extension programs, and administration of programs under the George-Barden Act. 3 cred. Meyer

Ed.C.I.139. Coordination Techniques

in Business Education. 3 cred. Meyer

Ed.C.I.238. Problems in Distributive Education. Cred ar. Meyer

Ed.C.I.239. Problems in Business Education. Cred. ar. Price

CREDIT, FEES, AND REGISTRATION

Students may register for one or more courses, with nine credits as the maximum for the six-week session.

FEES FOR EACH TERM

Tuition fee (5 or more credits)	\$37.50
Incidental fee	7.00
	<hr/>
	\$44.50
Tuition fee (4 or less credits)	\$27.00
Incidental fee	7.00
	<hr/>
	\$34.00

In addition, the student makes a refundable deposit of \$2, and pays a special fee of \$1.50 per credit for courses under Curriculum and Instruction (Ed.C.I.).

Students planning to register for graduate credit should apply for admission to the Graduate School at least four weeks before the opening of the Summer Session. The application must be accompanied by an official transcript in duplicate of undergraduate work. Applicants who hold degrees from the University of Minnesota are expected to present certified copies of their scholastic records. Applications should be sent to the Dean of the Graduate School, University of Minnesota, Minneapolis 14.

SUMMER RECREATION

The University of Minnesota is well situated for a program of healthful recreation. A definite program is planned each year to give the Summer Session student a maximum of recreational activity at a minimum of expense. The Twin Cities, with their parks, lakes, art and music centers, libraries, and museums, offer many fine attractions for the summer visitor.

REQUESTS FOR INFORMATION

Requests for information should be addressed to the University of Minnesota, Minneapolis 14, as follows:

Requests for *Summer Session Bulletin*
 Dean of the Summer Session
 560 Administration Building
 Housing for women
 Director of Comstock Hall
 Housing for men
 Director of Pioneer Hall

Housing for married graduate students
 Director of Men's Residences
 Room 3, Administration Building
 Admission to Graduate School
 Office of the Dean
 Graduate School
 234 Administration Building

EXPLANATIONS

Course numbering—Courses are designated by department names and numbers.

(-) A hyphen preceding a course number indicates continuity between that course and the course immediately preceding it in numerical order. Consult the prerequisite to determine whether the course may be taken out of sequence.

Controlled Courses—When course numbers appear in bold-face type, it indicates that the student must tally for the course or sections of the course in the college registration offices. See back cover page for Registration Tally Procedure for such courses.

Credits—The number of credits is listed in parentheses following the course title.

Prerequisites—Certain courses require for enrolment therein the completion of specific elementary courses, or the possession of some definite qualifications or minimum standing. These are listed in parentheses following the number of credits.

Unless otherwise indicated, courses are numbered as follows: courses primarily for freshmen and sophomores, 1 through 49; for juniors and seniors, 50 through 99, for juniors, seniors and graduate students, 100 through 199; for graduate students only, 200 and over.

The college bulletins list exceptions whereby sophomores with certain minimum grade averages can register for courses normally open only to juniors and seniors.

Work substantially equivalent to courses listed as prerequisites is occasionally accepted in lieu of the prerequisite listed. See your college bulletin for further information.

IBM departmental abbreviations (see page 50) are used with courses listed as prerequisites. When no departmental designation precedes the course number listed as a prerequisite, the prerequisite course is in the same department. Unless otherwise indicated a prerequisite reading "6 cr" means 6 credits in the same department.

Days and hours—MTWThF indicates that the class meets every day of the week; TTh, that the class meets only on Tuesdays and Thursdays.

A class listed I-II MW meets the first through the second hour Mondays and Wednesdays, the hyphen always indicating *through*.

A class listed IV-V½ continues through the first half of the fifth hour. A class listed III½-III convenes the middle of the second hour and runs through the third hour.

Information not listed—Course information not listed, or listed as "ar," should be obtained from the department offering the course.

Room changes—When necessary to make them, room changes will be posted on classroom doors.

Building abbreviations—See page 54 for building abbreviations. Maps of the Minneapolis and St. Paul campuses are also included at the back of the *Class Schedule*.

Class hour schedule—Class hours are identified by Roman numerals, and continue for fifty minutes after the beginning time listed below:

Hour	I	II	III	IV	V	VI	VII	VIII	IX	X
Minneapolis	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00
St. Paul	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45

Symbols—The following symbols are used throughout the bulletin:

* Course may be taken with consent of the instructor irrespective of prerequisites listed.

† To receive credit for this course, you must complete all courses listed after the †.

§ Credit is not given if the equivalent course listed after the § has been taken for credit.

COLLEGE OF AGRICULTURE, FORESTRY, AND HOME ECONOMICS

AGRICULTURAL BIOCHEMISTRY (AGBI)

- 1 Introd Organic Chemistry (5 cr; prereq. 8 cr inorg chem or see col bul)
II MTWThF, GHAud, Wands
- 5 Plant Biochemistry (3 cr, §105; prereq 3)
I MWF, 102Hr, Siminovitch
- 6 Animal Biochemistry (3 cr, §106; prereq 3)
II MWF, 204So, Schultze
- 52 Canceled
- 103 Dairy Chemistry (6 cr; prereq 2, 6)
Lect VI MWF, 113SnH, Jenness
Lab VII-IX MWF, 102SnH
- 105 Plant Biochemistry (3 cr, §5; prereq 3)
I MWF, 102Hr, Siminovitch
- 106 Animal Biochemistry (3 cr, §6; prereq 3)
II MWF, 204So, Schultze
- 108 Chemistry of Wheat, Wheat Products (3 cr; prereq 5)
IV MWF, 113SnH, Geddes
- 110 Flour Lab Methods (3-5 cr; prereq 2, concur regis 108)
VI-IX MWF, 208SnH, Geddes, Thompson
- 117 Lab Probs in Animal Nutrition (3 cr; prereq 116, cons instr)
Ar, Liener
- 118 Lab Probs in Biochemistry (3-5 cr; prereq sr, cons instr)
Ar
- 122 Lipides (3 cr; prereq* sr, 119)
II MW and hr ar, 113SnH, Lundberg
- 123 Enzymes (3 cr; prereq* sr, 119)
III MWF, 116SnH, Boyer
- 132 Lipides Lab (2 cr; prereq 2, concur regis 122)
VI-VIII MW, 202SnH, Lundberg
- 133 Enzymes Lab (2 cr; prereq 2, concur regis 123)
VI-VIII TTh, 202SnH, Boyer
- 203 Research Probs (2-5 cr; prereq cons instr)
Ar, Staff
- 205 Special Topics—Biochemical Literature (1-3 cr; prereq cons instr)
Ar, Staff
- 208 Cereal Chemistry Seminar (1 cr; prereq* 108)
Ar, Geddes
- 212 Canceled
- 224 Gen Seminar (1 cr, required of agric biochem maj)
Ar, Staff

AGRICULTURAL ECONOMICS (AGEC)

- 2 Prin Economics II (5 cr; §1-2; prereq 1)
—1, I MTWThF, 109HH, Lowe, Chappell
—2, III MTWThF, 109HH, Chappell, Taylor
- 3 Prin Economics (5 cr; prereq soph)
II MTWThF, 109HH, Lowe
- 8 Rural Economics (3 cr; prereq soph, 2 or 3)
III TThS, 210HH, Jesness

- 40 Prin Marketing Organization (3 cr; prereq soph, 2)
II MWF, 210HH, Taylor
- 47 Marketing Accounting (4 cr; prereq soph, 25)
Lect IV MWF, 311HH
Lab VIII-IX F, 311HH, Koller
- 80 Farm Accounting (3 cr)
I TThS, 210HH, Engene
- 103 Farm Operation (3 cr; prereq 102)
II TThS, 100HH, Pond
- 104 Types of Farming (3 cr; prereq 2)
III MWF, 311HH, Pond
- 107 Farm Work Simplification (3 cr; prereq 2)
VIII-IX MWF, 130TSH, Engene
- 126 Economics of Consumption (3 cr; prereq 2 or 3)
I TThS, 100HH, Waite
- 135 Methods of Price Analysis (3 cr; prereq sr, 131, 191)
III TThS, 130TSH, Waite
- 142 Marketing Organization: Fruits, Vegetables (2 cr; prereq 40)
III MW, 130TSH, Cox
- 150 Adv Farm Finance (3 cr; prereq 50)
2:30-4:00 TTh, 311HH, Koller
- 172 Canceled
- 226 Adv Farm Organization (3 cr)
Ar, Pond
- 270 Canceled

AGRICULTURAL ENGINEERING (AGEN)

- 3 Mechanical Drawing (3 cr)
III-IV MWF, 303En, Christopherson
- 6 Farm Buildings (3 cr)
I MWF, 303En, Christopherson
- 7 Farm Building Construction (3 cr)
Lect VI TTh, 48En
—1, Lab VII-IX T, 48 En, Burman
—2, Lab VII-IX Th, 48En
- 12 Agricultural Machinery (3 cr, §54; prereq 23)
II MWF, 217En, Johnson
- 19 Elem Surveying (3 cr; prereq 3, 11 or trig)
Lect VI T, 217En, Allred
Lab VII-IX TTh, 305En
- 21 Elem Surveying (5 cr; prereq 3, MM 12, regis IT)
Lect VI M, 105En
Lab VII-X M, VI-IX WF
- 35 Household Physics (5 cr)
—1, Lect I MWF, 101En
—2, Lect III TThS, 101En, Hustrulid
—1, Lab I-II TTh, 102En
—2, Lab VI-VII MF, 102En
—3, Lab VI-VII TTh, 102En
—4, Lab VIII-IX MF, 102En
—5, Lab VIII-IX TTh, 102En
- 41 Metal Work (3 cr)
VI-VIII TTh, 20En, Dent

- 42 Art Metal Work (3 cr)
VI-VIII WF, 20En, Dent
- 50 Adv Surveying (3 cr; prereq soph, 19)
Lect VI M, 103En, Larson
Lab VII-IX MF, 305En
- 54 Farm Power, Machinery (4 cr, §12, 13,
prereq 41, 23)
Lect VI MWF, 217En, Torrance
Quiz VII M, 217En
Lab VII-VIII WF, 49En, Johnson
- 103 Adv Probs in Soil Moisture Regulation (2-6
cr; prereq sr, 61, regis IT)
Ar, Manson, Allred
- 104 Soil Moisture Relation in Agriculture (3 cr;
prereq 9 cr agric engin incl phy)
I-IV TTh, 105En, Manson
- 105 Drainage, Irrigation, Soil Erosion Control
Design (4 cr; prereq* 61, 106)
Lect I TTh, 305En, Allred, Larson
Lab II-IV TTh, 305En
- 113 Farm Building Probs (2-6 cr; prereq sr, 167,
regis IT)
Ar, Otis, Christopherson
- 114 Buildings, Equipment, Materials, Methods
of Construction (3 cr; prereq 9 cr agric
engin incl 3, 6)
Ar, Otis, Christopherson
- 123 Farm Power, Machinery Probs (2-6 cr;
prereq sr, 171, regis IT)
Ar, Schwantes, Strait
- 124 Agricultural Machinery, Mechanical Power
Mgt (3 cr; prereq 9 cr agric engin incl
phys and 12)
Ar, Schwantes
- 125 Topics in Agricultural Physics (3 cr; prereq
sr, 72 or calculus 25)
Ar, Hustrulid
- 133 Rural Electrification Probs (2-6 cr; prereq
sr, 172, regis IT)
Ar, Hustrulid
- 150 Inspection Trip (1 cr; prereq regis IT)
Ar, Schwantes
- 172 Applied Electricity (3 cr; prereq EE 38 or
concur regis, regis IT)
III MF, 101En, Hustrulid
VI-IX W, 5En

AGRICULTURAL JOURNALISM (AGJO)

- 55 Agricultural Journalism Outlets (3 cr;
prereq* Jour 15, 51-52, 69 or 73)
Ar, Swanson

AGRONOMY AND PLANT GENETICS (AGRO)

- 1 Gen Farm Crops (3 cr)
IV MWF, 202Ag, Dunham
- 22 Grain, Hay Grading (3 cr; prereq soph, 1)
I-II MWF, 201Ag, Lambert
- 122 Grain, Hay Grading (3 cr)
I-II MWF, 201Ag, Lambert

- 133 Pasture Crops, Mgt (4 cr; prereq 23)
VI-VII MWF, 202Ag, Schmid
- 134 Seminar-Agronomy (2 cr; prereq sr, 9 cr)
Ar, Staff

ANIMAL HUSBANDRY (ANHU)

- 1 Livestock Production (4 cr)
—1, II MTWThF, C-LsPav, Aunan
—2, II MTWThF, W-LsPav, R Anderson
—3, II MTWThF, E-LsPav, Crane
- 8 Breeds of Livestock (4 cr; prereq 1, soph)
III-IV TThS, C-LsPav, Harvey
- 9 Livestock Judging (3 cr; prereq 8, soph)
III-IV MWF, C-LsPav, R Anderson
- 52 Meats (3 cr; prereq 1, 50)
VI-VIII TTh, MSh, P Anderson, Aunan
- 54 Meat Judging, Grading (3 cr; prereq 1)
III-IV TThS, MSh, Aunan
- 107 Meat Probs (3 cr; prereq 53)
Lect IV TTh, MSh, P Anderson
Lab VI-VIII F, MSh, P Anderson
- 113 Livestock Mgt (3 cr; prereq 57, 112)
VI-VIII MW, 3 LsPav, Harvey, P Ander-
son, Ferrin
- 114 Artificial Insemination (5 cr; prereq 112,
cons instr)
III MWF, VI-VIII TTh, 3LsPav, Cummings

DAIRY HUSBANDRY (DYHU)

- 1 Elem Dairying (3 cr; prereq entr cr in chem
or InCh 1 or 4)
III MWF, 100HH, Combs, Morris, Rudnick
- 4 Dairy Products Practice (3 cr; prereq soph,
1)
Ar, Combs
- 9 Dairy Cattle Judging (1 cr; prereq soph)
—1, VI-VIII F, Dairy Barn, Mix
—2, VI-VIII T, Dairy Barn, Mix
—3, VI-VIII Th, Dairy Barn, Mix
- 10 Dairy Products Judging (1 cr; prereq soph,
1)
IX-X Th, 9HH, Thomas
- 20 Household Microbiology (4 cr; prereq 3rd
qtr fresh, cons advis and instr)
Lect VI MF, 100HH, Olson
Lab VI-VII W, 212HH
- 51 Marketing Milk (3 cr; prereq 3, 50)
Lect IV MW, 210HH, Olson
Lab VI-VIII Th, 212HH
- 52 Dairy Herd Mgt (2 cr; prereq 103)
VII-IX TTh, 9HH, Mix
- 112 Cheese (3 cr; prereq 3, 50)
Lect IV TS, 210HH
Lab VI-VIII T, 6HH, Combs, Thomas, Morris
- 113 Technical Control (3 cr; prereq sr, 50, 111
or 112)
I-III TTh, 102HH, Coulter, Jezeski
- 115 Adv Dairy Bacteriology (3 cr; prereq sr,
50, 111 or 112)
Ar, Jezeski

- 116 Milk Secretion (3 cr; prereq sr, 9 cr physiol, AgBi 103)
I MWF, 210HH, Petersen
- 117 Dairy Cattle Breeding (3 cr; prereq 101, 104, Agro 31)
III TThS, 9HH, Harvey

ENTOMOLOGY AND ECONOMIC ZOOLOGY (ENT)

- 5 Economic Entomology (5 cr; prereq soph, 15 cr zool)
Lect VIII MWF, 102Hr, Cook
—1, Lab VI-VII MWF, 302CofH, Cook
—2, Lab IX-X MWF, 302CofH, Cook
- 21 Prin Beekeeping (3-5 cr)
VI-VIII MWF, 307CofH, Haydak
- 114 Apiculture (3 cr; prereq 9 cr ent)
Lect I MW, 307CofH, Haydak
Lab Ar
- 119 Canceled
- 120 Gen Ecology of Insects (3 cr; prereq 117-118)
Lect VI-VIII TTh, 307CofH, Hodson
Lab
- 127 Adv Gen Entomology (3 cr; prereq 15 cr zool or ent)
Lect I TTh, 211Z, Mickel
Lab I-III S, 402Z
- 140 Biological Microscopy (4 cr; prereq sr, 15 cr zool, ent, or bot, cons instr)
Lect VI WF, 208Z, Richards
Lab VII-IX WF, 208Z
- 146 Helminthology (3 cr; prereq 15 cr zool, cons instr)
VII-IX TTh, 208Z, Wallace
- 150 Introd Aphidology (3 cr; prereq* 52)
Ar, Granovsky
- 166 Wildlife Mgt (3 cr; prereq 63, 64, Zool 46-47, Bot 50, PiPa 53)
Lect III TTh, 100CofH, Beer
Lab Ar
- 167 Techniques in Forest Wildlife Mgt (3 cr; prereq grad, 64)
Given at Cloquet
- 170 Fisheries Resources (3 cr; prereq* 168, 169)
I MWF, 100CofH, Smith
- 177 Insecticides (5 cr; prereq* sr, 15 cr ent incl 5, inorg chem, org chem)
Lect IV MWF, 18CofH, Cutkomp
Lab I-III WF, 18CofH
- 197 Introd Research (ar cr; prereq sr, cons dept)
Ar, Staff
- 10 Farm Forestry (3 cr; prereq no forestry students)
Lect IV WF, 203GH, Duncan
—1, Lab VI-IX M, 203GH, Duncan
—2, Lab VI-IX T, 203GH, Duncan
- 112 Adv Forest Mensuration (3 cr; prereq* grad, 9)
VI-X Th, 206GH, Brown
- 116 Fabrication, Properties of Wood Products (3 cr; prereq 114)
VI-VIII MW, 3GH, Rees
- 119 Adv Wood Structure (4 cr; prereq sr, 53, 54)
Lect IX T, 211GH, Rees
Lab VI-VIII TTh
- 120 Estimating (3 cr; prereq sr)
IV MWF, 211GH
- 125 Wood Preservation (3 cr; prereq 53, 54)
III TThS, 201GH, Kaufert
- 142 Wood Chemistry (3 cr; prereq 53, 54, org chem)
II MWF, 202GH, Hossfeld
- 151 Logging (3 cr)
V MWF, 203GH, Weinstein
- 152 Wood Seasoning (3 cr; prereq 53, 54)
I TThS, 201GH, Kemp
- 156 Major Report (2 cr; prereq grad)
Ar
- 157 Major Report (2 cr; prereq grad)
Ar
- 158 Forest Seminar (1 cr; prereq grad)
3:00-5:00 Th, 202GH, Staff
- 159 Forest Seminar (1 cr; prereq grad)
3:00-5:00 Th, 202GH, Staff

HOME ECONOMICS (HE)

- 1 Choice, Care of Clothing (4 cr, §GC 15)
II MTWTh, 313HE, Quist
- 3 Clothing Construction A (3 cr; prereq 1, 3rd qtr fresh)
—1, III-IV, MWF, 304HE, Morris
—2, VI-VIII TTh, 304HE, Morris
- 4 Clothing Construction B (3 cr; prereq soph, 3)
VI-VII MWF, 305HE, Quist
- 6 Institution Experience (3 cr; maj HE, cons instr)
Ar, Scholl
- 17 Personal, Family Living (3 cr; prereq no sr)
—1, IV MWF, 213HE, Studley
—2, VII MWF, 213HE, Studley
- 20 Introd Related Art (4 cr, §56; prereq no HE sr)
II MTWF, 203HE, Myren
- 21 Color, Design I (3 cr; prereq 20)
—1, II-III MWF, 402HE, Petersen
—2, II-III TThS, 402HE, Ludwig
- 22 Color, Design II (3 cr; prereq 1, 20)
VI-VIII TTh, 112HE, Petersen

FORESTRY (FOR)

- 4 Dendrology (4 cr)
II MWF and hr ar, 202Ag, Rees
- 9 Forest Mensuration (3 cr; prereq 6, math 1, 6)
Lect IV MW, GHAud, Brown
—1, Lab VI-VIII M, 206GH, Brown
—2, Lab VI-VIII W, 206GH, Brown
—3, Lab II-IV S, 206GH, Brown

- 24 Probs in Home Planning, Furnishing (5 cr, §GC 16, FL 15, HE 57, 180; prereq soph, 20, not open to HE educ, text, rel art maj)
-1, II-III MTWF, 401HE, Esteros
-2, IV-V MTWF, 401HE, Myren
- 25 Design Applied to Crafts (3 cr; prereq 21 or 22)
III-IV TThS, 110HE, Petersen
- 27 Related Art Probs (3 cr; prereq soph, 21)
VI-VIII TTh, 401HE, Myren
- 30 Introd Nutrition (2 cr, §31; prereq no HE students)
VI TTh, 308F, Biester, Nymon
- 31 Introd Nutrition (3 cr, §30; prereq no sr)
III MWF, 313HE, Gibler
- 34 Nutrition Probs I (4 cr, §76, 170, 171; prereq 3rd qtr soph, 31, 40, physiol or human biol)
II MTWTh, 213HE, Nymon
- 40 Food Preparation (5 cr; prereq 2 qtrs chem)
-1, III-IV MTWThF, 103HE, Lawson
-2, VI-VII MTWThF, 103HE, Lawson
-3, VIII-IX MTWThF, 103HE
- 41 Food Mgt, Marketing (5 cr; prereq soph, 31, 40)
-1, III-IV TWThF, V WF, 207HE, Turnbull
-2, III-IV MTWTh, V TTh, 207HE, Turnbull
-3, VI-VIII MTWTh, IX TTh, 207HE, Trammell
- 45 Quantity Cookery (6 cr; prereq soph, 40, 41, HE maj)
Lect V TTh, 213HE, Higgins
-1, Lab 8:00-11:00 TThS, Cafeteria
-2, Lab 8:00-11:00 MWF, Cafeteria
- 46 Cafeteria Experience (3 cr; prereq soph, HE maj)
Lect IV W, Cafeteria, Scholl
-1, Lab IV-V MF, Cafeteria, Scholl
-2, Lab IV-V TTh, Cafeteria, Scholl
- 49 Household Equipment (3 cr; prereq* soph, AgEn 35)
-1, III-IV TThS, 106HE, Fuller
-2, VI-VIII TTh, 106HE, Fuller
- 50 Textiles (3 cr; prereq 1)
-1, III-IV MWF, 307HE, Gorham
-2, III-IV TThS, 307HE, Morris
- 53 Adv Clothing (3 cr; prereq 4, 50 or concur regis)
VI-VII MWF, 304HE, Gorham
- 57 Applications of Color, Design II (3 cr, §GC 16, FL 15, HE 24, 180; prereq no HE students, 56, writ permis from jr col office)
VII-VIII MWF, 402HE, Ludwig
- 65 Institution Mgt Probs (3 cr; prereq 64)
10:15-11:30 TTh, 213HE, Scholl
- 79 Selected Probs for Dietitians (3 cr; prereq maj HE, 170)
II MWF, 112HE, Biester
- 85 Home Mgt Prin (3 cr; prereq 40, 41 advised)
VII MWF, 203HE, Jeary

- 86 Home Mgt Lab (4 cr; prereq 85 or concur regis, PH 52a, b)
-1, I S and hr ar, H Mgt Houses, Studley
-2, I S and hr ar, H Mgt Houses, Jeary
- 89 Special Probs in Household Equipment (3 cr; prereq 49, AgEn 35, cons instr)
Ar, Fuller
- 120 Art History (3 cr)
VIII MWF, 203HE, Esteros
- 122 Adv Interior Design (3 cr; prereq* 27, 120)
III-IV TThS, 402HE, Esteros
- 140 Canceled
- 142 Experimental Cookery (3 cr; prereq maj HE, 40, AgBi 1)
VI-VIII TTh, 107HE, Turnbull
- 146 Special Food Probs (3 cr; prereq sr, maj HE, 142)
VI-VIII MW, 107HE, Turnbull
- 171 Child Nutrition (3 cr; prereq 170, HEEd 90)
III MW, 213HE, III F, 113F, IV-V F Observation, Nursery School
- 173 Nutrition in Disease (4 cr; prereq 170, 35 advised, HE maj)
Lect 8:45-10:00 TTh, 203HE, Gibler
Lab VI-VII F, 105HE
- 177 Digestion, Metabolism (3 cr; prereq 35)
VI-VIII MW, 112HE, Leichsenring, Nymon
- 178 Clinical Probs in Nutrition (2 cr; prereq maj HE, 170, 35 or concur regis)
Lect V M, 313HE, Gibler
-1, Lab VI-VIII T
-2, Lab VI-VIII Th
- 180 Home Planning, Furnishings (5 cr, §GC 16, FL 15, HE 24, 57; prereq 27)
VI-VIII MW, VI-VII F, 401HE, Paulsen
- 181 Housing Probs of the Family (3 cr; prereq 24 or 27; 120 advised)
VI-VIII TTh, 313HE, Paulsen
- 186 Probs in Income Mgt (3 cr; prereq* 34, 85, 86)
Ar, 313HE, Studley

HORTICULTURE (HORT)

- 10 Home Floriculture (3 cr)
III MWF and hr ar, 8Hr, Phillips
- 14 Commercial Floriculture—Spring Crops (3 cr; prereq 6 cr bot)
VI-VIII T, II TTh, 8Hr, Widmer
- 23 Plant Materials, Spring, Summer Aspects (3 cr; prereq 9 cr bot)
VI-VIII MW, 8Hr, Widmer
- 32 Vegetable Growing (3 cr; prereq 6 cr bot)
II MWF, 102Hr, Krantz, Hutchins
- 40 Horticulture Lab (2 cr; prereq* 1 or 6, soph)
VI-IX F, 8Hr, Weir
- 51 Garden Flowers (3 cr; prereq* 9 cr bot)
VI-VIII T, VI-VII Th, 102Hr, Phillips
- 192 Special Probs (2-4 cr; prereq cons instr)
Ar, Alderman, Staff

ORIENTATION (ORIE)

- 1 College Orientation Lectures (1 cr)
V M, 105En, McFarland

PLANT PATHOLOGY AND
AGRICULTURAL BOTANY (PLPA)

- 1 Plant Pathology (5 cr; \$10; prereq soph, 9 cr pl sci incl 6 cr in bot)
—1, VI-VIII MWF, 103PP, 105PP, Moore
—2, VIII-X MWF, 103PP, 105PP, Moore
- 3 Weeds (3 cr; prereq 6 cr bot)
III-IV TThS, 106AgrBot, Larson
- 10 Forest Pathology (5 cr, \$1; prereq soph, 6 cr bot)
Lect I MWF, 103PP, Christensen
—1, Lab I-II TThS, 105PP
—2, Lab III-IV TThS, 105PP
- 52 Canceled
- 53 Food Plants of Game Animals (3 cr; prereq 1 yr bot, 1 yr zool)
II TThS, 107AgrBot, Larson
- 107 Mycology (3 or 5 cr; prereq 1 or 10)
VI-VIII TTh, 106PP, 108PP, Dossdall
- 119 Prin Plant Disease Control (3 cr; prereq 1 or 10)
VI-VIII TTh, 103PP, 105PP, King
- 120 Adv Plant Pathology (3 cr; prereq* 14 cr pl sci)
—1, VIII-X MWF, 103PP, 105PP, Moore
—2, VI-VIII MWF, 103PP, 105PP, Moore
—3, I MWF, I-II TThS, 103PP or III-IV TThS, 105PP, Christensen
- 160 Plant Histochemistry (3 cr; prereq* 15 cr pl sci)
Ar, Landon
- 205 Research in Plant Pathology (ar cr)
Ar, Stakman, Staff
- 209 Special Probs in Mycology (ar cr; prereq 105-106-107)
Ar, Stakman, Dossdall, Christensen
- 213 Seminar (2 cr)
IX-X T, 401PP, Stakman, Staff
- 217 Ecology of Plant Pathogens (3 cr)
III-IV W, 103PP, II-IV F, 106PP, Kernkamp
- 253 Seminar—Applied Plant Physiology (1 cr)
Ar, Landon
- 256 Research Probs—Applied Plant Physiology (ar cr)
Ar, Landon
- 262 Research Probs—Agricultural Botany (ar cr)
Ar, Stakman, Larson

POULTRY HUSBANDRY (POHU)

- 1 Poultry Production (4 cr)
II MTWF, 230TSH, Canfield, Sloan
- 51 Hatchery Mgt (3 cr; prereq 1, Zool 15)
VII-VIII TTh, 135TSH, Canfield
- 55 Special Probs (1-3 cr; prereq 9 cr)
Ar, Staff

- 104 Seminar (1 cr; prereq 6 cr)
VI W, 135TSH, Sloan
- 153 Poultry Nutrition, Feeding (3 cr; prereq 1, AgBi 1)
IV MWF, 230TSH, Briggs

RHETORIC (RHET)

- 1-2-3 Communications I, II, III (3 cr)
All students registering for rhetoric for the first time will meet in 217En the first class hour every day for the first week. Returning students will report to 107En at eight o'clock the first day of class. Assignments to I MWF or I TThS sections will be made at those times.
- 22 Public Speaking (3 cr; prereq soph, rhet comm require)
—1, II MWF, 311En, Woods
—2, III MWF, 312En, Nichols
—3, IV MWF, 312En, Nichols
—4, VI MWF, 312En, Sandquist
—5, VII MWF, 312En, Hagen
—6, II TThS, 306En, Hagen
—7, III TThS, 306En, Shepard
—8, IV TThS, 306En, Hagen
- 31 English Literature I (5 cr; prereq soph, rhet comm require)
III MTWThF, 308En, Thurston
- 32 English Literature II (3 cr; prereq soph, rhet comm require)
II TThS, 307En, Seidenkranz
- 33 American Life in American Literature (3 cr; prereq soph, rhet comm require)
II MWF, 307En, Rosegrant
- 51 Exposition (3 cr; prereq rhet comm require)
—1, III MWF, 120TSA, Rosegrant
—2, IV MWF, 308En, Thurston
—3, III TThS, 312En, Brown
—4, IV TThS, 307En, Seidenkranz
- 54 Adv Public Speaking (3 cr; prereq 22)
—1, II MWF, 120TSA, Sandquist
—2, II TThS, 120TSA, Sandquist
- 59 Adv Play Production (3 cr; prereq* 28)
III TThS, 120TSA, Hagen
- 60 Contemporary Literature (3 cr; prereq rhet comm require)
IV MWF, 307En, Woods
- 91 American Speech for Foreign Students (no cr)
Ar, Woods

SOILS (SOIL)

- 5 Soil Mgt (3 cr; prereq soph, 4)
II TThS, 204So, Rost
- 104 Soil Mapping (3 cr; prereq 109)
Ar, McMiller
- 100 Soil Genesis, Classification (3 cr; prereq 108)
IV MWF, 204So, McMiller

VETERINARY MEDICINE

- 52 Anatomy, Physiology, Hygiene of Domestic Animals (3 cr)
I TThS, 103VM, Boyd
- 103 Animal Anatomy (4 cr; prereq regis 1st yr vet med, grad with cons instr)
VI-IX MWF, 103VM, Kitchell
- 104 Special Studies in Animal Anatomy (1-3 cr; prereq 101)
Ar, Kitchell, Weber
- 113 Animal Histology, Embryology (4 cr; prereq regis 1st yr vet med, grad with cons instr)
IV MW, I-III TTh, 103VM, Kitchell, Weber
- 114 Special Studies in Animal Histology, Embryology (1-3 cr; prereq 111)
Ar, Kitchell, Weber
- 121 Animal Bacteriology (5 cr; prereq 10 cr zool, 13 cr chem)
I-III MWF, 207TEH, Pomeroy
- 152 Animal Pathology (7 cr; prereq* sr, 103, 113, 136)
VI-IX MWF, III T, 207TEH, Kernkamp, Sautter
- 154 Veterinary Clinic Pathology (2 cr; prereq 152, 3rd yr vet med, cons instr)
II MW, 160VM Clinic, Hadlow
- 162 Animal Parasitology (5 cr; prereq sr, 161)
I TTh, III F, VI-VIII TTh, 207TEH, Griffiths
- 170 Veterinary Clinical Diagnosis (2 cr; prereq sr, 136, 151)
II T, II-IV Th, 160VM Clinic, Boyd, Staff
- 171C Clinical Conference (1 cr; prereq 170, 3rd yr vet med, cons instr)
VI F, 160VM Clinic, Bartlett, Staff
- 174 Adv Animal Surgery (3 cr)
I S, V-IX T, 160VM Clinic, Conner, Mather
- 179 Large Animal Medicine (5 cr)
I MTWThF, 160VM Clinic, Campbell, Boyd
- 185 Small Animal Medicine (4 cr)
VII MWF, VI Th, 160VM Clinic, Mather
- 190 Clinical, Lab Practice (5 cr; prereq 170, 3rd yr vet med, cons instr)
II-IV MTWThFS, 160VM Clinic, Clinic Staff

SCHOOL OF BUSINESS ADMINISTRATION

BUSINESS ADMINISTRATION (BA)

- 53 Sales, Negotiable Instruments (3 cr, 451 and 52 or 53; prereq 51)
Lect IV Th, BuAud, Neville, others
-1, I TTh, 4VH
-2, I TTh, 115VH
-3, I TTh, 205VH
-4, II TTh, 205VH
-5, II TTh, 115VH
-6, II TTh, 221VH
-7, III TTh, 115VH
-8, III TTh, 205VH
-9, III TTh, 221VH
-10, VI TTh, 1VH
-11, VII TTh, 4VH
-12, VIII TTh, 205VH
- 56 Property Rights, Obligations (3 cr; prereq 52 or 53)
-1, I-II½ TTh, 2VH
-2, I-II½ TTh, 6VH
- 58 Elements Public Finance (3 cr, §Econ 189, 192; prereq Econ 7)
-1, IV MWF, 4VH
-2, VI MWF, 207VH
-3, VII MWF, 113VH
- 61 Casualty Insurance (3 cr; prereq Econ 50)
III MWF, 207VH, Graves
- 67 Retail Store Mgt for Pharmacy Students (3 cr; prereq Econ 10, 30)
II MWF, Ar, Canoyer
- 68 Sales Mgt (3 cr; prereq 77)
II½-III TTh, 113VH
- 69 Retail Store Mgt (3 cr; prereq 77)
IV-V½ TTh, 207VH
- 70 Statistics Survey (3 cr, §Econ 5, Soc 45; prereq Econ 7)
II MWF, 2VH
- 71 Transportation Services, Charges I (3 cr, §Econ 172; prereq Econ 7)
-1, IV MWF, 1VH
-2, VI MWF, 4VH
-3, VIII MWF, 4VH
- 72 Transportation Services, Charges II (3 cr; prereq 71 or Econ 172)
II½-III TTh, 1VH, Nightingale
- 76 Credits, Collections (3 cr; prereq 77)
I-II½ TTh, 207VH
- 77 Survey in Marketing (3 cr, §Econ 185, prereq Econ 7)
Lect III M, 06Bo
-1, I TTh, 301VH
-2, III TTh, 306VH
-3, V WF, 1VH
-4, VI TTh, 221VH
-5, VII TTh, 301VH
- 86 Office Mgt (3 cr; prereq Econ 7)
VI MWF, 301VH
- 87 Advertising Probs (3 cr, §88; prereq Jour 18, BA 77, Psy 56, open to jour advertising maj)
VII-VIII½ TTh, 1VH, Vaile

- 88 Advertising (3 cr, §87; prereq 77, Psy 56)
VII MWF, 4VH
- 89 Production Mgt (3 cr; prereq Econ 7)
—1, I MWF, 301VH
—2, II MWF, 301VH
—3, VII MWF, 301VH
- 91 Tabulating Equipment Lab (1 cr; prereq Econ 5, 23)
Lect VI T, 4VH, Leary
—1, VI Th, 6VH
—2, VII T, 6VH
—3, VII Th, 6VH
—4, VIII T, 6VH
—5, VIII Th, 6VH
- 93 Accounting Lab (1 cr; prereq Econ 23)
—1, VII-VIII T, 306VH
—2, VII-VIII Th, 306VH
- 94 Cost Accounting Lab (1 cr, to be taken
concur with 153)
—1, V-VI T, 306VH
—2, V-VI Th, 306VH
- 99 Honors Course (ar cr; prereq cons dean)
Ar
- 109 Business Policy (3 cr; prereq sr, Econ 81)
I-II½ TTh, 1VH, Reighard
- 112 Business Statistics (3 cr; prereq Econ 5)
—1, I MWF, 6VH
—2, IV MWF, 6VH
—3, VIII MWF, 113VH
- 118 Auditing Procedure (3 cr; prereq 150)
Lect III T, 6VH, Lund, others
—1, VI-VII TTh, 307VH
—2, VIII-IX TTh, 307VH
- 130 Cost Accounting Survey (3 cr, §152; pre-
req Econ 23)
—1, I MWF, 2VH
—2, VII MWF, 6VH
—3, VIII MWF, 6VH
- 133 Standard Costs (3 cr; prereq 130 or 153)
VI MWF, 205VH, Ostlund
- 134 Income Tax Accounting (3 cr; prereq 150)
I-II½ TTh, 113VH, Nelson
- 135 Auditing, Public Accounting (3 cr; prereq
118)
II MWF, 6VH
- 136 Internal Auditing, Accounting Control (3
cr; prereq 150)
IV MWF, 306VH, Reighard
- 139 Analysis of Financial Statements (3 cr;
prereq Econ 23)
—1, III MWF, 4VH
—2, VI MWF, 221VH
- 143 Tax Accounting Probs (3 cr; prereq 134)
III MWF, 306VH, Nelson
- 145 Foreign Exchange (3 cr; prereq Econ 142)
IV MWF, 205VH, Myers
- 148 Securities Market (3 cr; prereq 146, Econ
149)
I MWF, 221VH
- 150 Intermediate Accounting I (3 cr; prereq
139, Math 20)
II MWF, 115VH
- 151 Intermediate Accounting II (3 cr; prereq
150)
—1, III MWF, 6VH
—2, VI MWF, 6VH
- 153 Cost Accounting (3 cr; prereq 152)
VII MWF, 115VH, Wheeler
- 156 Finance Mgt (3 cr; prereq Econ 155)
IV MWF, 221VH
- 157 CPA Probs (4 cr; prereq* 151, 153)
VIII-X½ TTh, 301VH, Nelson
- 158 Govt, Railroad, Utility Accounting (3 cr;
prereq 150)
II½-III TTh, 2VH, Heilman
- 167 Introd Industrial Relations (3 cr; prereq
Econ 161)
—1, II MWF, 4VH
—2, VI MWF, 1VH
- 171 Production Standards (3 cr; prereq 170)
Lect III T, 301VH, Immer
—1, III-IV W, 301VH
—2, III-IV F, 301VH
- 177 Foreign Trade (3 cr; prereq Econ 7)
II MWF, 113VH
- 182B Sr Topics—Business Finance (3 cr; pre-
req sr)
VI½-VII TTh, 207VH, Stehman
- 182C Sr Topics—Marketing (3 cr; prereq sr, 69)
VII-VIII½ TTh, 113VH, Canoyer
- 182D Sr Topics—Industrial Relations (3 cr;
prereq sr, 181D)
—1, VII½-VIII TTh, 115VH, Yoder
—2, VIII-IX½ MW, 115VH
- 182E Sr Topics—Office Mgt (3 cr; prereq sr,
181E)
VII TTh, VIII Th, 221VH, Donaldson
- 182F Sr Topics—Statistics (3 cr; prereq sr, 181F)
VI½-VII TTh, 205VH, Mudgett
- 182G Sr Topics—Production Mgt (3 cr; prereq
sr, 181G)
—1, III MWF, 221VH, Filipetti
—2, VIII MWF, 221VH
- 182H Sr Topics—Insurance (3 cr; prereq sr)
IV-V½ TTh, 210 VH, Graves
- 182I Sr Topics—Transportation (3 cr; prereq*
sr, 180-181I)
VII-VIII½ TTh, 2VH Nightingale
- 183 Practice Course (ar cr; prereq cons advis)
Ar
- 184 Scientific Mgt, Industry (3 cr, §180G; pre-
req sr, 89)
VII MWF, 221VH, Filipetti
- 194 Adv Advertising Procedure (3 cr; prereq
88)
IV MWF, 2VH, Longstaff

ECONOMICS (ECON)

- 3 Elements of Money, Banking (5 cr, §BA 57;
prereq 2nd qtr fresh)
Lect III TTh, BuAud, Stehman
—1, I MWF, 113VH
—2, I MWF, 205VH
—3, II MWF, 307VH
—4, II MWF, 218P

- 5, III MWF, 315C
 -6, III MWF, 3Lib
 -7, IV MWF, 157TSF
 -8, IV MWF, 159TSF
 -9, V MWF, 2VH
 -10, V MWF, 420MurH
 -11, VI MWF, 157TSF
 -12, VI MWF, 153TSF
 -13, VII MWF, 111C
 -14, VII MWF, 211Z
 -15, VIII MWF, 157TSF
 -16, VIII MWF, 301VH
- 5 Elements of Statistics (5 cr, §Soc 45, BA 70; prereq soph)
 Lect II T MNHAud
 -1, I MWThF, 420MurH
 -2, II MWThF, 211Z
 -3, III MWThF, 211Z
 -4, IV MWThF, 420MurH
 -5, V MWThF, 311MurH
 -6, VI MWThF, 420MurH
 -7, VII MWThF, 420MurH
 -8, VIII MWThF, 308MurH
- 6 Prin of Economics (5 cr, §6-7, §8, 62; prereq soph)
 -1, I MTWThF, 259TSF
 -2, VI MTWThF, 307MNH
- 7 Prin of Economics (5 cr, §6-7, §9, 63; prereq 6)
 Lect. VII TTh, 150Ph, Smith
 -1, I MWF, 307MNH
 -2, II MWF, 201WuH
 -3, II MWF, 143Ph
 -4, III MWF, 115C
 -5, III MWF, 115TSMb
 -6, IV MWF, 153TSF
 -7, V MWF, 113VH
 -8, VI MWF, 308MurH
 -9, VII MWF, 145Ph
 -10, VIII MWF, 205VH
- 9 Gen Economics (3 cr, §7; prereq 8)
 -1, II MWF, 106TSMc
 -2, IV MWF, 307MNH
 -3, VI MWF, 211Z
 -4, VII MWF, 257TSF
- 23 Prin of Accounting (4 cr; prereq 22)
 Lect VI T, BuAud, Heilman
 -1, I MWF, 306VH
 -2, I MWF, 307VH
 -3, II MWF, 306VH
 -4, III MWF, 307VH
 -5, III MWF, 307MNH
 -6, IV MWF, 307VH
 -7, V MWF, 307VH
 -8, VI MWF, 307VH
 -9, VII MWF, 307VH
- 27 Accounting Survey (5 cr, for pre-Law, Law students; prereq soph)
 -1, II MTWThF, 145Ph
 -2, VIII MTWThF, 211Z
- 28 Business Law (3 cr, §BA 51; prereq soph or jr with 6 cr econ, sr)
 I MWF, 18ME, Palmer
- 32 Bgn Typing (1 cr)
 -1, I MTWThF, 209VH
 -2, VI MTWThF, 209VH
 -3, VI MTWThF, 211VH
 -4, VII MTWThF, 209VH
- 33 Intermediate Typing (1 cr, §33-34; prereq 30 words a min)
 -1, I MTWThF, 211VH, Donaldson
 -2, IV MTWThF, 211VH
 -3, VIII MTWThF, 211VH
- 34 Typing Procedures (2 cr, §33-34; prereq soph, 33, 45 words a min)
 IV MTWThF, 209VH
- 38 Shorthand (3 cr, §37-38-39; prereq 37)
 III MTWThF, 211VH
- 39 Shorthand (3 cr, §37-38-39; prereq 38)
 -1, II MTWThF, 209VH
 -2, III MTWThF, 209VH
- 42 Adv Secretarial Procedure (3 cr; prereq* 34, 41)
 II MTWThF, 211VH, Peterson
- 50 Insurance Principles (3 cr; prereq 7)
 -1, III MWF, 115VH, Graves
 -2, IV-V½ TTh, 1VH
 -3, VIII MWF, 1VH
- 81 Intermediate Economic Analysis (3 cr, §80-81; prereq 80)
 -1, I MWF, 115VH
 -2, II MWF, 207VH
 -3, III MWF, 2VH
 -4, VII MWF, 205VH
- 84 Comparative Economic Systems (3 cr; prereq 7)
 III MWF, 205VH, Garver
- 99 Honors Course (4 cr; prereq cons maj advis)
 Ar
- 106 Critics of Classical Economists (3 cr; prereq* 105)
 VII MWF, 2VH, Papandreou
- 110 Industrial Price Control (3 cr; prereq 7, 15 addtl cr econ and/or BA)
 IV MWF, 115VH, Garver
- 123 Theory of Statistics (3 cr; prereq 122)
 II MWF, 205VH, Mudgett
- 126 Economic Probs of Latin America (3 cr; prereq 7)
 II MWF, 221VH, Myers
- 142 Monetary, Banking Policy (3 cr; prereq 3, 7)
 -1, I MWF, 4VH
 -2, VI MWF, 2VH
 -3, VIII MW, 2VH
- 149 Business Cycles (3 cr, prereq* sr, 142)
 -1, III MWF, 113VH
 -2, IV MWF, 207VH
 -3, VI MWF, 113VH
- 155 Corporation Finance (3 cr; prereq 3, 7)
 -1, II MWF, 1VH
 -2, IV MWF, 113VH
 -3, VII MWF, 207VH

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| <p>161 Labor Probs, Trade Unionism (3 cr; pre-req 7)
Lect. I MW, NHAud, Yoder
-1, I Th, 221VH
-2, II T, 301VH
-3, II T, 306VH
-4, IV T, 221VH
-5, IV T, 2VH
-6, VII Th, 253TSF</p> <p>164 Labor Legislation, Social Insurance (3 cr; prereq 161)
II½-III TTh, 4VH, Turnbull</p> <p>175 Govt Regulation of Business (3 cr; prereq 80)
-1, I MWF, 207VH
-2, III MWF, 1VH
-3, VII MWF, 1VH
-4, VIII MWF, 207VH</p> | <p>176 Intl Commercial Policies (3 cr; prereq 7)
I MWF, 1VH, Uppgren</p> <p>179 Economic Probs of the Far East (3 cr; prereq 7)
VI MWF, 115VH, Vaile</p> <p>193 State, Local Taxation (3 cr; prereq 189, 192 or BA 58)
II½-III TTh, 207VH, Borak</p> <p>195 Fiscal Policy (3 cr; prereq sr with cons instr, grad; 20 cr soc sci incl 142, BA 58)
IV-V½ TTh, 113VH, Heller</p> <p>206 Seminar-Market Prices (3 cr)
VIII½-IX MW, 210VH, Vaile</p> <p>209 Seminar-Monopolistic Competition (3 cr)
VII-VIII½ MW, 210VH, Boddy</p> <p>252 Seminar-Industrial Relations (3 cr)
VII-VIII½ TTh, 210VH, Yoder</p> <p>281 Seminar-Industrial Mgt (3 cr)
VIII½-IX TTh, 210VH, Filippetti</p> |
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INSTITUTE OF CHILD WELFARE (CW)

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| <p>10 Introd Child Study (2 cr; prereq 3rd qtr fresh)
V TTh, 202Pt, Cummings</p> <p>40 Child Training (3 cr; prereq soph, Psy 2)
VI TTh, 202Pt, Fuller</p> <p>80 Child Psychology (3 cr; prereq Psy 2)
IV MWF, 216NH, Hansen</p> <p>131 Personality, Emotional, Social Development (3 cr; prereq sr, 12 cr psy)
VII MWF, 202Pt, Harris</p> <p>132 Later Childhood, Adolescence (3 cr; prereq sr, 12 cr psy)
II MWF, 202Pt, Harris</p> <p>141 Behavior Probs in Older Children (2 cr; prereq sr, 12 cr psy, educ psy or soc)
VIII-IX Th, 202Pt, Blodgett</p> <p>142 Psychology of Atypical Children (3 cr; prereq sr, 12 cr psy)
II TThS, 202Pt, Blodgett</p> <p>152 Childhood Education (2 cr; prereq sr, 12 cr psy)
VIII TTh, 102NH, Fuller</p> <p>160 Physical Growth, Development (3 cr; prereq sr, 12 cr psy)
I MWF, 202Pt</p> <p>185 Children in Changing World (3 cr; prereq sr, 12 cr psy, educ, or soc)
VI MWF, 202Pt, Templin</p> | <p>222 Seminar-Current Research (1 cr)
Ar</p> <p>225 Seminar-Developmental Theory (1 cr; prereq cons instr)
Ar</p> <p>227 Multiple Factor Analysis (2 cr; prereq cons instr)
Ar, Roff</p> <p>232 Seminar-Recent Literature (1 cr)
IX M, 202 Pt, Anderson</p> <p>242 Practicum-Behavior Probs (ar cr; prereq 241, cons instr)
Ar</p> <p>250 Internship in Professional Work with Children (ar cr; prereq cons instr)
Ar</p> <p>272 Readings, Research in Child Development (ar cr)
Ar</p> <p>275 Technique, Field Work in Parent Education (ar cr; prereq cons instr)
Ar, Cummings</p> <p>291 Mental Examination in Preschool Child (4 cr; prereq cons instr)
Ar, Blodgett</p> |
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COLLEGE OF EDUCATION

AGRICULTURAL EDUCATION (AGED)

- 56 Rural Youth Leadership (3 cr)
V MWF, 301Hr, Bjoraker, Swanson
- 81 Teaching Agriculture (3 cr; prereq Ed 55B)
IV MWF, 301Hr, Kitts
- 82 Methods in Teaching Agriculture (3 cr; prereq 81)
III MWF, 301Hr, Kitts
- 91 Supervised Teaching Experience (6 cr; prereq 82, C aver in maj)
Ar, Kitts
- 104 Planning Programs (2 cr; prereq* 91)
III TTh, 301Hr, Peterson
- 221 Field Problems (3 cr)
Ar, Peterson, Staff
- 232 Research-Agricultural Education (3-9 cr; prereq 15 cred educ)
Ar, Peterson, Staff
- 291 Seminar-Agricultural Education (ar cr)
II-IV S, 301Hr, Peterson, Staff

ART EDUCATION (ARED)

- 14 Introd Art Education (2 cr)
V MWF, 109J
- 19 Survey of Art in Life, Education (3 cr)
—1, I-II MWF, 109J, Page
—2, VII-VIII MWF, 109J, Gayne
—3, VI-VIII TTh, 109J, Page
—4, I-II TThS, 109J, Hastie
- 58 Prin, Experiences in Art Education (5 cr)
III-IV MTWThF, 109J, Page, Hastie
- 88 Teaching, Supervision of Art (4 cr, 186-87-88; prereq 87)
IX-X T, 109J, Hastie
- 153 Curriculum Building in Art Education (3 cr)
III-V S, 109J
Canceled
- 157 Reading, Research in Art Education (2 cr; prereq cons instr)
IX Th and hr ar, 109J, Gayne
- 295 Probs in Art Education (ar cr; prereq cons instr)
VIII Th, 109J, Gayne

CURRICULUM AND INSTRUCTION
(EDCI)

- 58 Core Curriculum Foundations (1 cr; prereq cons instr)
—1, VI-VII W, 109Psy, Bossing
—2, VI-VII W, 201WuH, Cary
- 60B Teaching Reading in Intermediate Grades (3 cr; prereq Ed 71B)
VII T, VII-VIII Th, 202WuH, Bond
- 61 Teaching Social Studies in Elem School (3 cr; prereq Ed 71B)
—1, VI MWF, 105MurH, Wronski
—2, III-IV S, 206WeH, Fausch

- 65 Teaching Science in Elem School (2 cr; prereq Ed 71B)
IX TTh, 211NH, Boeck
- 104 Adult Education (3 cr)
VIII-IX Th, 107NH, Nolte
- 105 Visual Aids in Teaching (3 cr)
VII MWF, 201WeH, Wendt
- 107 Radio in Education (3 cr; prereq 9 cr educ)
III MWF, 302MurH, Tyler
- 109 Audio-Visual Materials, Equipment Lab (3 cr; prereq 105 or concur regis)
Lect VII T and 2 hrs lab ar in afternoon, 6WeH, Wendt, Luce
- 114 School Health Education Program (3 cr; prereq sr, EdT 83, PH 50)
I TThS, 201NGW, Ericson
- 117 Rural Education for Administrators, Teachers (3 cr; prereq sr, cons instr)
I-II S and hr ar, 100NH, Archer
- 122 Literature for Adolescents (2 cr; prereq* Ed 55B)
IX-X M, 216NH, Smith
- 125 Occupational Information Lab (1 cr; prereq cons instr)
Ar, Dugan
- 129 Prin, Probs of Teaching Social Hygiene (3 cr; prereq 9 cr educ)
VIII-IX M, 320SBH, Pearce, Griffiths, Smith
- 130 Probs of Child Education (2 cr; prereq sr, 9 cr educ incl EdT 55)
VIII WF, 202Pt, Fuller
- 133 Consumer Education in Secondary Schools (3 cr)
III-IV S, 110UHS, Price
- 136 Organization, Supervision of Distributive Education Programs (3 cr; prereq cons instr)
IX-X Th and hr ar, 202TNUH, Meyer
- 142 Canceled
- 145 Remedial Reading (3 cr; prereq recent course-reading or basic training counseling or school psych work)
I-II S and hr ar, 209NH, Bond
- 157 Practice in Supervision (3 cr; prereq cons instr)
Ar, Brueckner
- 161 Curriculum Construction-Business Education (3 cr; prereq* 113)
IX-X W and hr ar, 111Bu, Price
- 170B Curriculum Construction in Secondary Schools (3 cr; prereq* 113 or 119, 170)
I-II S and hr ar, 102F, Bossing
- 171 Curriculum Lab (2-6 cr; prereq* 170)
Ar, Bossing
- 173A Units of Instruction in Elementary School (3 cr; prereq 119 or teach experience)
III-IV S and hr ar, 209NH, Cook
- 173B Units of Instruction in Secondary School (3 cr; prereq* 113)
III-IV S and hr ar, 102F, Bossing

- 174 Clinical Methods in Speech Pathology (3 cr; prereq Spch 61, 67, 85, 162, 163 or concur regis)
VIII WF and hr ar, 306F, Bryngelson
- 175 Clinical Methods in Speech Pathology (3 cr; prereq Spch 61, 67, 85, 162, 163 or concur regis)
VIII WF and hr ar, 306F, Bryngelson
- 176 Clinical Methods in Speech Pathology (3 cr; prereq Spch 61, 67, 85, 162, 163 or concur regis)
VIII WF and hr ar, 306F, Bryngelson
- 199E Internship (ar cr)
Ar, Grim
- 201 Probs in Teaching Social Studies (3 cr a qtr; prereq cons instr)
IX-X T, 112Bu, Giles, Wronski
- 205 Probs in Visual Education (ar cr; prereq cons instr)
Ar, Wendt
- 207 Probs in Radio Education (1-3 cr; prereq 107)
Ar, Tyler
- 215 Probs in School Health Education Program (ar cr; prereq cons instr)
Ar, Grout
- 216 Field Work in School Health Education Program (ar cr; prereq cons instr)
Ar, Grout
- 217 Seminar School Health Education Program (ar cr; prereq cons instr)
Ar, Grout
- 222 Seminar-Current Probs in High School Instruction Techniques (1-3 cr)
IX-X W, 221Bu, Bossing, Smith
- 225 Spec Probs in Supervision, Instruction in Secondary Schools (ar cr)
Ar, Boardman, Keller
- 226 Seminar-Elementary School Probs (no cr)
IX-X Th, 221Bu, Staff
- 227 Probs of Rural Education (ar cr; prereq 117)
Ar, Archer
- 228 Probs in Higher Education, Teacher Training (ar cr; prereq cons instr)
Ar, Grim, Eckert
- 238 Probs of Distributive Education (ar cr; prereq cons instr)
Ar, Meyer
- 239 Probs of Business Education (ar cr; prereq cons instr)
Ar, Price
- 243 Research in Reading (3 cr; prereq cons instr)
VIII-IX T, 111Bu, Bond
- 252 Effective College Teaching (3 cr; prereq* 18 cr educ)
—1, II TTh and hr ar, 209NH, Eckert
—2, I-II S and hr ar, 206WeH, Eckert
- 261 Spec Probs in School Supervision (ar cr; prereq cons instr)
Ar, Brueckner
- 264 Research-Educational Diagnosis (3 cr; prereq 151)
III-IV S, 100NH, Brueckner
- 266 Supervision of Instruction in Secondary Schools (3 cr)
IV MWF, 11F, Boardman
- 271 Probs of Curriculum Construction (3-9 cr; prereq cons instr)
Ar, Bossing, Cook, Archer
- 273 Probs in Reading (3-9 cr; prereq cons instr)
Ar, Bond
- 284 Probs in Student Teaching (3-9 cr; prereq cons instr)
Ar, Grim
- 285 Professional Education of Teachers (3 cr)
III-IV S and hr ar, 112Bu, Grim
- 296 Spec Probs Teaching English (ar cr; prereq 294)
Ar, Smith

EDUCATION (ED)

- 55B Introd Secondary School Teaching (5 cr; prereq 6 cr psych)
—1, Lect I TThS, BuAud, Swenson
—1, VI-VII TTh, 111Bu, Adolphsen
—2, III-IV TTh, 112Bu, Adolphsen
—3, II-III TTh, 5F
—2, Lect II MTWThF, 111MeS, Hovet (for nurs educ maj only)
- 71C Introd Elem School Teaching (5 cr; prereq 71B)
Lect III MWF, 211NH, Brueckner
—1, I-II TTh, 206F, Wardeberg
—2, I-II TTh, 9F, Goossen
—3, III-IV TTh, 115Psy, Wardeberg
—4, III-IV TTh, 11F, Flanders
—5, VI-VII TTh, 221Bu, Wardeberg
- 81 Educ-PH Nurses (3 cr, not open to educ degree candidates)
III MWF, 113MeS, Grout

EDUCATIONAL ADMINISTRATION (EDAD)

- 210 Financial Aspects, Public School Business Admin (3 cr; prereq 227)
I MWF, 102NH, Neale
- 218 Recent Literature in Secondary Education (ar cr)
IX-X W, 221 Bu, Bossing, Boardman
- 226 School Plant Planning, Mgt (3 cr; prereq 227)
I-II S, 105F, Neale
- 228 Spec Probs, Education Admin (ar cr; prereq 225)
Ar, Neale
- 235 Seminar-Education Admin (no cr)
Ar, Neale
- 265 Admin Non-instructional Activities in Secondary School (3 cr)
III MWF, 11F, Boardman
- 270 Spec Probs in Secondary Education (ar cr)
Ar, Boardman, Bossing, Keller

EDUCATIONAL PSYCHOLOGY (EPSY)

- 60 Introd Measurement, Statistics (3 cr; prereq 6 cr psych)
II MWF, 109F, VanWagenen
- 115 Psychology of Elementary School Subjects (2 cr; prereq 9 cr psych, educ)
IX-X W, 301Psy, VanWagenen
- 120 Basic Prin of Measurement (3 cr; prereq 60)
VII MWF, NHAud, Cook
- 144 Individual Adult Testing (3 cr; prereq 120)
VIII MWF and ar, 209NH, Delp
- 150 Psycho-educational Clinic (sec 1, ar cr, sec 2, 3 cr; prereq 142 or EdCI 145, cons instr)
—1, Ar, Delp
—2, IX-X M and ar, 109Psy, Bond
- 158 Psychology of Adolescence (3 cr; prereq Ed 55B)
III MWF, 105MurH, Edwards
- 159 Personality Adjustment, Mental Hygiene (3 cr; prereq sr, rec course in psych)
III MWF, 201WuH, Wrenn
- 186 Educating the Visually Handicapped (2 cr; prereq* 182)
III-IV S, 102NH, Delp
- 218 Statistical Methods in Education (3 cr)
II MWF, 209NH, P O Johnson
- 218a Statistical Methods in Education Lab (2 cr; prereq 217a)
II-III TTh, 5ShH, Moonan
- 221 Adv Theory of Measurement (2 cr; prereq 220)
IX-X T, 301 Psy, VanWagenen
- 226 Diagnosis, Counseling in Student Personnel Program (3 cr; prereq* 225)
IV MWF, 201WuH, Wrenn
- 233 Probs in Guidance, Personnel Work (ar cr; prereq cons instr)
Ar, Edwards, Wrenn, Dugan
- 240 Probs in Measurement (3 cr)
Ar, P O Johnson
- 243 Statistical Probs for Students in Educational Psychology (3 cr)
Ar, P O Johnson
- 253 Research Probs (ar cr; prereq cons instr)
Ar, Staff
- 254 Measurement, Evaluation in Higher Education (3 cr)
III-IV S and hr ar, 109Psy, P Johnson
- 260 Educational Psychology Seminar (no cr, for PhD candidates)
VIII-IX F, 115Psy, Staff
- 281 Practice in Personnel Work (sec 1, 3 cr, sec 2, ar cr; prereq 225, 226)
—1, (SCB Sec), VI-VII F and hr ar, 101EdH, Hagenah
—2, Ar, Edwards, Wrenn
- 282 Practice in High School Personnel Work (3 cr)
Ar, Dugan
- 290 Individual Differences (3 cr)
I MWF, 115Psy

- 294 Psychology of Learning (3 cr; prereq 293)
III MWF, 115Psy, McConnell, Swenson

HISTORY AND PHILOSOPHY OF EDUCATION (HED)

- 71 History Education (5 cr)
IV MTWThF, 109Psy, Alexander
- 110 Intercultural Education (3 cr)
IX-X T, 221Bu, Cary
- 155 History of Public Education in US (3 cr)
VI MWF, 221Bu, Alexander
- 180 School, Social Order (3 cr; prereq sr, Ed 55B or 71C)
—1, VII-VIII T, VII Th, 216NH, Beck
—2, II MWF, 110P, Cary
—3, VIII MWF, 216NH, Cary
- 182 Comparative Philosophies of Education (3 cr)
IX-X W, 112Bu, Beck
- 241 Probs in History, Philosophy of Education (ar cr; prereq cons instr)
Ar, Cary, Beck, Alexander
- 242 Seminar-Philosophy of Education (3 cr)
IX-X M, 111Bu, Cary, Beck

HOME ECONOMICS EDUCATION (HEED)

- 90 Child Training (3 cr; prereq Psy 1-2)
IV MWF, 203HE, Peterson, Fuller
- 91 Observation, Materials, Teaching Home Economics (5 cr; see col bul)
VIII MWF, IX M and hr ar, 114HE, Rose, Kafka, Ford
- 92 Teaching Probs-Home Economics (2 cr; prereq sr, 91, 93 or concur regis 94, 192)
Ar, Rose
- 93 Supervised Teaching-Home Economics (6 cr; prereq see col bul)
Ar, Rose, Ford, Kafka, Hassinger, Thompson
- 94 Supervised Teaching-Home Economics (6 cr; see col bul)
Ar, Rose, Ford, Kafka
- 95 Field Experience for Home Demonstration Agents (6 cr; prereq cons dir HE educ and agric ext)
Ar, Rose
- 192 Evaluation-Home Economics Education (3 cr; prereq 91, Ed 55A-B)
VIII TTh, 203HE, Arny, Rose
- 193A Home Economics Curriculum (2-3 cr; prereq* 94)
IX-X W, 114HE, Arny, Rose
- 193B Home Economics Curriculum (2-3 cr; prereq* sr, cons instr)
III MWF, 114HE, Arny
- 194A Adult Education-Home Economics (3 cr; prereq 91, 93)
II MWF, 110HE, Ford
- 194B Adult Education-Home Economics (3 cr; prereq 91, 93)
IX MF, 2 hrs ar, 112HE, Ford

- 199E Internship (ar cr)
Ar, Rose
- 243 Trends-Home Economics (3 cr; prereq cons instr)
III-IV S, 114HE, Rose
- 293 Probs-Home Economics Education (1-3 cr; prereq cons instr, 294 advised)
Ar, Rose, Esteros
- 295 Seminar-Home Economics Education (1 cr)
IX Th, 114HE, Army, Rose, Esteros

INDUSTRIAL EDUCATION (IND)

- 3 Shop Finishing (3 cr; prereq 2)
VIII-IX TTh, 6Pt, Nelson
- 7 Building Construction Drawing (3 cr; prereq 6)
II-IV TTh, 201TNUH, Nelson
- 11 Special Class Woodwork (2 cr)
—1, I-IV S, 6Pt, LaBerge
—2, VIII-IX MW, 6Pt, Wall
- 12 Electricity, Radio (3 cr; prereq 10)
III-IV MWF, 15TNUH, Nelson
- 15 Basic Graphic Arts (3 cr)
VII-VIII MWF, 14TNUH, Wall
- 44 Equipment, Mgt (3 cr; prereq 42)
IX-X M and hr ar, 202TNUH, Widdowson
- 50A Directed Teaching (3 cr; prereq 70 and 80, Ed 55B)
Ar, Anderson
- 50B Directed Teaching (3 cr; prereq 70 and 80, Ed 55B)
Ar, Anderson
- 50C Directed Teaching (3 cr; prereq 70 and 80, Ed 55B)
Ar, Anderson
- 70 Teaching Industrial Subjects (3 cr; prereq 42, Ed 55B)
IX-X W and hr ar, 202TNUH, Micheels
- 101 Tests in Industrial Subjects (3 cr; prereq Ed 55B)
II MWF, 202TNUH, Micheels
- 105 Admin Industrial Education (3 cr; prereq 61, 80)
II-IV S, 202TNUH, Smith
- 109 Conference Leading for Industry (3 cr; prereq cons instr)
VIII-X T and hr ar, 116TNUH, Widdowson
- 125 Phil, Practice of Industrial Education (3 cr, §61)
I MWF, 202TNUH, Smith
- 200 Research Probs (3, 6, or 9 cr)
—1, Ar, Smith
—2, Ar, Micheels
- Dunwoody Shopwork, Drawing (ar cr)
Ar, Smith
- Off-Campus Courses, Services (ar cr)
Ar, Widdowson

METHODS AND DIRECTED TEACHING (EDT)

- 51B Teaching Nursing (4 cr; prereq 51A)
VII MWF, 113MeS, Boyle, Norris

- 52 Directed Teaching in Secondary School (ar cr; prereq Ed 55B, spec methods course)
Ar, Grim
- 53A Teaching Handicapped Children (4 cr; prereq Ed 71C)
Ar, Bond
- 53B Teaching Handicapped Children (4 cr; prereq 53A)
Ar, Bond
- 54A Directed Teaching in Elem School (4 cr, †54A-B; prereq Ed 71C)
I-IV MTWThF, Tuttle School, and hr ar, Staudenmaier, Andrews
- 54B Directed Teaching in Elem School (4 cr, †54A-B; prereq 54A)
I-IV MTWThF, Tuttle School, and hr ar, Staudenmaier, Andrews
- 54C Directed Teaching in Elem School (4 cr; prereq 54B)
Ar, Staudenmaier, Andrews
- 58 Nursery School, Kindergarten Lab (5 cr; prereq 57)
VIII MTWThF, 112Bu, Peterson
- 68Am Teaching Natural Science (3 cr; prereq Ed 55B, for minors only)
IX-X M, IX W, 3UHS, Boeck
- 69Am Teaching Social Studies (3 cr; prereq Ed 55B, for minors only)
VIII M, VIII-IX W, 109Psy, West
- 72A Directed Teaching of Distributive Education Subjects (2 cr, †72A-B-C; prereq Ed 55B, cons instr)
Ar, Meyer
- 72B Directed Teaching of Distributive Education Subjects (2 cr, †72A-B-C; prereq 72A)
Ar, Meyer
- 72C Directed Teaching of Distributive Education Subjects (2 cr, †72A-B-C; prereq 72B)
Ar, Meyer
- 73A Directed Teaching of Business Subjects (2 cr, †73A-B-C; prereq Ed 55B)
Ar, Price
- 73B Directed Teaching of Business Subjects (2 cr, †73A-B-C; prereq Ed 55)
Ar, Price
- 73C Directed Teaching of Business Subjects (2 cr, †73A-B-C; prereq Ed 55B)
Ar, Price
- 77 Teaching Nursery School (4 cr; prereq see col bul)
IX M and 15 hrs ar, 112Bu, Fuller
- 78 Teaching Kindergarten (4 cr; prereq see col bul)
IX M and 15 hrs ar, 112Bu, Fuller
- 79 Teaching Primary Grades (4 cr; prereq see col bul)
IX M and 15 hrs ar, 112Bu, Fuller
- 80 Teaching Typewriting (2 cr; prereq Ed 55B or concur regis)
IX-X M, 100NH, Price
- 84A Field Work-Recreational Leadership (2 cr)
V W and 6 hrs ar for maj, 221Bu, Giles

- 84B Field Work-Recreational Leadership (2 cr)
V W and 6 hrs ar for maj, 221Bu, Giles
- 84C Field Work-Recreational Leadership (2 cr)
V W and 6 hrs ar for maj, 221Bu, Giles
- 85A Field Work-Recreational Leadership (1 cr
minor, 2 cr maj)
V W and 3 hrs ar for minors, 221Bu, Giles
V W and 6 hrs ar for maj, 221Bu, Giles
- 85B Field Work-Recreational Leadership (1 cr
minor, 2 cr maj)
V W and 3 hrs ar for minors, 221Bu, Giles
V W and 6 hrs ar for maj, 221Bu, Giles
- 85C Field Work-Recreational Leadership (1 cr
minor, 2 cr maj)
V W and 3 hrs ar for minors, 221Bu, Giles
V W and 6 hrs ar for maj, 221Bu, Giles
- 90C Teaching Distributive Education Subject
(2 cr; prereq cons instr)
IX-X T, 202TNUH, Meyer

MUSIC EDUCATION (MUED)

- 6 Applied Instrumental Technique (2 cr; pre-
req* educ maj)
VI MTWF, 4NMA, Prescott
- 53 High School Methods (3 cr; prereq* 50B,
Ed 55B)
III MWF, 4ScH, Winslow
- 60 Supervision, Teaching of Music (3 cr, †60-
61-62; prereq sr, 50B, 53, Ed 55B, cons
instr)
IX-X W and 6 hrs ar, 4ScH, Winslow
- 61 Supervision, Teaching of Music (3 cr, †60-
61-62; prereq sr, 50B, 53, Ed 55B, cons
instr)
IX-X W and 6 hrs ar, 4ScH, Winslow
- 62 Supervision, Teaching of Music (3 cr, †60-
61-62; prereq sr, 50B, 53, Ed 55B cons
instr)
IX-X W and 6 hrs ar, 4ScH, Winslow
- 64 Band Organization (3 cr; prereq* 4-5-6)
VII MWF, 4NMA, Prescott
- 68 Conducting Instrumental Music, Survey of
Materials (4 cr; prereq sr, 65)
III-IV MWF, 104ScH, Ivory
- 104E Adv Topics in Vocal Music Education (3
cr; prereq sr, cons instr)
IV MWF, 4ScH, Winslow
- 224E Seminar—Individual Research Probs (2-6
cr)
Ar, Winslow, others
- 225E Adv Applied Music (2-4 cr; prereq entr
exam)
Ar

NURSING EDUCATION (NUED)

Students registering in these courses must be registered in the College of Education (major Nursing Education) or in some other nursing sequence.

- 29B Adv Psychiatric Nursing (6 cr; prereq
29A)
Ar, Lediger

- 33B Adv Medical Nursing (6 cr; prereq 33A)
Ar, Coe
- 34B Adv Obstetric Nursing (6 cr; prereq 34A)
Ar
- 40B Adv Operating Room Nursing (6 cr; pre-
req 40A)
Ar
- 46B Adv Rural Nursing (12 cr; prereq 46A)
Ar, Lowe
- 47B Adv Tuberculosis Nursing (10 cr; prereq
47A)
Ar, Emerson
- 52B Adv Surgical Nursing (6 cr; prereq 52A)
Ar, Hanson
- 55 Operative Aseptic Technique (1 cr)
Ar
- 57B Field Practice—Psychiatric Nursing (11 cr)
Ar
- 60 Ward Admin (5 cr)
III MTWThF, 111MeS, Grainger, Ar
- 61B Adv Pediatric Nursing (6 cr; prereq 61A)
Ar
- 65 Analysis Nursing Care (4 cr)
VII-VIII TTh and ar, 111MeS, Hanson
- 67 Field Practice—Ward Admin (6 cr; prereq
sr, 60, 65, 73, EdT 51B, cons instr)
VIII MWF and ar, 111MeS, Grainger
- 68 Construction, Use of Examinations, Other
Measures in Basic Nursing Courses (3 cr)
I MWF, 304IA, Johnston
- 69 Survey of Conditions, Trends in Nursing
(3 cr)
IV MWF, 111MeS, Densford
- 72 Prin of Learning, Methods of Teaching
(3 cr)
VIII TTh, IX Th, 2309PoH, Boyle, Paske-
witz
- 167 Studies, Experience in Ward Admin (8 cr;
prereq 60, 65, 73, EdT 51B, cons instr)
VIII MWF and ar, 111MeS, Grainger
- 171 Curriculum of School of Nursing (3 cr;
prereq 69, EdT 51A-B or concur regis)
VI MW and ar, 111MeS, Harrington

PHYSICAL EDUCATION FOR MEN (PE)

Professional Courses

- 4B Basketball Fundamentals (1 cr)
VII-VIII TTh, CH, Cowles, Vancisin
- 5C Stunts, Contests, Softball, Baseball (1 cr)
III-IV TTh, CH, Ostrander, Roning, Siebert
- 6C Aquatics (1 cr)
V MWF, CH, Thorpe
- 7C Recreational Games (1 cr; prereq soph)
II-III TTh, CH, Ostrander, Osell
- 8 Tennis, Golf (1 cr)
VI MWF, CH, Brain, Bolstad
- 9B American Country, Ballroom Dancing
(1 cr)
V or VI TTh and 1 hr ar, NGW, Piper, Bell

- 11C Survey Recreation Activities (1 cr, re-
creat students only)
V M, CH, Giles
- 23C Introd Recreation Leadership (1 cr; pre-
req 11A-B-C)
V F, CH, Giles
- 32 Canceled
- 43 Camp Aquatics (2 cr)
IV MWF, CH, Thorpe, Ostrander
- 47 Camp Leadership (2 cr)
VII MW, CH, Osell, Thorpe
- 58 Leadership in Community Recreation (3 cr;
prereq 57)
VII MWF, CH, Giles
- 59 Canceled
- 60A Prevention, Care of Injuries (3 cr; pre-
req 50, 51, Anat 57)
IV TThS, CH, Stein
- 60B Athletic Training Lab (1 cr; prereq 60A)
Ar, Stein
- 61 History Physical Education (3 cr; prereq
soph)
I MWF, CH, Keller
- 63 Organization Admin of Physical Education
(3 cr; prereq 32 or 101, 55)
III MWF, CH, Piper
- 64B Leadership in Nature Recreation (2 cr;
prereq 64A)
V-VII Th, CH, Thompson
- 67 Football Coaching (2 cr; prereq jr, 4A, yr
exper on squad)
II TThS, CH, Bierman
- 73 Directed Teaching (2 cr; prereq see col bul)
V M and 5 hrs ar, CH, Bartelma
- 74 Directed Teaching (2 cr; prereq see col bul)
V M, and 5 hrs ar, CH, Bartelma
- 75 Directed Teaching (2 cr; prereq see col bul)
V M and 5 hrs ar, CH, Bartelma
- 107 Canceled
- 112 Programming in Recreation (3 cr; prereq
57-58)
VI MWF, CH, Fitzgerald
- 116 Community Recreation Resources, Organiza-
tions (3 cr; prereq 110-111-112)
II MWF, CH, Ostrander
- 121 Prin Recreation Methods (3 cr; prereq Ed
T 84A-B-C, 85A-B-C)
III MWF, CH, Fitzgerald
- 135 Tests, Measurements in Physical Education
(3 cr; prereq sr, 10 cr PE and EPsy 60)
III MWF, CH, Keller
- 173 Canceled
- 234 Secondary School, College Curriculum in
Physical Education, Recreation (3 cr; pre-
req 63, 101)
II MWF, CH, Nordly
- 242 Community Organization for Recreation
(3 cr)
IV MWF, CH, Fitzgerald
- 247 Probs in Health Education (cr ar)
Ar, Nordly

- 261 Seminar—Contemporary Probs in Physical
Education Recreation (cr ar; prereq 236,
247)
Ar, Nordly

PHYSICAL EDUCATION FOR WOMEN (PE)

Professional Courses

Courses above 100 open to both men and women

- 21C Elem Physical Education
—9, Tennis (½ cr)
V MW, 151NGW, Tenney
—10, Golf (½ cr)
VIII TTh, 60NGW, Tenney
—11, Aquatics (½ cr)
VII TTh, 58NGW, Eibner
—12, Ballroom, Country Dance (½ cr)
Ballroom, V TTh, Country, VI TTh,
153NGW, Bell
- 25 First Aid (1 cr)
III TTh, 201NGW, 153A NGW
- 27 Instructor's Course—First Aid (1 cr, pre-
req 26 or current adv first aid cert)
IV MW, 201NGW, Jaeger
- 41C Intermediate Physical Education
—13, Track, Field (½ cr)
VI TTh, 60NGW, Birmingham
—14, Officiating Softball (½ cr)
VIII TTh, 153NGW, Hauptfuehrer
—15, Aquatics (W.S.L.) (1 cr; prereq 41A
adv aquatics)
VI MWF, 58NGW, Larson
—16, Adv Modern Dance (½ cr; prereq
41B Int Modern Dance)
VII TTh, 151NGW, Bockstruck
—17, Adv Tennis (½ cr; prereq 21C Tennis)
III TTh, 151NGW, Tenney
- 54 Camp Leadership (3 cr)
II MWF, 201NGW, Tinker
- 56 Adv Folk Dance (2 cr; prereq cons instr)
III MWF, 153NGW, Bockstruck
- 57B Teaching Aquatics (1 cr; prereq 57A)
III TThS, 201NGW, 58NGW, Larson
- 60 Prin of Play (3 cr; prereq Psy 2)
—1, VII MWF for CW maj, 201NGW, Tinker
—2, VIII MWF for Elem Ed maj, 201NGW,
153NGW, Tinker, Jaeger, Wilson, Ericson
—3, IX MWF for Elem Ed maj, 201NGW,
153NGW, Tinker, Jaeger, Wilson, Ericson
- 61C Teaching Team Sports (1 cr; prereq 41C
Officiating Softball)
II MWF, 201NGW, 60NGW, Hauptfuehrer
- 65A Teaching Individual, Dual Sports (1 cr;
prereq 41C Adv Tennis; 21A Badminton)
I TThS, 3NGW, 60NGW, Jaeger
- 73A Teaching Rhythm (1 cr; prereq 21A
Fundamentals Rhythm)
II TThS, 151NGW, 3NGW, Bockstruck

- 88 Adv Dance Composition (2 cr; prereq cons instr)
3:00-4:15 TTh, 151NGW, Bell, Bockstruck
- 89 Dance Production (3 cr; prereq cons instr)
VIII MWF, 151NGW, Bell, Bockstruck
- 90A Student Teaching (2-3 cr; prereq cons instr)
II TTh and ar, 3NGW, Jaeger, Hauptfuehrer
- 90B Student Teaching (2-3 cr; prereq sr, cons instr)
II TTh and ar, 3NGW, Jaeger, Hauptfuehrer
- 90C Student Teaching (2-3 cr; prereq sr, cons instr)
II TTh and ar, 3NGW, Jaeger, Hauptfuehrer
- 95 Administration of Physical Education (3 cr; prereq sr)
II MWF, 201NGW, Baker
- 112E Supervision of Physical Education (3 cr; prereq sr, cons instr)
IV MWF, 201NGW, Baker
- 114E School Health Program (3 cr)
I TThS, 201NGW, Ericson

GENERAL COLLEGE (GC)

- 1A Individual Orientation (4 cr)
-1, II MTWF, 10P, Gamelin
-2, IV MTWF, 10P, Gamelin
-3, VI MTWF, 10P, West
- 2 Vocational Orientation (5 cr; prereq cons instr or advis)
-1, III MTWThF, 104WeH, Borow
-2, IV MTWThF, 104WeH, Richardson
- 3 Home Life Orientation (5 cr)
-1, III MTWThF, 206WeH, Anderson
-2, V MTWThF, 5Lib, Anderson
- 4 Probs of Contemporary Society (5 cr)
III MTWThF, 101WeH, McCune
- 6C Related Physical Sciences (5 cr, §7A, B, C, D*; prereq 6B)
III MTWThF, 166Ph, Harris
- 7B Elem Light, Astronomy (5 cr, §6A, B, C*)
I MTWThF, 150Ph, Appel
- 7D Elem Geology (5 cr, §6A, B, C*)
I MTWThF, 2P, Harris
- 7EX Sound in Music, Speech (3 cr)
VII MWF, 133Ph, Rassweiler
- 8 Fundamentals of Mathematics (4 cr; prereq 1 yr elem algebra)
-1, II MTWTh, 113F, Benenson
-2, III MTWTh, 113F, Benenson
- 10B Human Biology (3 cr; prereq 10A)
-1, I MWF, 110P, Resnick
-2, IV MWF, 201WeH, Resnick
- 10C Human Biology (3 cr)
-1, V MWF, 201WeH, Cieslak
-2, VI MWF, 201WeH, Cieslak
- 11C Basic Wealth (3 cr)
II MWF, 201 WeH
- 12 Nature Study (3 cr)
VII-VIII TTh, 206WeH, Cieslak
- 15 Clothing Selection, Purchase, Care (3 cr)
VII MWF, 206WeH, Bayor
- 17 Income Mgt, Buying (2 cr)
II MW, 455C, Kafka
- 19B Probs of Investment Transaction (4 cr; prereq* 19A)
III MTWTh, 6L, Rassweiler
- 21 Gen Arts (3 cr)
V MWF, 206WeH, Hill
- 22C Art Today (3 cr)
III MWF, 201WeH, Tallon
- 22X Art in Business (3 cr)
I MWF, 206WeH, Tallon
- 23A Art Lab (3 cr)
Lect IV T, 206WeH
-1, III-IV MW, 301WeH, Duncan
-2, VI-VII MW, 301WeH, Duncan
-3, VI-VII TTh, 301WeH, Duncan
- 23D Introd Commercial Art (3 cr; prereq 23C)
III-IV TTh, 301WeH, Tallon
- 24C Music Today (2 cr)
-1, II TTh, 202WeH, Yohe
-2, IV TTh, 202WeH, Hill
- 25C Music Today (3 cr; prereq* 24A with grade of 50 per)
VII-VIII MW, 202WeH, Hill
- 25D Music Lab (2 cr)
VI MWF, 202WeH, Yohe
- 26A Photography (3 cr)
V Th, 105MurH, VI-IX T, 20MurH, Liebling
- 26B Photography (3 cr; prereq* 23A, grade B in 26A)
VI-IX Th, 20 MurH, Liebling
- 29CX Library Methods: Techniques II (5 cr; prereq 29AX, BX)
VI-VII TTh, VII M, 3Lib, Methven
- 29DX Library Methods: Practice Work (3 cr; prereq 29BX, concur regis 29CX)
Ar, Methven
- 30A Literature Today (3 cr)
IV MWF, 313Z, Appel
- 30B Literature Today (3 cr; prereq 30A, 30C or 30D)
I MWF, 209NH, Wright
- 30C Literature Today (3 cr)
II MWF, 206WeH, Draxten
- 30E Literature Today (3 cr)
VI MWF, 206WeH, Hensley
- 31A Practice in Effective Writing (3 cr)
-1, I MF, I-II W, 302WeH, Bechtle
-2, IV-V M, IV WF, 14P, Wright
-3, V TF, IV-V Th, 14P, Wright
-4, VI MF, VI-VII W, 14P, Sheldon
-5, VI MW, VI-VII F, 302WeH, Appel

- 31B** Organization, Writing (3 cr; prereq 31A)
 —6, II W, II-III F, 14P, Kivits
 —7, II-III M, III W, 302WeH, Hensley
 —8, III T, II-III Th, 302WeH, Hensley
 —9, VI T, VI-VII Th, 14P, Draxten
 —10, VII M, VII-VIII W, 302WeH, Bechtle
- 31C** Report Writing (3 cr; prereq 31A, 31B recommended)
 —11, I-II M, I W, 14P, Liebeler
 —12, I-II T, I Th, 14P, Sheldon
 —13, IV T, IV-V Th, 302WeH, Sheldon
- 31D** Business Writing (3 cr; prereq 31A; 31B recommended)
 —14, I-II T, I Th, 302WeH, Kivits
 —15, IV-V M, V W, 302WeH, Draxten
 —16, IV W, III-IV F, 302WeH, Liebeler
 —17, VI-VII T, VI Th, 302WeH, Bechtle
- 32A** Personality, Language (3 cr)
 —1, I MWF, 306WeH, Olson
 —2, III MWF, 306WeH, Unes
 —3, V MWF, 306WeH, Unes
 —4, VI MWF, 306WeH, Olson
- 32B** Voice, Interpretation (3 cr; prereq 32A)
 —5, II MWF, 306WeH, Olson
- 32C** Speech Organization (3 cr; prereq 32A)
 —6, III MWF, 202WeH, Halvorson
 —7, IV MWF, 306WeH, Halvorson
- 32D** Group Discussion (3 cr; prereq 32A)
 —8, II T, II-III Th, 306WeH, Olson
 —9, III-IV T, IV Th, 306WeH, Unes
- 32EX** Everyday Business Speech (3 cr; prereq 32A)
 —10, VII MWF, 306WeH, Unes
- 33A** Speech Studio (3 cr)
 —11, V-VI T, V Th, 306WeH, Halvorson
- 33B** Speech Studio (3 cr; prereq 33A)
 —12, VIII T, VII-VIII Th, 306WeH, Halvorson
- 34A** Flight Probs (5 cr; prereq 7A, approval committee)
 V MTWThF, 145Ph, Koester
- 37** Social Trends, Probs (5 cr)
 I MTWThF, 201WeH, Cox
- 38** Gen Geography (5 cr)
 V MTWThF, 101WeH, Jennings
- 40A** Intro'd Philosophy (3 cr)
 III TTh, VI Th, 201WeH, Raab
- 40CX** Religions in Minnesota (3 cr)
 IV MWF, 218P, Allen
- 41** Practical Applications of Psychology (5 cr)
 V MTWThF, NHAud, Longstaff
- 42B** Personal Adjustment (3 cr; prereq 42A)
 VII MWF, 216NH, Templin
- 43A** Background of Modern World (5 cr)
 I MTWThF, 101WeH, Moen
- 44B** Current History (2 cr)
 VI TTh, 101WeH, Gluek
- 45A** Growth of American Democracy (5 cr)
 II MTWThF, 101WeH, Stout
- 45B** American Economic, Social Development (3 cr)
 VI MWF, 101WeH, Gluek
- 45C** Minnesota, Upper Midwest (5 cr)
 VII MTWThF, 101 WeH, Stout
- 45D** Community Probs (1-3 cr; prereq cons instr)
 VI TTh, 202WeH, McCune and Stout
- 46B** Functions, Probs of Govt (3 cr)
 IV MWF, 101WeH, Potter
- 47A** Fundamentals of Typewriting (1 cr)
 —1, II MTWThF, 107 TSMb, Newcomb
 —2, IV MTWThF, 107 TSMb, Newcomb
- 47BX** Bgn Shorthand (2 cr)
 VII MTWTh, 301Psy, Newcomb
- 47DX** Bookkeeping, Accounting Lab (3 cr; prereq* 47CX, cons instr)
 V-VI TTh, 301VH, Ellis
- 47EX** Office Organization, Procedure (2 cr; prereq cons instr)
 III T, III-IV Th, 6F, Liebeler
- 48C** Prin of Business Operation (3 cr; prereq 48B or 5 cr econ)
 VII MWF, 18ME
- 49C** Retailing, Selling (5 cr; prereq 49B)
 Lect II M, 104WeH
 —1, I-II TTh, 104WeH, Determan
 —2, 6:30-10:00 p.m. T, 104WeH, Determan

INSTITUTE OF TECHNOLOGY

CHEMISTRY

Analytical Chemistry (ANCH)

- 2** Quantitative Analysis (5 cr; prereq soph, InCh 13)
 Lect VI MWF, 410C, Meehan
 —1, Lab VII-IX MWF, 310C
 —2, Lab I-III TTh and 3 consec hrs from VI-IX T or VI-IX Th, 310C
 —3, Lab VI-X T, VI-IX Th, 310C
- 7** Quantitative Analysis (4 cr; prereq InCh 11 or 12)
 Lect VI TTh, 225C, O'Connor
 Rec I S, 115C
 Lab VII-X T, VII-IX Th, 2 hrs I-III TTh or II-IV W
- 98** Sr Topics (5 cr; prereq sr)
 Ar
- 102** Quantitative Analysis (5 cr; prereq InCh 13)
 VI-IX MWF, 310C, Meehan

- 103 Quantitative Inorganic Microanalysis (3 cr; prereq 1, 2)
VI F, 315C, Sandell
Lab, Ar
- 108 Gen Technical Analysis (2-3 cr; prereq 1, 2)
Ar, Sandell
- 109 Rock Analysis (3 cr; prereq 1, 2)
Ar, Peck
- 127 Optical Methods in Analytical Chemistry (2-3 cr; prereq PCh 103)
Ar, Meehan
- 133 Voltammetry, Amperometric Titrations (2 cr; prereq PCh 103)
VI MW, 315C, Kolthoff
- 134 Voltammetry, Amperometric Titrations Lab (2 cr; prereq 133 or concur regis)
Ar, Kolthoff
- 137 Seminar—Modern Probs in Analytical Chemistry (1 cr; prereq 1, 2, PCh 103)
IV T, 315C
- 138 Adv Volumetric Analysis (3 cr; prereq 131)
Ar, Kolthoff
- 203 Topics in Analytical Chemistry (3 cr; prereq 1, 2, 123)
Ar, Kolthoff
- 303 Research in Quantitative Analysis (ar cr)
Ar

Inorganic Chemistry (INCH)

- 2 Gen Inorganic Chemistry (4 cr; prereq 1)
Lect II TThS, 100C, Pray
Quiz VII Th, 100C
—1, Lab I-III M (for IT students)
—2, Lab I-III M (for SLA students)
—3, Lab VII-IX T (for Agric students)
- 7 Gen Inorganic Chemistry (5 cr; prereq 6)
Lect II TThS, 410C, Lindeke
Quiz I M, 410C
Lab II-III M, I-III W
- 11 Semimicro Qualitative Analysis (4 cr; prereq 2, 5, 7, or 10)
—1, Lect III MWF, 325C, O'Brien
Lab VI-IX F (for IT students)
—2, Lect II TThS, 325C, Heisig
Lab II-V W (for IT students)
—3, Lect VII TWF, 410C, Johnson
Lab V-VIII M (for IT students)
—4, Lect VI MWF, 100C, Pervier
Lab VI-IX Th (for SLA, Agric students)
—5, Lect VIII MWF, 225C, O'Brien
Lab VI-IX Th (for SLA students)
—6, Lect VII MWF, 100C, Maynard
Lab V-VIII Th (for Med, Med Tech students)
—7, Lect VII MWF, 325C, Brasted
Lab V-VIII T (for Pre-Dent, Nurs students)
- 12 Semimicro Qualitative Analysis (5 cr; prereq 2, 5, 7, or 10)
Lect II MWF, 100C, Sneed
Lab I-III TTh

- 54 Seminar (1 cr; prereq sr)
III T, 215C
- 98 Thesis (5 cr)
Ar
- 102 Semimicro Qualitative Analysis (3 cr; prereq AnCh 1, 2)
Ar, Barber
- 105 Adv Inorganic Chemistry (3 cr; prereq AnCh 1, 2, OrCh 62)
III MWF, 225C, Maynard
- 108 Nonaqueous Systems (3 cr; prereq AnCh 1, 2, OrCh 62)
Ar, Pray
- 110 Synthetic Inorganic Chemistry (3-5 cr; prereq OrCh 63)
Ar, Heisig
- 136 Seminar—Modern Probs in Inorganic Chemistry (1 cr; prereq grad)
III T, 215C
- 303 Research in Inorganic Chemistry (ar cr)
Ar

Organic Chemistry (ORCH)

- 62 Elem Organic Chemistry (4 cr; prereq 61)
—1, Lect IV MTWThF, 100C, Koelsch
—1, Lab VI-IX W, 390C
—2, Lab VI-IX Th, 390C
—3, Lab I-IV Th, 390C
—4, Lab VI-IX F, 390C
—2, Lect IV TThS, 410C, Dodson
Lab Conf IV MW, 455C
—5, VI-IX M, 390C
—6, VI-IX T, 390C
—7, VI-IX W, 390C
—8, VI-IX Th, 390C
—9, VI-IX F, 390C
- 63 Elem Organic Chemistry (3 cr; prereq 62)
III MWThF, 100C, Parham
- 64 Elem Organic Chemistry Lab (3 cr; prereq 62 or concur regis)
Lect III S, 100C
—1, Lab II-IV, VI-VIII T, 390C, Parham
—2, Lab VI-VIII TTh, 390C
- 98 Sr Thesis (5 cr; prereq 63, 64)
Ar
- 107 Adv Organic Chemistry (3 cr; prereq 106)
IV MWF, 325C, Smith
- 130 Organic Quantitative Analysis (3 cr; prereq 64, AnCh 1, 2, cons instr)
Ar, Lauer
- 139 Adv Organic Chemistry Lab (2-5 cr; prereq 64, read ger, cons instr)
Ar, Arnold
- 143 Natural Products (3 cr; prereq 64)
I MWF, 315C, Parham
- 153 Organic Chemistry Seminar (1 cr; prereq sr)
7:45 p.m. to 8:45 p.m. W, 325C
- 203 Organic Chemistry Seminar (1 cr)
7:45 p.m. to 8:45 p.m. W, 325C
- 303 Research in Organic Chemistry (ar cr; prereq 110, cons instr)
Ar

Physical Chemistry (PCH)

- 103 Physical Chemistry (3 cr; prereq 102)
Lect IV MWF, 410C, Crawford
Rec IV S, 111C
- 106 Physical Chemistry Lab (1-2 cr; prereq 103
or concur regis)
—1, Lect VI M, 325C, Livingston
Lab VII-VIII M, VI-VIII W, 190C
—2, Lect VI Th, 325C
Lab VI-VIII T, VII-VIII Th, 190C
—3, Lect VI M 325C
Lab III-IV T, II-IV Th, 190C
—4, Lect VI Th, 325C
Lab III-IV T or Th, VI-VIII F, 190C
- 112 Adv Physicochemical Experiments (2 cr;
prereq 111)
Ar, Wertz
- 118 Adv Physical Chemistry (3 cr; prereq 117)
II TThS, 225C, Lipscomb
- 131 Colloidal Processes (3 cr; prereq 128)
IV MWF, 111C, Reyerson
- 134 Colloidal Chemistry Lab (ar cr; prereq sr,
128)
Ar
- 152 Seminar (1 cr; prereq sr)
7:00 p.m. M, 325C, Livingston
- 203 Thermodynamics, Chemistry (4 cr; pre-
req 202)
II MWF, 225C, MacDougall
- 209 Adv Crystal Chemistry (3 cr; prereq 103)
Ar, Lipscomb
- 213 Adv Physical Chemistry Lab (ar cr; prereq
103)
Ar, MacDougall
- 223 Colloid Seminar (1 cr)
Ar, Reyerson
- 231 Radioactivity Lab (1-2 cr; prereq 161 or
concur regis)
Ar, O'Connor
- 252 Seminar (1 cr)
7:00 p.m. M, 325C, Livingston
- 255 Quantitative Theory of Valence (3 cr)
Ar, Crawford
- 303 Research in Physical Chemistry (ar cr)
Ar

**DRAWING AND DESCRIPTIVE
GEOMETRY (DRAW)**

- 44 Lettering (1 cr)
IV T, 101E
- 45 Alphabets (2 cr; prereq 44)
III TS, 18E

LIBRARY INSTRUCTION (LIB)

- 1 Use of Books, Libraries (2 cr)
—1, II MW, 3Lib
—2, IV MW, 3Lib, Moen
- 61 Library Practice (3 cr; prereq 18 cr or lib
exper)
Ar, Shove, Hayner
- 64 Reference III (2 cr; prereq 63)
I TTh, 5 Lib, Russell
- 76 Library Service in Hospitals (3 cr)
I TThS, 316Lib
- 77 Book Selection for Hospital Patients (3 cr)
III MWF, 316Lib
- 79 Medical Reference Work (3 cr)
II MWF, 316Lib, Kingsley
- 80 Hospital Library Practice (4 cr; prereq 76,
77, 79)
Ar
- 84 Subject Cataloging, Classification (3 cr;
prereq 81, 82)
Ar, Simonton
- 85 Special Probs (1-3 cr; prereq cons dir)
Ar, McDiarmid, Shove, Hayner
- 153 Prin of School Library Organization, Mgt
(3 cr; prereq cons instr)
II MWF, hr ar, 5 Lib, Hayner
- 154 Prin of Public Library Admin (3 cr; pre-
req Pol 121)
I MWF, 5Lib, Methven
- 155 Admin Probs in College, University Library
(3 cr; prereq Pol 121, or EdAd 253)
II MWF, 339Lib, Shove
- 171 Prin, Probs in Reading Guidance for Chil-
dren (3 cr; prereq 70)
III MWF, 5Lib
- 172 Prin, Probs in Reading Guidance for Ado-
lescents (3 cr; prereq 70)
III MWF, 5Lib, Hayner
- 257 Seminar—Library Admin (3 cr)
Ar, McDiarmid
- 262 Seminar—Adv Bibliography (3 cr)
Ar, Shove
- 273 Seminar—Library Work with Children,
Young People (3 cr)
Ar, Hayner

COLLEGE OF MEDICAL SCIENCES

ANATOMY (ANAT)

- 3 Elem Anatomy (4 cr; for 3 yr student nurses, dent hyg)
Ar
- 4 Elem Anatomy (5 cr, for med tech, 5 yr student nurses; prereq Zool 3 or 15)
Lect, quiz I MTWF, 102IA, Matzke
Lab VIII-IX TTh
- 57 Elem Anatomy (4 cr; for phys educ students)
III MWF, 304IA, Youell
Lab IV MWF

BACTERIOLOGY AND IMMUNOLOGY (BACT)

- 1 Elem Bacteriology (4 cr)
Lect III MWF, 129MH, Staff
Lab IV-V MWF
- 53 Gen Bacteriology (5 cr; prereq soph with C aver, 10 cr chem, 4 cr bot or zool)
Lect VII MWF, 214MH, Staff
Lab VIII-IX MWF
- 103 Soil Microbiology (3 cr; prereq 53, 8 cr org chem)
Lect I MWF, 214MH, Schmidt
Lab II-III MF
- 116 Immunology (3 cr; prereq 102 or 105)
Lect VII-VIII T, VII Th, 129MH, Watson
Lab IX TTh
- 123 Applied Bacteriology (3 cr; prereq 122)
III TThS, 129MH, Ar
- 203 Seminar (1 cr)
IX Th, 214MH

NURSING (NURS)

- 14 Introd Medical Sciences (2 cr)
VII MW, 304IA, Coe
- 17A Introd Clinical Nursing (5 cr)
II MTWThF, III MWF, PoH Amph, Love
- 20 Prin of Nursing in Conditions of Skin (1 cr)
IX M, PoH Amph, Schey
- 41 Prin Pediatrics, Pediatric Nursing (3 cr)
VIII MWF, PoH Amph, Gautefald
- 42 Prin of Nursing in Obstetrics, Gynecology (3 cr)
VIII-IX TTh, PoH Amph, Robertson
- 45 First Aid (1 cr)
III-IV T, PoH Amph, Raisanen
- 57A Medical, Surgical Nursing (12 cr)
IV MWThF, PoH Amph, Erickson
VI-VII MTWTh, PoH Amph, Brennan
- 106 Neuropsychiatric Nursing (4 cr)
VI-VII TTh, 2309PoH
VII F, PoH Amph, Sell

PHARMACOLOGY (PHCL)

- 10 Pharmacology for Nurses (2 cr; prereq 9)
VI Th, 111MeS, Cranston
- 101 Introd Pharmacology (2 cr; prereq* Phsl 106, 107)
I M, 15MeS, II M, 12MeS, O'Dell
- 102 Gen, Experimental Pharmacology (9 cr; prereq 101)
II MWThFS, 15MeS, Bieter, others
- 106 Gen Pharmacology (2 cr; prereq 105)
VI TTh, 15MeS, Wright, others
- 108 Prescription Writing (1 cr; prereq 101 or 102, 106)
VI F, 113MeS, Wright

PHYSIOLOGICAL CHEMISTRY (PHCH)

- 50 Physiological Chemistry (4 cr, for phys educ, dent hyg, nurs students; prereq inorg chem)
VI MTWTh, 166Ph, Carr, Dunshee
- 103 Physiological Chemistry for fresh vet med students (6 cr; prereq 102)
IV-VI TTh, 129MH, Armstrong, others

PHYSIOLOGY (PHSL)

- 4 Human Physiology (4 cr; prereq 1 qtr zool, 1 qtr chem)
Lect VIII T, VII-VIII Th, 214MH
Conf VII T, 214MH

PUBLIC HEALTH (PH)

- 3 Personal Health (2 cr, §GC 10C)
—1, VI MW, BuAud
—2, VI TTh, 100C, Thomson (for IT students)
- 4 Health Probs of Community (2 cr; prereq 3 or GC 10C, or exempt)
I TTh, 313Z, Fox
- 50 Public, Personal Health (3 cr, §3, 4, 52, 53, 100, GC 10C)
III MWF, 15MeS, Thomson
- 51 Community Hygiene (3 cr; prereq see SLA bul)
IV MWF, 129MH, Cowan
- 52a Health Care of Family (2 cr; prereq Bact 53, Phsl 4, for HE students)
VI MW, 213HE, Todd
- 52b Health Care of Family Lab (1 cr)
—1, Lab VII-VIII T, 01MeH, Wilson
—2, Lab VII-VIII Th, 01MeH
- 56 First Aid, Safety for Nurses (3 cr; prereq regis nurs)
—1, VI TTh, 206WeH, Schaar
—2, VII TTh, 201WeH
—3, VIII TTh, 201WeH
- 57 Health of Infant, Preschool Child (2 cr; prereq 4 or 50 or 51 or 52 or 53 or 100)
IV TTh, 12MeS, Boynton

- 59 Health of School Child (3 cr; prereq 3 and 4 or 50 or 51 or 52 or 100)
VII MWF, 150Ph, Anderson, Thomson
- 60 Tuberculosis, Its Control (2 cr; prereq regis nurs, or permis)
IV TS, 113MeS, Myers
- 63 Prin Public Health Nursing II (3 cr; prereq 62, 100 or concur regis)
—1, I MWF, 129MH, Taylor
—2, VI MWF, 129MH
- 64 Cancer Nursing (3 cr)
VI MWF, 214MH, Maloy
- 65 Field Work—School Nursing (ar cr; prereq regis PH nurs)
- 66 Field Work—Rural Nursing (ar cr; prereq regis PH nurs)
- 67 Field Work—Family Health Agency (ar cr; prereq regis PH nurs)
- 70 Practice Teaching—Home Nursing (ar cr; prereq 67, Ed 81)
- 100 Elements of Preventive Medicine, Public Health (5 cr for nurs, PH students, others; prereq 3 or 50, course in bact)
Lect II MWF, 214MH, Anderson, Thomson, Taylor
—1, Rec III TTh, 12MeS
—2, Rec VI TTh, 113MeS
—3, Rec III TTh, 113MeS
- 101 Public Health Admin, Field Work (2 cr; for sr meds)
Ar, Thomson
- 102 Environmental Sanitation I (3 cr; prereq* sr, 50 or 51 or 53 or 100 or concur regis)
I TThS, 06Bo, Pierce, Olson
- 103 Public Health Bacteriology (ar cr; prereq cons instr)
II-III MWF, SBH Lab, Bauer
- 110 Biometric Prin (3 cr; prereq 18 cr biol, sci, or math; concur with 111)
I TThS, 15MeS, Thornton
- 111 Biometry Lab (2 cr; concur with 110)
—1, I-II MWF, 118MH, Thornton
—2, III-IV MWF, 118MH
—3, VIII-IX MWF, 118MH
—4, III-IV TThS, 118MH
- 113 Sewage, Excreta, Waste Disposal (4 cr; prereq 102, 104)
III MWF, VI-IX T, SBH Lab, Whittaker, Pierce, Olson
- 116 Public Health Engineering Admin (2 cr; prereq 102, 100 or 104, 106 and two of 112, 113, 115)
Ar, Whittaker
- 119 Field Practice in Environmental Sanitation (ar cr; prereq cons instr)
Ar, Whittaker
- 120 Correlation Analysis (3 cr; prereq 110)
III TThS, 214MH, Hartman
- 121 Correlation Lab (2 cr; concur with 120)
—1, I-II MWF, 118MH, Hartman
—2, III-IV MWF, 118MH
—3, VI-VII MWF, 118MH
—4, I-II TThS, 118MH
—5, VII-IX TTh, 118MH
- 122 Public Health Admin Probs (3 cr; prereq 106)
IV MWF, Anderson, 113MeS
- 123 Topics in Public Health (ar cr; prereq cons instr)
Ar, Staff
- 129 Field Work in Industrial Nursing (ar cr; prereq 67)
Ar, Vroom
- 133 Mental Hygiene (3 cr; prereq 62 or exper)
I TThS, 129MH
- 135 Conservation of Hearing (1 cr; prereq 53 or 100 and 62 or concur regis)
I F, 15MeS, Boies
- 136 Sight Conservation (1 cr; prereq 53 or 100 and 62 or concur regis)
I W, 12MeS, Hanson
- 137 Dental Hygiene (1 cr)
I M, 211Z, Jordan
- 138 Field Work in Child Hygiene (ar cr; prereq sr, cons instr)
Ar, Taylor
- 139 Special Field Work in Mental Hygiene Program (ar cr; prereq cons instr)
Ar, Taylor
- 141 Social, Economic Aspects of Medical Care (3 cr; prereq cons instr)
IV TThS, 111MeS
- 152 Industrial Hygiene Engineering (3 cr; prereq cons instr)
Ar, Pierce
- 153 The Hospital, Community (1 cr; prereq cons instr)
Ar, Stephan, Hamilton
- 164 Prin, Organization, Mgt of Hospitals (5 cr; prereq 163)
VII-VIII MTWThF, TSP, Stephan, Hamilton
- 167 Mgt Probs—Hospital Admin (4 cr; prereq 163, concur with 164)
III, IV MWF, II, III, TTh, TSP, Hamilton
- 170 Supervision in PH Nursing (3 cr; prereq 53 or 100, 63, exper in PH nurs, cons instr)
III MWF, 214MH, Taylor
- 171 Probs in PH Nursing (ar cr; prereq* 170)
Ar
- 173 Field Work in Supervision (ar cr; prereq* regis PH nurs, 170)
Ar, Taylor, Assoc
- 174 Supervision Lab (2 cr; prereq regis PH nurs)
Ar, Taylor, Assoc
- 181 Prin, Methods Community Health Education (ar cr; prereq cons instr)
VI-VII M, Ar, Grout
- 190 Field Work in Community Health Education Program (ar cr; prereq 125, 227, cons instr)
Ar, Grout

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| <p>200 Research (ar cr; prereq cons instr)
Ar, Anderson, Diehl</p> <p>201 Topics in Biometry (ar cr; prereq* 120, 130)
Ar, Treloar, Thornton</p> <p>210 Seminar in Public Health (ar cr; prereq cons instr)
IX-X M, 113MeS</p> | <p>211 Seminar in Biometry (1 cr; prereq cons instr)
Ar, Treloar</p> <p>220 Readings in Probs of Physiological Hygiene (ar cr; prereq cons instr)
Ar, Keys</p> <p>227 Canceled</p> <p>290 Research in Physiological Hygiene (ar cr; prereq cons instr)
Ar, Staff</p> |
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AIR SCIENCE AND TACTICS (AIR)

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|---|---|
| <p>33 Air Science I (1 cr; prereq 32)
-1, III M, 116A, IX-X T, Gym
-2, VII M, 116A, IX-X T, Gym</p> <p>36 Air Science II (1 cr; prereq 35)
-1, III M, 105, 116A, IX-X T, Gym
-2, VIII M, 105, 116A, IX-X T, Gym</p> | <p>133 Air Science III (3 cr; prereq 132)
-1, I MWF, 105, 116A, IX-X T, Gym
-2, IV MWF, 105, 116A, IX-X T, Gym</p> <p>136 Air Science IV (3 cr; prereq 135)
-1, II MWF, 105, 116A, IX-X T, Gym
-2, VI MWF, 105, 116A, IX-X T, Gym</p> |
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MILITARY SCIENCE AND TACTICS (MIL)

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| <p>3 First Year Basic Course (1 cr; prereq 2)
-1, III M, 116A, Crocker, VIII-IX T, Ar
-2, VII M, 116A, Crocker, VIII-IX T, Ar</p> <p>6 Second Year Basic Course (1 cr; prereq 5)
-1, III M, VIII-IX T, Ar
-Artillery, 101A, Pully
-Engineering, T-4A, Aliotta
-Ordnance, T-1A, Wood
-Quartermaster, 201A, Coleman
-Transport, 103A, Bitler
-Signal Corps, 206A, Copley
-2, VIII M, VIII-IX T, Ar
-Artillery, 101A, Pully
-Engineering, T-4A, Aliotta
-Ordnance, T-1A, Wood
-Quartermaster, 201A, Coleman
-Transport, 103A, Bitler
-Signal Corps, 206A, Copley</p> <p>153 First Year Adv Course (3 cr; prereq 152)
-1, I MWF, VIII-IX T, Ar
-Artillery, 101A, Pully
-Engineering, T-4A, Aliotta
-Ordnance, T-1A, Wood
-Quartermaster, 201A, Coleman</p> | <p>-Transport, 103A, Bitler
-Signal Corps, 206A, Copley
-2, IV MWF, VIII-IX T, Ar
-Artillery, 101A, Pully
-Engineering, T-4A, Aliotta
-Ordnance, T-1A, Wood
-Quartermaster, 201A, Coleman
-Transport, 103A, Bitler
-Signal Corps, 206A, Copley</p> <p>156 Second Year Adv Course (3 cr; prereq 155)
-1, II MWF, VIII-IX T, Ar
-Artillery, 101A, Pully
-Engineering, T-4A, Aliotta
-Ordnance, T-1A, Wood
-Quartermaster, 201A, Coleman
-Transport, 103A, Bitler
-Signal Corps, 206A, Copley
-2, VI MWF, VIII-IX T, Ar
-Artillery, 101A, Pully
-Engineering, T-4A, Aliotta
-Ordnance, T-1A, Wood
-Quartermaster, 201A, Coleman
-Transport, 103A, Bitler
-Signal Corps, 206A, Copley</p> |
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NAVAL SCIENCE AND TACTICS (NAV)

- | | |
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| <p>13 Duties, Responsibilities of Naval Officer (3 cr)
-1, Lect III MWF, 205A
-2, Lect IV MWF, 205A
-3, Lect VII MWF, 205A
Lab VIII-IX T, Tracy</p> | <p>23 Applied Naval Electronics (3 cr)
-1, Lect II MWF, 202A
-2, Lect VI MWF, 202A
-3, Lect VII MWF, 202A
Lab VIII-IX T, Kelsey</p> |
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| <p>53 Fixing Position by Observation of Heavenly Bodies (3 cr)
 -1, Lect III MWF, 12A
 -2, Lect VI MWF, 12A
 Lab VIII-IX T, Holm</p> <p>55 Military Policy, Power, Principles (3 cr)
 Lect Ar MWF, 205A, Lewis
 Lab VIII-IX T</p> | <p>63 Naval Admin, Prin of Leadership (3 cr)
 -1, II MWF, 12A
 -2, IV MWF, 12A
 Lab VIII-IX T, Davis</p> <p>66 Amphibious Operations (3 cr)
 Lect Ar MWF, 205A, Lewis
 Lab VIII-IX T</p> <p>69 Commissary Stores; Ships Stores (4 cr)
 Lect Ar MTWF, 202A
 Lab VIII-IX T, Wells</p> |
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PHYSICAL EDUCATION FOR MEN (PE)

Nonprofessional Courses

- | | |
|--|--|
| <p>1C Sports Education (1 cr)
 -1, Swimming, Track, Softball, Tennis
 II MWF, III MWF, IV MWF, VI MWF, VII MWF, CH, MacMillan, Staff
 -2, Bgn Swimming
 II MWF, III TThS, CH, Boyce
 -3, Adapted Activities
 III MWF, IV MWF, VIII MWF, CH, Osell</p> <p>2C Sports Education (1 cr)
 -1, Adv Swimming, VII MWF, CH, Thorpe</p> | <p>-2, Life Saving, III MWF, CH, Thorpe
 -3, Tennis, V MWF, CH, Brain
 -4, Golf, III-IV MTWThFS, CH, Bolstad
 -5, Handball, Squash, IV MWF, CH, MacMillan
 -6, Folk Dancing, Coeducational
 II MWF, VII MWF, NGW
 -7, Ballroom Dancing, Coeducational
 V MWF, NGW
 -8, Intermediate Swimming, II TThS, CH, Boyce</p> |
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PHYSICAL EDUCATION FOR WOMEN (PE)

Nonprofessional Courses

Aquatics

- | | |
|--|---|
| <p>Canoeing
 -1, III MWF, 58NGW, 201NGW
 -2, VI TTh, 58NGW, 201NGW</p> <p>Swimming, Bgn
 -1, IV MWF, 51NGW, 201NGW
 -2, II TTh, 51NGW, 201NGW</p> <p>Swimming, Adv Bgn
 -1, VI MWF, 51NGW
 -2, III TTh, 51NGW</p> <p>Swimming, Intermediate
 -1, II MWF, 58NGW
 -2, VIII MWF, 51NGW, 201NGW</p> <p>Swimming, Adv Diving
 IV MWF, 58NGW</p> <p>Swimming, Adv Synchronized
 VIII MWF, 58NGW</p> <p>Red Cross Life Saving
 V MWF, 58NGW, 201NGW</p> <p>Water Safety Instructor's Course
 VII MWF, 58NGW, 201NGW</p> <p>Body Building
 Individual Body Building
 III MWF, 153A NGW</p> <p>Individual Sports
 Archery, Elm
 II TTh, 60NGW
 Golf, Elem
 -1, I MWF, 60NGW, 201NGW</p> | <p>-2, VI MWF, 60NGW
 -3, V MWF, 60NGW
 -4, V TTh, 60NGW</p> <p>Golf, Adv
 -1, Ar
 -2, Ar</p> <p>Tennis, Elem
 -1, I MWF, 151NGW
 -2, II MWF, 151NGW
 -3, IV MWF, 60NGW
 -4, VI MWF, 151NGW
 -5, VI TTh, 151NGW
 -6, III TTh, 60NGW</p> <p>Tennis, Adv Intermediate
 -1, III MWF, 151NGW
 -2, V TTh, 151NGW</p> <p>Rhythms
 Folk, Square Dance
 -1, II MWF, 153NGW
 -2, VII MWF, 151NGW</p> <p>Elem Modern Dance
 -1, IV MWF, 151NGW
 -2, VIII MWF, 151NGW</p> <p>Intermediate Adv Modern Dance
 VI MWF, 153NGW</p> <p>Elem Ballroom Dance
 V MWF, 153NGW</p> <p>Team Sports
 Softball
 -1, III MWF, 60NGW
 -2, IV TTh, 60NGW</p> |
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COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

AMERICAN STUDIES (AMST)

- 202 Seminar for MA candidates in Amer Studies
(2 cr)
VIII-IX M, 307F, Smith
- 212 Seminar for PhD candidates in American
Studies (3 cr; prereq cons instr)
IX-X W, 307F, Hornberger

ANTHROPOLOGY (ANTH)

- 40 Introd Anthropology (5 cr)
VII MTWThF, 102Law, Wallis
- 80 American Indian (3 cr)
II TThS, 106TSMc, Spencer
- 106 European Prehistory (3 cr)
VII MWF, 106TSMc, Kelly
- 113 Character of Cultures (3 cr)
IV MWF, 106TSMc, Wallis
- 116 Indians of the Southwest (3 cr)
I MWF, 106TSMc, Kelly
- 117 Anthropology, Contemporary Probs (3 cr)
VIII MWF, 106TSMc, Kelly
- 124 Probs in Anthropology (ar cr; prereq* 123)
Ar, Staff
- 128 Races, Cultures of Japan (3 cr)
VI MWF, 106TSMc, Spencer
- 169 Peoples of the South Seas (3 cr)
III MWF, 106TSMc, Spencer
- 206 Seminar (3 cr)
Ar, Wallis, Wilford, Spencer, Kelly

ART (ART)

- 1 Introd Art (4 cr)
Lect III MWF, NHAud, Eitner, Schmidt,
Whiteside
—1, I-II T, 203TSF, 207TSF
—2, III-IV T, 203TSF, 207TSF
—3, V-VI T, 203TSF, 207TSF
—4, VII-VIII T, 203TSF, 207TSF
—5, III-IV Th, 203TSF, 207TSF
—6, V-VI Th, 203TSF, 207TSF
- 3 Masters in Art—Renaissance to Modern (3
cr; prereq 1)
III MWF, 207NH, Arnason
- 4 Gen Design (3 cr; prereq* 1)
—1, I-II MWF, 104J, Downs
—2, VI-VII MWF, 104J, Downs
- 5 Gen Design (3 cr; prereq* 4)
—1, I-II TThS, 104J, Schmidt
—2, VI-VIII TTh, 104J, Schmidt
- 10 Photography (3 cr; prereq soph)
Lect V Th, 105MurH, Liebling
Lab I-IV W
- 12 Drawing, Design (5 cr; prereq 11)
V-VII MWF, 203TSF, 207TSF, Collins
- 20 Drawing, Painting I (2 cr; prereq 1)
—1, I-II MF, 417E, Young
—2, II-III TTh, 207aJ, Rollins
—3, IV-V TTh, 207aJ, Whiteside
—4, III-IV MF, 207aJ, Quirt

- 21 Drawing, Painting I (2 cr; prereq 20)
—1, I-II MF, 207aJ, Rollins
—2, III-IV MF, 207bJ, Rollins
—3, I-II TTh, 207bJ, Parker
—4, VI-VII MF, 207aJ, Quirt
- 30 Technical Drawing (2 cr)
—1, I-II MF, 207bJ, Doseff
—2, VI-VII MF, 207bJ, Doseff
- 31 Technical Drawing (2 cr; prereq 30)
—1, I-II MF, 207bJ, Doseff
—2, VI-VII MF, 207bJ, Doseff
- 32 Technical Drawing (2 cr; prereq 31)
—1, I-II MF, 207bJ, Doseff
—2, VI-VII MF, 207bJ, Doseff
- 33 Sculpture I Figure, Portrait Modeling (3 cr;
prereq* 1)
—1, I-II MWF, 405E, Sabean
—2, III-IV MWF, 405E, Sabean
—3, VI-VII MWF, 405E, Rood
- 34 Sculpture I Figure, Portrait Modeling (3 cr;
prereq* 33)
—1, I-II MWF, 405E, Sabean
—2, III-IV MWF, 405E, Sabean
—3, VI-VII MWF, 405E, Rood
- 35 Sculpture I Figure, Portrait Modeling (3 cr;
prereq* 34)
—1, I-II MWF, 405E, Sabean
—2, III-IV MWF, 405E, Sabean
—3, VI-VII MWF, 405E, Rood
- 44 Design Workshop (3 cr; prereq 43)
—1, VI-VII MWF, 2J, Sabean
—2, VI-VIII TTh, 2J, Adams
- 45 Design Workshop (3 cr; prereq 44)
—1, VI-VII MWF, 11J, Adams
—2, I-II TThS, 11J, Morton
- 52 Pictorial Composition (3 cr; prereq 51)
V-VII TTh, 200aJ, Morris
- 60 Drawing, Painting II (3 cr; prereq 21)
—1, II-III TThS, 200aJ, Morris
—2, IV-V TThS, 207bJ, Arnest
- 60A Drawing, Painting II (2 cr; prereq 21,
architects only)
II-IV ThS, 417E, Young, Whiteside
- 61 Drawing, Painting II (3 cr; prereq 60)
VI-VIII TTh, 207bJ, Doseff
- 61A Drawing, Painting II (2 cr; prereq 60A,
architects only)
II-IV ThS, 417E, Young, Whiteside
- 62 Drawing, Painting II (3 cr; prereq 61)
—1, I-II MWF, 200aJ, Arnest
—2, III-IV MWF, 200 bJ, Parker
- 62A Drawing, Painting II (2 cr; prereq 61A,
architects only)
II-IV ThS, 417E, Young, Whiteside
- 68 Modern Painting, Sculpture (3 cr; prereq*
1)
VII MWF, 207NH, Arnason

- 70 Drawing, Painting III (3 cr; prereq 52, 62)
 -1, I-II MWF, 200bJ, Quirt
 -2, III-IV MWF, 417E, Young (water color)
 -3, VI-VII MWF, 200aJ, Parker
 -4, I-III TTh, 200bJ, Arnest
- 71 Drawing, Painting III (3 cr; prereq 70)
 -1, I-II MWF, 200bJ, Quirt
 -2, III-IV MWF, 417E, Young (water color)
 -3, VI-VII MWF, 200aJ, Parker
 -4, I-III TTh, 200bJ, Arnest
- 72 Drawing, Painting III (3 cr; prereq 71)
 -1, I-II MWF, 200bJ, Quirt
 -2, III-IV MWF, 417E, Young (water color)
 -3, VI-VII MWF, 200aJ, Parker
 -4, I-III TTh, 200bJ, Arnest
- 75 Present Techniques (3 cr; prereq 74)
 -1, III-IV MWF, 104J, Downs
 -2, VIII-IX MWF, 104J, Collins
- 80 Drawing, Painting IV (3 cr; prereq 72)
 -1, III-V WF, 200aJ, Guston
 -2, I-IV S and ar, 200aJ, Guston
 -3, I-IV S and ar, 200bJ, Morris
- 81 Drawing, Painting IV (3 cr; prereq 80)
 -1, III-V WF, 200aJ, Guston
 -2, I-IV S and ar, 200aJ, Guston
 -3, I-IV S and ar, 200bJ, Morris
- 82 Drawing, Painting IV (3 cr; prereq 81)
 -1, III-V WF, 200aJ, Guston
 -2, I-IV S and ar, 200aJ, Guston
 -3, I-IV S and ar, 200bJ, Morris
- 85 Sculpture II (3 cr; prereq 84)
 -1, I-II MWF, 11J, Rood
 -2, III-IV MWF, 11J, Rood
- 87 Textile Design (3 cr; prereq cons instr)
 VI-VII MWF, 4J, Berglund
- 89 Textile Design (3 cr; prereq 88)
 VIII-IX MWF, 4J, Berglund
- 90 Print Processes (3 cr; prereq* 62)
 -1, II-IV MW, 203J, Myers
 -2, II-IV TTh, 203J, Myers
 -3, VI-VIII TTh, 203J, Myers
- 91 Print Processes (3 cr; prereq 90)
 -1, II-IV MW, 203J, Myers
 -2, II-IV TTh, 203J, Myers
 -3, VI-VIII TTh, 203J, Myers
- 92 Print Processes (3 cr; prereq 91)
 -1, II-IV MW, 203J, Myers
 -2, II-IV TTh, 203J, Myers
 -3, VI-VIII TTh, 203J, Myers
- 93 Ceramics I (3 cr; prereq 5, 45)
 III-IV TThS, 10J, Forst
- 94 Ceramics I (3 cr; prereq 93)
 I-II TThS, 10J, Forst
- 95 Ceramics I (3 cr; prereq 94)
 I-II TThS, 10J, Forst
- 99 Leather, Textile Design (3 cr; prereq 98)
 III-IV MWF, 2J, Berglund
- 108 Romanesque, Gothic Art, Architecture (3 cr; prereq 9 cr art or 9 cr hist or lit, cons instr)
 II MWF, 207NH, Eitner
- 118 Renaissance Art—Northern Europe (3 cr; prereq 9 cr art or 9 cr hist or lit, cons instr)
 VI MWF, 207NH, Eitner
- 128 European Art—17th, 18th Century (3 cr; prereq 9 cr art hist or 9 cr hist or lit, cons instr)
 IV MWF, 207NH, Torbert
- 135 Adv Design (3 cr; prereq 134)
 IX-X T and ar, 104J, Torbert
- 138 Renaissance, Modern Architecture (3 cr; prereq* 137)
 I MWF, 207NH, Torbert
- 143 Design in Jewelry (3 cr; prereq 5, 21, 45)
 III-IV TThS, 11J, Morton
- 144 Design in Jewelry (3 cr; prereq 143)
 VI-VIII TTh, 11J, Morton
- 145 Design in Jewelry (3 cr; prereq 144)
 VI-VIII TTh, 11J, Morton
- 148 Art in United States—Contemporary Movements (3 cr; prereq 9 cr art hist or 9 cr hist or lit, cons instr)
 VIII MWF, 207NH, Tselos
- 150 Probs in Painting, Prints (ar cr; prereq cons instr)
 -1, III-V WF, 200aJ, Guston
 -2, I-IV S and ar, 200aJ, Guston
 -3, I-IV S and ar, 200bJ, Morris
 -4, Ar, Staff
- 151 Probs in Painting, Prints (ar cr; prereq 150)
 -1, III-V WF, 200aJ, Guston
 -2, I-IV S and ar, 200aJ, Guston
 -3, I-IV S and ar, 200bJ, Morris
 -4, Ar, Staff
- 152 Probs in Painting, Prints (ar cr; prereq 151)
 -1, III-V WF, 200aJ, Guston
 -2, I-IV S and ar, 200aJ, Guston
 -3, I-IV S and ar, 200bJ, Morris
 -4, Ar, Staff
- 155 Industrial Design (3 cr; prereq 154)
 I-III TTh, 2J, Adams
- 183 Sculpture III (3 cr; prereq cons instr)
 Ar, Rood, Sabean
- 184 Sculpture III (3 cr; prereq 183)
 Ar, Rood, Sabean
- 185 Sculpture III (3 cr; prereq 184)
 Ar, Rood, Sabean
- 193 Ceramics II (3 cr; prereq cons instr)
 Ar, Forst
- 194 Ceramics II (3 cr; prereq 193)
 Ar, Forst
- 195 Ceramics II (3 cr; prereq 194)
 Ar, Forst
- 200 Adv Probs (ar cr; prereq cons instr)
 Ar, Staff
- 201 Adv Probs (ar cr; prereq cons instr)
 Ar, Staff
- 202 Adv Probs (ar cr; prereq cons instr)
 Ar, Staff
- 208 Seminar—Modern European Art (3 cr; prereq cons instr)
 Ar, Tselos

- 218 Seminar-American Art (3 cr; prereq cons instr)
Ar, Tselos
- 238 Seminar (ar cr; prereq cons instr)
Ar, Tselos

ASTRONOMY (AST)

- 11 Descriptive Astronomy (5 cr)
IV MTWF, 166Ph, Luyten
- 53 Stellar Astronomy (3 cr; prereq 51 or 11, Math 6)
II MWF, 358Ph, Luyten

BOTANY (BOT)

- 3 Gen Botany (4 cr; prereq 2)
—1, Lect III TTh, 06Bo
—2, Lect VI TTh, 06Bo
—1, Lab III-IV TTh, 1, 4, 5Bo
—2, Lab V-VI TTh, 1, 4, 5Bo
—3, Lab VII-VIII TTh, 1, 4, 5Bo
—4, Lab IX-X TTh, 1, 4, 5Bo
—5, Lab I-II WF, 1, 4Bo
—6, Lab III-IV WF, 1, 4Bo
—7, Lab V-VI WF, 1, 4, 5Bo
—8, Lab VII-VIII WF, 1, 4, 5Bo
- 51 Gen Plant Physiology (4 cr; prereq 3 or 5 or NSci 9, 2 qtr inorg chem)
Lect VI MW, 06Bo, Brown
—1, Lab III-IV MW, 104Bo
—2, Lab VII-VIII MW, 104Bo
Conf hr VI F or hr ar
- 52 Elem Taxonomy (3 cr; prereq 3 or 5 or NSci 9)
Lect VI MW, 401Bo, Ownbey
Lab VII-VIII MW
- 54 Survey of the Plant Kingdom (5 cr; prereq 3 or 5 or NSci 9)
II-IV MWF, 5Bo, Abbe
- 115 Minnesota Spring Flora (3 cr; prereq* 10 cr)
VI-VIII TTh, 401Bo, Ownbey
- 123 Research Methods in Histology (3-5 cr, prereq 3 or 5, 121 or 125, cons instr)
Lect III MWF, 209Bo, Abbe
Lab Ar, Hansen
- 133 Ecological Plant Geography (5 cr; prereq 50 or 130 or For 2, 3, 4)
VI-VIII MWF, 214Bo, Cooper
- 137 Experimental Ecology (5 cr; prereq 18 cr pl sci incl 50 or 130, 51, cons instr)
I-III TThS, IV S, 215Bo, Lawrence
- 165 Introd Pollen Analysis (3 cr; prereq cons instr)
VI-VII MWF, 202Bo, Dahl
- 178 Nitrogen Metabolism of Plants (3 cr; prereq* sr, 51 or 140, 20 cr chem or agric biochem, PCh 103 or 108)
II-III½ TTh, 110Bo, Brown, Frenkel
- 181 Adv Physiology Lab (2 cr; prereq sr, 178 or concur regis)
—1, VI-X T, 104Bo, Brown, Frenkel
—2, VI-X Th, 104Bo, Brown, Frenkel

- 199 Problems (1-5 cr; 20 cr nat sci, cons instr)
Ar
- 203 Research Probs—Morphology of Vascular Plants
Ar, Abbe
- 207 Research Probs—Taxonomy, Floristic Plant Geography
Ar, Ownbey
- 211 Research Probs—Paleobotany
Ar
- 223 Research Probs—Ecology
Ar, Cooper, Lawrence
- 227 Research Probs—Plant Physiology
Ar, Brown, Frenkel
- 231 Research Probs—Cytology
Ar, Dahl
- 242 Seminar—Morphology
Ar, Abbe
- 245 Seminar—Taxonomy
Ar, Ownbey
- 248 Seminar—Paleobotany
Ar
- 251 Seminar—Ecology
Ar, Cooper, Lawrence
- 254 Seminar—Plant Physiology
Ar, Brown, Frenkel
- 257 Seminar—Cytology
Ar, Dahl

CLASSICS

Classics (CLAS)

- Courses for which no knowledge of Greek or Latin is required.
- 24 Technical Terms of Science, Medicine, Humanities (3 cr; prereq soph)
Lect IV MW, 8F
—1, IV F (Med, chem, biol) 8F
—2, V F (hum, soc sci, engin) 8F
- 43 Ancient Mythology—Relation to Literature, Art (2 cr; prereq soph)
V MW, Ar
- 108 Cultural Aspects of Language (3 cr; prereq any 2 courses above 50 in foreign lang)
VIII MWF, 103F
- 123 Introd to Roman Archeology (3 cr)
VIII MWF, 6F
- 193 Classical Literary Traditions (3 cr; prereq 9 cr engl or foreign literature)
V MWF, 201F

Greek (GRK)

- 3 Selections from Attic Prose (5 cr; prereq 2)
II MTWThF, 103F
- 53 Plato—Apology, Selections (3 cr; prereq 3)
IX MWF, Ar
- 73 New Testament (3 cr; prereq any two of 51, 52, 53)
II TThS, Ar
- 173 Reading (3 cr; prereq cons dept)
Ar

- 213 Seminar—Greek Epic (3 cr)
III-IV S, Ar

Latin (LAT)

- 3 Intermediate Latin (5 cr; prereq 2 or 1 yr high school Latin)
IV MTWThF, 103F
- 51 Readings—Prose, Poetry (3 cr; prereq 12 or 3 or 4 yrs high school Latin)
Ar
- 73 Prose Composition (2 cr; prereq 12 or 3 yrs high school Latin)
II TTh, 108F
- 83 Roman Literature (3 cr; prereq 82)
II MWF, 108F
- 113 Adv Prose Composition (2 cr, †111-112-113; prereq 112)
Ar
- 133 Vulgar Latin (3 cr; prereq cons instr)
III MWF, 108F
- 173 Reading (3 cr; prereq cons dept)
Ar
- 203 Seminar—Cicero (3 cr)
Ar

ENGLISH

Composition (COMP)

- 4 Fresh Composition (3 cr; prereq place test)
—1, III TThS, 303F
—2, IV TThS, 206F
—3, V MWF, 205F
—4, VIII MWF, 206F
- 5 Fresh Composition (3 cr; prereq 4)
—1, IV TThS, 303F
—2, V MWF, 311½F
—3, VIII MWF, 201F
- 6 Fresh Composition (3 cr; prereq 5)
—1, I MWF, 206F
—2, II MWF, 114TSMa
—3, III MWF, 8F
—4, IV MWF, 206F
—5, V MWF, 209F
—6, VI MWF, 227F
—7, VII MWF, 10F
- 7 Composition Review (3 cr; prereq 6 or Comm 3 or Engl C with cons instr)
—1, V MWF, 206F, Christie
—2, VI MWF, 10F, Bean
- 27 Adv Writing (3 cr, †27-28 or 27-29; prereq 6 or Comm 3, or Engl C, or exempt)
—1, I MWF, 304F, Helton
—2, II MWF, 304F, Bean
—3, III MWF, 304F, Steinmann
—4, IV MWF, 107F, delPlaine
—5, V MWF, for pre-meds, 107F, delPlaine
—6, VI MWF, 5F, Engelhart
—7, VII MWF, 8F, Ar

- 28 Adv Writing (3 cr, †27-28 or 27-29; prereq 6 or Comm 3, or Engl C, or exempt)
—1, I MWF, 207F, Smith
—2, II MWF, 5F, delPlaine
—3, III MWF, 5F, O'Connor
—4, IV MWF, 3F, Macdonald
—5, VI MWF, 304F, Ross
—6, VII MWF, 304F, Johnson
- 29 Adv Writing (3 cr, †27-28 or 27-29; prereq 27)
—1, II TThS, 107F, Atkins
—2, III MWF, 107F, Hessler
- 58 Business Reports, Letters (3 cr; prereq 6 or Comm 3 or Engl C, or exempt, regis BA or cons instr)
—1, I MWF, 115TSMb, Guthrie, other
—2, II MWF, 115TSMb
—3, IV MWF, 115TSMb
—4, VI MWF, 115TSMb
—5, I TThS, 115TSMb
- 103 Writing Fiction (3 cr; prereq 102)
—1, VIII-IX M, 304F, Blum
—2, VIII-IX W, 304F, Ross
- 106 Writing Poetry (3 cr; prereq 105)
VIII-IX Th, 304F, Coxé
- 202 Seminar—Writing (3 cr; prereq cons instr)
IX-X M, 204F, Coxé

English (ENGL)

- A Fresh English (5 cr; prereq place test)
II MTWThF, 103NH
- B Fresh English (5 cr; prereq A)
I MTWThF, 305F
- C Fresh English (5 cr; prereq B)
—1, I MTWThF, 303F
—2, II MTWThF, 115TSMa
—3, III MTWThF, 115TSMa
—4, IV MTWThF, 115TSMa
—5, V MTWThF, 303F
—6, VI MTWThF, 3F
—7, VII MTWThF, 115TSMa
—8, VIII MTWThF, 209F
- 23 Introd Literature (5 cr; prereq C or Comp 6 or Comm 3)
—1, III MTWThF, 301F, Moore
—2, III MTWThF, 420MurH, Coxé
—3, VI MTWThF, 301F, Buckley
- 39 20th Century Literature (3 cr; prereq C or Comp 6 or Comm 3)
VII MWF, 206F
- 55 Shakespeare-Comedies (3 cr; prereq C; or Comp 6 or Comm 3 and 6 addtl crs; or 10 cr in 21-22-23)
—1, I TThS, 11F, Atkins
—2, II MWF, 303F, Hessler
—3, VI MWF, 213F, Marx
—4, VII MWF, 303F, Christie
—5, VIII MWF, 303F, Ar
- 56 Shakespeare-Tragedies (3 cr; prereq* 55)
—1, III TThS, 107F, Atkins
—2, VI MWF, 206F, Steinmann
—3, VIII MWF, 207F, Turpie

- 67 Literature of the Bible (3 cr; prereq C; or Comp 6 or Comm 3, and 6 addtl crs; or 10 cr in 21-22-23)
IV MWF, 303F, Unger
- 75 Chaucer (4 cr; prereq C; or Comp 6 or Comm 3, and 6 addtl crs; or 10 cr in 21-22-23)
III MWThF, 322F, Reisman
- 99 Reading (3 cr; prereq 98)
Ar, Hessler
- 103 Beowulf (3 cr; prereq 100)
II MWF, 305F, Armstrong
- 106 Whitman, Mark Twain (3 cr; prereq 6 cr above C)
III MWF, 204F, Marx
- 113 American Short Story (3 cr; prereq 6 cr above C)
IV MWF, MNHAud, McDowell
- 114 Midwest Literature (3 cr; prereq 6 cr above C)
IV MWF, 204F, Buckley
- 125 Technique of the Novel (3 cr; prereq sr, 124)
IX-X T, 204F, Gray
- 129 Modern Drama—1880 to Present (3 cr; prereq 56 or 127)
VI MWF, 204F, Hillhouse
- 131 English Poetry 1832-1914 (3 cr; prereq 130)
VI MWF, 207F, Blum
- 134 Origins of American Naturalism (3 cr; prereq 6 cr above C)
VI MWF, 303F, Bowron
- 136 Adv Shakespeare (4 cr; prereq 56)
VI MTWF, 205F, Brown
- 139 19th Century English Literature (3 cr; prereq 138)
III TThS, 204F, Erdman
- 141 Adv Chaucer (3 cr; prereq 140)
VIII MWF, 311F, Clark
- 149 English Literature—Middle Ages, Excl of Chaucer (3 cr; prereq 148)
VII MWF, 311½F, Clark
- 151 Recent Poetry (4 cr; prereq 6 cr above C)
II MTWF, 204F, Unger
- 162 Milton (3 cr; prereq 22 or 56)
VI MWF, 209½F, Unger
- 166 Historical Backgrounds of Modern English (3 cr; prereq 165)
VII MWF, 213F, Allen
- 173 Development of Standard English (3 cr; Prereq 172)
VII-VIII T, 304F, Allen
- 174 American English (3 cr; prereq 6 cr engl lit incl lang, above C)
VI MWF, 307F, Allen
- 181 Recent Trends in Literary Criticism (3 cr; prereq 6 cr above C)
I MWF, 204F, O'Connor
- 182 Far West in Literature (3 cr; prereq 6 cr above C)
II MWF, 205F, H. N. Smith
- 186 Interpretation of Drama (3 cr; prereq 185)
IX-X W, 302F, Reisman
- 189 18th Century Literature (3 cr; prereq 6 cr above C)
II MWF, 207F, Moore
- 199 17th Century Literature (3 cr; prereq 198)
III MWF, 303F, Monk
- 230 18th Century Novel (3 cr)
IX-X Th, 312Lib, Hillhouse
- 233 Shakespeare's Tragic, Comic Art (3 cr; prereq reading knowledge fren or ger)
IX-X T, 312Lib, Brown
- 242 Canterbury Tales (3 cr)
IX-X Th, 339Lib, Clark
- 255 American Romanticism I (3 cr; prereq cons instr)
IX-X F, 104F, McDowell
- 279 American Realism (3 cr; prereq cons instr)
IX-X F, 103F, Hornberger
- 283 English Romantic Movement (3 cr)
IX-X W, 312Lib, Erdman
- 286 Dryden, His Age (3 cr)
IX-X W, 328Lib, Monk
- 299 Independent Reading (3 cr; prereq 298)
Ar, Graduate Staff

GENERAL STUDIES

Communication (COMM)

- 1 Communication (4 cr)
—1, III MTWF, 107TNM
—2, V MWThF, 107TNM
- 2 Communication (4 cr; prereq 1)
—1, I MTWF, 8TNM
—2, V MWThF, 8TNM
—3, VII MWThF, 14TNM
- 3 Communication (4 cr; prereq 2)
—1, I MWThF, 115TNM
—2, II MTWF, 115TNM
—3, III MTWF, 115TNM
—4, IV MWThF, 115TNM
—5, V MTWF, 115TNM
—6, VI MTWF, 115TNM
—7, VII MTWF, 115TNM

Family Life (FL)

- 1 Prep for Marriage (3 cr)
—1, II MWF, 159TSF, Dyer, Koontz
—2, V MWF, 159TSF, Neubeck, others
—3, VII MWF, 159TSF
—4, II TThS, 159TSF
- 14 Nutrition, Food Mgt (5 cr)
IX MTWThF, X TTh, 5UHS, Shepard
- 15 The Home, Its Furnishings (3 cr)
IV MWF, 206WeH, Ludwig
- 25 Child Development, Adjustment (3 cr)
III MWF, 157TSF, Hansen

Humanities (HUM)

- 1 Humanities in the Modern World I (5 cr)
—1, IV MTWThF, 209NH, Bowditch
—2, VI MTWThF, 111NH, Bryan

- 2 Humanities in the Modern World II (5 cr; prereq 1)
 -1, III MTWThF, 111NH, Blum
 -2, IV MTWThF, 111NH, Marsh
 -3, IV MTWThF, 225C, Livingston
- 3 Humanities in the Modern World III (5 cr; prereq 2)
 -1, I MTWThF, 111NH, Neumeier
 -2, II MTWThF, 111NH, Marsh
 -3, III MTWThF, 410C, Ramsland
 -4, IV MTWThF, 4ME, Ames
 -5, V MTWThF, 11F, Turnbull
 -6, VI MTWThF, 9F, Carr
 -7, VII MTWThF, 259TSF, Linnell
- 4 Humanities in the Modern World IV (5 cr; prereq 1 or 2 or 3)
 VI MTWThF, 102L, Swanson
- 13 Renaissance Heritage (5 cr)
 -1, II MTWThF, 9TNM, Ames
 -2, III MTWThF, 109TSF, Livingston
- 23 American Life III (3 cr)
 -1, II MWF, 308F, Turpie
 -2, II MWF, 6F, Kwiat
 -3, III MWF, 308F, Bowron
 -4, VII MWF, 6F, Davies
- 53 Humanities in the Modern World (5 cr, §3)
 -1, II MTWThF, 210P, Wood
 -2, III MTWThF, 209NH, McClosky
 -3, VI MTWThF, 2P, Wolf
- 63 Renaissance Heritage (5 cr, §13)
 -1, II MTWThF, 301F, DeWitt
 -2, VI MTWThF, 216NH, Shaw
- 73 Humanities in the United States (3 cr, §23)
 VII MWF, 110P, Hornberger
- 133 Proseminar (2 cr; prereq sr)
 Ar, Ames

Natural Science (NSCI)

- 3 Orientation to Natural Sciences (5 cr)
 Lect II MTWTh, 166Ph, Graubard
 -1, I F
 -2, II F
 -3, VI T
 -4, VII T
 -5, VIII T
 -6, IX T
 -7, VIII W
 -8, IX W
 -9, VIII Th
 -10, IX Th
- 6 Physical World (4 cr; prereq 5)
 Lect IV MWF, 133Ph, Kruglak
 -1, VI-VII M
 -2, VIII-IX M
 -3, III-IV T
 -4, VI-VII W
 -5, III-IV Th
 -6, VI-VII Th
 -7, VI-VII F
 -8, I-II S

- 9 Gen Biology (4 cr, †7-8-9; prereq 8)
 Lect V WF, 06Bo, Merrell
 -1, I-II TTh
 -2, III-IV MW
 -3, IX-X MF
- 173 Development of Sciences (3 cr; prereq* 172)
 VII MWF, 143Ph, Graubard

Personal Orientation (PO)

- 1 How to Study (2 cr)
 -1, I MWF, 109TSF, Harrell
 -2, II MWF, 109TSF, Harrell
 -3, VI MWF, 109TSF, Renzaglia
 -4, VII MWF, 109TSF, Renzaglia
- 11 Choosing a Vocation (2 cr)
 II TTh and hr ar, 257TSF, Hewer

Social Sciences (SSCI)

- 1 Introd Social Science (4 cr)
 -1, IV MWF, 202Pt, Naftalin, others
 -2, VI TTh, VII T, 207NH
- 2 Introd Social Science (4 cr; prereq 1)
 -1, II MWF, 107NH
 -2, IV MWF, 110P
 -3, VI MWF, 259TSF
- 3 Introd Social Science (4 cr; prereq 2)
 -1, I MWF, 106NH
 -2, II MWF, 259TSF
 -3, III MWF, 253TSF
 -4, IV MWF, 6F
 -5, V MWF, 107NH
 -6, VI MWF, 107NH
 -7, VII MWF, 253TSF
- 13 Intl Relations (3 cr)
 III MWF, 102NH, Levi
- 83 Public Affairs Forum (3 cr)
 IV MWF, V F, 207F, Ziebarth

GEOGRAPHY (GEOG)

- 11 Human Geography (5 cr)
 Lect III MWF, 2P, Borchert
 -1, Lab I TTh, 103Bu
 -2, Lab II TTh, 103Bu
 -3, Lab III TTh, 103Bu
 -4, Lab IV TTh, 103Bu
 -5, Lab V TTh, 103Bu
 -6, Lab V MW, 103Bu
 -7, Lab VIII MW, 103Bu
 -8, Lab IX MW, 103Bu
- 41 Commercial Production (5 cr)
 Lect IV MWThF, 2P, Weaver
 -1, Rec VII T, 103Bu
 -2, Rec VIII T, 103Bu
 -3, Rec IX T, 103Bu
 -4, Rec II F, 103Bu
 -5, Rec VIII F, 103Bu
 -6, Rec IX F, 103Bu
- 45 Population Patterns, Settlement Forms (5 cr; prereq* 11 or 41)
 VI MTWThF, 103Bu, Kress

- 47 Minnesota (3 cr; prereq* 11)
I MWF, 103Bu, Kress
- 104 Australasia, New Zealand (2 cr; prereq* 11)
II MW, 103Bu, Weaver
- 111 Cartography, Graphic Representation (3 cr; prereq 8 cr)
VIII-IX ½ MF, 411C, Humlum
- 120 Asia (3 cr; prereq* 11)
IV MWF, 103Bu, Broek
- 134 Adv Climatology (3 cr; prereq 133)
VII MWF, 103Bu, Borchert
- 150 Agricultural Geography (3 cr; prereq* 1 or 41, 10 cr addtl geog or econ)
III MWF, 103Bu, Humlum
- 241 Field Course
Ar, Broek
- 253 Seminar
VIII-IX Th, 103Bu, Humlum
- 301 Research Probs
Ar, Broek, Weaver

GEOLOGY (GEOL)

- A Gen Geology Lab (2 cr; prereq 2 or concur regis)
-1, I-II TTh, 22P
-2, III-IV TTh, 22P
-3, VI-VII TTh, 22P
- B Gen Geology Lab (2 cr; prereq A)
-1, I-II MW, 20P
-2, III-IV MW, 20P
-3, VIII-IX TTh, 20P
- 1 Gen Geology (3 cr, †1-2, except Forestry students)
-1, III TThS, 210P, Zumberge
-2, VI MWF, 110P, Swain
- 2 Gen Geology (3 cr, †1-2; prereq 1)
-1, IV TThS, 210P, Bell
-2, VII MWF, 210P, Ar
- 8 Earth Features, Their Meaning (5 cr, †1, NSci 6)
II MTWThF, 2P, Thiel
- 11 Gen Geology (5 cr, for miners)
III MTWThF, 110P)
- 25 Rock Study (2 cr; prereq 24, soph)
Lect I T, 210P, Goldich
Rec I S, 210P, Goldich
-1, Lab II TTh, 200P, Goldich
-2, Lab VI-VII T, 200P, Goldich
-3, Lab VIII-IX T, 200P, Goldich
- 104 Micropaleontology (3 cr; prereq 103)
Ar, Swain
- 109 Stratigraphic Paleontology (3 cr; prereq 108)
Ar, Bell
- 112 Petroleum Geology (3 cr; prereq sr, 151, 125)
I TThS, 110P, Swain
- 114 Minnesota, Adjoining Areas (3 cr; prereq 25)
IV MWF, 210P, Thiel
- 120 Glacial Geology (3 cr; prereq A, 2)
II MWF, 220P, Wright

- 132 Petrology (4 cr; prereq 131)
Lect III MW, 210P, Goldich
Rec III F, 210P
Lab VI-VII WF
- 137 Prin Chemical Geology (3 cr; prereq 25)
Ar, Gruner
- 141 Applied Petrography (3 cr; prereq 140)
Lect V S, 200P, Goldich
Lab VIII-IX MW, 200P, Goldich
- 145 Aerial Photographs (3 cr; prereq A, 2)
VI-VIII TTh, 220P, Wright
- 152 Stratigraphy (3 cr; prereq 151)
II TThS, 110P, Bell
- 167 Mineralography (3 cr; prereq sr, 166)
VI-VII MTh, 207P, VII-VIII T, Schwartz
- 170 Geologic Probs (3 cr; prereq cons maj advis)
Ar

GERMAN (GERM)

Students submitting one year high school work must take second quarter course; those submitting two years must take third quarter course.

- 1 Bgn German (5 cr)
-1, I MTWThF, 209½F
-2, II MTWThF, 2F
- 2 Bgn German (5 cr; prereq 1)
-1, I MTWThF, 209F
-2, II MTWThF, 209½F
- 3 Bgn German (5 cr; prereq 2)
-1, I MTWThF, 213F
-2, II MTWThF, 213F
-3, III MTWThF, 213F
-4, IV MTWThF, 209½F
-5, VII MTWThF, 209F
- 3a Bgn Conversational German (5 cr; prereq 2a)
Demonstration III MTWThF, 209F
Drill IV MTWThF, 213F
- 3b Bgn Reading German (5 cr; prereq 2b)
II MTWThF, 209F
- 4 Intermediate German (5 cr; prereq 3 or 3a or 3b)
-1, III MTWThF, 209½F
-2, VII MTWThF, 209½F
- 20 Reading, Speaking (5 cr; prereq 4)
III MTWThF, 207F
- 26 Chemical German (3 cr; prereq 25 for chem, miners)
-1, II MWF, 215C
-2, IV MWF, 215C
- 26a Chemical German (4 cr; prereq 25a for pharm, agric students)
IV MTWF, 215C
- 29 Chemical Prose (3 cr; prereq 23)
IV MWF, 209F
- 33 Medical German (5 cr; prereq 3, 3a or 3b)
II MTWThF, 208F
- 43 Reading German Chemical Periodicals (2 cr; prereq 42)
IV TTh, 209F

- 52 Composition (2 cr; prereq 51)
VI MF, 209F, Downs
- 55 Conversation (2 cr; prereq 54)
VI TTh, 209F
- 53 Pronunciation (2 cr; prereq 4)
III TTh, 208F, Downs
- 59 Pronunciation, Diction (1-2 cr; prereq 3,
cand for germ play)
Ar
- 61 Lyrics, Ballads (3 cr; prereq 3 cr above 59)
II MWF, 307F
- 65 Modern Drama (3 cr; prereq 3 cr above 59)
IV MWF, 208F
- 72 Survey of Literature (3 cr; prereq 3 cr
above 59)
III MWF, 208F
- 75 Classics in Translation (2 cr)
VII MF, 208F
- 77 Faust I (3 cr; prereq 63, 3 adtl cr above
59)
II MWF, 10F
- 120 Old High German (3 cr; prereq 119)
VIII-IX W, 208F, Downs
- 145 Canceled
- 152 19th Century Literature (3 cr; prereq sr,
151)
VIII-X T, 208F, Pfeiffer
- 255 Seminar-Literary Probs (3 cr; prereq 9 cr
grad course germ lit)
VIII-IX M, 208F, Wood

HISTORY (HIST)

- 2 Civilization of the Modern World (3 cr)
Lect II MW MNHAud, Bowditch
-1, II T, 3F
-2, II Th, 3F
-3, II Th, 227F
-4, II F, 221Bu
-5, II F, 113F
-6, II F, Ar
- 3 Civilization of the Modern World (3 cr)
Lect II TTh, BuAud, Wolf
-1, I T, 114TNM
-2, I W, 114TNM
-3, I Th, 114TNM
-4, II M, 111C
-5, II W, 315C
-6, II W, 111C
-7, II F, 111C
-8, III T, 111C
-9, III T, 12F
-10, III W, 202Pt
-11, III Th, 111C
-12, IV T, 221Bu
-13, IV Th, 221Bu
-14, VI Th, 112Bu
-15, VII W, 111Bu
- 6 English History (3 cr)
Lect II MW, NHAud, Burt
-1, II T, 114TNM
-2, II T, 153TSF
-3, III T, 115C

- 4, I Th, 153TSF
-5, II Th, 114TNM
-6, III Th, 215C
- 13 Medieval History (3 cr; prereq maj mus or
art)
IV MWF, 221Bu, Thompson, Krey
- 16 Ancient Civilization (3 cr)
VII TWTh, 112Bu, Jones
- 16A Ancient Civilization with Readings (5 cr)
VII MTWThF, 112Bu, Jones
- 17 Modern Economic, Social Probs (5 cr; pre-
req 3rd qtr fresh)
Lect II TThS, 221Bu, Nelson
-1, III TTh, 2F
-2, VIII TTh, 221Bu, Heaton
- 22 American History (3 cr; prereq soph)
-1, Lect II TTh, 211NH, BuAud, Wolf,
Osgood
-2, Lect VIII TTh, 211NH, Davies
-1, II M, 221Bu
-2, VIII M, 111Bu
-3, IV T, 111C
-4, IV T, 204F
-5, IV Th, 111C
-6, VI W, 202TNUH
-7, II F, 102NH
-8, III F, Ar
-9, VII F, 153TSF
- 52 Ancient Civilization (3 cr, §16)
VII TWTh, 112Bu, Jones
- 55 Civilization of the Modern World (3 cr, §3)
Lect II TTh, BuAud, Wolf
-1, Ar, 112Bu
-2, VII T, 153TSF
-3, IV W, 202TNUH
- 58 History of England (3 cr)
Lect II MW, NHAud, Burt
Quiz, II F, 100NH
- 61 American History (3 cr, §22)
-1, Lect II TTh, 211NH, Osgood
-2, Lect VIII TTh, 211NH, Davies
-1, II W, 221Bu
-2, III Th, 115TNM
-3, IV Th, 204F
-4, VII Th, 153TSF
- 67a Renaissance, Reformation (3 cr)
III MWF, 221Bu, Krey
- 69 American History since 1900 (3 cr)
VII MWF, 221Bu, Davies
- 72 English Constitutional History (3 cr; prereq
see col bul)
-1, I MWF, 111Bu, Thompson
-2, I MWF, 145Ph, Willson
- 78 Canadian History (3 cr)
III TThS, 221Bu, Burt
- 83a American Agricultural History (3 cr; pre-
req soph)
I TThS, 221Bu, Loehr
- 88 American Colonies (3 cr)
II MWF, 111Bu, Tyler
- 89 Economic History of Modern War (3 cr)
VI MWF, 111Bu, Bowditch

- 92 American West (3 cr)
III TThS, 111Bu, Osgood
- 95 American Diplomatic History (3 cr)
VI MWF, 112Bu, Warner
- 99 Minnesota, the NW (3 cr)
III MWF, 112Bu, Jordan
- 102a Greece to 200BC (3 cr)
I TThS, 112Bu, Jones
- 103 Continental Europe (3 cr)
IV MWF, 111Bu, Steefel
- 111 Europe in the 20th Century (3 cr)
I MWF, MNHAud, Deutsch
- 114 Economic History of Europe (3 cr)
I TThS, 111Bu, Nelson
- 118a Scandinavia During World War II (3 cr; prereq* 108A or 124)
VI MWF, 6F, Skodvin
- 119 World War II (3 cr)
II MWF, 18ME, Deutsch
- 124 Scandinavian Countries (3 cr)
II MWF, 253TSF
- 127 Russia (3 cr)
IV MWF, 112Bu, Anderson
- 127a Middle-East 1801 to Present (3 cr; prereq 3)
III MWF, 103NH, Anderson
- 130 Modern England 1642 to 1714 (3 cr)
II MWF, 112Bu, Willson
- 145 American Folklore (3 cr)
I MWF, 112Bu, Jordan
- 148 American Economic, Social History (3 cr)
II TThS, 111Bu, Loehr
- 151 Social Intellectual History of United States (3 cr)
III MWF, 111Bu, Tyler
- 156 Readings—Canadian History (3 cr; prereq sr)
III TThS, 221Bu, Burt
- 159 Latin-American History (3 cr)
VIII MWF, 221Bu, Allen
- 169 Readings in Works of Great Historians (3 cr; prereq sr)
IV TThS, 111Bu, Steefel
- 172 Readings in Ancient History (3 cr; prereq sr)
Ar, Jones
- 175 Readings in Medieval, Renaissance History (3 cr; prereq sr)
VIII-IX W, 339Lib
- 178 Readings in 17th Century France (3 cr; prereq sr, fren)
VIII-IX M, 106Bu, Wolf
- 178a Russian History (3 cr; prereq* sr, 125-126-127, rus, ger, or fren)
VII-VIII M, 312Lib, Anderson
- 178b Scandinavian History (3 cr; prereq sr)
Ar
- 178d World War II (3 cr; prereq sr)
VI-VII W, 106Bu, Deutsch
- 181 Readings in European Economic History (3 cr; prereq sr)
VI-VII T, 6F, Heaton
- 187 Early American Social, Intellectual History (3 cr; prereq sr)
VI-VII Th, 328Lib, Tyler
- 187a West in American History (3 cr; prereq sr)
VIII-IX M, 339Lib, Osgood
- 187c Third Party Movements Since Civil War (3 cr; prereq sr)
VI-VII T, 328Lib, Stephenson
- 187d Minnesota, the NW (3 cr; prereq sr)
VIII-IX W, 219Bu, Jordan
- 190 American Economic History (3 cr; prereq sr)
VI-VII Th, 301Lib, Loehr
- 193 Readings in Canadian History (3 cr; prereq sr)
Ar, Burt
- 210 Seminar—American History (3 cr)
—1, VIII-IX Th, 301Lib, Loehr
—2, VII-VIII F, 328Lib, Stephenson
—3, Ar, Osgood
- 226 Seminar—Modern European History (3 cr)
Ar, Steefel

JOURNALISM (JOUR)

- 5 American Newspaper (3 cr; prereq 3rd qtr fresh with C aver, no jour maj)
II TThS, 311 MurH, Ford
- 10 Photography (3 cr; prereq soph)
Lect V Th, 105MurH, Liebling
Lab VI-IX M, 20MurH, Liebling
- 14 Newspaper Reporting (3 cr; prereq see col bul)
—1, III-IV MWF, 212MurH, Patterson
—2, III-IV TThS, 212MurH, Hage
- 15 Newspaper Reporting (3 cr; prereq see col bul)
—1, I-II MWF, 212MurH, Charnley
—2, III-IV MWF, 210MurH, Crumpler
- 18 Prin Advertising (3 cr; prereq soph, 13 with C aver, Comp 27-28 or concur regis)
—1, III TThS, 308MurH, Seehafer
—2, VI-VIII TTh, 212MurH, Patterson
- 51 News Editing (3 cr; prereq 15 or B aver in 13-14, or 13, 18 for adver maj)
Lect V T, 105MurH, Eddy
—1, Lab I-II TTh, 207MurH, Emery
—2, Lab VIII-IX TTh, 207MurH, Davis
—3, Lab I-II MF, 207MurH, Jensen
—4, Lab VIII-IX MW, 207MurH, Davis
- 52 News Editing (3 cr; prereq 51, 55)
Lect V T, 308MurH, Patterson
—1, Lab III-IV MF, 206MurH, Emery
—2, Lab III-IV TTh, 206MurH, Eddy
—3, Lab VI-VII MW, 206MurH, Patterson
—4, Lab VIII-IX TTh, 206MurH

- 55 Advertising, Newspaper Typography (3 cr; prereq jour maj, sr col stand, for others 11 or 13 and 41)
 —1, Lect VII M, 302MurH, Barnhart
 —2, Lect V Th, 308MurH, Wilson
 —3, Lab I-II MW, 315MurH, Wilson
 —4, Lab VIII-IX TTh, 315MurH, Wilson
- 59 Typography Workshop (2 cr; prereq 55, 65, cons instr)
 Ar, Wilson
- 65 Graphic Arts (3 cr; prereq cons maj advis)
 IV MWF, 105MurH, Wilson
- 66 Pictorial Journalism (3 cr; prereq 10, 15, cons instr)
 Lect VIII M, 311MurH, Kildow
 Lab VIII-IX WF, 20MurH, Kildow
- 67 Radio News Writing (3 cr; prereq 15)
 Lect VII WF, 302MurH, Jensen
 Lab III-IV, days ar, 207MurH, Jensen, Hoshal
- 68 Probs—Radio Writing (3 cr; prereq see col bul)
 VI MWF, 302MurH, Charnley
- 69 Newspaper, Magazine Articles (3 cr; prereq 41)
 I MWF, 311MurH
- 73 Magazine Writing, Editing (3 cr; prereq 15 or 18)
 —1, I MWF, 302MurH, Kildow
 —2, VI MWF, 311MurH, Hage
- 82 Supervising School Publications (3 cr; prereq 41 or 51)
 VII MWF, 311 MurH, Kildow
- 86 Advertising Copy Writing (3 cr; prereq 51 or 41, and 55, 65)
 VII MWF, 308MurH, Seehafer
- 94 Newspaper Advertising (3 cr; prereq 51, 55; or 41, 55, cons instr)
 I TTS, 308MurH, Gerald
- 95 Circulation, Newspaper Mgt (3 cr; prereq 51)
 II TThS, 105MurH, Barnhart
- 101 Reporting Public Affairs (3 cr; prereq 51)
 —1, III TThS, 311MurH, Duncan
 —2, III MWF, 308MurH, Hage
- 103 Literary Aspects of Journalism (3 cr; prereq cons instr)
 IV MWF, 308MurH, Ford
- 104 Adv Newspaper Advertising (3 cr; prereq 51, 94, cons instr)
 II MWF, 308MurH, Barnhart
- 110 History of Journalism (3 cr; prereq 13)
 —1, II MWF, 105MurH, Ford
 —2, II MWF, 311MurH, Emery
- 115 Communication Media Analysis (3 cr; prereq 51, cons instr; or Econ 5 or Psy 70)
 III MWF, 311MurH, Swanson
- 116 Mass Communication (3 cr; prereq jour sr, or cons instr)
 I MWF, 308MurH, Swanson

- 118A Adv Reporting of Public Affairs (3 cr; prereq 101, cons instr)
 VI-IX MW, 405MurH, Crumpler
- 118B Projects in Media Analysis (3 cr; prereq 115, cons instr)
 VIII-IX TF, 405MurH, Swanson
- 118C Readings in Journalism (3 cr; prereq jour maj with B aver, cons instr)
 Ar, Casey
- 142 Current Newspaper Probs (3 cr; prereq sr, 51)
 Lect VI-VII TTh, 105MurH
 —1, VI-VII Th, 302MurH, Casey
 —2, VI-VII Th, 308MurH, Crumpler
 —3, VI-VII Th, 311MurH, Duncan
 —4, VI-VII Th, 405MurH, Charnley
 —5, VI-VII Th, 206MurH
- 150 Public Relations, Community Services (2 cr, §78; prereq sr, cons maj advis and instr)
 VIII-IX Th, 405MurH, Emery
- 177 Freedom of Press, Communications Law (3 cr; prereq* 51)
 IV MWF, 311MurH, Gerald
- 208 Communication Agencies as Social Institutions (3 cr; prereq cons advis)
 Ar, Gerald

LINGUISTICS AND COMPARATIVE PHILOLOGY

Chinese (CHIN)

- 3 Bgn Chinese (5 cr; prereq 2)
 V MTWThF, 108F, Mather

Japanese (JAP)

- 3 Bgn Japanese (5 cr; prereq 2)
 V MTWThF, 4F, Syro-Boiarsky
- 53 Adv Japanese (3 cr; prereq 52)
 VIII MWF, 4F, Syro-Boiarsky
- 58 Composition (2 cr; prereq 57)
 VIII TTh, 108F, Syro-Boiarsky
- 63 Adv Reading (3 cr; prereq 62)
 Ar, Syro-Boiarsky

Linguistics and Comparative Philology (LING)

- 123 Intro Arabic (3 cr; prereq 122)
 IV MWF, 4F, Irving
- 130 Readings in Sanskrit (3 cr; prereq 129)
 III TThS, 108F, Swanson

Russian (RUSS)

- 3 Intermediate Russian (5 cr; prereq 2)
 VII MTWThF, 11F, Niemi
- 53 Adv Russian (3 cr; prereq 52)
 VI MWF, 108F, Blinoff
- 58 Conversation (3 cr; prereq 57)
 VII MWF, 108F, Blinoff

- 63 Composition (2 cr; prereq 62)
VI TTh, 108F, Blinoff
- 73 Readings in Russian Literature (3 cr; pre-
req 72)
VIII MWF, 108F, Niemi
- 103 Literature (3 cr; prereq 8 cr lit)
V MWF, 10F, Niemi

MATHEMATICS (MATH)

- 1 Higher Algebra (5 cr; prereq see col bul)
-1, I MTWThF, 101F
-2, V MTWThF, 301F
-3, VII MTWThF, 101F
- 6 Trigonometry (5 cr; prereq plane geom, 1)
-1, I MTWThF, 109F
-2, V MTWThF, 109F
-3, VI MTWThF, 109F
- 7 College Algebra (5 cr, §8, or 15; prereq 6)
-1, III MTWThF, 102F
-2, VI MTWThF, 110F
- 8 Commerce Algebra (5 cr, §7, or 15; prereq
1)
-1, V MTWThF, 213F
-2, VI MTWThF, 101F
- 16 Elem Mathematical Analysis (5 cr; prereq
15)
-1, I MTWThF, 105F
-2, V MTWThF, 105F
- 20 Mathematics of Investment (5 cr; prereq
7 or 8; or 15 and 16)
-1, I MTWThF, 301F
-2, VIII MTWThF, 101F
- 30 Analytic Geometry (5 cr; prereq 7 or 6-8,
or 16)
-1, II MTWThF, 104F
-2, VII MTWThF, 105F
- 50 Calculus I (5 cr; prereq 30)
-1, II MTWThF, 105F
-2, VI MTWThF, 104F
- 51 Calculus II (5 cr; prereq 50)
-1, I MTWThF, 102F
-2, IV MTWThF, 105F
- 105 Intermediate Calculus (5 cr; prereq 51)
-1, III MTWThF, 105F
-2, VI MTWThF, 105F
- 107 Adv Calculus (5 cr; prereq 105, or 50-51
with grades A, acquaint with solid anal
geom or cons instr)
V MTWThF, 104F
- 110 Tutorial Course, Adv Mathematics (3-6 cr;
prereq 51)
Ar
- 118 Vector Analysis (3 cr; prereq 51)
II MWF, 101F, Hering
- 123 Mathematical Theory of Statistics (3 cr;
prereq 122)
IV MWF, 104F, Hart
- 125 Theory of Geometric Construction (3 cr;
prereq 30)
III MWF, 104F, Carlson

- 137 Adv Theory of Equations (3 cr; prereq 51,
62)
VII MWF, 104F, Gibbens
- 146 Fourier Series, Orthogonal Functions (3 cr;
prereq 145)
IV TThS, 104F, Cameron
- 202 Linear Algebras (3 cr; prereq* 201)
III TThS, 104F, Kalisch
- 205 Adv Topics in Mathematical Statistics (3
cr; prereq 204)
VIII MThF, 105F, Bearman
- 208 Theory of Functions (3 cr; prereq 207)
II TThS, 101F, Olmsted
- 240 Fourier Transform (3 cr; prereq 239)
IV MWF, 102F, Gelbaum
- 257 Seminar-Integration in Function Space (3
cr; prereq 247)
II TThS, 109F, Cameron

MUSIC (MUS)

- C Piano (no cr; prereq B)
Ar
- F Voice (no cr; prereq E)
Ar
- 1 Fundamentals of Music (2 cr, for non-mus
maj)
I MTWTh, 3ScH, Berryman
- 2T Music Theory (3 cr; prereq 1T)
V MTWThF, 3ScH, George
- 3T Music Theory (3 cr; prereq 2T)
-1, II MTWThF, 3 ScH, 103ScH, Feese, Fet-
ler
-2, VII MTWThF, 3ScH, 103ScH, Feese,
George
- 5T Music Theory (4 cr; prereq 4T)
V MTWThF, 103ScH, Malcolm
- 6T Music Theory (4 cr; prereq 5T)
-1, I MTWThF, 103ScH, Malcolm
-2, III MTWThF, 103ScH, Malcolm
-3, VI MTWThF, 103ScH, George
- 8 Counterpoint (3 cr; prereq 7, soph)
IV MWF, 103ScH, Fetler
- 10 Introd Music (4 cr)
Lect III MWF, ScHAud, Nolte
Lab III TTh, ScHAud, Nolte
- 11 Piano—Individual Lessons (2-4 cr; prereq
entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Fer-
guson, Humber, Kendall, Lindsay, Rymmer,
Stephens, Nolte
- 11C Piano—Class Lessons (2 cr; prereq cons
instr)
Lect VIII Th, ScHAud
-1, II TTh, 107ScH, Hunter
-2, III TTh, 107ScH, Hunter
-3, VI TTh, 107ScH, Hunter
- 12 Voice—Individual Lessons (2-4 cr; prereq
entr exam, see col bul)
VIII Th, ScHAud, lesson hrs ar, Birnbach,
Hull, Schuessler, Sheridan

- 12C Voice—Class Lessons (2 cr; prereq cons instr)
VIII Th, ScHAud
—1, III TTh, 211ScH, Schuessler
—2, VI TTh, 211ScH, Schuessler
—3, VII MW, 211ScH, Schuessler
- 13 Violin (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud, lesson hrs ar, Cullen, Druian, Scheurer
- 14 Viola (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Barton
- 15 Cello (2-4 cr; prereq entr exam, see col bul)
VIII TTh, ScHAud
lesson hrs ar, Meltzer, Hubert
- 16 Double Bass (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Fitch
- 17 Flute (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Arnegard, Niosi, Winkler
- 18 Oboe (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Angelucci
- 19 Clarinet or Saxophone (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Handlon, Fitch
- 20 Bassoon (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Santucci
- 21 Trumpet (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, MacKay, Greco
- 22 French Horn (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Linder
- 23 Trombone (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, MacKay
- 24 Tuba (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, MacKay
- 25 Percussion (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Segal, Denecke
- 26 Harp (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar
- 27 Organ (2-4 cr; prereq entr exam, see col bul)
VIII Th, ScHAud
lesson hrs ar, Jennings, Berryman
- 33 Music Literature (2 cr)
II MWF, ScHAud, Ivory
- 36 History of Music (2 cr; prereq soph)
II MWF, 4ScH, Ferguson
- 39 Keyboard Harmony (1 cr; prereq 38)
II TTh, 2ScH, Jennings
- 42 Orchestra (1 cr; prereq cons dir)
7:30 p.m. T, NMAAud, Oberg
- 45 University Chorus (1 cr, †43-44-45; prereq cons dir)
—1, IV MW and 7:30 T, 4NMA, Aliferis
—2, VIII MW and 7:30 T, NHAud, Aliferis
- 45U Farm Music Ensembles (1 cr)
4:30-5:45 TTh, 102Hr, Rymer
- 48 Concert Band (1 cr; prereq cons dir)
—1, IX MTTh, 4NMA, Prescott
—2, IX MWF, 5NMA, Prescott
- 52 Music—18th Century (2 cr; prereq 51)
III TTh, 104ScH, Ivory
- 55 Romantic Movement (2 cr; prereq 54)
VII WF, 104ScH, Kendall
- 58 Bach, Beethoven (3 cr; prereq 57)
VI-VII TTh, 104ScH, Ferguson
- 62 Instrumental Ensemble (2 cr; prereq 61)
VI MWF, 104ScH, Stephens
- 65 Vocal Ensemble (2 cr; prereq 64)
VIII M, 209ScH and VIII WF, 104ScH, Hull
- 68 The Chamber Singers (1 cr; prereq cons instr)
VI MWF, 4ScH, Aliferis
- 72 Normal Piano (2 cr; prereq 71)
I MWF, 104ScH, Kendall
- 75 Adv Harmony (2 cr; prereq 74)
III MW, 2ScH, Aliferis
- 79 Composition (2 cr; prereq 78)
IV TTh, 103ScH, Fetler
- 82 Adv Normal Piano (2 cr; prereq 81)
VIII-IX MW, 103ScH, Kendall
- 85 Adv Composition (2 cr; prereq sr, 84)
Ar, Ferguson, Fetler
- 88 Orchestration (2 cr; prereq 87)
II WF, 215ScH, Aliferis
- 92 Adv Instrumental Ensemble (2 cr; prereq 91)
VI MWF, 104 ScH, Stephens
- 95 Improvisation (1 cr; prereq 94)
II TTh, 206ScH, Berryman
- 202 Basis of Musical Expression (3 cr; prereq 201)
VIII-IX M, 104ScH and VIII-IX F, 103ScH, and conf hr, Ferguson
- 207 Composition in Larger Forms (3 cr; prereq 206)
Ar, Ferguson
- 211 Adv Topics—Music Analysis (3 cr; prereq 210)
II MWF, 2ScH, Oberg

- 212 Special Probs—Music (3-9 cr; prereq 202 or 211)
Ar, 107ScH, Oberg, Ferguson

PHILOSOPHY (PHIL)

- 1 Probs of Philosophy (5 cr, §1A; prereq* fresh with cons instr)
—1, Lect IV MWF, 301F, Sellars
—1, IV TTh, 322F
—2, V TTh, 305F
—2, Lect VIII MTWThF, 110F, Brodbeck
- 2 Logic (5 cr, §2A; prereq* soph)
—1, II MTWThF, 321F, Swanson
—2, VII MTWThF, 321F, Holmer
—3, III MTWThF, 321F, Terrell
- 3 Ethics (5 cr, §3A; prereq* soph)
V MTWThF, 308F, Holmer
- 3A Sel Probs of Ethics (3 cr, §3; prereq* soph)
VI MWF, 213NH, Wiggins
- 4 Introd Philosophy of Art (4 cr; prereq Art 1 or Mus 10)
III MTThF, 202Pt, Hospers
- 52 History of Philosophy (5 cr)
III MTWThF, MNHAud, Shaw
- 71 Design for America (5 cr; prereq* sr)
V MTWThF, 213NH, Wiggins
- 83 Science, Civilization (3 cr; prereq* sr)
VII MWF, 113F, Brodbeck
- 108 Aristotle (3 cr; prereq* 50 or 51 or 52)
VIII MWF, 305F, Sellars
- 112 Kant (3 cr; prereq* 52)
VII MWF, 307F, Sellars
- 115A 19th Century Thought (3 cr; prereq* 52)
IV MWF, 205F, Brodbeck
- 119 Readings in Recent Philosophy (3 cr; prereq 118)
Ar, Holmer
- 135 Philosophy of Modern Literature (3 cr)
VI MWF, 106NH, Hospers
- 153 Philosophy of Science (4 cr; prereq* 2)
III MTWF, 206F, Feigl
- 155 Metaphysics (5 cr; prereq* 50 or 51 or 52)
VII MTWThF, 204F, Conger
- 160 Prin Esthetics (3 cr; prereq 159)
IV MWF, 321F, Hospers
- 164 Ethical Theory (3 cr; prereq* 50 or 51 or 52)
II MWF, 322F, Feigl
- 182 Philosophy of Religion (3 cr; prereq 6 cr)
VI MWF, 322F, Conger
- 193 Seminar—Philosophy (3 cr; prereq* 9 cr)
Ar, Conger, Feigl, Sellars, others
- 225 Seminar—Philosophy of Language (3 cr; prereq* 143 or 147)
Ar, Sellars
- 232 Adv History of Philosophy (3 cr; prereq see col bul)
VI½-VII TTh, 305F, Hospers
- 246 Seminar—Philosophy of Biology, Psychology (3 cr; prereq cons instr)
VIII-IX T, Ar, Feigl, Meehl

- 249 Seminar—Logic of Exact Sciences (3 cr; prereq cons instr)
Ar, Feigl, Graves

PHYSICS (PHYS)

- 3 Introd Physical Science (3 cr; prereq 2)
III MWF, 150Ph, Kruglak
- 3a Introd Physical Science with Lab (4 cr; prereq 2a)
Lect III MWF, 150Ph, Kruglak
Lab secs will be assigned during first 2 days of class
- 4 Gen Physics (5 cr; prereq see col bul)
Lect and Quiz III MTWThF, 133Ph, Valasek
Lab secs will be assigned during first 2 days of class
- 6 Gen Physics (5 cr; prereq 5)
Lect and Quiz I MTWThF, 166Ph, Nafe
Lab secs will be assigned during first 2 days of class
- 8 Gen Physics (5 cr; prereq 7)
Lect and Quiz VII MTWThF, 166Ph, Wall, assistants
Lab secs will be assigned during first 2 days of class
- 9 Gen Physics (5 cr; prereq 8)
—1, Lect and Quiz II MTWThF, 133Ph, Williams
—2, Lect and Quiz II MTWThF, 150Ph, Ney
—3, Lect and Quiz VI MTWThF, 150Ph, Freier
Lab secs will be assigned during first 2 days of class
- 105 Theoretical Physics (5 cr; prereq 103)
I MTWThF, 133Ph, Nier
- 110 Modern Experimental Physics (3 cr; prereq 144)
VI-IX TTh, 49Ph, Schmitt
- 111 Modern Physics (3 cr; prereq 109)
VI MWF, 133Ph
- 112 Modern Experimental Physics (3 cr; prereq 144)
VI-IX TTh, 49Ph, Schmitt
- 114 Elem Physical Investigation (3 cr; prereq 15 cr, Math 51, cons dept chair)
Ar
- 116 Elem Physical Investigation (3 cr; prereq 15 cr, Math 51, cons dept chair)
Ar
- 118 Elem Physical Investigation (3 cr; prereq 15 cr, Math 51, cons dept chair)
Ar
- 136 Spectrum Analysis (3 cr; prereq 15 cr)
Lect VII T, 143Ph, Valasek
Lab VIII-IX T, VII-IX Th, 348Ph
- 185 Atomistics, Elem Quantum Mechanics (3 cr; prereq 183)
IV MWF, 145Ph, Tate
- 193 Introd Mathematical Physics (3 cr; prereq 192)
III MWF, 145Ph, Hill

- 203 Analytical Dynamics (3 cr)
VI MWF, 145Ph, Hill
- 212 Quantum Mechanics (3 cr)
III TTh, IV F, 143Ph, Weinberg
- 218 Seminar—Contemporary Theoretical Physics
(3 cr)
VI TTh, 145Ph, Critchfield
- 230 Adv Nuclear Theory (3 cr)
III MWF, 143Ph, Critchfield

POLITICAL SCIENCE (POL)

- C State in the Modern World (3 cr; prereq B)
—1, III MWF, 4ME, Lippincott
—2, III TThS, 216NH, Potter
- 2 American Government, Politics (3 cr, †1-2,
‡5; prereq 1)
II MWF, 4ME, Demetriou
- 3 American Government, Politics (3 cr; pre-
req 2)
—1, IV MWF, 150Ph, Christensen
—2, I TThS, 213NH, Warp
- 5 American Government, Politics (5 cr, †1-2)
VI MTWThF, 211NH, deGrazia
- 25 World Politics (3 cr)
VI MWF, NHAud, Mills
- 53 Field Work in Government, Politics (3 cr;
prereq 52, res Minn)
—1, IV-V T and hr ar, 102NH
—2, IV-V Th and hr ar, 102NH, Naftalin
- 85 Probs of World Politics (3 cr; prereq* 25
or Hist 1-2-3)
II MWF, 211NH Mills
- 93 Honors Work in Selected Fields (ar cr;
prereq 18 cr)
Ar
- 97 American, European Colonies Today (3 cr;
prereq* 6 cr)
III MWF, 216NH, Mills
- 103 Prin American Constitution III (3 cr; pre-
req 101 or 102)
II TThS, 216NH, Anderson
- 118 Local Government (3 cr; prereq* 116)
I MWF, 216NH, Brazier
- 122 Municipal Probs (3 cr; prereq* 121)
II TThS, 207NH, Ludwig
- 127 Government, Economic Order (3 cr; prereq
126)
IV TThS, 207NH, Warp
- 133 Public Admin (3 cr; prereq* 131)
II MWF, 213NH, Short
- 143 Government of USSR (3 cr; prereq 6 cr)
IV MWF, 211NH, McClosky
- 155 Government in Latin America (3 cr; pre-
req* 6 cr)
III MWF, 213NH, Christensen
- 162 Recent Political Thought (3 cr, †Phil 70;
prereq* 6 cr or 12 cr soc sci)
III TThS, 213NH, Sibley
- 166 Political Thought—Early Modern (3 cr;
prereq* 6 cr or 12 cr soc sci)
IV TThS, 216NH, Sibley

- 169 Political Behavior (3 cr; prereq 168)
III MWF, 107NH, deGrazia
- 177 Conduct of American Foreign Relations
(3 cr; prereq 176)
III TThS, 207NH, McLaughlin
- 182 Intl Law (3 cr; prereq* 181)
I TThS, 207NH, McLaughlin
- 186 Intl Organization III (3 cr; prereq* 6 cr)
I MWF, 213NH, Levi
- 187 Probs of European Reconstruction (3 cr;
prereq* 6 cr)
IV-V M and hr ar, 06Bo, Levi
- 194 Intl Relations in Far East (3 cr; prereq*
6 cr)
II MWF, 216NH, Quigley
- 205 Seminar—Public Law (3 cr, †204-205; pre-
req 204)
VI-VII½ TTh, 107NH, Warp
- 212 Seminar—Public Admin (3 cr, †210-211-212;
prereq cons staff)
VIII½-X½ TTh, 13Lib, Ludwig, Short,
Warp
- 221 Seminar—Political Power in Modern World
(3 cr; prereq* 12 cr)
VII-VIII M, 102NH, McClosky
- 227 Readings in Classics of Politics (3 cr; pre-
req* 12 cr incl 6 cr pol theory)
VIII-IX TTh, 109TSF, Lippincott
- 237 Seminar—Federalism, Intergovernmental Re-
lations (3 cr; prereq* 12 cr)
IV-V½ TTh, 100NH, Anderson
- 240 Intl Law, Diplomacy III (3 cr; prereq* sr
with cons instr, 181)
Ar, McLaughlin
- 244 Colonization, Imperialism (3 cr; prereq*
196)
Ar, Mills
- 247 Seminar—Far Eastern Government, Politics
(3 cr; prereq 153-154)
VII-VIII W, 214NH, Quigley

PSYCHOLOGY (PSY)

- A Elem Psychology (5 cr; prereq see col bul)
V MTWThF, NHAud, Longstaff, MacCorquod-
dale
- 1-2 Gen Psychology (6 cr; prereq soph)
—1, II MTWThFS, 313Z, Rosen
—2, IV MTWThFS, NHAud, Russell
- 2 Gen Psychology (3 cr, †1-2; prereq 1)
—1, II MWF, BuAud, MacCorquodale
—2, VIII MWF, BuAud, Heron
- 3 Psychology Applied to Daily Life (3 cr; pre-
req 2)
III MWF, BuAud, Longstaff, others
- 4-5 Psychology Lab (4 cr; prereq soph, 1-2 or
concur regis)
—1, V-VI MTThF, 211Psy, Tinker, others
—2, VII-VIII MTThF, 211Psy
—3, IX-X MTThF, 211Psy
—4, I-II TThFS, 211Psy
- 5 Psychology Lab (2 cr, †4-5; prereq 4)
I-II MW, 211Psy

- 52 Genetic Psychology (3 cr; prereq 2)
IV MWF, BuAud, Heron
- 55 Psychology of Sensation (3 cr; prereq 2)
IV MWF, 211Psy, Tinker
- 70 Prin of Psychological Measurement (3 cr;
prereq 2, 5)
VI MWF, 115Psy, Clark
- 92 Readings in Psychology (ar cr; prereq 2, 3
addtl cr, cons instr)
Ar, Staff
- 103 Experimental Psychology (3 cr; prereq 102)
VII MWF and VIII WF, Tinker
- 125-126 Individual Differences (6 cr; prereq sr,
2, 5 or 5 cr stat)
II MTWThFS, 115Psy, Paterson
- 127 Projects in Individual Differences (3 cr;
prereq sr, 126)
Ar, Paterson, Longstaff
- 130 Vocational Occupational Psychology (3 cr;
prereq 9 cr)
Lect. IV TS, 211Psy, Paterson
—1, Lab VI-VII W, 211Psy
—2, Lab VIII-IX W, 211Psy
- 137 Occupational Counseling (2 cr; prereq sr,
130)
VIII-IX M, 115Psy, Stone
- 147 Political Psychology (3 cr; prereq 2, 5, 9 cr
soc sci)
III TThS, 105MurH, Bird
- 153 Individual Investigations in Animal Psy-
chology (3 cr; prereq 151)
Ar, Heron
- 168 Public Opinion Analysis (3 cr; prereq sr,
167)
Ar, Clark
- 246 Adv Abnormal Psychology
IV MWF, 115Psy, Bird
- 20 Oral, Written French (5 cr; prereq 4)
VI MTWThF, 202F
- 52 Pronunciation, Diction (1-2 cr; prereq 4,
cand fren play)
Ar, Wirtz
- 55 Conversation (3 cr; prereq 20 or 54)
VI MWF, 302F
- 65 Adv Conversation (3 cr; prereq 63)
III MWF, 2F, Guinotte
- 72 Survey of Literature (3 cr; prereq 71)
IV MWF, 201F, Clefton
- 74 Survey of Literature (5 cr; prereq 73)
III MTWThF, 307F, Brackney
- 77 French Civilization, Culture (3 cr; prereq
76)
III MWF, 6F, Fermaud
- 105 Syntax, Composition (1 cr; prereq 104)
VI F, 203F, Barton
- 107 Cours de Style (3 cr; prereq* 64)
Ar, Guinotte
- 112 19th Cent Poetry (3 cr; prereq 72 or 74)
II MWF, 201F, Clefton
- 117 17th Cent Literature (3 cr; prereq 116)
IV MWF, 108F, Fermaud
- 120 18th Cent Literature (3 cr; prereq 119)
IV TTh, V Th, 201F, Clefton
- 156 Realistic Novel (3 cr; prereq 72 or 74)
VII MWF, 201F, Barton
- 173 History French Language (1 cr, †171-172-173;
prereq 172)
VII Th, 304F, Brackney
- 183 Movement of Ideas in French Literature
(2 cr; prereq 72 or 74, cons instr)
IX-X W, 301Lib, Desgranges
- 203 Old French Phonology, Morphology (2 cr)
VII-VIII T, 205F, Brackney
- 206 Old French Literature (2 cr)
VIII-IX Th, 103F, Brackney
- 209 Canceled

ROMANCE LANGUAGES

Students submitting one year high school work must take second quarter course; those submitting two years must take third quarter course.

French (FREN)

- 1 Bgn French (5 cr)
—1, III MTWThF, 110F
—2, VII MTWThF, 226F
- 2 Bgn French (5 cr; prereq 1)
—1, III MTWThF, 226F
—2, VII MTWThF, 227F
- 3 Intermediate French (5 cr; prereq 2)
—1, I MTWThF, 201F
—2, IV MTWThF, 305F
—3, VI MTWThF, 201F
- 3a Intermediate Conversational French (5 cr;
prereq 2a)
Demonstration III MTWThF, 227F
—1, Lab VI MTWThF, 4F
—2, Lab VII MTWThF, 4F
- 4 Intermediate French (5 cr; prereq 3, 3a)
III MTWThF, 202F

Italian (ITAL)

- 3 Intermediate Italian (4 cr; prereq 2 with
grade C)
IV MTWThF, 302F, Nissen
- 74 Petrarch (3 cr; prereq 3; or 2 with cons
instr)
III MWF, 302F, Nissen
- 162 Canceled
- 164 Dante in English (3 cr; prereq cons instr)
II MWF, 302F, Nissen

Portuguese (PORT)

- 3 Intermediate Portuguese (5 cr; prereq 2)
VII MTWThF, 302F, Luckey
- 71 Brazilian Literature, Culture in English (3
cr; prereq 70)
Ar, Luckey

Spanish (SPAN)

- 1 Bgn Spanish (5 cr)
—1, II MTWThF, 11F
—2, VII MTWThF, 202F

- 2 Bgn Spanish (5 cr; prereq 1)
—1, III MTWThF, 201F
—2, VII MTWThF, 110F
- 3 Intermediate Spanish (5 cr; prereq 2)
—1, I MTWThF, 202F
—2, IV MTWThF, 227F
—3, VI MTWThF, 11F
- 3a Intermediate Conversational Spanish (5 cr; prereq 2a)
Dem II MTWThF, 8F
Lab V MTWThF, 202F
- 4 Intermediate Spanish (5 cr; prereq 3 or 3a)
II MTWThF, 202F
- 20 Oral, Written Spanish (5 cr; prereq 4)
—1, III MTWThF, 3F
—2, VII MTWThF, 207F
- 55 Conversation (3 cr; prereq 20 or 54)
—1, II MWF, 3F
—2, III MWF, 4F, Mills
- 56 Phonetics, Diction (3 cr; prereq 53 or 20)
IV TTh, 203F
Lab III-IV S, 203F, LeFort
- 57 Commercial Spanish (5 cr; prereq 53 or 20)
VII MTWThF, 3F, Cuneo
- 62 Adv Conversation (3 cr; prereq 60)
II MWF, 226F
- 67 Literature of Spain (3 cr; prereq 66)
VI MWF, 103F, Pattison
- 69 Literature of Spain (5 cr; prereq 68)
VI MTWThF, 208F, Grismer
- 72 Latin American Civilization, Culture (3 cr; prereq* 71)
—1, IV MWF, 203F, LeFort
—2, VI MWF, 226F, Cuneo
- 76 Literature of Spanish America (3 cr; prereq 75)
II MWF, 4F, Irving
- 105 Syntax, Composition (1 cr; prereq 104)
IV T, 307F, Pattison
- 117 17th Cent Literature (3 cr; prereq 116)
VII MWF, 103F, Grismer
- 142 Contemporary Latin American Literature (3 cr; prereq 141)
VIII MWF, 302F, LeFort
- 148 Canceled
- 176 Contemporary Spanish Literature (3 cr; prereq 175)
IV MWF, 307F, Pattison
- 246 Old Spanish Literature (2 cr)
IX-X Th, 203F, Irving
- 252 Spanish Seminar (2 cr)
VIII-IX W, 203F, Pattison
- 255 Canceled
- SCANDINAVIAN (SCAN)**
- 3 Intermediate Norwegian (5 cr; prereq 2)
VI MTWThF, 12F, Clausen
- 6 Adv Norwegian (3 cr; prereq 5)
VII MWF, 12F
- 9 Intermediate Swedish (5 cr; prereq 8)
II MTWThF, 12F, Lorenzen

- 12 Adv Swedish (3 cr; prereq 11)
III MWF, 12F, Lorenzen
- 23 Scandinavian Life Today, Yesterday (3 cr; prereq 22)
V MWF, 12F, Gustafson
- 61 Norwegian Conversation (3 cr; prereq 3)
Ar, Clausen
- 71 Swedish Conversation (3 cr; prereq 12)
Ar, Lorenzen
- 153 Modern Scandinavian Home as an Expression of Northern Art (3 cr)
Ar, Lien
- 173 Contemporary Scandinavian Theater (3 cr; prereq 6 or 12 or 8 cr lit)
IV MWF, Gustafson
- 193 Scandinavian Literatures (3 cr; prereq 6 or 12)
Ar, Gustafson
- 217 Scandinavian Romanticism (3 cr)
Ar, Gustafson
- 223 Dramatic Interpretative Probs in Strindberg (3 cr)
Ar, Gustafson

SOCIAL WORK (SW)

- 200 Canceled
- 207 Topics in Social Work (ar cr)
VII-IX Th, Staff
- 209 Seminar—Social Agencies, Institutions (ar cr)
Ar, Doyle
- 212 Initial Field Training (ar cr; prereq 220 or 282A or concur regis)
Ar, Staff
- 215 Adv Field Training (ar cr; prereq 221 or 282B)
Ar, Staff
- 216 Adv Field Training (ar cr; prereq 221 or 282B)
Ar
- 217 Adv Field Training (ar cr; prereq 221 or 282B)
Ar
- 219 Seminar for Field Training Supervisors (ar cr; prereq super of students in field work)
IX-X Th, Staff
- 220 Case Work I (3 cr; prereq 200, 210 or concur regis)
IV TThS, 103NH, Whitmore
- 225 Seminar—Family Class Work (ar cr; prereq* 221 or 282B)
IX-X T, 102NH, Dyer
- 227 Seminar—Case Work in Psychiatric Setting (ar cr; prereq 221 or 282B, concur regis in 215-216-217)
VII-VIII Th, 103NH, Shea
- 229 Seminar—Case Work Supervision (ar cr; prereq 222 or 230 or 251 or 261)
VI-VII T, 102NH, Dyer
- 230 Psychiatric Social Case Work (3 cr; prereq 221)
II TThS, 107NH, Shea

- 239 Seminar—Psychiatric Social Work (2 cr; prereq 230, 235, 236)
Ar, Hinckley
- 250 Medical Information for Social Workers (3 cr; prereq PH 50 or 51)
IX T and VIII-IX Th, 129MH, Mueller, Staff
- 253 Adv Medical Social Work (3 cr; prereq 252)
III TThS, 103NH, Mueller
- 259 Seminar—Medical Social Work (ar cr; prereq 221, concur regis in 251-252-253)
VI-VII Th, 102NH, Mueller
- 261 Probs in Child Case Work (3 cr; prereq 211, 221)
II TThS, 102NH, Guilford
- 262 Prin of School Social Work (2 cr; prereq 221 or 282B)
IX-X T, 100NH, Laabs
- 266 Seminar—Child Welfare (ar cr)
IX-X Th, 103NH, Guilford
- 269 Seminar—Public Welfare Admin (ar cr; prereq 268)
IX-X F, 103NH, Kidneigh
- 279 Seminar—Admin, Community Organization (ar cr; prereq 275, 280)
IX-X M, 103NH, Kidneigh
- 280 Community Organization (3 cr; prereq* 200, 282)
I TThS, 107NH, Kidneigh
- 282A Prin of Group Work I (3 cr; prereq 210 or concur regis)
IV TThS, 106NH, Konopka
- 285 Group Work III (2 cr; prereq 282B)
II-III Th, 100NH, Konopka
- 288 Supervision, Admin in Group Work II (2 cr; prereq 287)
VI-VII T, 100NH, Konopka
- 289 Seminar—Group Work (ar cr)
VII-VIII Th, 100NH, Konopka
- 293 Spec Studies in Social Work (ar cr)
Ar
- 299 Seminar—Recent Research (ar cr)
IX-X Th, 100NH, Monachesi
- 300 Gen Seminar (ar cr)
Ar, Staff
- 7 Urban Sociology (3 cr; prereq 1 or 1A)
III TThS, 107NH, Caplow
- 14 Rural Sociology (3 cr, for Agric students; prereq 1 or 1A)
IV MWF, 213NH
- 45 Social Statistics (5 cr, §Econ 5; prereq 1 or 1A)
Lect IV MWF, 106NH, Ball
—1, VI-VII MW, 122NH
—2, VI-VII TTh, 122NH
- 49 Social Probs (3 cr; prereq 1 or 1A)
I MWF, 211NH, Martindale
- 51 Areas of Social Work (3-4 cr; prereq 50)
II TThS and 3 hr observ for seq D students, 213NH, Winslow
- 53 Elements of Criminology (3 cr; prereq 1 or 1A)
III MWF, 18ME, Vold
- 91 Case Method—Study of Human Probs (3 cr; prereq 50 or 51, or cons maj advis)
III TThS, 15MeS, Winslow
- 99 Tutorial—Selected Fields (3 cr; prereq cons maj advis)
Ar
- 100 Contemporary Penology (3 cr; prereq* 1 or 1A, 53, 15 cr soc sci, CW, educ, phil or psych)
II MWF, 106NH, Vold
- 103 Juvenile Courts, Probation (3 cr; prereq 53)
III TThS, 106NH, Monachesi
- 112 Population Policy (3 cr; prereq* sr, 111)
III MWF, 100NH, Marshall
- 116 Population Theory in Scandinavian Countries (3 cr; prereq* 1 or 1A)
Ar, Skodvin
- 117 Scandinavian Folk Movements (3 cr; prereq* 1 or 1A)
VII MWF, 9F, Skodvin
- 123 Interaction—Racial, Cultural Groups in America (3 cr; prereq* 1 or 1A, 15 cr soc sci, CW, educ, phil or psych)
II TThS, 112Bu, Rose
- 124 Social Mobility (3 cr; prereq* 140, 162, 15 cr soc sci, CW, educ, phil or psych)
II TThS, 218P, Gross
- 140 Social Organization (3 cr; prereq* 1 or 1A, 15 cr soc sci, CW, educ, phil or psych)
II TThS, 106NH, Chapin
- 141 The Family (3 cr; prereq* 1 or 1A, 15 cr soc sci, CW, educ, phil or psych)
IV TThS, 213NH, Quackenbush
- 161 Rural Community Analysis (3 cr; prereq* 1 or 1A, 15 cr soc sci, educ, CW, phil or psych)
VI T, VI-VII Th, 302Hr, Marshall
- 172 Theories of Social Reconstruction (3 cr; prereq* 1 or 1A, 15 cr soc sci, CW, educ, phil or psych)
III MWF, 106NH, Martindale
- 181 Probs in Rural Social Research (2 cr; prereq* sr, 1 or 1A, 15 cr soc sci, educ, CW, phil or psych)
VIII-IX M, 106NH, Nelson

SOCIOLOGY (SOC)

- 1 Introd Sociology (5 cr)
Lect II TThS, NHAud, Monachesi, others
—1, I WF, 107NH
—2, II MW, 100NH
—3, IV MW, 107NH
—4, VI MW, 100NH
—5, VII MW, 100NH
—6, III TTh, 102NH
- 1A Introd Sociology (3 cr, for Agric students)
I TThS, 102Hr
- 2 Intermediate Sociology (5 cr; prereq 1 or 1A)
Lect I TThS, 211NH, Caplow
—1, I WF, 100NH
—2, II TTh, 253TSF
—3, IV MW, 100NH
—4, IV TTh, 107NH

- 186 Field Work, Social Research (2 cr; prereq 185)
Ar, Gross
- 200 Seminar-Probs in Criminology
VIII-IX Th, 104A NH, Vold
- 201 Seminar-Social Psychology of Family Relationships
VII½-IX½ T, 107NH
- 202 Seminar-Urban Sociology
VIII-IX W, 103NH, Caplow
- 205 Seminar-Social Theory
VI-VII W, 103NH, Martindale
- 208 Seminar-Statistical Theory, Relation to Social Theory, Practice
VIII-IX F, 122NH, Chapin
- 211 Seminar-Population Research
Ar, Marshall
- 217 Seminar-Current Rural Social Probs
Ar, Nelson
- 218 Methodological Probs in Sociological Research
VI-VII Th, 106NH, Gross
- 219 Probs of Modern Mass Society
VII-X T, 103NH, Rose
- 33 Bgn Acting (3 cr; prereq 32)
—1, II MWF, 3rd fl NH, Turner
—2, II TThS, 19ScH
—3, III MWF, 3rd fl NH
- 34 Stagecraft (3 cr, §71-72-73; prereq 31)
II T and I-II ThS, 3rd fl NH
- 51 Adv Public Speaking (3 cr; prereq 3 or 6)
—1, II MWF, 306F, Gilkinson
—2, II MWF, 107F
- 57 Speech Writing, Platform Speaking (3 cr; prereq 56)
—1, III MWF, 114F, Gilkinson
—2, VII MWF, 205F, Gilkinson
- 61 Personal Development through Speech (3 cr; prereq 3 or 6, Psy 2)
VII MWF, 308F
- 65 Radio Speech (3 cr; prereq 3 or 6)
II MWF, 302MurH, Ziebarth
- 66 Radio Drama (3 cr; prereq 3 or 6)
IV MWF, 302MurH, Engar
- 67 Phonetics (3 cr; prereq 3 or 6)
I MWF, 306F, Irwin
- 73 Play Production (3 cr, §34, 93, 113; prereq 72)
IV MWF, 3rd fl NH, Graham
- 79 Adv Acting (3 cr; prereq 78)
II MWF, 3rd fl NH, Graham
- 82 Interpretative Reading (3 cr; prereq 81)
I TThS, 306F
- 83 Interpretative Reading (3 cr; prereq 82)
—1, IV MWF, 308F
—2, VI MWF, 308F
- 92 Stage Lighting (3 cr, §72; prereq 31)
III TThS, and IV TS, 3rd fl NH
- 97 Intercollegiate Oratory, Debate (1-3 cr; by petition, soph with C aver)
Ar, Howell
- 103 Argumentation, Persuasion (3 cr; prereq 102)
—1, III MWF, 306F, Howell
—2, III MWF, 305F
—3, VI MWF, 306F, Howell
- 105 Theory of Reading, Acting (3 cr; prereq 3 or 6, 83, Psy 2)
III TThS, 306F, Thompson
- 106 Discussion (3 cr; prereq 3 or 6)
VII MWF, 305F, Howell
- 113 Stage Direction (3 cr; prereq 112)
III MWF, 19ScH, Whiting
- 117 Writing Radio Drama (3 cr; prereq sr, 33, cons instr)
II MWF, ScH Seminar Room, Thompson
- 126 History, Criticism of Public Address (3 cr; prereq 3 or 6, Psy 2)
II TThS, 308F, Gilkinson
- 143 Speech Instrumentation (3 cr; prereq 3 or 6, 67, Psy 2, 5)
VII MWF, 306F, Irwin
- 155 Lip Reading (3 cr; prereq* 3 or 6, 61, 67, Psy 2)
IV MWF, 306F, Hedgecock

SPEECH (SPCH)

- 1 Fundamentals of Speech (3 cr, fl-2; prereq* soph)
—1, II TThS, 306F, Gilkinson, others
—2, IV MWF, 209TSF
—3, VI MWF, 209TSF
—4, III MWF, 257TSF
- 2 Fundamentals of Speech (3 cr, fl-2; prereq 1)
—1, II MWF, 257TSF, Gilkinson, others
—2, III MWF, 210VH
—3, IV MWF, 322F
—4, VII MWF, 2F
—5, VIII MWF, 311½F
—6, II TThS, 311½F
—7, I MWF, 2F
- 3 Fundamentals of Speech (3 cr; prereq 2)
—1, II MWF, 311½F, Gilkinson, others
—2, III MWF, 209TSF
—3, VI MWF, 2F
—4, VII MWF, 322F
- 5 Fundamentals of Speech (5 cr; prereq* soph)
—1, III MTWThF, 311½, Gilkinson, others
—2, IV MTWThF, 311½F
—3, VIII MTWThF, 109F
—4, I MTWThF, 311½F
- 6 Fundamentals of Speech (5 cr; prereq 5)
—1, IV MTWThF, 311F
—2, VI MTWThF, 311½F
—3, VII MTWThF, 311F
—4, II MTWThF, 311F
- 31 Introd Theater (3 cr; prereq 3 or 6 or concur regis)
II MWF, 19ScH, Whiting

- 163 Speech Pathology (3 cr, †162-163; prereq 162)
VI T and VI-VII Th, 306F, Henrikson
- 166 Clinical Methods in Speech Pathology (3 cr, †EdCI 176; prereq sr 165)
VIII WF and hr ar, 306F
- 176 Theater Backgrounds (3 cr; prereq sr, 175)
VII M and VII-VIII W, Ar, Whiting
- 183 Readings in Speech (ar cr; prereq 182)
Ar, Staff
- 201 Gen Seminar
Ar, Staff
- 209 Seminar-Rhetoric, Persuasion
Ar, Howell
- 213 Seminar-Dramatic Theory
Ar, Thompson
- 223 Seminar-Oral Interpretation of Literature
Ar
- 233 Seminar-Adv Speech Probs
Ar, Gilkinson
- 243 Seminar-Radio Research
Ar, Ziebarth
- 263 Seminar-Speech Pathology
Ar, Henrikson
- 293 Research-Special Probs
Ar, Staff

ZOOLOGY (ZOO)

- 3 Gen Zoology (4 cr, †1-2-3; prereq 2)
-1, Lect II TTh, 06Bo, Minnich
-2, Lect IV WF, 06Bo, Wodsedalek
-3, Lect VII TTh, 06Bo, Olson
-1, Lab I-II MF, 101, 107 Z
-2, Lab III-IV MF, 101, 107 Z
-3, Lab V-VI MF, 101, 107Z
-4, Lab VII-VIII MF, 101, 107Z
-5, Lab III-IV TTh, 101, 107Z
- 50 Introd Gen Physiology (5 cr; prereq* 3 or 15 cr bot, 10 cr chem)
Lect III TThS, 313Z, Steinbach
-1, Lab I-II TThS, 18Z
-2, Lab IV-V TThS, 18Z
-3, Lab VI-VIII TTh, 18Z
- 53 Fauna of Central United States (5 cr; prereq 3)
Lect VIII MWF, 313Z, Eddy
-1, Lab VI-VII MW and VI-IX F, Sub 3Z
-2, Lab IX-X MW and VII-X F, Sub 3Z
- 58 Introd Ornithology (3 cr; prereq 57)
VII-IX TTh, 307MNH, Warner
- 83 Introd Genetics, Eugenics (3 cr; prereq 3 or 10 cr bot)
II MWF, 06Bo, Reed
- 102 Zoological Techniques (prereq grad)
Ar
- 110 Animal Reactions (3 cr; prereq 15 cr, cons instr)
IV MWF, 211Z, Minnich
- 119 Canceled
- 120 Gen Ecology of Insects (3 cr; prereq 15 cr zool or ent)
Lect VI TTh, 307CofH, Hodson
Lab VII-VIII TTh, 307CofH
- 127 Adv Gen Entomology (3 cr; prereq 126)
Lect I TTh, 211Z, Mickel
Lab I-III S, 401Z
- 140 Biological Microscopy (4 cr; prereq 15 cr zool, ent, or bot, cons instr)
Lect VI WF, 208Z, Richards
Lab VII-IX WF, 208Z
- 146 Helminthology (3 cr; prereq 15 cr, cons instr)
VII-IX TTh, 208Z, Wallace
- 162 Cytology (3 cr; prereq 161)
Lect VI TTh, 313Z, Wodsedalek
Lab VII-VIII TTh
- 175 Human Genetics (3 cr; prereq* 83, cons instr)
IX MWF, 313Z, Reed
- 182 Experimental Embryology (5 cr; prereq 15 cr incl 50, 59)
III MWF, 201Z, Spratt
- 199 Problems (ar cr; prereq 198)
Ar
- 203 Research-Entomology
Ar
- 213 Research-Ecology
Ar
- 219 Research-Physiology
Ar
- 223 Research-Biophysics
Ar
- 231 Research-Histology
Ar
- 235 Research-Embryology
Ar
- 239 Research-Cytology
Ar
- 243 Canceled
- 253 Research-Genetics
Ar
- 263 Research-Parasitology
Ar
- 293 Gen Seminar
Ar
- 298 Seminar-Spec Research Fields
Ar

COURSE FEES

The following courses require payment of course fees as indicated.

Aeronautical Engineering Laboratory fee, required of all sophomores, juniors, and seniors in aeronautical engineering.....	\$ 3.00 per quarter
20, Flying (payable at the University Airport).....	4.50 per solo hour 7.50 per dual hour
46, Orientation Course in Link Flying	
No fee for Aero Engineers; other students.....	42.00 per quarter
47, Basic Instrument Course, all students.....	7.00 per hour
48, Advanced Instrument Course, all students.....	98.00 per quarter
49, Refresher Course, all students, minimum 6 hours or \$42.....	7.00 per hour
Agricultural Education 82, 91, 199E.....	1.50 per credit
Agricultural Engineering 5, 7, 13, 14, 19, 20, 21, 23, 24, 25, 33, 35, 40, 72.....	1.00 per quarter
41, 43.....	6.00 per quarter
42.....	3.00 per quarter
Architecture 160, 262, IHP I-II.....	1.00 per quarter
AD I-II-III, Arch. 40.....	3.00 per quarter
AD IV.....	10.00 per quarter
Art 1, 4, 5, 11, 12, 20, 21, 30, 31, 32, 50, 51, 52, 53, 54, 55, 60, 60A, 61, 61A, 62, 62A, 63, 64, 65, 70, 71, 72, 73, 74, 75, 80, 81, 82, 90, 91, 92, 103, 133, 134, 135, 150, 151, 152, 153, 154, 155, 200, 201, 202.....	1.00 per quarter
33, 34, 35, 43, 44, 45, 83, 84, 85, 87, 88, 89, 93, 94, 95, 97, 98, 99, 183, 184, 185, 193, 194, 195.....	2.00 per quarter
10, 143, 144, 145.....	5.00 per quarter
Art Education 84, 86, 87, 88, 184, 185.....	1.50 per credit
Astronomy 20.....	1.00 per quarter
Bacteriology 53, 102, 103, 104, 113, 114, 116, 123, 124.....	3.00 per quarter
Biological Station, Laboratory fee.....	5.00 per term
Biostatistics (see Public Health)	
Botany 1, 2, 3, 50, 51, 52, 53, 54, 112, 113, 114, 115, 118, 119, 121, 127, 130, 132, 134, 137, 165, 196, 197, 198, 199.....	1.50 per quarter
4, 5.....	2.25 per quarter
120, 123, 154, 173, 174, 175, 179, 180, 181.....	3.00 per quarter
Business Administration	
112, 130, 139, 150.....	2.00 per quarter
170, 171.....	1.00 per quarter
Civil Engineering 51, 52, 53, 137, 146.....	2.00 per quarter
23.....	10.00 per quarter
Communications I.....	1.00 per quarter
Drawing 65 (Jour. 65).....	1.00 per quarter
Economics 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43—(for one or more of these courses).....	2.50 per quarter
Education 51A-B-C, 55A-B, 71A-B-C.....	1.50 per credit
Ed.C.I., Curriculum and Instruction. All courses.....	1.50 per credit
Ed.Psy. 142, 143, 144, 150.....	1.50 per credit
217, 218.....	1.00 per quarter
216A, 217A, 218A.....	1.50 per quarter
Ed.T., Methods and Directed Teaching. All courses.....	1.50 per credit

Electrical Engineering 12, 14, 112, 114, 116, 118, 120, 127, 128, 129.....	1.00 per quarter
16, 122, 124, 126, 164, 165, 166.....	2.00 per quarter
English 4 (Engineering English).....	1.00 per quarter
Entomology 5, 21, 51, 52, 56, 63, 64, 114, 117, 118, 119, 120, 121, 125, 126, 127, 141, 142, 144, 145, 146, 150, 164, 165, 166, 170, 175, 176, 179.....	1.50 per quarter
55, 128, 129, 140, 168, 169, 177.....	5.00 per quarter
Family Life 14.....	3.00 per quarter
General College 10A.....	1.00 per quarter
22A-B-C, 22X, 23AX-BX-CX-DX, 24A-B-C, 24AX-BX-CX, 25A-B-C-D, 25X, 28, 32A-B-C-D, 32AX-BX-CX, 33A-B-C, 33AX-BX-CX.....	1.50 per quarter
23A-B-C-D.....	2.00 per quarter
47A.....	2.50 per quarter
26A, 26B.....	5.00 per quarter
Geology A, B, 23, 24.....	1.00 per quarter
175.....	5.00 per quarter
100, 115, 150.....	10.00 per quarter
Home Economics Education 91, 93, 94, 197, 199E.....	1.50 per credit
Humanities 1, 11, 21, 51, 61, 71.....	1.00 per quarter
Industrial Education 1, 2, 3, 5, 6, 7, 10, 11, 12, 15, 16, 20, 21, 25, 26, 50A-B-C, 70, 75.....	1.50 per credit
Journalism, general fee.....	1.00 per quarter
The general fee of \$1 is charged students registered for courses in Journalism with the exception of Journalism 5. The fee is \$1 per quarter regardless of the number of courses taken.	
The following courses have fees in addition to the \$1 general fee:	
51, 58, 59, 67, 68 (in addition to general fee).....	2.00 per quarter
41, 52, 55 (in addition to general fee).....	3.00 per quarter
10, 66 (in addition to general fee).....	5.00 per quarter
Library Tuition (for all Library courses except Lib. 1)	
Students taking 12 credits or more of library courses will pay full tuition rate for Library—\$42 (resident), \$75 (nonresident) and may take other courses with no college tuition charge. Students taking less than 12 credits of library courses will pay the library rate for library courses and the college rate for other courses except that no student will be charged more than \$42 (resident), \$75 (nonresident) regardless of courses pursued.	
Mathematics and Mechanics 87, 141, 143.....	1.00 per quarter
Mechanical Engineering 1-9, 12-18, 33, 34, 35, 61, 110-114, 118, 149, 159, 169, 189, 198.....	2.00 per quarter
Methods and Directed Teaching. All courses.....	1.50 per credit
Mortuary Science Course Fees	
Anatomy.....	1.00 per quarter
Bacteriology.....	3.00 per quarter
Embalming.....	1.00 per quarter
Restorative Art.....	1.00 per quarter
Music 11-27, Mu.Ed. 225E, one individual lesson per week, 2 credits	30.00 per quarter
Two individual lessons per week, 4 credits.....	60.00 per quarter
Class lessons in courses 11C, 12C, 2 credits.....	15.00 per quarter
A, B, C, D, E, F, one individual lesson per week, no credit.....	30.00 per quarter
10, 31-36, 50-58.....	1.50 per quarter

Music Education 4-6, 50-65, 50A-B, 112E.....	1.50 per credit
Natural Science 4, 5, 6.....	1.00 per quarter
7, 8, 9	1.50 per quarter
Physical Education (men) 1A-B-C, 2A-B-C.....	1.00 per credit
4A-B-C, 5A-B-C, 6A-B-C, 7A-B-C, 8, 9A-B, 53, 54, 55, 60A-B, 73, 74, 75, 199	1.50 per credit
A towel and locker fee of \$2.50 per quarter, payable at the department, is charged all students using physical education facilities for activity. Uniforms for class work or recreational activity are \$2 per quarter.	
Physical Education (women) Nonprofessional Courses, 21A-B-C, 41A-B-C, 54, 87, 88.....	2.50 per quarter
Maximum course fee of \$5.00 per quarter on the above courses regardless of the number of courses taken.	
50, 51 (one or both).....	2.00 per quarter
57A-B, 61A-B-C, 62, 64, 65, 65A-B, 66, 73A-B-C, 83, 90A-B-C	1.50 per credit
Physical Therapy 75	3.00 per quarter
Physics 1a, 2a, 3a, 4-9, 52, 110, 112, 134, 136, 144, 145, 146, 154.....	2.00 per quarter
Psychology 4, 5, 135, 136, 137.....	1.00 per quarter
130	2.00 per quarter
Public Health 65, 66, 67, 119, 129, 138, 139, 173, 190.....	1.00 per credit
80, 140, 150	1.00 per quarter
121, 131	1.50 per quarter
111	2.00 per quarter
184, 185, 186, 187, 188.....	3.00 per quarter
169	100.00 per course
Rhetoric I (Communications) 12, 22, 28, 54, 59.....	1.00 per quarter
Social Work 210-217	3.50 per quarter
Soils 108	2.00 per quarter
Speech 1, 2, 3, 5, 6, 51, 55, 56, 57, 61, 65, 67, 81, 82, 83.....	1.00 per quarter
31, 32, 33, 34, 66, 71, 72, 73, 78, 79, 91, 92, 93, 111, 112, 113, 131, 132, 133	2.00 per quarter
Zoology 22, Lab.	7.00 per quarter
1, 2, 3, 14, 15, 21, 50, 51, 52, 53, 55, 57, 58, 59, 75, 81, 100, 101, 102, 107, 108 109, 110, 111, 112, 113, 115, 116, 117, 118, 119, 120, 121, 125, 126, 127, 132, 143, 144, 145, 146, 149, 150, 155, 156, 157, 160, 161, 162, 170, 180.....	1.50 per quarter
128, 129, 140	5.00 per quarter

Courses Requiring Deposit Cards

Nonveterans should purchase Agricultural Biochemistry, Chemistry, Pharmacy, or Physiological Chemistry deposit cards as appropriate. Chemistry, Pharmacy, and Physiological Chemistry cards may be purchased from the bursar, Administration Building, Minneapolis Campus. Agricultural Biochemistry cards may be purchased from the cashier, Coffey Hall, St. Paul Campus. Chemistry deposit cards are \$10 each. Other deposit cards are \$5 each. Veterans will receive information from the instructor concerning cards and checking into laboratory. No student will be assigned a desk in the laboratory until he presents his card. The course fee, laboratory material, and breakage will be charged against the card. The unused balance will be credited to the student's matriculation deposit at the end of the course.

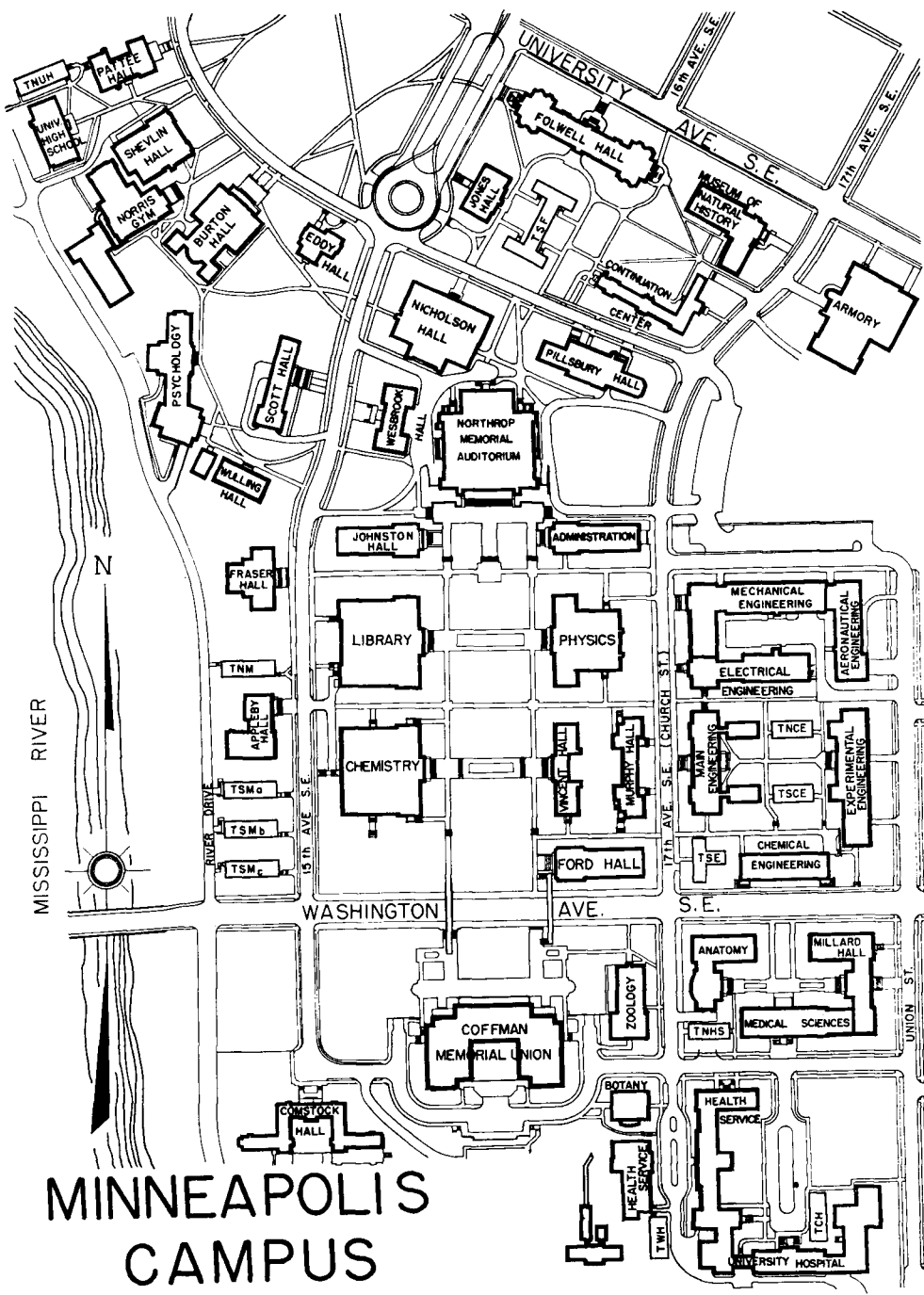
American Studies	227F	Industrial Education	101TNUH
Anatomy	201 IA	Journalism	111MurH
Animal Husbandry	8LsPav	Library Instruction	7Lib
Anthropology	112TSMc	Linguistics and Philology	317F
Art	108J	Mathematics	119F
Art Education	105J	Methods, Directed Teaching	204Bu
Astronomy	359Ph	Military Science and Tactics	106A
Bacteriology	228MH	Music	107ScH
Botany	8Bo	Music Education	107ScH
Business Administration	127VH	Naval Science and Tactics	203A
Chemistry	127C	Nursery School	100CWI
Child Welfare	101Pt	Nursing	125MeS
Classics	118F	Nursing Education	125MeS
Curriculum and Instruction	204Bu	Philosophy	323F
Dairy Husbandry	207HH	Physical Education for Men	220CH
Drawing, Descriptive Geometry	208E	Physical Education for Women	101NGW
Economics	127VH	Physics	148Ph
Education	204Bu	Physiology	318MH
Educational Administration	204Bu	Plant Pathology and Botany	304PP
Educational Psychology	204Bu	Political Science	210NH
English	219F	Poultry Husbandry	120TSH
Entomology, Economic Zoology	300CofH	Psychology	112Psy
Forestry	110GH	Public Health	121MH
General Studies	101TSF	Rhetoric	309En
Geography	101aBu	Romance Languages	200F
Geology and Mineralogy	108P	Scandinavian	13F
General College	108WeH	Social Work	110NH
German	210F	Sociology	110NH
History	102Bu	Soils	100aSo
History of Education	204Bu	Speech	309aF
Home Economics	215HE	Student Counseling Bureau	101EdH
Home Economics Education	215HE	Veterinary Medicine	203TEH
Horticulture	111Hr	Zoology	108Z

DEPARTMENTAL ABBREVIATIONS

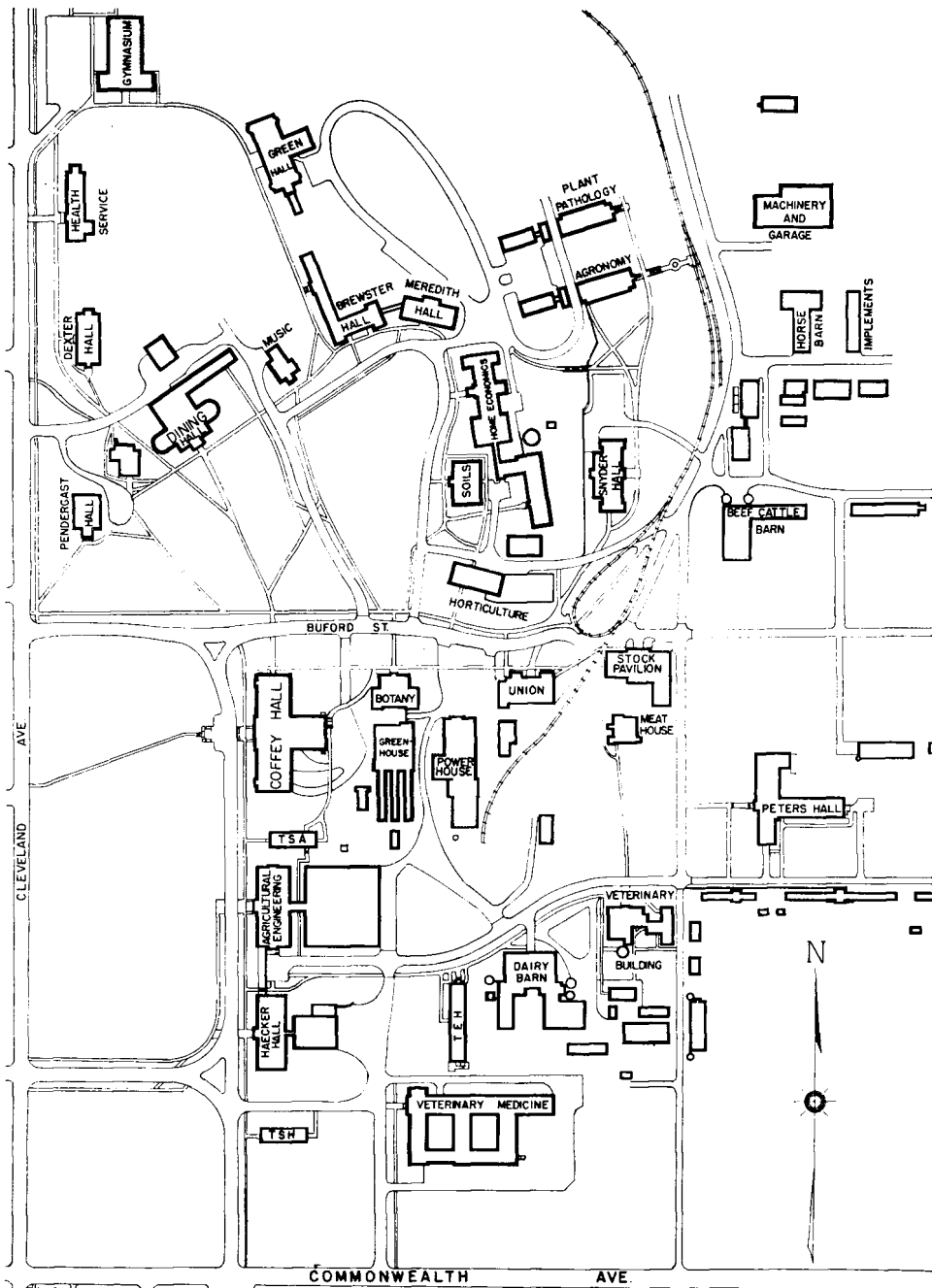
The following abbreviations, designed for IBM class cards, are used in designating prerequisite courses throughout the *Class Schedule*.

Aero, Aeronautical Engineering	AnHu, Animal Husbandry
AgBi, Agricultural Biochemistry	Anth, Anthropology
AgEc, Agricultural Economics	Arch, Architecture
AgEd, Agricultural Education	ArEd, Art Education
AgEn, Agricultural Engineering	Art, Art
AgJo, Agricultural Journalism	Ast, Astronomy
Agro, Agronomy	BA, Business Administration
Air, Air Science and Tactics	Bact, Bacteriology
AmSt, American Studies	Bot, Botany
Anat, Anatomy	CE, Civil Engineering
AnCh, Analytical Chemistry	ChEn, Chemical Engineering

Chin, Chinese	Ling, Linguistics and Comparative Philology
Clas, Classics	Math, Mathematics
Comm, Communication	ME, Mechanical Engineering
Comp, Composition	Met, Metallurgy
CW, Child Welfare	Mil, Military Science and Tactics
Draw, Drawing and Descriptive Geometry	Min, Mining
DyHu, Dairy Husbandry	MM, Mathematics and Mechanics
Econ, Economics	MuEd, Music Education
Ed, General Education	Mus, Music
EdAd, Educational Administration	Nav, Naval Science and Tactics
EdCI, Educational Curriculum and Instruction	NSci, Natural Science
EdT, Methods and Directed Teaching	NuEd, Nursing Education
EE, Electrical Engineering	OrCh, Organic Chemistry
Engl, English	Oric, Orientation
Eut, Entomology and Economic Zoology	Path, Pathology
FL, Family Life	PCh, Physical Chemistry
Food, Food Technology	PE, Physical Education
For, Forestry	PetE, Petroleum Engineering
FoSt, Foreign Study	PH, Public Health
Fren, French	PhCh, Physiological Chemistry
GC, General College	Phcl, Pharmacology
GE, General Engineering	Phil, Philosophy
Geog, Geography	Phsl, Physiology
Geol, Geology	Phys, Physics
Germ, German	PIPa, Plant Pathology
Gphy, Geophysics	PO, Personal Orientation
Grk, Greek	PoHu, Poultry Husbandry
HE, Home Economics	Pol, Political Science
HEd, History of Education	Port, Portuguese
HEEd, Home Economics Education	Psy, Psychology
Hist, History	Rhet, Rhetoric
Hort, Horticulture	Russ, Russian
Hum, Humanities	Scan, Scandinavian
InCh, Inorganic Chemistry	Soc, Sociology
Ind, Industrial Education	Soil, Soils
Ital, Italian	Span, Spanish
Jap, Japanese	Spch, Speech
Jour, Journalism	SSci, Social Science
Lat, Latin	SW, Social Work
Law, Law	TA, Technical Aide
Lib, Library Science	Vet, Veterinary Medicine
	Zool, Zoology



MINNEAPOLIS CAMPUS



ST. PAUL CAMPUS

Student's Copy of Spring Quarter Classes

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
I						
II						
III						
IV						
V						

BUILDING ABBREVIATIONS

A, Armory	Hr, Horticulture (St. P.)
Ag, Agronomy (St. P.)	IA, Institute of Anatomy
AgrBot, Agricultural Botany (St. P.)	J, Jones Hall
AE, Aeronautical Engineering	L, Law Building
AH, Appleby Hall	Lib, Library Building
Bo, Botany	LsPav, Stock Pavilion (St. P.)
Bu, Burton Hall	ME, Mechanical Engineering
C, Chemistry Building	MeH, Meredith Hall (St. P.)
CofH, Coffey Hall (St. P.)	MeS, Medical Sciences
CH, Cooke Hall	MEx, Mines Experiment Station
E, Main Engineering	MH, Millard Hall
EdH, Eddy Hall	MNH, Museum of Natural History
EE, Electrical Engineering	MSh, Meat Shop (St. P.)
En, Engineering Building (St. P.)	MurH, William J. Murphy Hall
Ex, Experimental Engineering	NGW, Norris Gymnasium for Women
F, Folwell Hall	NH, Nicholson Hall
GH, Green Hall (St. P.)	NMA, Northrop Memorial Auditorium
HE, Home Economics (St. P.)	OSL, Oak Street Laboratories
HH, Haecker Hall (St. P.)	P, Pillsbury Hall

Student's Copy of Spring Quarter Classes

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
VI						HAVE YOU CHECKED ALL SECTION NUMBERS?
VII						
VIII						
IX						Course—Section Room—Building
X						<i>PH 100, Sec. 3 113 MeS</i>

BUILDING ABBREVIATIONS

<p>Ph, Physics PoH, Louise M. Powell Hall PP, Plant Pathology (St. P.) Psy, Psychology Pt, Pattee Hall ScH, Scott Hall ShH, Shevlin Hall SnH, Snyder Hall (St. P.) So, Soils (St. P.) TCH, Temporary, Court of Hospital TEH, Temporary, East of Haecker Hall, (St. P.) TNCE, Temporary, North Court of Engineering TNM, Temporary, North of Mines (AH) TNUH, Temporary, North of University High School TSA, Temporary, South of Administration (CofH—St. P.)</p>	<p>TSCE, Temporary, South Court of Engineering TSE, Temporary, South of Engineering TSF, Temporary, South of Folwell TSH, Temporary, South of Haecker Hall (St. P.) TSMa, First Temporary, South of Mines (AH) TSMb, Second Temporary, South of Mines (AH) TSMc, Third Temporary, South of Mines (AH) TSP, Temporary, South of Powell Hall UHS, University High School Ve, Veterinary (St. P.) VH, Vincent Hall WeH, Wesbrook Hall WuH, Wulling Hall Z, Zoology Building</p>
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CALENDAR

March	16	Fees due for students in residence winter quarter in undergraduate colleges
March	24, 27	Registration and payment of fees for new students in all undergraduate colleges who have not already registered
March	27	Spring quarter classes begin 8:00 a.m. (7:45 a.m. on St. Paul Campus)
March	31	Last day for registration and payment of fees for the Graduate School, and for teachers in service
April	7	Holiday (Good Friday)
April	20	Parents Day
May	18	Cap and Gown Day Convocation, 11:00 a.m. Graduating students excused from IV hour classes to attend
May	30	Holiday (Memorial Day)
June	3-9	Final examination period
June	4	Baccalaureate service, 11:00 a.m.
June	10	Spring quarter closes. Commencement, 8:00 p.m.

MARCH

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

APRIL

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

MAY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

FINAL EXAMINATIONS

Final Examination Schedule—The time of examination is based on the hours and days the class is regularly scheduled during the quarter. For purposes of determining the proper examination time:

- Use the lecture hour rather than the laboratory or recitation periods.
- Use the MWF sequence if scheduled four or more days per week.
- Use the first class hour if scheduled two or more hours a day.

This schedule does not apply to courses offered primarily to students registered in Pharmacy, Law, Medicine, and Dentistry; to classes meeting after 6:00 o'clock p.m.; and to courses numbered 200 and over which have no regularly scheduled classroom.

I MWF 8:00-10:00 Th June 8	VII MWF 1:30- 3:30 M June 5
I TThS 10:30-12:30 Th June 8	VII TTh 4:00- 6:00 M June 5
II MWF 8:00-10:00 F June 9	VIII MWF 1:30- 3:30 W June 7
II TThS 10:30-12:30 F June 9	VIII TTh 4:00- 6:00 W June 7
III MWF 8:00-10:00 M June 5	IX MWF 1:30- 3:30 S June 3
III TThS 10:30-12:30 M June 5	IX TTh 4:00- 6:00 S June 3
IV MWF 8:00-10:00 W June 7	X MWF 1:30- 3:30 T June 6
IV TThS 10:30-12:30 W June 7	X TTh 4:00- 6:00 T June 6
V MWF 1:30- 3:30 Th June 8	
V TTh 4:00- 6:00 Th June 8	Classes meeting on Saturdays only:
VI MWF 1:30- 3:30 F June 9	I, II S 10:30-12:30 S June 3
VI TTh 4:00- 6:00 F June 9	III, IV S 1:30- 3:30 S June 3

Common Examinations—For courses having common examinations, all sections are examined together at one time irrespective of the regularly scheduled hours and days. A list of courses for which common examinations are given will be published in the Official Daily Bulletin.

Length of Examinations—Examinations for classes scheduled four or more days a week may continue into the examination period established for TThS classes provided the instructor notifies the Room Scheduling Office of his intention to do this.

Conflicts—Students shall consult their college office regarding procedure to follow in case of examination conflicts.

Rooms—Examinations are given in the regularly scheduled classroom unless the instructor arranges for and announces a different examination room.

INTERCAMPUS CAR SCHEDULE

For the school year 1949-50, September 26 to June 10, inclusive, except during the Christmas and spring vacations.

Leaving Minneapolis Campus					Leaving St. Paul Campus				
7:05	8:40	10:10	11:40	1:10	7:20	8:55	10:25	11:55	1:25
7:20	8:55	10:25	11:55	1:25	7:35	9:10	10:40	12:10	1:40
7:40	9:10	10:40	12:10	1:40	7:55	9:25	10:55	12:25	1:55
7:55	9:25	10:55	12:25	etc.	8:10	9:40	11:10	12:40	etc.
8:10	9:40	11:10	12:40	Last	8:25	9:55	11:25	12:55	Last
8:25	9:55	11:25	12:55	car	8:40	10:10	11:40	1:10	car
				6:40					6:55

Half hour schedule Saturday afternoons, beginning Minneapolis Campus at 1:10; last car at 6:40. Beginning St. Paul Campus at 1:25; last car at 6:55. No cars on Sundays. Holiday schedule will be announced.

Passes for those who have classes on both campuses are issued at the University Post Office on the Minneapolis Campus and the Admissions and Records Office on the St. Paul Campus.

Tickets for the Intercampus car may be purchased at the Cashier's Office on either campus, twenty rides for one dollar.

CONVOCATIONS

At 11:00 o'clock each Thursday morning, except for holidays and examination periods, an established authority on some subject of general interest, or a cultural attraction of equal general interest, is presented at Northrop Memorial Auditorium to students, staff, and faculty members of the University of Minnesota. Such programs not only offer a liberal education in adventure, art, foreign news, music and dance, science, and world affairs, but they are at the same time highly entertaining. While classes are not dismissed for convocation hour, it is possible for any student to attend convocations of his or her choice. It is, of course, intended that the students, staff, and faculty should attend these convocations. The general public is likewise invited. The convocations are usually preceded by an organ recital. The convocation program is broadcast over KUOM.

GENERAL EXTENSION DIVISION

Instruction, by both class and correspondence study methods, is also open to, and employed by, regularly matriculated students as a means of earning credits toward degrees. Extension classes conducted in Minneapolis, St. Paul, or Duluth are classed as residence work; credits earned in them satisfy residence as well as credit requirements. Credits earned by correspondence study do not classify as residence, but are accepted for a part of the credit requirements for most undergraduate degrees. (The Institute of Technology has special requirements which students must follow.) Students, therefore, who are temporarily out of residence (except dropped students) are privileged to register for either form of instruction.

For further information, address the General Extension Division, Nicholson Hall, University of Minnesota, Minneapolis 14, Minnesota.

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REGISTRATION TALLY PROCEDURE

To tally for courses listed below, the student should obtain an IBM class reservation card at the appropriate college tally office indicated. These class reservation cards must be attached to the students' registration blank when it is presented at the college window in the Office of Admissions and Records (a manual tally is maintained for some courses tallied at 136E and the registration blank will be stamped to indicate that these courses were tallied).

AGRICULTURE, FORESTRY, AND HOME ECONOMIS

Tally at 203d CofH for all courses except the following (courses numbered 200 and over are not tallied).

AgEn 21, 103, 105, 113, 123, 125, 133, 150, 172 tallied at 136E
HE 30 tallied at 107TSF

BUSINESS ADMINISTRATION

Tally at 107VH for all courses except the following:

BA 99, 183 not tallied
BA 67 tallied at 101WuH
Econ 34, 38, 42, 99, 206, 209, 252, 281 not tallied
Econ 9, 28 tallied at 136E
Other Econ courses tallied at 107TSF for all students except those registered in the School of Business Administration

EDUCATION

Tally at 204Bu for courses listed below unless otherwise indicated. Other courses are not tallied.

AgEd 56, 81, 82, 91, 104 tallied at 203d CofH
ArEd 19, 58
Ed 55B, 71C
EdCI 58, 61, 109, 125, 129, 252
EPsy 150, 218a, 281
HED 180
HEEd 90, 91, 92, 93, 94, 95, 192, 193A, 193B, 194A, 194B, 199E tallied at 203d CofH
Ind 3, 7, 11, 12, 15, 200
PE (for Women) 25, 54, 60

GENERAL COLLEGE

Tally at 108WeH for all courses.

INSTITUTE OF TECHNOLOGY

The courses listed below are tallied at 136E unless otherwise indicated. Courses numbered 200 and over are not tallied.

AnCh 2, 98, 102, 103, 108, 109, 127, 133, 134, 137, 138
AnCh 7 tallied at 107TSF
Draw 44, 45 tallied at 107TSF
InCh 2, 7, 11, 12, 54, 98, 102, 105, 108, 110, 136
InCh 2, 11 tallied at 203d CofH for Agric students and 107TSF for SLA students
InCh 7, 12 tallied at 107TSF for SLA students and 101WuH for Pharmacy students
OrCh 63, 64, 98, 107, 130, 139, 143, 153
OrCh 62 tallied at 107TSF for SLA students and 101WuH for Pharmacy students
PCh 103, 106, 112, 118, 131, 134, 152
All other departments (Aero, Arch, ChEn, CE, Draw, EE, Engl, Gphy, MM, ME, Met, Min, PetE, TA) All courses numbered below 200 are tallied

MEDICAL SCIENCES

The courses listed below are tallied as indicated. Other courses are not tallied.

Bact 1 tallied at 107TSF
Bact 53 tallied at 203dCofH for Agric students and 107TSF for SLA students
PH 56, 63, 100, 111, 121 tallied at 107TSF
PH 52a, 52b tallied at 203dCofH
PH 3 (sec 1) tallied at 107TSF
PH 3 (sec 2) tallied at 136E

SCIENCE, LITERATURE, AND THE ARTS

Courses listed below are tallied at 107TSF unless otherwise indicated. Other courses are not tallied.

Art 1, 4, 5, 10, 12, 20, 21, 30, 31, 32, 33, 34, 35, 44, 45, 52, 60, 61, 62, 70, 71, 72, 75, 80, 81, 82, 85, 87, 89, 90, 91, 92, 93, 94, 95, 99, 135, 143, 144, 145, 150, 151, 152, 155
Art 60A, 61A, 62A tallied at 136E
Bot 3, 51, 52, 54, 115, 123, 165, 181
Bot 3 tallied at 203d CofH for Agric students
Clas 24
Comm 1, 2, 3
Comp 4, 5, 6, 7, 27, 28, 29, 58, 103, 106
Engl A, B, C, 23, 55, 56, 99, 230, 233, 242, 255, 279, 283, 286
FL 1, 14, 15, 25
Fren 1, 2, 3, 3A, 4, 20
Geog 11, 41, 45, 47, 104, 120, 134, 150
Geol A, B, 1, 2, 25, 104, 120, 132, 141, 145, 167
Geol 11, 25 tallied at 136E for IT students
Germ 1, 2, 3, 3a, 3b, 4, 20, 33
Germ 26, 29, 43 tallied at 136E
Germ 26a tallied at 203d CofH
Hist 2, 3, 6, 17, 22, 55, 58, 61, 72, 210
Hum 1, 2, 3, 4, 13, 23, 53, 63, 73, 133
Jour 10, 14, 15, 18, 51, 52, 55, 66, 67, 68, 69, 73, 86, 101, 110, 115, 118A, 118B, 142
Lib 1
Math 1, 6, 7, 8, 16, 20, 30, 50, 51, 105, 107
Mus 1, 2T, 3T, 5T, 6T, 8, 11C, 12C, 36, 39, 45, 48
Mus 45U tallied at 203d CofH
NSci 3, 6, 9
Phil 1, 2, 3, 3A, 4, 52, 71
Phys 3, 3a, 110, 112, 136
Phys 8, 9 tallied at 136E
PO 1, 11
Pol C, 3, 53
Psy 1-2, 2, 3, 4-5, 5, 55, 70, 125-126, 130, 246
Soc 1, 2, 45
Soc 1A tallied at 203d CofH
Span 1, 2, 3, 3A, 4, 20, 55, 72
Spch 1, 2, 3, 5, 6, 33, 34, 51, 57, 61, 65, 66, 67, 79, 82, 83, 103, 105, 106, 126
SSci 1, 2, 3, 13, 83
Zool 3, 50, 53, 58, 110, 127, 140, 146, 162, 182
Zool 120 tallied at 203d CofH

The Bulletin of the
UNIVERSITY of MINNESOTA

Class Schedule

Fall Quarter
1950

8/4/5

including

- Registration instructions
- Final examination schedule
- Courses tallied in college offices
- Registration dates
- Course fees
- Calendar

How to Use the Class Schedule

The *Class Schedule* lists hours and days and room schedules for courses offered by colleges of the University. Brief course titles and prerequisites are also shown, as well as last-minute changes in course offerings.

Changes made subsequent to publication of the *Class Schedule* are published in the *Official Daily Bulletin*.

The University of Minnesota reserves the right to cancel any and all courses in which registration is insufficient to warrant continuation of the course.

The following information should appear on your registration blank:

1. The departmental abbreviation listed after each departmental heading (divisional headings are abbreviated in some instances).
2. The course and section numbers for each lecture, recitation or laboratory period for which you are registering.
3. The abbreviated course title.
4. The number of credits shown for the course.
5. The hours and days scheduled for the class.

Do not register from the *Class Schedule* alone. Your college bulletin is essential to getting full course descriptions, rules and requirements, and other information necessary for sound program planning.

REGISTRATION INSTRUCTIONS

Step 1—Have your program approved by your college office.

This can be done on those days listed for your college on page 4. Supplementary instructions may be issued by the college in which you are registering.

Step 2—Get class reservation cards for courses tallied in the college offices.

Courses tallied in the college offices are listed on page 125. These cards reserve a place for you in those courses.

Step 3—Turn in your Registration Permit, class reservation cards, and approved Registration Blank to your college window in the Office of Admissions and Records to get a fee statement.

Graduate students must first obtain approval of their program from the Graduate School office.

Step 4—Pay your fees to the bursar.

Fees for students registered through September 15 are due September 21.

Fees for students registered later are due September 29.

If you are a veteran:

First—Have your fee statement approved at the veterans window in the Office of Admissions and Records for collection from the Veterans Administration (veterans must pay the \$5.00 matriculation fee for new students themselves).

Second—Take it to the bursar to get a receipt.

Third—Present this receipt with your Veterans Course List to the Bureau of Veterans' Affairs, Shevlin Hall, to obtain books and supplies.

Note: You will not be issued a fee statement if you do not have your permit card and necessary class reservation cards, or if your registration blank does not show proper approval by your college.

Remember that accurate registration is your personal responsibility. You will receive credit only in courses for which you are properly registered. Likewise, you will be held responsible for every course for which you register unless you officially cancel it on a regular cancellation form.

CHANGE OF REGISTRATION

- Have your "cancel-add" blank approved by your college office.
- Get necessary class reservation cards for courses you are adding as in step 2 above.
- Present the "cancel-add" blank and class reservation cards to your college window in the Office of Admissions and Records. You will get a supplementary fee statement or fee refund statement as necessary.

WITHDRAWAL FROM THE UNIVERSITY

Notify the Office of Admissions and Records of your intention to withdraw from the University. Veterans must also notify the Bureau of Veterans' Affairs.

COLLEGE OFFICES AND REGISTRATION DATES

Students participating in the program of orientation for new students should register on the date specifically assigned to them for this activity. Other students may register at any time during the period for their college.

<p>Agriculture, Forestry, Home Economics 203d Coffey Hall August 7-September 29</p> <p>Business Administration 107 Vincent Hall August 7-11, September 25-29</p> <p>Dental Hygiene 106 Medical Sciences Bldg. August 7-18, September 25-29</p> <p>Dentistry 149 Medical Sciences Bldg. August 7-September 29</p> <p>Education 204 Burton Hall August 7-25, September 25-29</p> <p>General College 108 Wesbrook Hall August 7-September 29</p> <p>Graduate School 234 Administration Bldg. August 7-September 29</p> <p>Institute of Technology Architecture and Engineering, 133 Main Engineering Bldg. Chemistry, 127 Chemistry Bldg. Mines, Metallurgy, 103 Appleby Hall New Students, August 7-September 29 Former Students, September 18-29</p> <p>Law School 204 Fraser Hall August 21-September 29</p> <p>Medical School 136 Medical Sciences Bldg. New Students, September 29 Former Students, June 20</p>	<p>Medical Technology 605 West Hospitals August 7-25, September 18-29</p> <p>Nursing 125 Medical Sciences Bldg. August 7-18, September 25-29</p> <p>Occupational Therapy 204 Temporary West Hospitals August 7-25, September 18-29</p> <p>Pharmacy 101 Wulling Hall August 7-25, September 25-29</p> <p>Physical Therapy 209 Temporary West Hospitals August 7-15, September 18-29</p> <p>Public Health 121 Millard Hall August 7-25, September 18-29</p> <p>Science, Literature, Arts Junior College, 107 Temporary South Folwell A-K Senior College, 146 Physics Bldg. L-Z Senior College, 219 Administration Bldg. Special Students, 111 Temporary South Folwell August 7-September 29 (Senior College advisers not available August 26-September 16)</p> <p>University College 146 Physics Bldg. August 7-September 29</p> <p>Veterinary Medicine 203d Coffey Hall New students from other institutions September 25, 26, 27 Other students August 7-September 29</p>
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Institute of Technology Enrolling Numbers

Returning students will register on the dates listed for their enrolling number: 1-100, September 18; 101-200, September 19; 201-300, September 20; 301-400, September 21; 401-500, September 22; 501-600, September 25; 601-700, September 26; 701-800, September 27; 801-900, September 28; other numbers, September 29.

EXPLANATIONS

Course numbering—A hyphen (-) preceding a course number indicates continuity between that course and the course immediately preceding it in numerical order. Consult the prerequisite to determine whether the course may be taken out of sequence.

Course titles—When a course title appears in bold-face type, a student registering for that course must obtain a class reservation card in the college registration office in which the course is tallied (see page 125).

Credits—The number of credits is listed in parentheses following the course title. Credits listed for winter-spring courses are for one quarter only.

Prerequisites—Certain courses require for enrolment therein the completion of specific elementary courses, or the possession of some definite qualifications or minimum standing. These are listed in parentheses following the number of credits.

Unless otherwise indicated, courses are numbered as follows: courses primarily for freshmen and sophomores, 1 through 49; for juniors and seniors, 50 through 99; for juniors, seniors and graduate students, 100 through 199; for graduate students only, 200 and over.

Work substantially equivalent to courses listed as prerequisites is occasionally accepted in lieu of the prerequisite listed. See your college bulletin for further information.

When no departmental designation precedes the course number listed as a prerequisite, the prerequisite course is in the same department. Unless otherwise indicated a prerequisite reading "6 cr" means 6 credits in the same department.

Days and hours—MTWThF indicates that the class meets every day of the week; TTh, that the class meets only on Tuesdays and Thursdays.

A class listed I-II MW meets the first through the second hour Mondays and Wednesdays, the hyphen always indicating *through*.

A class listed IV-V½ continues through the first half of the fifth hour. A class listed II½-III convenes the middle of the second hour and runs through the third hour.

Building abbreviations—See page 118 for building abbreviations. Maps of the Minneapolis and St. Paul Campuses are also included at the back of the *Class Schedule*.

Information not listed—Course information not listed, or listed as "ar," should be obtained from the department offering the course.

Room changes—When necessary to make them, room changes are posted on classroom doors.

Class hour schedule—Class hours are identified by Roman numerals, and continue for fifty minutes after the beginning time listed below.

Hour	I	II	III	IV	V	VI	VII	VIII	IX	X
Minneapolis	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00
St. Paul	7:45	8:45	9:45	10:45	11:45	12:45	1:45	2:45	3:45	4:45

Symbols—The following symbols are used throughout the bulletin:

* Course may be taken with consent of the instructor irrespective of prerequisites.

† To receive credit for this course, you must complete all courses listed after the †.

§ Credit is not given if the equivalent course listed after the § has been taken for credit.

**COLLEGE OF AGRICULTURE, FORESTRY, HOME ECONOMICS,
AND VETERINARY MEDICINE**

**AGRICULTURAL BIOCHEMISTRY
(AGBI)**

Fall Quarter

- 1** **Introd Organic Chemistry** (5 cr; prereq 8 cr inorg chem or see col bul)
II MTWThF, GHAud, Wands
- 2** **Quantitative Methods** (5 cr; prereq 8 cr inorg chem)
VI-IX MWF, 116SnH, Hill
- 3** **Introd Biochemistry** (3 cr; prereq 1)
I TThS, GHAud, Gilles
- 52** **Biochemistry, Microbiology of Cereal Grains** (3 cr; prereq regis ME-Milling Option; 5 cr elem org chem, 9 cr gen biol)
II TThS, 310SnH, Cuendet
- 118** **Lab Probs in Biochemistry** (3-5 cr; prereq sr, cons instr)
Ar
- 119** **Colloids** (3 cr; prereq sr, 3 or 8 cr org chem)
III MWF, 113SnH, Briggs
- 124** **Vitamins** (3 cr; prereq 6, 119)
II TThS, 113SnH, Schultze
- 129** **Colloids Lab** (2 cr; prereq 2, concur regis 119)
VI-VIII TTh, 202 SnH, Briggs
- 202** **Biochemical Micromethods** (3 cr; prereq* 6 cr from 129-133, adv biochem)
VI-IX MW, 208SnH, Boyer
- 203** **Research Probs** (3-5 cr; prereq cons instr)
Ar, Staff
- 205** **Special Topics in Biochemical Literature** (1-3 cr; prereq cons instr)
Ar, Staff
- 208** **Cereal Chemistry Seminar** (1 cr; prereq* 108)
Ar, Geddes
- 213** **Seminar in Dairy Chemistry** (1 cr; prereq 103, cons instr)
Ar, Jenness
- 216** **Nutrition, Enzymes Seminar** (1 cr; prereq 116, cons instr)
Ar, Schultze, Boyer
- 219** **Colloid Chemistry Seminar** (1 cr; prereq 119, cons instr)
Ar, Briggs
- 220** **Protein Chemistry Seminar** (1 cr; prereq 120, cons instr)
Ar, Sandstrom
- 221** **Carbohydrate Chemistry Seminar** (1 cr; prereq 121, cons instr)
Ar, Smith
- 222** **Chemistry of Lipides Seminar** (1 cr; prereq 122, cons instr)
Ar, Lundberg

- 224** **Gen Seminar** (1 cr)
Ar, Sandstrom

Winter and Spring Quarters

- 1s See 1f
- 2w See 2f
- 3w See 3f
- 5s **Plant Biochemistry** (3 cr, §105; prereq 3, org chem) I MWF
- 6s **Animal Biochemistry** (3 cr, §106; prereq 3, org chem) II MWF Schultze
- 103s **Dairy Chemistry** (6 cr; prereq 2, 6) Lect VI MWF Jenness; Lab VII-IX MWF Jenness
- 105s **Plant Biochemistry** (3 cr, §5; prereq 3, org chem) I MWF
- 106s **Animal Biochemistry** (3 cr, §6; Prereq 3, org chem) II MWF Schultze
- 108s **Chemistry of Wheat, Wheat Products** (3 cr; prereq 5) IV MWF Geddes
- 110s **Flour Lab Methods** (3-5 cr; prereq 2, concur regis 108) VI-IX MWF Geddes, Cuendet
- 116w **Adv Animal Nutrition** (3 cr; prereq 6) III TThS Schultze
- 117s **Lab Probs in Animal Nutrition** (3 cr; prereq 116, cons instr) Ar Liener
- 118w,s See 118f
- 120w **Proteins** (3 cr; prereq* sr, 119) III MWF Sandstrom
- 121w **Carbohydrates** (3 cr; prereq* sr, 119) II MWF Smith
- 122s **Lipides** (3 cr; prereq* sr, 119) II MW, VI W Lundberg
- 123s **Enzymes** (3 cr; prereq* sr, 119) III MWF Boyer
- 130w **Proteins Lab** (2 cr; prereq 2, concur regis 120) VI-VIII TTh Sandstrom
- 131w **Carbohydrate Lab** (2 cr; prereq 2, concur regis 121) VI-VIII MW Smith
- 132s **Lipides Lab** (2 cr; prereq sr, 2 or concur regis 122) VI-VIII MW Lundberg
- 133s **Enzymes Lab** (2 cr; prereq 2, concur regis 123) VI-VIII TTh Boyer
- 201w **Adv Colloids** (3 cr; prereq 119, PCh 103) Ar Briggs
- 203w,s See 203f
- 205w,s See 205f
- 208w,s See 208f
- 213w See 213f
- 216w,s See 216f
- 219w See 219f
- 220w See 220f
- 221w See 221f
- 222w See 222f
- 224w,s See 224f

AGRICULTURAL ECONOMICS (AGEC)

Fall Quarter

- 1 **Prin Economics I** (3 cr, †1-2; prereq soph, regis agric, forestry)
 - 1, I MWF, 109HH, Lowe
 - 2, III MWF, 109HH, Lowe
 - 3, I MWF, 100HH, Chappell
- 3 **Prin Economics** (5 cr; prereq soph, maj HE)
 - II MTWThF, 109HH, Lowe
- 25 **Prin Accounting** (4 cr; prereq soph, regis agric, forestry, HE)
 - II MWF, 311HH, Koller
 - Lab VIII-IX Th
- 30 **Agricultural Prices** (3 cr; prereq soph, 2)
 - II TThS, 210HH
- 40 **Prin Marketing Organization** (3 cr; prereq soph, 2)
 - I MWF, 210HH, Cox
- 50 **Farm Finance** (5 cr; prereq 2, regis agric, forestry)
 - IV MTWFS, 130TSH, Koller
- 90 **Agricultural Statistics** (5 cr)
 - III TThS, 210HH, Cox
 - Lab ar
- 110 **Economics of Agricultural Production** (3 cr; prereq 2)
 - I TThS, 210HH, Dowell
- 126 **Economics of Consumption** (3 cr; prereq 2 or 3)
 - I TThS, 100HH, Waite
- 140 **Marketing Organization: Staples** (3 cr; prereq 40)
 - III MWF, 130TSH, Cox
- 144 **Cooperative Organization** (3 cr; prereq 40)
 - II TThS, 311HH, Jesness
- 221 **Farm Organization Studies** (3 cr)
 - Ar, Pond

Winter and Spring Quarters

- 1w See 1f I MWF
- 2w.s **Prin Economics II** (5 cr, †1-2; prereq 1)
 - I MTWThF Lowe, Chappell; III MTWThF Chappell (w) Lowe (s)
- 3w.s See 3f
- 8s **Rural Economics** (3 cr; prereq soph, 2 or 3)
 - III TThS Jesness
- 25w See 25f Lect II TThS Koller; Lab VIII-IX Th
- 40s See 40f II MWF
- 47s **Marketing Accounting** (4 cr; prereq soph, 25)
 - Lect IV MWF Koller; Lab VIII-IX F
- 80s **Farm Accounting** (3 cr)
 - I TThS Engine
- 102w **Farm Organization** (3 cr; prereq 2)
 - II TThS Pond
- 103s **Farm Operation** (3 cr; prereq 102)
 - II TThS Pond
- 104s **Types of Farming** (3 cr; prereq 2)
 - III MWF Pond
- 107s **Farm Work Simplification** (3 cr; prereq 2)
 - VIII-IX MWF Engine

- 126s See 126f
- 131w **Market Prices** (3 cr; prereq 30, 40)
 - III TThS, Waite
- 135s **Methods of Price Analysis** (3 cr; prereq sr, 131, 191)
 - III TThS Waite
- 141w **Marketing Organization: Dairy, Poultry Products** (3 cr; prereq 40)
 - II MWF Jesness
- 142s **Marketing Organization: Fruits, Vegetables** (2 cr; prereq 40)
 - III MW Cox
- 143w **Marketing Organization: Livestock, Meats** (3 cr; prereq 40)
 - III MWF Dowell
- 150s **Adv Farm Finance** (3 cr; prereq 50)
 - 2:30-4:00 TTh Koller
- 170w **Land Economics** (3 cr; prereq 110)
 - 1:30-3:00 WF Dowell
- 172s **Economics of World Agriculture** (3 cr; prereq* 110)
 - 1:15-2:30 WF Dowell
- 191w **Adv Agricultural Statistics** (3 cr; prereq 90)
 - IV MWF Waite
- 206w **Seminar-Agricultural Policy** (3 cr)
 - 3:30-5:00 MW Jesness
- 226s **Adv Farm Organization** (3 cr)
 - Ar Pond
- 241s **Seminar-Marketing of Livestock, Livestock Products** (3 cr)
 - Ar Dowell

AGRICULTURAL ENGINEERING (AGEN)

Fall Quarter

- 3 **Mechanical Drawing** (3 cr)
 - 1, III-IV MWF, 303En, Christopherson
 - 2, VI-VII MWF, 303En, Christopherson
- 11 **Applied Mathematics** (5 cr; prereq plane geom)
 - II MTWThF, 103En, Flikke
- 13 **Gas Engines, Tractors** (3 cr, \$54; prereq 23)
 - Lect VI WF, 216En, Torrance
 - Lab VII-VIII WF, 37En, Torrance
- 19 **Elem Surveying** (3 cr; prereq 3, 11 or trig)
 - Lect V T, 217En, Larson
 - Lab VI-VIII TTh, 305En, Larson
- 24 **Agricultural Physics I** (4 cr; prereq Math 6)
 - Lect III MWF, 101En, Hustrulid
 - 1, Lab VI-VII M, 102En
 - 2, Lab VI-VII F, 102En
 - 3, Lab IX-X T, 102En
 - 4, Lab IX-X Th, 102En
 - 5, Lab IX-X F, 102En
 - 6, Lab I-II S, 102En
- 35 **Household Physics** (5 cr)
 - Lect III TThS, 101En, Hustrulid
 - 1, Lab I-II TTh, 102En
 - 2, Lab VI-VII TTh, 102En
- 40 **Mechanical Training** (3 cr)
 - I-II MWF, 106, 20En, Dent
- 43 **Mechanical Lab** (3 cr; prereq regis IT)
 - I-II TThS, 106, 20En, Dent
- 50 **Adv Surveying** (3 cr; prereq soph, 19)
 - Lect V M, 103En, Larson
 - Lab VI-VIII MF, 305En, Larson

- 52 **Elements of Farm Machinery** (3 cr; prereq ME 24, regis IT)
Lect VI TTh, 103En, Schwantes
Lab VII-IX Th, 49En, Johnson
- 53 **Farm Structures** (3 cr; prereq CE 37 or concur regis, MM 128, Econ 9, regis IT)
Lect IV T, 303En, Otis
Rec IV Th, 303En, Otis
Lab VII-IX T, 303En, Otis
- 60 **Introd Soil, Water Control** (3 cr; prereq 11, 23, Soil 4)
VI-VIII WF, 305En, Manson
- 63 **Farm Structures Lab** (3 cr; prereq 53 or concur regis, MM 141, regis IT)
I-III TTh, 48En, Otis
- 67 **Rural Sanitation, Water Supply** (3 cr; prereq soph, 11, 23, Soil 4)
II MWF, 103En, Allred
- 70 **Dairy Engineering** (3 cr; prereq 23)
I MWF, 105En, Strait
- 101 **Adv Probs in Soil Moisture Regulation** (3-6 cr; prereq sr, 61, regis IT)
Ar, Manson, Allred
- 104 **Soil Moisture Relation in Agriculture** (4 cr; prereq Soil 4)
I-IV TTh, 305En, Manson
- 111 **Farm Building Probs** (2-6 cr; prereq 167, regis IT)
Ar, Christopherson, Otis
- 121 **Farm Power, Machinery Probs** (2-6 cr; prereq 171, regis IT)
Ar, Schwantes, Strait
- 122 **Farm Power, Machinery Probs** (2-6 cr; prereq 171, regis IT)
Ar, Schwantes, Strait
- 123 **Farm Power, Machinery Probs** (2-6 cr; prereq 171, regis IT)
Ar, Schwantes, Strait
- 131 **Rural Electrification Probs** (2-6 cr; prereq sr, 172, regis IT)
Ar, Hustrulid
- 171 **Design of Agricultural Machinery** (3 cr; prereq 52, ME 121, regis IT)
Lect VII M, 105En, Strait
Lab VIII-X M, 49En, VII-IX W, 305En, Strait
- 201 **Research-Soil Moisture Relations** (3-6 cr; prereq 101, 102 or 103, one qtr stat)
Ar, Manson, Allred
- 211 **Farm Structures Research** (2-6 cr; prereq 167)
Ar
- 221 **Farm Power, Machinery Research** (2-6 cr; prereq 121, 122 or 123)
Ar
- Winter and Spring Quarters**
- 3w,s See 3f III-IV MWF
- 6s **Farm Buildings** (3 cr) I MWF Christopherson
- 7s **Farm Building Construction** (3 cr) Lect VI TTh; Labs VII-IX T; VII-IX Th Burman
- 11w See 11f IV MTWThF
- 12s **Agricultural Machinery** (3 cr, §54; prereq 23) II MWF Schwantes
- 18w **Agricultural Automotives** (3 cr; prereq ME 131, regis IT) Lect I TTh; Lab VIII-X F Strait
- 19s See 19f Lect VI T; Lab VII-IX TTh Larson
- 21s **Elements of Surveying** (5 cr; prereq Draw 3, MM 12, regis IT) Lect VI M; Lab VII-X M, VI-IX WF Manson
- 23w **Gen Physics** (5 cr; prereq 11) Lect II MTWF Hustrulid; Labs I-II Th; VI-VII Th; IX-X Th
- 25w **Agricultural Physics II** (4 cr; prereq 24) Lect I TThs Hustrulid; Labs III-IV T; VI-VII M; VI-VII T; VI-VII F; IX-X M; IX-X T
- 31w **Prin Drainage** (3 cr) II MWF Larson
- 32w **Elements of Supplemental Irrigation** (2 cr) III TTh Allred
- 35s See 35f Lect I MWF; III TThs Hustrulid; Labs I-II TTh; VI-VII MF; VI-VII TTh; VIII-IX MF; VIII-IX TTh
- 36w **Rural Sanitation, Water Supply** (3 cr; prereq MM 129, regis IT) II MWF Allred
- 41w,s **Metal Work** (3 cr) I-II TThs(w); VI-VIII TTh(s) Dent
- 42s **Art Metal Work** (3 cr) VI-VIII WF Dent
- 50s See 50f Lect VI M; Lab VII-IX MF Larson
- 51w **Soil Water Conservation** (3 cr; prereq 21, Soil 4, MM 129 or concur regis, regis IT)
IV MWF Manson
- 54s **Farm Power, Machinery** (4 cr, §12, 13; prereq 23, 41) VI-VII M Torrance, VI-VIII WF Johnson
- 55w **Electricity in Agriculture** (2 cr; prereq 11, 23) VI TTh Hustrulid
- 61w **Irrigation** (3 cr; prereq 51, regis IT) I MWF Allred
- 73w **Steam Boilers, Heat Engines** (3 cr; prereq 18, ME 131, regis IT) Lect VII MF; Lab VII-X W Strait
- 102w,103s See 101f
- 104s See 104f
- 105s **Drainage, Irrigation, Soil Erosion Control Design** (4 cr; prereq* 61, 106, regis IT)
I-IV TTh Allred, Larson
- 106w **Agricultural Hydrology** (3 cr; prereq 61 or concur regis, regis IT) VI MWF Manson, Larson
- 112w,s See 111f
- 114s **Buildings, Equipment, Materials, Methods of Construction** (3 cr; prereq 3, 6, 7) Ar Christopherson, Otis
- 124s **Agricultural Machinery, Mechanical Power Mgt** (3 cr; prereq 9 cr agric engin incl 12) Ar Schwantes
- 125s **Topics in Agricultural Physics** (3 cr; prereq 25, Phys 9, integ calculus) Ar Hustrulid

- 126w Mgt of Agricultural Machinery (3 cr; prereq 171, AgEc 102, regis IT) II TTh and 3 hr ar Schwantes
- 132w,133s See 131f
- 150s Inspection Trip (1 cr; prereq sr, regis IT) Ar Schwantes
- 167w Adv Farm Structures (3 cr; prereq 63, ME 160, CE 146, regis IT) Lect I T; Rec I Th; Lab VIII-X F Otis
- 172s Applied Electricity (3 cr; prereq EE 38 or concur regis, regis IT) Lect II MF Hustrulid; Lab VI-IX W
- 202w,203s See 201f
- 212w,213s See 211f
- 222w,223s See 221f

AGRICULTURAL JOURNALISM (AGJO)

Fall Quarter

- 54 Editing Agricultural Bulletins (3 cr; prereq* Jour 15, 51-52, 69 or 73) Ar, Swanson

Winter and Spring Quarters

- 53w Publicity (3 cr; prereq rhet comm require) † TThS Swanson
- 55s Agricultural Journalism Outlets (3 cr; prereq* Jour 15, 51-52, 69, or 73) Ar Swanson

AGRONOMY AND PLANT GENETICS (AGRO)

Fall Quarter

- 1 Gen Farm Crops (3 cr) IV MWF, 202Ag, Dunham
- 23 Forage Crops (4 cr; prereq soph, 1) Lect VI MWF, 202Ag, Schmid Lab VII MWF, 201Ag
- 31 Prin Genetics (4 cr; prereq soph) Lect I TThS, 202Ag, Lambert Lab Ar
- 123 Forage Crops (4 cr) Lect VI MWF, 202Ag, Schmid Lab VII MWF, 201Ag
- 126 Crop Judging (4 cr; prereq 22) Ar, Schmid
- 131 Prin Genetics (4 cr) Lect I TThS, 202Ag, Lambert Lab Ar
- 135 Weed Control (3 cr; prereq 1, PIPa 3) VI-VII TTh, 202Ag, Dunham, Heggenes
- 201 Research in Farm Crops (ar cr; prereq 121, 123) Ar, Schmid, Dunham
- 262 Farm Crops Seminar (1½ cr; prereq 9 cr farm crops) Ar, Staff
- 241 Research in Plant Genetics (ar cr) Ar, Hayes, Burnham, Rinke, Thomas
- 242 Seminar-Plant Breeding (1 cr) Ar, Agron & Hort Staff

- 243 Methods in Plant Breeding (3 cr) Ar, Hayes
- 244 Lab Methods in Plant Breeding (ar cr) Ar, Staff
- 245 Adv Genetics (3 cr) Ar, Burnham
- 249 Adv Genetics, Specialized (2 cr; prereq 245) Ar, Burnham

Winter and Spring Quarters

- 1s See 1f
- 21w Grain Crops (4 cr; prereq soph, 1) Lect VI MWF Dunham; Lab VII MWF, VIII W
- 22s Grain, Hay Grading (3 cr; prereq soph, 1) I-II MWF Lambert
- 24s Identification, Judging (1 cr; prereq soph, 1, 22 or concur regis) VIII-IX Th Schmid
- 31w See 31f
- 52w Production, Grading of Cereal Crops (4 cr; prereq regis ME-Milling Option, 9 cr biol) Lect III MWF Dunham, Schmid; Lab III-IV TTh Lambert, Caldwell
- 121w Grain Crops (4 cr) Lect VI MWF Dunham; Lab VII MWF, VIII W
- 122s Grain, Hay Grading (3 cr) I-II MWF Lambert
- 131w See 131f
- 132w Farm Crops Plant Breeding (4 cr; prereq 31) VI-VIII TTh Rinke
- 133s Pasture Crops, Mgt (4 cr; prereq 23) Lect VI MWF Schmid; Lab VII MWF
- 134s Seminar-Agronomy (2 cr; prereq sr, 9 cr) Ar, Staff
- 201w,s See 201f
- 202w See 202f
- 203w Adv Studies in Agronomy (3 cr; prereq 121, 123) Ar Dunham, Schmid, Thomas
- 241w,s See 241f
- 242s See 242f
- 246w Seminar-Genetics (2 cr) Ar Agron, Hort, An Husb Staff
- 247w Cytogenetics (3 cr; prereq Bot 119) Ar Burnham
- 248w Applied Statistics (3 cr; prereq PH 110) Ar Thomas
- 250w Cytogenetics, Specialized Agronomy (2 cr; prereq 247) Ar Burnham

ANIMAL HUSBANDRY (ANHU)

Fall Quarter

- 1 Livestock Production (4 cr) —1, II MTWThF, LsPav, Aunan —2, III MTWThF, LsPav, Crane
- 53 Adv Meats (3 cr; prereq 52) VI-VIII TTh, MSh, P Anderson
- 56 Livestock Feeding I (3 cr; prereq 1) III MWF, AudPetH, R Anderson
- 58 Market Classes, Grades of Livestock, Livestock Products (3 cr; prereq 1) II T, AudPetH II-IV Th, 217PetH, Harvey

- 101 Livestock Selection (3 cr; prereq 9)
VI-VII MWF, LsPav, R Anderson
- 116 Prenatal Development of Farm Animals (4 cr; prereq cons instr)
IV MWF, Lab, PetH, Cummings
- 208 Seminar-Animal Husbandry (1 cr)
Ar
- 211 Experimental Methods (3 cr)
Ar
- 212 Research-Meats (3-9 cr)
Ar
- 213 Research-Animal Husbandry (3-9 cr)
Ar

Winter and Spring Quarters

- 1w,s See 1f
- 8w,s Breeds of Livestock (4 cr; prereq soph 1) III-IV TThS Harvey
- 9s Livestock Judging (3 cr; prereq 8) III-IV MWF R Anderson
- 50w Meat Selection, Utilization (3 cr; prereq regis agric, HE) III-IV TThS P Anderson
- 51w Meats, Meat Products (3 cr; prereq 1) VI-VII MWF P Anderson
- 52s Meats (3 cr; prereq 1, 50) VI-VIII TTh P Anderson
- 54s Meat Judging, Grading (3 cr; prereq 1) III-IV TThS Aunan
- 57w Livestock Feeding II (3 cr; prereq 56) III MWF R Anderson
- 107s Meat Probs (3 cr; prereq 53) Lect IV TTh; Lab VI-VIII F P Anderson
- 112w Animal Breeding (3 cr; prereq Agro 31) IV MWF Winters
- 113s Livestock Mgt (3 cr; prereq 57, 112) VI-VIII MW Harvey
- 114s Artificial Insemination (4 cr; prereq 112, cons instr) IV MWF Cummings; Lab VI-VIII TTh
- 209w,210s See 208f
- 212w,s See 212f
- 213w,s See 213f

DAIRY HUSBANDRY (DYHU)

Fall Quarter

- 1 Elements of Dairying (3 cr; prereq entr cr in chem or InCh 1 or 4)
III MWF, 100HH, Combs, Morris, Rudnick
- 3 Testing Dairy Products (2 cr; prereq 1)
VII-VIII TTh, 101HH, Thomas, Rudnick
- 101 Milk Production (3 cr; prereq 1)
IV MWF, 210HH, Fitch
- 104 Dairy Stock Selection (3 cr; prereq 9, 101 or concur regis)
VI-VII TTh, 9HH, Hervey
- 105 Seminar I (1 cr; prereq sr, 3 courses in dairy husb)
II F, 210HH, Petersen
- 111 Butter (3 cr; prereq 3, 50)
VI MW, 210HH, Coulter, Thomas
- 202 Research-Dairy Production (ar cr)
Ar

- 205 Research-Dairy Manufacturing (ar cr)
Ar
- 212 Research-Dairy Bacteriology (ar cr)
Ar

Winter and Spring Quarters

- 1s See 1f
- 4s Dairy Products Practice (3 cr; prereq soph 1) Ar Combs
- 9s Dairy Cattle Judging (1 cr; prereq soph) VI-VIII T Thoele; VI-VIII Th Olson; VI-VIII F Mix
- 10s Dairy Products Judging (1 cr; prereq soph, 1) IX-X Th Thomas, Morris
- 20s Household Microbiology (4 cr; prereq 3rd qtr fresh, cons advis and instr) Lect VI MF Olson; Lab VI-VII W
- 50w Dairy Bacteriology (5 cr; lect only 3 cr; prereq soph, Bact 53, cons instr to take lect only) Lect VI MWF Olson; Lab VII-VIII MWF
- 51s Market Milk (3 cr; prereq 3, 50) Lect IV MW Olson; Lab VI-VIII Th
- 52s Dairy Herd Mgt (2 cr; prereq 103) VII-IX TTh Mix
- 103w Dairy Stock Feeding (3 cr; prereq sr, 101, AnHu 56) II TThS Gullickson
- 106w Seminar II (1 cr; prereq 105) III F Petersen
- 110w Ice Cream, Frozen Desserts (3 cr; prereq 1, 3) Lect IV TS Combs, Thomas; Lab VI-VIII T
- 112s Cheese (3 cr; prereq 3, 50) IV TS Combs, Morris; Lab VI-VIII T
- 113s Technical Control (3 cr; prereq sr, 50, 111 or 112) I-III TTh, Coulter, Jezeski
- 114w Milk By-Products (3 cr; prereq 3) I TTh Coulter, Morris; Lab VI-VIII Th
- 115s Adv Dairy Bacteriology (3 cr; prereq sr, 50, 111 or 112) II-III MWF Jezeski
- 116s Milk Secretion (3 cr; prereq sr, 9 cr physiol, AgBi 103) I MWF Petersen
- 117s Dairy Cattle Breeding (3 cr; prereq 101, 104, Agro 31) III TThS Hervey
- 118s Milk Production, Secretion (3 cr; prereq regis vet med) VIII MWF Petersen
- 203w,204s See 202f
- 206w,207s See 205f
- 213w,214s See 212f

ENTOMOLOGY AND ECONOMIC ZOOLOGY (ENT)

Fall Quarter

- 5 Economic Entomology (5 cr; prereq soph, Zool 15)
Lect VIII MWF, 107AgrBot, Hodson
—1, Lab VI-VII MWF, 302CofH, Hodson
—2, Lab IX-X MWF, 302CofH, Hodson
- 51 Introd Parasitology (5 cr; prereq Zool 15)
Lect VI MWF, 313Z, Wallace
—1, Lab I-II MWF, 208Z
—2, Lab III-IV MWF, 208Z

- 117 **Animal Ecology** (3 cr; prereq 15 cr zool or ent)
Lect VI-VII TTh, 211Z, Eddy
Lab VIII TTh, Sub3Z
- 121 **Ichthyology** (3 cr; prereq 15 cr zool or ent)
Lect and lab IX-X MWF, 211, Sub3Z, Eddy
- 125 **Adv Gen Entomology** (3 cr; prereq 15 cr zool or ent)
Lect I TTh, 211Z, Mickel
Lab I-III S, 402Z, Mickel
- 128 **Insect Physiology** (4 cr; prereq sr, 15 cr zool or ent, cons instr)
Lect VI WF, 8CofH, Richards
Lab VII-IX WF, 8CofH, Richards
- 141 **Insects in Relation to Plant Diseases** (3 cr; prereq 8 cr ent or pl path)
I-II MWF, 302CofH, Christensen, Granovsky
- 144 **Medical Entomology** (3 cr; prereq 15 cr zool or ent incl 52, cons instr)
VII-IX TTh, 208Z, Burroughs
- 164 **Wildlife Mgt** (3 cr; prereq 63, 64, Zool 46-47, Bot 50, PIPa 53)
Lect III TTh, 100CofH, Marshall
Lab I-III S, 100CofH, Marshall
- 168 **Fishery Biology, Mgt** (5 cr, †168-169; prereq* Zool 53, 118, 119, 121, Bot 57, PH 110, 111)
Lect VI MWF, 100CofH, Smith
Lab VII-VIII MWF, 100CofH, Smith
- 175 **Prin Economic Entomology** (4 cr; prereq* 15 cr ent incl 5)
III MWF, 307CofH, Cutkomp
- 197 **Introd Research** (ar cr; prereq sr, cons dept)
Ar, Staff
- 200 **Seminar** (1 cr)
Ar

Winter and Spring Quarters

- 5w,s See 5f Cutkomp(w); Cook(s)
- 21s **Prin Beekeeping** (3-5 cr) VI-VIII MWF
Haydak
- 52w **Introd Entomology** (5 cr; prereq Zool 15)
Lect VIII MWF Mickel; Labs VI-VII MWF; IX-X MWF Mickel
- 56w **Forest Entomology** (5 cr; prereq Zool 15)
Lect VIII MWF; Labs VI-VII MWF; IX-X MWF Hodson
- 57s **Mill Pests, Their Control** (5 cr; prereq regis ME-Milling Option, 9 cr gen biol)
Lect VIII MWF; Lab VI-VII MWF Cook
- 63w **Mammalogy** (4 cr; prereq Zool 22) Lect II MWF; Labs I-II ThS; IV-V ThS Beer
- 64w **Introd Fish, Wildlife Mgt** (5 cr; prereq Zool 3, Bot 50 or For 20) III MTWThF
Marshall, Smith
- 114s **Apiculture** (3 cr; prereq 9 cr) Lect I MW;
Lab Ar Haydak
- 118w **Animal Ecology** (3 cr; prereq 15 cr zool or ent, cons instr) VI-VIII TTh Hodson
- 120s **Gen Ecology of Insects** (3 cr; prereq 117-118) VI-VIII TTh Hodson

- 126w-127s See 125f
- 129w See 128f
- 142w See 141f
- 145w **Parasitic Protozoa** (3 cr; prereq 15 cr zool, cons instr) VII-IX TTh Wallace
- 146s **Helminthology** (3 cr; prereq 15 cr zool, cons instr) VII-IX TTh Wallace
- 150s **Introd Aphidology** (3 cr; prereq* 52) Ar
Granovsky
- 165w-166s See 164f I MWF(w) Marshall; III TTh(s) and Lab ar Beer
- 167s **Techniques in Forest Wildlife Mgt** (3 cr; prereq grad, 64) Given at Cloquet
- 169w See 168f
- 170s **Fisheries Resources** (3 cr; prereq* 168, 169) I MWF Smith
- 176w **Legal, Regulatory Aspects of Pest Control** (3 cr; prereq* 15 cr ent incl 5) III MWF
Aamodt
- 197w,s See 197f
- 200w **Seminar** (1 cr) Ar

FOOD TECHNOLOGY (FOOD)

Fall Quarter

- 101 **Food Technology** (3 cr; prereq AgBi 3, 52, Bact 53, course in phys)
II TThS, 116SnH, Geddes

Winter and Spring Quarters

- 102w See 101f
- 104w **Frozen Food Processing, Storage** (3 cr; prereq Bact 53, AgBi 5 or 6)
IV MWF Winter

FORESTRY (FOR)

Fall Quarter

- 1A **Conservation of Natural Resources** (3 cr)
V MWF, GHAud, Kaufert, Hall
- 7 **Forest Measurements** (3 cr; prereq Math 6)
Lect IV MW, GHAud, Brown
-1, Lab VI-VIII M, 206GH
-2, Lab VI-VIII W, 206GH
-3, Lab II-IV S, 206GH
- 10 **Farm Forestry** (3 cr; prereq no forestry maj)
Lect IV WF, 203GH, Duncan
-1, Lab VI-IX M, 203GH
-2, Lab VI-IX T, 203GH
- 49 **Identification of Commercial Woods** (2 cr; prereq soph, no foresters)
Ar, Rees, Kemp
- 53 **Wood Structure, Identification** (3 cr; prereq 4)
-1, VI-VIII MW, 211GH, Rees
-2, VI-VIII TTh, 211GH
- 56 **Forest Products** (3 cr)
I MWF, 203GH, Kaufert
- 58 **Lumber Merchandising, Grading** (3 cr; prereq 53, 54)
III MWF, 201GH, Kemp

- 111 Adv Forest Measurements (3 cr; prereq grad, 9)
VI-X T, 206GH, Brown
- 114 Mechanical, Physical Properties of Wood (3 cr; prereq 53, 54, Math 7)
I TThS, 203GH, Rees
- 121 Wood Finishing (3 cr; prereq org chem)
Ar, Hossfeld
- 123 Intro Forest Economics, Valuation (3 cr)
IV TThS, 203GH, Allison, Stoltenberg
- 126 Silvics (3 cr)
II MWF, 203GH, Hansen
- 130 Forest Valuation (5 cr; prereq grad)
I MTWThF, 201GH, Allison
- 136 Forest Economics (3 cr; prereq grad, 8 cr econ)
IV TThS, 201GH, Allison
- 137 Seeding, Planting (3 cr)
Lect II TTh, 203GH, Hansen, Duncan
—1, Lab VI-VIII M, 201GH, Duncan
—2, Lab VI-VIII T, 201GH, Duncan
- 145 Adv Silviculture (3 cr; prereq grad, 127)
Ar
- 156 Maj Report (2 cr; prereq grad)
Ar
- 157 Maj Report (2 cr; prereq grad)
Ar
- 200 Research Probs-Science, Practice of Silviculture (ar cr)
Ar
- 203 Research Probs-Forest Mgt, Forest Mgt Plans (ar cr)
Ar
- 205 Research Probs-Forest Economics (ar cr)
Ar
- 207 Research Probs-Wood Technology (ar cr)
Ar
- 213 Special Probs-Forest Utilization (ar cr)
Ar
- 218 Research Probs-Forest Measurements (ar cr)
Ar
- 223 Forestry Seminar (1 cr)
Ar

Winter and Spring Quarters

- 1w Intro Forestry (3 cr) V MWF Hall
- 4s Dendrology (4 cr) Lect III MWF; Labs ar Rees
—8w-9s See 7f
10s See 10f
- 20w Intro Range Mgt, Grazing (3 cr; prereq soph) II TThS Allison
- 51s Logging (3 cr) V MWF Weinstein
- 52s Wood Seasoning (3 cr; prereq 53, 54)
I TThS Kemp
—54w See 53f
- 55w Forest Protection (3 cr) I TThS Schneider
- 57w Wood Utilization (3 cr; prereq sr, 53-54)
I MWF Kaufert, Kemp
- 101w Adv Dendrology (3 cr; prereq 4) Ar Rees
- 111w-112s See 111f

- 113w Wood Pulp, Paper (3 cr) IX MWF Hossfeld
- 115w Mechanical, Physical Properties of Wood (3 cr; prereq 114) I-II TThS Rees
- 116s Fabrication, Properties of Wood Products (3 cr; prereq 114) VI-VIII MW Rees
- 119s Adv Wood Structure (4 cr; prereq sr, 53, 54) Lect IX T; Lab VI-VIII TTh, Rees
- 120s Estimating (3 cr; prereq sr) IV MWF Larson
- 124w Intro Forest Mgt (3 cr) III MWF Allison, Stoltenberg
- 125s Wood Preservation (3 cr; prereq 53-54) III TThS Kaufert
- 127w Intro Silviculture (3 cr; prereq grad, 126) II MWF Hansen
- 128s Field Silviculture I (3 cr; prereq 126) Given at Cloquet
- 129s Field Silviculture II (3 cr; prereq sr, 126) Given at Cloquet
- 131w Forest Policy (3 cr; prereq grad) I MWF Allison
- 132s Forest Mgt, Utilization I (3 cr; prereq sr, 123, 124) Given at Cloquet
- 133s Forest Mgt Utilization II (3 cr; prereq sr, 123, 124) Given at Cloquet
- 134s Aerial Photography in Forest Mgt (1 cr; prereq 9) Given at Cloquet
- 140w Forest Mgt (5 cr; prereq grad, 128, 132) III MTWThF Allison
- 141w Prin Silvics (3 cr; prereq grad, 127) II TThS Hansen
- 142s Wood Chemistry (3 cr; prereq 53, 54, org chem) II MWF Hossfeld
- 143w Forest Recreation (3 cr) IV MWF Duncan
- 156w,s See 156f
157w,s See 157f
201w,202s See 200f
204w See 203f
206w See 205f
208w,209s See 207f
214w,215s See 213f
219w See 218f
224w,225s See 223f

HOME ECONOMICS (HE)

Fall Quarter

- 1 Choice, Care of Clothing (4 cr, §GC 15, not open to HE sr or men)
—1, III MTWTh, 313HE, Quist
—2, IV MTWTh, 313HE, Quist
- 3 Clothing Construction A (3 cr; prereq 3rd qtr fresh, 1)
—1, III-IV MWF, 304HE
—2, VI-VIII TTh, 304HE
- 4 Clothing Construction B (3 cr; prereq soph, 3)
—1, VI-VII MWF, 304HE, Quist
—2, VI-VIII TTh, 305HE, Gorham
- 6 Institution Experience (3 cr; prereq maj instit mgt, cons instr)
Ar, Scholl

- 17 **Personal, Family Living** (3 cr; prereq no sr)
 -1, IV MWF, 213HE, Studley
 -2, VII MWF, 213HE, Studley
- 20 **Introd Related Art** (4 cr, §56; prereq no HE sr)
 -1, II MTWF, 203HE, Myren
 -2, III MTWF, 203HE, Myren
- 21 **Color, Design I** (3 cr; prereq 20)
 -1, II-III MWF, 402HE, Bookbinder
 -2, VI-VIII TTh, 402HE, Bookbinder
- 22 **Color, Design II** (3 cr; prereq 1, 20)
 II-III MWF, 110HE, Petersen
- 23 **Adv Design** (3 cr; prereq soph, 21)
 VI-VII MWF, 110HE, Bookbinder
- 24 **Probs in Home Planning, Furnishing** (5 cr; §GC 16, FL 15, HE 57, 180; prereq soph, 20, not open to textiles and clothing in business, related art, HE educ maj)
 VI-VIII MW, VI-VII F, 401HE, Petersen
- 27 **Related Art Probs** (3 cr; prereq soph, 21)
 -1, II-III TThS, 401HE, Ludwig
 -2, VI-VIII TTh, 401HE, Petersen
- 30 **Introd Nutrition** (2 cr; prereq no HE students)
 III TTh, 201WeH, Biester, Nymon
- 31 **Introd Nutrition** (3 cr, §30; prereq no sr)
 -1, III MWF, 213HE, Theis
 -2, 9:45-11:00 TTh, 213HE, Biester
 -3, VI MWF, 213HE, Theis
- 33 **Nutrition I** (4 cr; prereq soph, AgBi 1, Phsl 4 or concur regis)
 Lect III MWF, 307HE, Nymon
 Lab VI-VIII T, 211HE, Nymon
- 40 **Food Preparation** (5 cr; prereq 2 qtrs chem)
 -1, III-IV MTWThF, 103HE, Jones
 -2, VI-VII MTWThF, 103HE, Jones
 -3, VIII-IX MTWThF, 103HE, Hermanson
- 41 **Food Mgt, Marketing** (5 cr; prereq soph, 31, 40)
 -1, III-IV TWThF, V WF, 207HE, Lund
 -2, III-IV MTWTh, V TTh, 207HE, Trammell
 -3, VII-VIII MTWTh, IX TTh, 207HE, Trammell
- 45 **Quantity Cookery** (6 cr; prereq soph, 40, 41)
 Lect V TTh, 213HE, Higgins
 Lab 8:00-11:00 TThS, Cafeteria
- 46 **Cafeteria Experience** (3 cr; prereq soph)
 Lect, IV W, Cafeteria
 -1, Lab IV-V MF, Cafeteria
 -2, Lab IV-V TTh, Cafeteria
- 49 **Household Equipment** (3 cr; prereq* soph, AgEn 35)
 -1, VII-VIII MWF, 106HE
 -2, VI-VIII TTh, 106HE
- 50 **Textiles** (3 cr; prereq 1)
 III-IV TThS, 307HE, Gorham
- 52 **Introd Textiles** (3 cr; for SLA, BA, UC or ArtEd; prereq writ permis from jr col office)
 VI-VII MWF, 307HE
- 53 **Adv Clothing** (3 cr; prereq 4, 50 or concur regis)
 IV-V MWF, 305HE, Gorham
- 56 **Applications of Color, Design I** (3 cr, §20, prereq no HE students, writ permis from jr col office)
 VIII-IX MWF, 402HE, Ludwig
- 64 **Institution Buying** (4 cr; prereq 45, 46, or concur regis)
 IV MWF, Cafeteria, Scholl
 Field Trips 1:00-4:00 F
- 76 **Nutrition** (4 cr, §34 or 170, 171; prereq 30 or 31, 40)
 IV MTWF, 107AgrBot, Nymon
- 85 **Home Mgt Prin** (3 cr; prereq 40, 41 advised)
 VII MWF, 203HE, Jeary
- 86 **Home Mgt Lab** (4 cr; prereq 85 or concur regis, PH 52a, 52b; 40, 41 advised)
 -1, I S and ar, Home Mgt House, Jeary
 -2, I S and ar, Home Mgt House, Stephens
- 98 **Home Economics Extension** (3 cr; prereq sr, HEED 91 or concur regis)
 Ar
- 102 **Adv Textiles** (3 cr; prereq 50, AgBi 1, AgEc 3 or concur regis)
 VI-VIII TTh, 307, 311HE, Phelps
- 120 **Art History** (3 cr; prereq sr)
 VIII MWF, 313HE, Esteros
- 140 **New Developments in Food Preparation** (3 cr; prereq 40)
 I-II TTh, Gordon
- 142 **Experimental Cookery** (3 cr; prereq 40, AgBi 1)
 -1, VI-VIII MW, 107HE, Gordon
 -2, VI-VIII TTh, 107HE, Noble
- 170 **Family Nutrition** (3 cr; prereq 31, 40, AgBi 1, 3 cr physiol)
 II MWF, 313HE, Leichsenring, Nymon
- 178 **Clinical Probs in Nutrition** (2 cr; prereq 170, 35 or concur regis)
 Lect V M, 313HE, Theis
 -1, Lab VI-VIII T, U Hosp
 -2, Lab VI-VIII Th, U Hosp
- 179 **Readings in Nutrition** (2 cr; prereq 170)
 II TTh, 110HE, Biester, Nymon
- 180 **Home Planning, Furnishings** (5 cr, §GC 16, FL 15, HE 24, 57; prereq 27, 120 advised)
 IV-V MTWF, 401HE, Esteros, Ludwig
- 209 **Seminar-Textiles, Clothing** (1 cr; prereq*)
 Ar, Phelps
- 296 **Home Economics Probs** (1-5 cr; prereq*)
 Ar
- 299 **Home Economics Probs** (ar cr; prereq*)
 Ar

Winter and Spring Quarters

1w,s See 1f II MTWTh (w,s); III MTWTh (w) Quint

- 3w,s See 3f III-IV MWF (s); VI-VII MWF (w) Quist; VI-VIII TTh (w,s) Quist
- 4w,s See 4f II-III MWF (w); VI-VII MWF (s); VI-VIII TTh (w) Gorham
- 6w,s See 6f
- 17w,s See 17f
- 20w,s See 20f II MTWF (s); IV MTWF (w); VIII MTWF (w) Myren
- 21w,s See 21f II-III MWF (s) Bookbinder; II-III TThS (s) Ludwig; VI-VII MWF (w) Bookbinder; VI-VIII TTh (w,s) Bookbinder
- 22w,s See 22f II-III MWF (w) Petersen; VI-VIII TTh (w,s) Petersen
- 24s See 24f IV-V MTWF Bookbinder
- 25w,s Design Applied to Crafts (3 cr; prereq 21 or 22) II-III TThS (w) Petersen; III-IV TThS (s) Petersen
- 27w,s See 27f II-III MWF Myren (w); Petersen (s)
- 30s See 30f VI TTh Biester, Nymon
- 31w,s See 31f II MWF (w); 9:45-11:00 TTh (w); III MWF (s) Theis
- 34s Nutrition Probs (4 cr, §76, or 170, 171; prereq 3rd qtr soph, 31, 40, physiol or human biol) II MTWTh Nymon
- 35w Nutrition II (4 cr; prereq soph, 33) Lect II MWF; Lab VI-VIII T Nymon
- 40w,s See 40f
- 41w,s See 41f
- 45w,s Quantity Cookery (6 cr; prereq soph, 40, 41) Lect V TTh Higgins; Labs 8:00-11:00 MWF; 8:00-11:00 TThS Cafeteria
- 46w,s See 46f
- 49w,s See 49f III-IV TThS (s), VI-VIII TTh (w,s); VII-VIII MWF (w)
- 50w,s See 50f III-IV MWF (w,s) Gorham; III-IV TThS (s); VI-VII MWF (w)
- 53w,s See 53f VI-VII MWF, Gorham
- 57s Applications of Color, Design II (3 cr, §GC 16, FL 15, HE 24, 180; prereq 56, no HE students, writ permis from jr col office) VIII-IX MWF Ludwig
- 65s Institution Mgt Probs (3 cr; prereq 45, 46, 64) 10:15-11:30 TTh Scholl
- 70w Adv Food Preparation (3 cr; prereq 41, AgBi 1) VI-VIII TTh Trammell
- 71s Demonstrations (1 cr; prereq 3rd qtr jr, 41) VI-VIII F
- 79s Selected Probs for Dietitians (3 cr; prereq 170) II MWF Biester
- 85w,s See 85f
- 86w,s See 86f
- 89w,s Special Probs in Household Equipment (3 cr; prereq 49, AgEn 35, cons instr) Ar
- 98w,s See 98f
- 107w Textile Analysis (3 cr; prereq 50, AgBi 1, 2) VI-VIII MWF Phelps
- 120w,s See 120f
- 121w Textile Design (3 cr; prereq 27, 50; 23 advised) II-III TThS Bookbinder

- 122s Adv Interior Design (3 cr; prereq* 27, 120) III-IV TThS Esteros
- 125w Adv Costume Design (3 cr; prereq* 3, 22) IV-V MWF Esteros
- 142w,s See 142f VI-VIII MW (w) Trammell; VI-VIII TTh (s) Gordon
- 146s Special Food Probs (3 cr; prereq sr, 142) VI-VIII MW Gordon
- 170w See 170f III MWF Biester, Nymon
- 171w,s Child Nutrition (3 cr; prereq 170, HEEd 90) III MW StP Campus and III F, IV-V F Mpls Campus, Leichsenring
- 173s Nutrition in Disease (4 cr; prereq 170; 35 advised) Lect 8:45-10:00 TTh Theis; Lab VI-VII F
- 176w Adv Nutrition (4 cr; prereq 35 or concur regis, AgBi 2) Lect IV MW Biester; Lab II-IV TTh
- 177s Digestion, Metabolism (3 cr; prereq 35) VI-VIII MW Leichsenring, Nymon
- 178w,s See 178f
- 179w See 179f V WF Theis
- 180w,s See 180f IV-V MTWF (w) Ludwig; VI-VIII MW and VI-VII F (s) Myren
- 185w Family Relationships (3 cr; prereq* 17, 86, HEEd 90) Ar Studley
- 186s Probs in Income Mgt (3 cr; prereq* 34, 85, 86) VII MWF Studley
- 209w,s See 209f
- 279w,s Seminar-Nutrition (1 cr; prereq*) Ar Biester
- 296w,s See 296f
- 299w,s See 299f

HORTICULTURE (HORT)

Fall Quarter

- 6 Fruit Growing (3 cr)
II MWF, 102Hr, Brierley
- 21 Plant Materials, Fall, Winter Aspects (3 cr; prereq 6 cr bot)
VI-VIII MW, 8Hr, Widmer
- 24 Prin Landscape Design (3 cr; prereq* 21 or 22)
VI-VIII MF, 107Hr, Phillips
- 52 Commercial Floriculture, Fall Crops (3 cr; prereq 6 cr bot)
III TTh, VI-VIII T, 8Hr, Widmer
- 107 Orchard Mgt (3 cr; prereq* 6, hort maj or min)
III TTh, VI-VII T, 102 Hr, Brierley
- 135 Potatoes (3 cr; prereq 32, or Agro 1, 9 cr bot)
Ar, Krantz
- 190 Special Probs (2-4 cr; prereq cons instr)
Ar, Alderman, Staff
- 193 Horticultural Seminar (1 cr; prereq sr, 9 cr hort)
IX W, 301Hr, Alderman, Staff
- 243 Adv Topics in Horticulture (3 cr)
Ar, Alderman, Brierley, Krantz

- 247 Report on Special Horticultural Topics (ar cr)
Ar, Staff
- 249 Research in Horticultural Crop Breeding (ar cr)
Ar, Krantz, Currence, Hutchins, Wilcox
- Winter and Spring Quarters**
- 1w Gen Horticulture (3 cr) III MWF Alderman, Weir
- 10s Home Floriculture (3 cr) III MWF Phillips
- 22s Plant Materials, Spring, Summer Aspects (3 cr; prereq 6 cr bot) VI-VIII MW Widmer
- 25w Prin Plant Composition (3 cr; prereq* 21 or 22) VI-VIII MF Phillips
- 32s Vegetable Growing (3 cr; prereq 6 cr bot) II MWF Krantz, Hutchins
- 36w Plant Propagation (3 cr; prereq 6 cr bot) III TTh, VI-VIII T Widmer
- 40s Horticulture Lab (2 cr; prereq* soph, 6) VI-IX F Weir
- 54s Commercial Floriculture, Spring Crops (3 cr; prereq 6 cr bot) III TTh; VI-VIII T Widmer
- 76s Landscape Construction, Maintenance (3 cr; prereq* 24 or 25) VI T, VI-IX Th Phillips
- 110w Horticultural Crop Breeding (3 cr; prereq Agro 31) III TThS Wilcox
- 121w Small Fruit Culture (3 cr; prereq* hort maj or min, 6 or 32, 9 cr bot) II MWF Brierley
- 138w Vegetable Crops I (3 cr; prereq 32, 9 cr bot) Ar Nylund
- 153w Conservatory Plants, Florists' Flowers (3 cr; prereq 9 cr bot) VI-VII MW and VIII W Widmer
- 191w-192s See 190f
- 194w See 193f
- 241w Organization of Horticultural Research (2 cr) Ar Alderman, Krantz
- 244w See 243f
- 247w,s See 247f
- 248w Truck Crop Breeding (3 cr; prereq 110, or Agro 132) IV MWF Currence
- 249w,s See 249f

ORIENTATION (ORIE)

Fall Quarter

- 1 College Orientation Lectures (1 cr)
--1, I T, CofAud, McFarland
--2, I W, CofAud, McFarland

Winter and Spring Quarters

- 1w,s See 1f V M

PLANT PATHOLOGY AND AGRICULTURAL BOTANY (PLPA)

Fall Quarter

- 1 Plant Pathology (5 cr, \$10; prereq soph, 9 cr pl sci incl 6 in bot)

- Lect VIII MWF, 103, 105PP, Moore
--1, Lab VI-VII MWF, 103, 105, 106PP
--2, Lab IX-X MWF, 103, 105, 106PP
- 4 Grasses, Sedges (3 cr; prereq soph, 9 cr bot)
Lect III TThS, 106AgrBot, Larson
Lab IV TS, 106AgrBot
- 52 Biochemistry, Microbiology of Cereal Grains (3 cr; prereq regis ME-Milling option, 5 cr elem org chem, 9 cr gen biol)
II TThS, 310SnH, C Christensen
- 56 Intro Study of Fungi (3 cr; prereq* 9 cr bot)
Lect II MW, 103PP, C Christensen
Lab II-IV F, 103, 105, 106PP
- 101 Special Agricultural Botany (3 or 5 cr; prereq 9 cr bot)
II TThS, 300AgrBot, Kernkamp
- 103 Physiology of Crop Plants (3 or 5 cr; prereq* 15 cr pl sci)
Lect IV MWF, 107AgrBot, Heggeness
Lab Ar
- 105 Mycology (3 or 5 cr; prereq 1 or 10)
VI-VIII TTh, 103, 105, 110PP, Dossdall
- 113 Fungi (4 cr; prereq 10 cr biol, 10 cr chem, Bact 53; primarily for med students)
Lect III MW, 111MeS; Lab IV-V MW, 129MH, C Christensen
- 118 Bacterial Diseases of Plants (3 cr; prereq 1 or 10)
III-IV MWF, 103, 105, 106PP, Eide
- 120 Adv Plant Pathology (3 cr; prereq* 14 cr pl sci)
Lect VIII MWF, 103, 105, 106PP, Moore
Lab IX-X MWF
- 135 Weed Control (3 cr; prereq 3, Agro 1)
VI-VII TTh, 202Ag, Heggeness
- 141 Insects in Relation to Plant Disease (3 cr; prereq 8 cr ent or pl path)
I-II MWF, 302CofH, J Christensen
- 143 Methods (3 cr; prereq 1 or 10)
III-IV TThS, 103, 105, 106PP, Hart, Moore
- 156 Adv Study of Fungi (3 cr; prereq* 9 cr bot)
Lect II MW, 103PP, C Christensen
Lab II-IV F, 103, 105, 106PP
- 163 Practical Applications of Plant Physiology (3 cr; prereq* 15 cr pl sci)
Ar, Landon
- 203 Research-Plant Pathology (ar cr)
Ar, Stakman, Staff
- 207 Special Probs in Mycology (ar cr; prereq 105-106-107)
Ar, Stakman, C Christensen, Dossdall
- 213 Seminar (2 cr)
IX-X T, 401PP, Stakman, Staff
- 215 Genetics of Plant Pathogens (5 cr; prereq 1 or 10, Agro 131)
III-IV MWF, 401, 105PP, Stakman, J Christensen
- 216 Physiology of Plant Pathogens (3 or 5 cr)
Ar, Landon

- 251 Seminar-Applied Plant Physiology (1 cr)
Ar, Landon
- 254 Research Probs in Applied Plant Physiology
(ar cr)
Ar, Landon
- 260 Research Probs in Agricultural Botany
(3 or 5 cr)
Ar, Stakman, Larson

Winter and Spring Quarters

- 1s See 1f
- 3s Weeds (3 cr; prereq 6 cr bot) III-IV TThS
Larson
- 9w Seed Technology, Testing (3 cr; prereq
soph, 9 cr bot) II-III TThS Larson
- 10w,s Forest Pathology (5 cr, §1, prereq soph,
6 cr bot) Lect I MWF (s); VII MWF (w)
C Christensen; Labs I-II TThS (s); IV-
VI MWF (w); VIII-IX MWF (w)
- 53s Food Plants of Game Animals (3 cr; pre-
req 1 yr bot, 1 yr zool) II TThS Larson
- 102w Physiology of Seeds (3 cr; prereq* 15 cr
pl sci) Lect III MW Heggeness; Lab
III-IV F
- 104w Industrial Mycology (3 cr; prereq 1 or 10
or 56) Lect II MW C Christensen; Lab
II-III F
- 106w-107s See 105f
- 111w Diseases of Field Crops (4 cr; prereq 1
or 10) III-IV TThS J Christensen, Kern-
kamp
- 112s Diseases of Fruit, Vegetable Crops (3 cr;
prereq 1 or 10) Lect II MF Eide, King;
Lab II-IV W
- 114w Adv Forest Pathology (3 cr; prereq 1 or
10) VI-VIII T and VII-VIII Th C
Christensen
- 119s Prin Plant Disease Control (3 cr; prereq
1 or 10) III-V TTh King
- 120w,s See 120f Lect I MWF (s) C Christensen;
VII MWF (w) C Christensen; VIII MWF
(s) Moore; Labs I-II TThS (s); VIII-IX
MWF (w); IX-X MWF (s)
- 142w See 141f
- 161s Technology of Fruits, Vegetables (3 cr;
prereq* 15 cr pl sci) Ar Landon
- 162w Temperature Relations of Crop Plants (3
cr; prereq* 15 cr pl sci) Ar Landon
- 204w See 203f
- 205s Research Plant Pathology (ar cr) Ar
Stakman, Staff
- 208w See 207f
- 209s Special Probs in Mycology (ar cr) Ar
Stakman, C Christensen, Dosdall
- 211w History of Plant Pathology (2 cr) Ar
Stakman
- 213w,s See 213f
- 217s Ecology of Plant Pathogens (3 cr) Lect
III-IV W Kernkamp; Lab II-IV F
- 218w Prin Plant Pathology (5 cr; prereq 1,
or 10, Bact 53, 6 cr in pl path) III-IV
MWF Stakman, Eide
- 252w,253s See 251f
- 255w,256s See 254f
- 261w,262s See 260f

POULTRY HUSBANDRY (POHU)

Fall Quarter

- 52 Poultry Selection (3 cr; prereq 1)
VII-VIII TTh, 217 PetH, Canfield
- 55 Special Probs (1-3 cr; prereq 9 cr)
Ar, Sloan
- 154 Poultry Products (4 cr; prereq 1)
Lect VI MW, 217PetH, Sloan, Canfield
Lab VII-VIII MW, B16PetH
- 214 Research in Poultry Husbandry (ar cr;
prereq 9 cr)
Ar, Staff
- 215 Research-Poultry Nutrition (ar cr; prereq
9 cr in agric biochem)
Ar, Briggs
- 216 Research-Poultry Breeding (ar cr; prereq
9 cr in genetics)
Ar, Shoffner
- 217 Poultry Husbandry Seminar (1 cr)
Ar, Staff

Winter and Spring Quarters

- 1w,s Poultry Production (4 cr) II MTWF
Canfield
- 51s Hatchery Mgt (3 cr; prereq 1, Zool 15)
VII-VIII TTh Canfield
- 55w,s See 55f
- 102w Poultry Breeding (4 cr; prereq 1, Agro
31) Lect I MWF Shoffner; Lab ar
- 104s Seminar (1 cr; prereq 6 cr) Ar Sloan
- 153s Poultry Nutrition, Feeding (3 cr; prereq
1, AgBi 1) IV MWF Briggs
- 214w,s See 214f
- 215w,s See 215f
- 216w,s See 216f
- 217w,s See 217f

RHETORIC (RHET)

Fall Quarter

- 1-2-3 Communications I, II, III (3 cr per qtr)
All entering freshmen will meet in Green
Hall Auditorium the first period every
day for the first week of the quarter.
At this time they will be given diag-
nostic tests in the communication skills,
and at the end of the week will be
sectioned according to their needs and
abilities. After the first week, all sec-
tions will continue to meet during the
first hour, but a student will be as-
signed to a MWF or a TThS sequence.
Students transferring to this college with
fewer than nine credits of freshman
English earned elsewhere are also re-
quired to take these diagnostic tests.
All students who have taken at least one
course in Communications on this cam-
pus but who have not completed their
freshman Communication requirement
will be given their section assignment
in 107 Ag Engineering the first period
of the first class day of the quarter.

- 12 **Debate, Discussion** (3 cr; prereq soph, rhet comm require)
III TThS, 312En, Shepard
- 22 **Public Speaking** (3 cr; prereq soph, rhet comm require)
—1, II MWF, 312En, Shepard
—2, III MWF, 312En, Nichols
—3, IV MWF, 312En, Nichols
—4, VI MWF, 312En, Sandquist
—5, VII MWF, 312En, Sandquist
—6, II TThS, 120TSA, Drake
—7, III TThS, 307En, Woods
—8, IV TThS, 120TSA, Hagen
- 23 **Play Production** (3 cr; prereq soph, rhet comm require)
III TThS, 120TSA, Drake
- 31 **English Literature I** (5 cr; prereq soph, rhet comm require)
III MTWThF, 308En, Thurston
- 32 **English Literature II** (3 cr; prereq soph, rhet comm require)
II TThS, 311En, Rosegrant
- 33 **American Life in American Literature** (3 cr; prereq soph, rhet comm require)
II MWF, 307En, Seidenkranz
- 51 **Exposition** (3 cr; prereq rhet comm require)
—1, III MWF, 120TSA, Rosegrant
—2, IV MWF, 120TSA, Nelson
—3, VI MWF, 308En, Thurston
—4, III TThS, 312En, Brown
—5, IV TThS, 307En, Seidenkranz
- 54 **Adv Public Speaking** (3 cr; prereq 22)
—1, II MWF, 120TSA, Drake
—2, II TThS, 307En, Sandquist
- 60 **Contemporary Literature** (3 cr; prereq rhet comm require)
IV MWF, 307En, Woods
- 91 **American Speech for Foreign Students** (no cr)
Ar, Woods

Winter and Spring Quarters

- 1w,s-2w,s-3w,s See 1-2-3f
- 12w,s See 12f
- 22w,s See 22f
- 26w,s Original Writing (3 cr; prereq soph, rhet comm require) III MWF Woods
- 28w See 23f
- 31w,s See 31f
- 32w,s See 32f
- 33w,s See 33f
- 51w,s See 51f
- 54w,s See 54f
- 59s Adv Play Production (3 cr; prereq* 23)
III TThS Drake
- 60w,s See 60f
- 91w,s See 91f

SOILS (SOIL)

Fall Quarter

- 103 **Prin Soil Erosion** (3 cr; prereq 4)
II TThS, 204So, MacGregor
- 111 **Field, Lab Studies of Soils** (3 cr; prereq 4)
VII T, 204So, McMiller
Lab VIII-IX T, VII-IX Th
- 202 **Seminar—Soils** (1 cr)
Ar, Rost

Winter and Spring Quarters

- 4w Soils (3 cr; prereq soph, InCh 2 or 5)
II MWF Caldwell
- 5s Soil Mgt (3 cr; prereq soph, 4) II TThS Rost
- 104s Soil Mapping (3 cr; prereq 109) Ar McMiller
- 108w Physical Properties of Soils (3 cr; prereq 4) Lect VI TTh; Labs VII-IX T; VII-IX Th McMiller
- 109s Soil Genesis, Classification (3 cr; prereq 108) IV MWF McMiller
- 110w Chemistry of Soil (3 cr; prereq 4) I TThS MacGregor
- 203w,s See 203f
- 205w Soil Colloids (3 cr; prereq AgBi 119)
Ar Caldwell
- 206w Soil Physics (3 cr; prereq 108) Ar Caldwell
- 207w Adv Soils (3 cr; prereq 1 yr chem) II MWF Caldwell
- 208s Soil Fertility (3 cr; prereq 4) II TThS Rost

VETERINARY MEDICINE (VET)

Fall Quarter

- 50 **Anatomy, Physiology, Hygiene of Domestic Animals** (3 cr)
I TThS, 103Vet A, Flint
- 101 **Animal Anatomy** (7 cr; prereq regis 1st yr vet med; grad with cons instr)
VI-VIII MWF, VI-IX TTh, 103Vet A, Kitchell
- 104 **Special Studies in Animal Anatomy** (1-3 cr; prereq 101)
Ar, Kitchell, Weber
- 111 **Animal Histology, Embryology** (6 cr; prereq regis 1st yr vet med; grad with cons instr)
I-IV MWF, 103Vet A, Weber
- 114 **Special Studies in Animal Histology, Embryology** (1-3 cr; prereq 111)
Ar, Kitchell, Weber
- 122 **Animal Bacteriology** (6 cr; prereq 10 cr zool, 13 cr chem)
II-IV MWF, 207TEH, Pomeroy
- 135 **Animal Physiology** (8 cr; prereq* 103, 113, PhCh 103)
I MTWThF, II-IV TTh, VI M, 207TEH, Hemingway, Sellars

- 140 Seminar—Animal Physiology (2 cr)
Ar, Hemingway, Sellars
- 151 Animal Pathology (4 cr; prereq* sr, 103, 113)
VI-IX WF, 207TEH, Kernkamp, Sautter
- 171a Clinical Conference (1 cr; prereq 170)
VI F, 160VetC, Bartlett, Staff
- 172 Animal Surgery (6 cr; prereq 170)
I TWThF, MSh, VIII WF, 220TSH, Bemis
- 177 Large Animal Medicine (5 cr; prereq 170)
I MS, VII MWF, MSh, Campbell, Boyd
- 188 Clinical, Lab Practice (5 cr; prereq 170)
II-IV MTWThFS, 160VetC, Campbell, Staff
- 201 Adv Animal, Poultry, Pathology (ar cr; prereq cons instr)
Ar
- 205 Adv Animal Bacteriology (ar cr; prereq cons instr)
Ar
- 209 Adv Clinical Technique (ar cr; prereq cons instr)
Ar
- 213 Veterinary Obstetrics, Gynecology (ar cr, cons instr)
Ar
- 217 Seminar—Veterinary Medicine (1 cr)
Ar
- 230 Research—Veterinary Medicine (ar cr)
Ar
- Winter and Spring Quarters**
- 51w,52s See 50f
- 102w Animal Anatomy (5 cr; prereq regis 1st yr vet med; grad with cons instr) VI-VIII TWThF, IX WF Kitchell
- 103s Animal Anatomy (4 cr; prereq regis 1st yr vet med; grad with cons instr) VI-IX MWF Kitchell
- 104w,s See 104f
- 106w Veterinary Surgical Anatomy (1 cr; prereq* 3rd yr vet med) VI-VIII M Kitchell
- 109w Anatomy, Physiology, Hygiene of Poultry (3 cr; prereq Zool 15, PoHu 1) VI MWF Pomeroy
- 112w Animal Histology, Embryology (5 cr; prereq regis 1st yr vet med; grad with cons instr) I-III MWF, IV MW Weber
- 113s Animal Histology, Embryology (4 cr; prereq regis 1st yr vet med; grad with cons instr) I-III TTh Weber
- 114w,s See 114f
- 121s Animal Bacteriology (5 cr; prereq 10 cr zool, 13 cr chem) I-III MWF Pomeroy
- 123w Animal Bacteriology (4 cr; prereq 10 cr zool, 13 cr chem) II-IV MW, II-III F Pomeroy
- 136w Animal Physiology (7 cr; prereq* 103, 113, PhCh 103) I MTWThF, II-IV TTh Hemingway, Sellars
- 140w,s See 140f
- 143w Veterinary Clinical Pharmacology (3 cr; prereq Phcl 105, 3rd yr vet med; grad cons instr) VI-IX W, VI F O'Dell
- 152w Animal Pathology (5 cr; prereq* sr, 103, 113) VI-IX WF, VI M Kernkamp, Sautter
- 153s Animal Pathology (6 cr; prereq* sr, 103, 113) VI-IX WF, VI M, I F Kernkamp, Sautter
- 154s Veterinary Clinical Pathology (2 cr; prereq 152, 3rd yr vet med; grad cons instr) VI MF Hadlow
- 161w Animal Parasitology (4 cr; prereq* sr, 103, 113) VI-IX TTh Griffiths
- 162s Animal Parasitology (6 cr; prereq sr, 161) VI-VIII TTh, I TTh, III WF Griffiths
- 170s Veterinary Clinical Diagnosis (2 cr; prereq sr, 136, 151) II T, II-IV Th Pritchard
- 172bw,173cs See 171af
- 173w Special Animal Surgery (5 cr; prereq* 3rd yr vet med) VI-IX TTh, I S Bemis, Mather
- 174s Adv Animal Surgery (3 cr) VI-IX T, I S Bemis, Mather
- 178w Large Animal Surgery (5 cr; prereq* 3rd yr vet med) I MTWThF Campbell, Boyd
- 179s Large Animal Medicine (5 cr) I MTWThF Campbell, Boyd
- 185s Small Animal Medicine (4 cr) VII MWF, VI Th Mather
- 189w Clinical, Lab Practice (5 cr; prereq 170, 3rd yr vet med, cons instr) II-III MWF, II-IV TThS Campbell, Staff
- 190s Clinical, Lab Practice (5 cr; prereq 170, 3rd yr vet med, cons instr) I TThS; II-IV MTWThFS Campbell, Staff
- 201w,s See 201f
- 205w,s See 205f
- 209w,s See 209f
- 213w,s See 213f
- 217w,s See 217f
- 230w,s See 230f

AIR SCIENCE AND TACTICS (AIR)

Fall Quarter

- 31 Air Science I (1 cr)
—1, III MWF, 116A, Booher
—2, VII MWF, 116A, Booher
- 34 Air Science II (1 cr; prereq 33)
—1, III MWF, 105A, Kraus (Adm), 116A, Monsees (Comm)
- 2, VIII MWF, 105A, Kraus (Adm), 116A, Monsees (Comm)
- 131 Air Science III (3 cr; prereq 36)
—1, I MTWThF, 105A, Kraus (Adm), 116A, Monsees (Comm)
—2, IV MTWThF, 105A, Kraus (Adm), 116A, Monsees (Comm)

- 134 Air Science IV (3 cr; prereq 133)
 -1, II MTWThF, 105A, Kraus (Adm),
 116aA, Monsees (Comm)
 -2, VI MTWThF, 105A, Kraus (Adm),
 116aA, Monsees (Comm)

Winter and Spring Quarters

- 32w See 31f (prereq 31)
 33s See 31f (prereq 32) III M, IX-X T; VII M,
 IX-X T

- 35w See 34f (prereq 34)
 36s See 34f (prereq 35) III M, IX-X T; VIII M,
 IX-X T
 132w See 131f (prereq 131)
 133s See 131f (prereq 132) I MWF, IX-X T; IV
 MWF, IX-X T
 135w See 134f (prereq 134)
 136s See 134f (prereq 135) II MWF, IX-X T;
 IV MWF, IX-X T

SCHOOL OF BUSINESS ADMINISTRATION

BUSINESS ADMINISTRATION (BA)

Fall Quarter

- 51 Contracts (3 cr, §51, 52 or 53, §Econ 28;
 prereq Econ 7)
 Lect IV T, BuAud, Neville, others
 -1, I TTh, 2VH
 -2, I TTh, 205VH
 -3, II TTh, 2VH
 -4, II TTh, 301VH
 -5, III TTh, 2VH
 -6, III TTh, 211Z
 -7, VI TTh, 1VH
 -8, VI TTh, 8ForH
 -9, VII TTh, 8ForH
 -10, VII TTh, 1VH
 -11, VIII TTh, 1VH
- 54 Elem Accounting, Combined Course (4 cr;
 §22, 24-25)
 II MWThF, 306VH, Heilman, others
- 57 Money, Banking (3 cr, §Econ 3)
 I MWF, 205VH, Stehman, others
- 58 Elements of Public Finance (3 cr, §Econ 189,
 or 191-192; prereq Econ 7)
 -1, II MWF, 8ForH, Heller, Borak, others
 -2, IV MWF, 4VH
 -3, VI MWF, 1VH
- 65 Analysis of Financial Statements (3 cr; §139,
 151; prereq Econ 26)
 -1, II½-III TTh, 4VH, Heilman, others
 -2, VII½-VIII TTh, 2VH
- 66 Cost Accounting Survey (3 cr; §130, 152;
 prereq Econ 26)
 -1, I-II½ TTh, 307VH, Wheeler, others
 -2, IV-V½ TTh, 6VH
 -3, VI-VII½ TTh, 9ForH
- 70 Statistics Survey (3 cr, §Econ 5, Soc 45;
 prereq Econ 7)
 -1, I MWF, 6VH
 -2, V MWF, 2VH
- 71 Transportation Services, Charges I (3 cr,
 §Econ 172; prereq Econ 7)
 -1, II MWF, 1VH, Nightingale, others
 -2, VII MWF, 4VH
 -3, VIII MWF, 6VH

- 74 Business Statistics (3 cr; §112; prereq 5)
 -1, II MWF, 301VH, Mudgett, Gaumnitz,
 others
 -2, III MWF, 205VH
 -3, VII MWF, 20ForH
- 77 Survey, Marketing (3 cr; §Econ 185, pre-
 req 7)
 Lect III T, 06Bo, Vaile, others
 -1, I TTh, 1VH
 -2, II TTh, 211Z
 -3, IV TTh, 1VH
 -4, V TTh, 1VH
 -5, VI TTh, 6VH
 -6, VIII TTh, 205VH
- 86 Survey Office Mgt (3 cr; prereq Econ 7)
 VII MWF, 205VH, Donaldson
- 89 Production Mgt (3 cr, §187; prereq Econ 7)
 -1, IV MWF, 116ForH, Filipetti, others
 -2, VI MWF, 2VH
- 91 Tabulating Equipment Lab (1 cr; prereq
 Econ 5, 26)
 Lect VI T, 4VH, Leary, others
 -1, VI Th, 306VH
 -2, VII T, 306VH
 -3, VII Th, 306VH
 -4, VIII T, 306VH
 -5, VIII Th, 306VH
- 93 Accounting Lab (1 cr; prereq Econ 26)
 -1, IV-V T, 306VH, Nielsen, others
 -2, IV-V Th, 306VH
 -3, VII-VIII T, 307VH
 -4, VII-VIII Th, 307VH
- 97 Honors Course (ar cr; prereq cons dean)
 Ar
- 113 Sales Management (3 cr, §68; prereq 77)
 II½-III TTh, 1VH, Lewis
- 114 Retail Store Mgt (3 cr, §69; prereq 77)
 -1, II½-III TTh, 6VH, Canoyer
 -2, VI-VII½ TTh, 2VH
- 115 Life Insurance (3 cr, §59; prereq Econ 50)
 VI-VII½ TTh, 207VH, Graves

- 118 **Auditing Principles, Procedures** (4 cr; prereq 151)
 —1, Lect VI TTh, 301VH, Nelson, Lund, others
 Lab VII-VIII TTh, 301VH
 —2, Lect VII MW, 301VH
 Lab VIII-IX MW, 301VH
- 134 **Income Tax Accounting** (4 cr; prereq 151)
 —1, I-II TTh, 113VH, Reighard, Nelson
 —2, VII-VIII TTh, 4VH
- 150 **Intermed Accounting I** (3 cr; prereq Econ 26, Math 20)
 —1, I MWF, 301VH, Heilman, Nelson, others
 —2, VI MWF, 205VH
- 152 **Cost Accounting** (3 cr, §66, 130; prereq Econ 26)
 —1, IV MWF, 301VH, Ostlund, Wheeler
 —2, VIII MWF, 2VH
- 154 **Budgetary Control** (3 cr; prereq 153)
 IV-V½ TTh, 301VH, Wheeler
- 156 **Finance Mgt** (3 cr; prereq Econ 75 or 155)
 —1, II MWF, 6VH, Stehman
 —2, VII MWF, 306VH
- 159 **Adv Accounting** (3 cr; prereq 151)
 II½-III TTh, 307VH, Heilman
- 167 **Introd Industrial Relations** (3 cr; prereq Econ 73 or 161)
 —1, II MWF, 2VH, Turnbull
 —2, VI MWF, 4VH
- 168 **Adv Personnel Admin** (3 cr; prereq 167)
 IV MWF, 313Z, Heneman
- 173 **Market Analysis, Research** (3 cr; prereq sr, 77, Econ 5)
 III MWF, 113VH
- 177 **Foreign Trade** (3 cr; prereq Econ 7)
 II MWF, 113VH, Lewis
- 180C **Sr Topics—Marketing** (3 cr; prereq sr, 77)
 —1, VI-VII½ TTh, 113VH, Vaile, Lewis
 —2, VII½-VIII TTh, 113VH, Canoyer
- 180D **Sr Topics—Industrial Relations** (3 cr; prereq sr, 167)
 —1, VII½-VIII TTh, 207VH, Yoder, Heneman
 —2, VIII-IX½ MW, 113VH
- 180E **Sr Topics—Office Mgt** (3 cr; prereq sr, 86)
 IV MWF, 205VH, Donaldson
- 180F **Sr Topics—Statistics** (3 cr; prereq sr)
 VI½-VII TTh, 205VH, Mudgett
- 180G **Sr Topics—Production Mgt** (3 cr; prereq* sr, 89 or 187, factory mgt or ind mgt sequences)
 —1, III MWF, 2VH, Filipetti
 —2, VIII MWF, 4VH
- 180I **Sr Topics—Transportation** (3 cr; prereq* sr, 174)
 VII-VIII½ TTh, 6VH, Nightingale
- 183 **Practice Course** (ar cr; prereq cons advis)
 Ar
- 184 **Scientific Mgt, Industry** (3 cr; prereq sr, 89, or 187)
 VI MWF, 301VH, Filipetti
- 187 **Admin of Production** (3 cr; §89; jr, sr with cons, grad; prereq Econ 7)
 II MWF, 145Ph
- 188 **Advertising** (3 cr, §87, 88; prereq 77, Psy 56)
 VI MWF, 113VH, Lewis
- 198 **Internship: Public Accounting** (ar cr; cons of instr)
 Ar, Heilman
- 199 **Internship: Internal Accounting** (ar cr; cons of instr)
 Ar, Wheeler
- 258 **Seminar—Cost Accounting** (3 cr; grad)
 VII-VIII½ TTh, 210VH, Ostlund

Winter and Spring Quarters

- 51w See 51f Lect VI T; Secs I TTh; II TTh Neville, others
- 52w Agency, Partnership, Corporations (3 cr, §51, 52 or 53; prereq 51) Lect IV T; Secs I TTh; II TTh; III TTh; VI TTh; VII TTh Neville, others
- 53s Sales, Negotiable Instruments (3 cr, §51, 52 or 53; prereq 51) Lect IV T; Secs I TTh; II TTh; III TTh; VI TTh; VII TTh; VIII TTh Neville, others
- 54w,55w,s See 54f
- 56s Property Rights, Obligations (3 cr; prereq §2 or 53) I-II½ TTh Neville, others
- 57w See 57f
- 59w,s See 58f II MWF (w); III MWF (s); IV MWF (s); VII MWF (w,s) Heller, Borak, others
- 65w,s See 65f II½-III TTh Heilman, others
- 66w,s See 66f I MWF (w,s); IV MWF (s); VI MWF (w); VIII MWF (s) Wheeler, others
- 67s Retail Store Mgt for Pharmacy Students (3 cr; prereq Econ 30) VI MWF Werner
- 70w,s See 70f I MWF (s); VII MWF (w)
- 71w,s See 71f II MWF (w); IV MWF (s); VI MWF (w,s); VIII MWF (w,s) Nightingale, others
- 74w,s See 74f I MWF (w,s); IV MWF (w,s); VI MWF (w); VIII MWF (s) Mudgett, Gaumnitz, others
- 76s Credits, Collections (3 cr; prereq 77) II MWF Nielsen
- 77w,s See 77f Lect III T (w,s); Secs I TTh (w); II TTh (w,s); III TTh (w,s); IV TTh (s); VI TTh (w,s); VII TTh (w); VIII TTh (s) Vaile, others
- 86w,s See 86f III MWF (s); VII MWF (w) Donaldson
- 87w,s Advertising Probs (3 cr, §188; prereq 77, Jour 18, Psy 56, open to jour adv maj) VII-VIII½ TTh Vaile
- 89w,s See 89f I MWF (s); II MWF (w,s); III MWF (w); VII MWF (s); VIII MWF (w) Filipetti, others
- 91w,s See 91f
- 93w,s See 93f VII-VIII T (w,s); VII-VIII Th (s) Nielsen, others

- 94w,s Cost Accounting Lab (1 cr, to be taken concur with 153) V-VI T; V-VI Th; VII-VIII T Nielsen, others
- 96s Business Equipment Lab (1 cr; prereq bus educ maj, Econ 26) VII-VIII Th
- 93w,99s Honors Course (ar cr; prereq cons dean) Ar
- 109s Business Policy (3 cr; prereq sr, Econ 81) I-II½ TTh Reighard
- 112w Time Series Analysis, Qualitative Control (3 cr, §74; prereq Econ 5) IV MWF Gaumnitz
- 113w,s See 113f II½-III TTh (w,s); VI-VII½ TTh (s) Lewis
- 114w,s See 114f II½-III TTh Canoyer
- 116w Fire, Marine Insurance (3 cr, §60; prereq Econ 50) VI-VII½ TTh Graves
- 117s Casualty Insurance (3 cr, §61; prereq Econ 50) IV-V½ TTh Graves
- 118w,s See 118f Lect VI TTh (w,s); VII MW (s); Labs VII-VIII TTh (w,s); VIII-IX MW (s)
- 131s Distribution Cost Accounting (2 cr; prereq 153) VI TTh Ostlund
- 133w,s Standard Costs (3 cr; prereq 153) VI MWF Ostlund
- 134w,s See 134f I-II TTh (s); II-III TTh (w) Reighard, Nelson
- 135s Auditing, Public Accounting (3 cr; prereq 118) II MWF Reighard
- 136w,s Controllorship Functions, Procedure (3 cr; prereq 151) III MWF (s); IV MWF (w) Reighard
- 145s Int'l Finance, Foreign Exchange (3 cr; prereq Econ 64 or 142) IV MWF
- 146w Investments (3 cr; prereq Econ 75 or 155) II MWF Stehman
- 148s Securities Market (3 cr; prereq 146, Econ 149) I MWF
- 150w,s See 150f IV MWF (w); VI MWF (s) Heilman, Nelson, others
- 151w,s Intermed Accounting II (3 cr, §65, 139; prereq 150) I MWF; VI MWF Heilman, Nelson, others
- 152w-153s See 152f III MWF (w); VII MWF (w,s) Ostlund, Wheeler
- 153w See 152f
- 156w,s See 156f IV MWF Stehman
- 158s Governmental Accounting (2 cr; prereq 151) III TTh Heilman
- 159s See 159f IV MWF Heilman
- 167w,s See 167f I MWF (w); III MWF (s); VI MWF (s) Turnbull
- 170w Methods Analysis, Work Measurement (3 cr; prereq 89 or 187) Rec II TTh; Lab V-VII T Block
- 171s Motion Study Applications (3 cr; prereq 170) Lect II T, Sec II-III Th
- 173w See 173f VI MWF
- 174w,s Transportation Services, Charges II (3 cr, §72; prereq 71 or Econ 172) II MWF (s); IV MWF (w) Nightingale
- 177w,s See 177f
- 181Aw Sr Topics—Accounting (3 cr; prereq sr, 12 cr sr college acctg) I-II½ TTh Reighard
- 181Bw-182Bs Sr Topics—Business Finance (3 cr; prereq sr) VII-VIII½ TTh Uppgren (w), Stehman (s)
- 181Cw See 180Cf (prereq sr, 77)
- 182Cs See 180Cf (prereq sr, 114) VII½-VIII TTh Canoyer
- 181Dw-182Ds See 180Df
- 181Ew-182Es See 180Ef (prereq 180E) IV MWF (w); VII TTh and VIII Th (s) Donaldson
- 181Fw-182Fs See 180Ff (prereq 180F)
- 181Gw-182Gs See 180Gf III MWF (w); VIII MWF (s) Filipetti
- 182Hs Sr Topics—Insurance (3 cr; prereq sr, 6 cr insurance) IV MWF Graves
- 181Iw-181Is See 180If
- 183w,s See 183f Graves
- 184s See 184f VII MWF Filipetti
- 188w,s See 188f III MWF (w); VII MWF (s)
- 194s Adv Advertising Procedure (3 cr; prereq 87, 88, or 188) IV MWF Longstaff
- 198w,s See 198f
- 199w,s See 199f
- 211w Seminar—Marketing (3 cr) VIII MWF Vaile
- 264s Seminar—Accounting Theory: Income Determination, Statement Presentation (3 cr) VII-VIII½ TTh Nelson
- 265w Accounting under Gov't Regulation (3 cr) VII-VIII½ TTh Heilman

ECONOMICS (ECON)

Fall Quarter

- 1 Business History (5 cr)
Lect III TTh, BuAud, Heaton, others
- 1, I MWF, 211Z
- 2, I MWF, 111C
- 3, II MWF, 211Z
- 4, II MWF, 111C
- 5, III MWF, 111C
- 6, IV MWF, 202TNUH
- 7, V MWF, 6VH
- 8, VI MWF, 420MurH
- 9, VII MWF, 420MurH
- 10, VIII MWF, 3ForH
- 3 Elements of Money, Banking (5 cr, §BA 57; prereq 2nd qtr fresh)
- Lect VII TTh, NHAud, Stehman, others
- 1, I MWF, 307MNH
- 2, II MWF, 311MurH
- 3, III MWF, 311MurH
- 4, IV MWF, 157TSF
- 5, V MWF, 113VH
- 6, VI MWF, 311MurH
- 7, VII MWF, 8ForH
- 8, VIII MWF, 308MurH

- 5 Elements of Statistics** (5 cr, §Soc 45, BA 70; prereq soph)
Lect II Th, 100C, Kozelka, others
-1, I MTWF, 420MurH
-2, II MTWF, 420MurH
-3, III MTWF, 420MurH
-4, IV MTWF, 420MurH
-5, V MTWF, 205VH
-6, VI MTWF, 3ForH
-7, VII MTWF, 3ForH
- 6 Prin Economics** (5 cr, §8, 62; prereq soph)
Lect I TTh, BuAud, Smith, others
-1, I MWF, 115C
-2, I MWF, 215C
-3, II MWF, 16ForH
-4, II MWF, 115C
-5, III MWF, 5ForH
-6, III MWF, 6ForH
-7, IV MWF, 16ForH
-8, IV MWF, 307MNH
-9, V MWF, 207VH
-10, V MWF, 4VH
-11, VI MWF, 106ForH
-12, VI MWF, 307MNH
-13, VII MWF, 5ForH
-14, VII MWF, 105ForH
-15, VIII MWF, 6ForH
-16, VIII MWF, 7ForH
- 7 Prin Economics** (5 cr, §9, 63; prereq 3, 6)
Lect VI TTh, 2P, Smith, others
-1, I MWF, 14P
-2, IV MWF, 14P
-3, VI MWF, 6ForH
-4, VIII MWF, 5ForH
- 8 Gen Economics** (3 cr, §6, 62; prereq soph)
-1, I MWF, 16ForH, Filipetti, others
-2, II MWF, 215C
-3, IV MWF, 106ForH
-4, VI MWF, 16ForH
-5, VII MWF, 106ForH
- 10 Introd Economics Analysis** (3 cr, for pharmacy students)
-1, I MWF, 201WuH
-2, II MWF, 201WuH
- 23 Prin Accounting** (4 cr; prereq 22)
III MTWF, 106TNM, Heilman, others
- 24 Prin Accounting** (3 cr, §22, BA 54; prereq soph)
-1, I MWF, 307VH, Heilman, others
-2, I MWF, 106ForH
-3, II MWF, 307VH
-4, II MWF, 106ForH
-5, III MWF, 307VH
-6, III MWF, 306VH
-7, IV MWF, 307VH
-8, IV MWF, 306VH
-9, V MWF, 307VH
-10, V MWF, 306VH
-11, VI MWF, 307VH
-12, VI MWF, 306VH
-13, VII MWF, 307VH
-14, VII MWF, 6ForH
- 15, VIII MWF, 307VH
-16, VIII MWF, 306VH
- 28 Business Law** (3 cr, §BA 51; prereq soph or jr with 6 cr econ, sr)
I MWF, 8ForH, Palmer
- 32 Bgn Typing** (1 cr)
-1, I MTWThF, 209VH, Donaldson, others
-2, II MTWThF, 211VH
-3, IV MTWThF, 209VH
-4, V MTWThF, 209VH
-5, VII MTWThF, 209VH
- 33 Intermed Typing** (1 cr, †33-34; prereq 30 words a min)
-1, I MTWThF, 211VH, Donaldson, others
-2, IV MTWThF, 211VH
-3, VII MTWThF, 211VH
- 34 Typing Procedures** (2 cr, †33-34; prereq soph 33, 45 words a min)
VI MTWThF, 209VH, Peterson
- 37 Shorthand** (3 cr, †37-38-39; prereq* soph, 33)
-1, II MTWThF, 209VH, Donaldson, others
-2, III MTWThF, 211VH
- 40 Adv Shorthand: Secretarial Procedure** (3 cr, †40-41; prereq* soph, 34, 39)
III MTWThF, 209VH, Peterson
- 50 Insurance Prin** (3 cr; prereq 7)
-1, IV MWF, 1VH, Graves
-2, VIII MWF, 1VH
-3, IV MWF, 153TSF
- 62 Competition, Monopoly in Modern Industry** (3 cr, §6, 8)
I MWF, 306VH, Gray
- 64 Economics of Money, Banking** (3 cr, §142)
-1, I MWF, 2VH
-2, III MWF, 301VH
-3, VI MWF, 308MurH
- 73 Manpower Economics, Prob** (3 cr, §161; prereq 7)
Lect I TTh, NHAud
-1, II T, 306VH
-2, II T, 205VH
-3, III Th, 306VH
-4, III Th, 205VH
-5, IV T, 205VH
-6, IV T, 113VH
-7, VI T, 307VH
-8, VI Th, 307VH
- 75 Corporation Finance** (3 cr, §155; prereq 3, 7)
-1, I MWF, 4VH, Stehman, Borak, Burns
-2, III MWF, 313Z
-3, IV MWF, 6VH
-4, VIII MWF, 205VH
- 80 Intermed Economic Analysis** (3 cr, †80-81, §103; prereq 20 cr soc sci incl 7)
-1, I MWF, 207VH, Boddy, others
-2, II MWF, 207VH
-3, III MWF, 4VH
-4, IV MWF, 2VH
-5, V MWF, 1VH
-6, VI MWF, 6VH
-7, VII MWF, 1VH
-8, VIII MWF, 207VH

- 85 **Gov't Regulation of Business** (3 cr, §175; prereq 7)
 —1, I MWF, 1VH, Boddy, Papandreou, others
 —2, III MWF, 207VH
 —3, VI MWF, 207VH
 —4, VII MWF, 207VH
- 97 **Honors Course** (ar cr; prereq cons maj advis)
 Ar
- 103 **Adv Economic Theory** (3 cr, †103-104, §80; prereq 20 cr soc sci incl 7)
 VII MWF, 113VH
- 105 **Development of Economic Thought: Classical Theory** (3 cr; prereq* 104)
 IV MWF, 113VH
- 121 **Theory of Statistics** (3 cr, †121-122; prereq 5)
 II MWF, 205VH, Mudgett
- 142 **Monetary, Banking Policy** (3 cr, §64; prereq 3, 7, jr and sr with cons, grad)
 VII MWF, 2VH, Stovel
- 149 **Business Cycles** (3 cr; prereq* sr, 64 or 142)
 —1, III MWF, 1VH, Upgren, Stovel
 —2, IV MWF, 207VH
- 161 **Gen Manpower Economics** (3 cr, §73; prereq 7, jr and sr with cons, grad)
 VII MWF, 6VH, Yoder
- 162 **Labor Movements** (3 cr; prereq 73 or 161)
 III MWF, 308MurH, Turnbull
- 172 **Economic Transportation** (3 cr, §BA 71; prereq 20 cr soc sci incl 7)
 III MWF, 6VH, Nightingale
- 176 **Introd Int'l Economics** (3 cr; prereq 7)
 —1, I MWF, 113VH, Upgren, Stovel
 —2, II MWF, 4VH
- 191 **Public Finance** (3 cr, †191-192, §189, BA 58; prereq 7)
 II½-III TTh, 207VH, Heller
- 200 **Theory of Employment Resources** (3 cr, †200-201)
 VIII½-IX TTh, 210VH, Brownlee
- 233 **Seminar—Public Finance** (3 cr, †233-234)
 VII-VIII½ MW, 210VH, Heller
- 243 **Seminar—Money, Banking** (3 cr, †243-244)
 VIII½-IX MW, 210VH, Upgren
- Winter and Spring Quarters**
- 2w See 1f (prereq 1)
- 3s See 3f Lect III TTh; Secs I MWF; II MWF; III MWF; IV MWF; V MWF; VI MWF; VII MWF; VIII MWF Stehman, others
- 5w,s See 5f Lect II Th (w,s); Secs I MTWF (s); II MTWF (w,s); III MTWF (w,s); IV MTWF (s); V MTWF (s); VI MTWF (w,s); VII MTWF (w,s); VIII MTWF (s) Kozelka, others
- 6w-7s See 6f Lect VII TTh; Secs I MWF (s only); II MWF; III MWF; IV MWF; V MWF; VI MWF; VII MWF; VIII MWF (s only) Smith, others
- 6s See 6f Lect I TTh; Secs I MWF; III MWF; VI MWF; VIII MWF
- 7w See 6f (§9, 63; prereq 3, 6)
- 8w-9s See 8f II MWF; III MWF; VI MWF Filipetti, others
- 9w See 8f (§7, 63; prereq 8) II MWF; IV MWF; VI MWF; VII MWF Filipetti, others
- 24w-25s See 24f I MWF; II MWF; III MWF; IV MWF; V MWF; VI MWF; VII MWF; VIII MWF
- 24s See 24f III MWF; VI MWF
- 25w-26s See 24f (§23, BA 55; prereq 24)
- 27s **Accounting Survey** (5 cr, §24-25, BA 54, for prelaw students; prereq soph)
 II MTWThF; VIII MTWThF
- 28w,s See 28f
- 30w **Elements of Retail Accounting** (3 cr, for pharmacy students; prereq 10) I MWF; II MWF
- 32w,s See 32f I MTWThF; VI MTWThF; VII MTWThF Donaldson, others
- 33w,s See 33f I MTWThF; IV MTWThF
- 34w,s See 34f IV MTWThF (s); VII MTWThF (w) Peterson
- 35w **Office Practice for Dental Hygienists** (3 cr; prereq jr, 30 typing words a min) IV MWF Peterson
- 37w-38s See 37f II MTWThF (w); III MTWThF (s)
- 38w-39s See 37f (†37-38-39; prereq 37)
- 41w See 40f (†40-41; prereq* 40)
- 42s **Adv Secretarial Procedure** (3 cr; prereq* 34, 41) II MTWThF
- 43s **Shorthand Theory** (2 cr; prereq 34, 39, cons instr) IX-X T
- 50w,s See 50f
- 63w **Money, Cycles, Taxation** (3 cr, §7, 9; prereq 62) I MWF Gray
- 64w,s See 64f I MWF (s); II MWF (w); IV MWF (w); VI MWF (s); VII MWF (w); VIII MWF (s)
- 73w,s See 73f Lect III TTh (w); I TTh (s); Secs I Th (w); II T (w,s); III Th (s); IV T (s); VI Th (w); VII Th (w,s)
- 75w,s See 75f II MWF (w,s); III MWF (w,s); IV MWF (s); VII MWF (w,s) Stehman, Borak, Burns
- 80w-81s See 80f I MWF; II MWF; III MWF; VI MWF Boddy, others
- 81w See 80f (§104; prereq 80)
- 84s **Comparative Economic Systems** (3 cr; prereq 7) III MWF
- 85w,s See 85f I MWF (w,s); III MWF (s); IV MWF (w); VII MWF (s); VIII MWF (s)
- 98w,99s See 97f
- 103w-104s See 103f III MWF, Boddy
- 104w See 103f (§81; prereq 103)
- 106w **Development of Economic Thought: Soc Critics, Neo-Classical Theory** (3 cr; prereq 104) VI MWF Papandreou
- 107s **Schools of Economic Thought: Theory of Effective Demand** (3 cr; prereq 104) VI MWF

- 110s Industrial Price Control (3 cr; prereq 7, 15 addtl cr econ and/or BA) IV MWF
 -122w-123s See 121f (prereq 121)
- 126s Economic Probs of Latin America (3 cr, prereq 7) II MWF
- 140w Co-op Movement (3 cr; prereq 7) VI MWF Canoyer
- 149w,s See 149f III MWF (w); IV MWF (s); VI MWF (s); VIII MWF (w)
- 155w The Modern Corporation (3 cr, \$75; prereq jr and sr with cons, grad; 3, 7) II½-III TTh Stehman
- 162w See 162f VI MWF Turnbull
- 164w,s Labor Legislation: Collective Bargaining (3 cr; prereq 73 or 161) I MWF (s); III MWF (w) Turnbull
- 166s Settlement of Industrial Disputes (3 cr; prereq 73 or 161) VII MWF
- 176w,176s See 176f I MWF (w); II MWF (s) Upgren, Stovel
- 178w Economics of Consumption (3 cr; prereq 7) III MWF Canoyer
- 179s Economic Probs of the Far East (3 cr; prereq 7) VI MWF Vaile
- 185w Economics of Marketing (3 cr, \$BA 77; prereq 7) VII MWF Vaile
- 186w Int'l Economic Relations (3 cr; prereq 176) II MWF Upgren
- 190w Nat'l Income Analysis (3 cr; prereq *7, 20 cr econ and/or BA, basic prep in acctg) IV-V½ TTh Papandreau
- 192w See 191f (§189, BA 58; prereq 191)
- 193s State, Local Taxation (3 cr; prereq 189, 192, or BA 53) II½-III TTh Borak
- 195s Fiscal Policy (3 cr; prereq sr with cons instr or grad, 20 cr soc sci incl a course pub fin and 64 or 142) IV-V½ TTh Heller
- 201w See 200f
- 205s Seminar—Economic Structure, Behavior (3 cr) VIII½-IX TTh Papandreau
- 210s Seminar—Business Cycle, Employment Theory (3 cr) VIII½-IX MW Upgren
- 214s Theory of Monopolistic Competition (3 cr) VII-VIII½ MW Boddy
- 215s Welfare Economics (3 cr; prereq 213) VIII½-IX TTh Brownlee
- 234w See 233f (†233-234; prereq 233)
- 244w See 243f (†243-244; prereq 243)
- 251w-252s Seminar—Industrial Relations VII-VIII½ TTh Yoder

INSTITUTE OF CHILD WELFARE (CW)

Fall Quarter

- 40 Child Training (3 cr; prereq soph, Psy 2) VI TTh, 202Pt, Fuller
- 80 Child Psychology (3 cr; prereq Psy 2) IV MWF, 202WeH, Harris
- 130 Motor, Linguistic, Intellectual Development (3 cr; prereq sr, 12 cr psy) II MWF, 202Pt, Roff
- 140 Behavior Probs Younger Children (2 cr; prereq sr, 12 cr psy, educ psy or soc) III-IV S, 202Pt, Blodgett
- 143 Probs of Mental Deficiency (3 cr; prereq sr, 12 cr psy) III MWF, 202Pt, Blodgett
- 150 Childhood Education (2 cr; prereq sr, 12 cr psy) VIII TTh, 5ShH, Fuller
- 166 Maturity, Aging (2 cr; prereq sr, 15 cr psy, educ, or soc) VI TTh, 5ShH, Anderson
- 200 Observation, Study of Children (1 cr; prereq 12 cr psy, 3 cr stat) Ar, Harris, staff
- 220 Seminar—Current Research (1 cr) Ar, Roff
- 223 Seminar—Developmental Theory (1 cr; prereq cons instr) Ar, Anderson

- 230 Seminar—Recent Literature (1 cr) IX M, 202Pt, Anderson
- 250 Internship—Professional Work with Children (ar cr; prereq cons instr) Ar, Anderson
- 270 Readings Research Child Development (ar cr) Ar, Anderson, staff

Winter and Spring Quarters

- 10s Introd Child Study (2 cr; prereq 3rd qtr fresh) V TTh, Cummings
- 40w,s See 40f VI TTh (w,s) Fuller; V MW (w) Peterson
- 80w,s See 80f Harris (w); Ar (s)
- 131w Personality, Emotional, Social Development (3 cr; prereq sr, 12 cr psy) II MWF, Templin
- 132s Later Childhood, Adolescence (3 cr; prereq sr, 12 cr psy) II MWF, Harris
- 140w See 140f VIII-IX Th Blodgett
- 141w,s Behavior Probs in Older Children (2 cr; prereq sr, 12 cr psy, educ psy or soc) III-IV S (w); VIII-IX S (s) Blodgett
- 142s Psychology of Atypical Children (3 cr; prereq sr, 12 cr psy) II TThs Blodgett
- 151w-152s See 150f
- 160s Physical Growth, Development (3 cr; prereq sr, 12 cr psy) I MWF Roff

220w,s See 220f
223w,s See 223f
226w Seminar—Projective Methods with Children, Adolescents (2 cr; prereq cons instr) Ar Harris

Education (ar cr; prereq cons instr) Ar Cummings
230w-291s Mental Examination of Preschool Child (4 cr; prereq cons instr) Ar Blodgett

SCHOOL OF DENTISTRY

Crown and Bridge (CRBR)

Fall Quarter

- 60 Crown, Bridge (4 cr; prereq Oral Anat 52, 2nd yr dent)
Lect VI T, 113MeS, Estes
Lab III-V Th, I-III S and VII-IX T, 1MeS, Estes, Yock
- 80 Crown, Bridge (lect 1 cr, clinic ar cr; prereq 62, 3rd yr dent)
Lect I M, 113MeS
Clinic ar
- 90 Crown, Bridge (lect, 1 cr, clinic ar cr; prereq 82, 4th yr dent)
Lect VI M, 111MeS, Thom
Clinic ar

Winter and Spring Quarters

- 61w-62s See 60 f (prereq 60) Lect I T (w); VI F (s); Labs II-IV T, I-III Th, VII-IX W (w); II-IV Th, VII-IX TF (s)
- 81w-82s See 80f (prereq 80) Lect I T (s); Clinic ar (w,s)
- 91w-92s See 90f Lect I Th (w); Clinic ar (w,s)

Dental Jurisprudence (JURI)

Winter and Spring Quarters

- 91w Dental Jurisprudence (1 cr) Lect I W

Dental Hygiene (DHYG)

Fall Quarter

- 7 Oral Anatomy (2 cr)
Lect VI F, 401MeS, Hall
—1, Lab VII-IX W, 104MeS
—2, Lab VII-IX F, 104MeS
- 40 Educational School Work (2 cr)
Lect I M, 401 MeS, White
Lab ar

- 45 Dental Assisting (2 cr)
Clin ar, staff
- 53 Dental Prophylaxis (2 cr)
Clinic ar, Jackson
- 56 General Pathology (1 cr)
VI Th, 401MeS, Wahlquist
- 57 Prosthetic Dent, Dental Lab (2 cr)
Lect I W, 401MeS
Lab Tues P.M., 104MeS

Winter and Spring Quarters

- 8w-9s See 7f
- 21w-22s Dental Prophylaxis (3 cr w, 1 cr s)
Lect I Th Jackson (w), Lab ar (w);
Clinic ar (s)
- 41w-42s See 40f
- 46w See 45f
- 54w-55s See 53f
- 58w-59s See 57f Lect I W Hall (w,s); Labs VII-IX Th (w,s); II-IV T (w)
- 60w Oral Histology, Pathology (1 cr) VI M, I F Radosch

Denture Prosthesis (PROS)

Fall Quarter

- 50 Denture Prosthesis (4 cr; prereq 1st yr dent)
Lect VI Th, 12MeS, Listiak
—1, Lab I-III MT, 1MeS, Listiak
—2, Lab VII-IX Th, 1MeS, Listiak
- 60 Denture Prosthesis (3 cr; prereq 52, 2nd yr dent)
Lect I M, 12MeS, Listiak
—1, Lab III-V W, VII-IX M, 1MeS, Listiak
—2, Lab VII-IX W, VII-IX F, 1MeS, Listiak
- 80 Denture Prosthesis (ar cr; prereq 62, 3rd yr dent)
Clinic ar

- 90 Denture Prosthesis (lect 1 cr, clinic ar cr; prereq 82, 4th yr dent)
Lect I F, 111MeS, Listiak
Clinic ar

Winter and Spring Quarters

- 51w-52s See 50f (prereq 50) Lect VI T (w);
I M (s); Labs I-III F, VII-IX T, VI-VIII
Th (w); II-IV M, I-IV W (s)
62s Denture Prosthesis (2 cr; prereq 60) Lect
ar; Dem I S; Clinic II-IV S
-81w-82s See 80f (lect 1 cr, clinic ar cr; pre-
req 80) Lect VI M (w,s); Clinic ar (w,s)
-91w-92s See 90f (prereq 90) Clinic ar (w,s)

Operative Dentistry (OPER)

Fall Quarter

- 80 Operative Dentistry (lect 1 cr, clinic ar cr)
Lect I F, 113MeS, Simon
Clinic ar
84 Endodontia (1 cr; prereq 3rd yr dent)
VI Th, 104IA, Jensen
90 Operative Dentistry (lect 1 cr, clinic cr ar;
prereq 4th yr dent)
Lect I W, 111MeS, Simon
Clinic ar

Winter and Spring Quarters

- 61w,62s Operative Dentistry (4 cr; prereq Oral
Anat 52, 2nd yr dent) Lect I M (w);
VI M (s); Labs II-IV MW, VII-IX F (w);
VII-IX MWTh (s)
81w,82s See 80f (prereq 80) Lect VI T (w);
I M (s); Clinic ar (w,s)
91w,92s See 90f Lect I F (s); Clinic ar (w,s)

Oral Anatomy (ANAT)

Fall Quarter

- 50 Oral Anatomy (2 cr; prereq 1st yr dent)
Lect VI T, 12MeS, Hall
Lab I-III F, 1MeS, Hall

Winter and Spring Quarters

- 51w-52s See 50f (3 cr (w), 2 cr (s); prereq
50) Lect VI M (w); I F (s); Labs I-IV S,
VII-IX M (w); II-IV F (s)

Oral Diagnosis (DIAG)

Fall Quarter

- 80 Oral Diagnosis (1 cr; prereq 3rd yr dent)
Lect I S, 113MeS, Mitchell
238 Adv Clinical Oral Diagnosis (ar cr)
Ar, Simon, Staff
239 Adv Clinical Oral Diagnosis (ar cr)
Ar, Simon, Staff
240 Adv Clinical Oral Diagnosis (ar cr)
Ar, Simon, Staff
241 Adv Clinical Oral Diagnosis (ar cr)
Ar, Simon, Staff

Winter and Spring Quarters

- 62s Dental Radiology (1 cr; prereq 2nd yr
dent) Lect VI T
238w,s,239w,s,240w,s,241w,s See 238f, 239f, 240f,
241f

Oral Histology and Pathology (PATH)

Fall Quarter

- 80 Oral Histology, Pathology (4 cr; prereq
Bact 100, Path 105, 3rd yr dent)
Lect VI MWF, 113MeS, Mitchell
Lab VII-IX MF
242 Research—Oral Pathology (ar cr)
Ar, Mitchell
243 Seminar—Dental Research (1 cr)
Ar, Mitchell
244 Clinical Oral Pathology Conference (1 cr)
Ar, Clark, Mitchell

Winter and Spring Quarters

- 242w,s See 242f
243w,s See 243f
244w,s See 244f

Oral Hygiene and Periodontia (PERI)

Fall Quarter

- 90 Periodontia (lect 1 cr, clinic ar cr; prereq
4th yr dent)
Lect VI T, 111MeS, Schaffer
Clinic ar

Winter and Spring Quarters

- 81w Periodontia (lect 1 cr, clinic ar cr; pre-
req 3rd yr dent) Lect VI Th; Clinic ar

Oral Medicine (OMED)

Winter and Spring Quarters

- 81w-82s Oral Medicine (1 cr; prereq 3rd yr
dent) Lect VI W (w,s)

Oral Surgery (OSUR)

Fall Quarter

- 90 Oral Surgery (1 cr)
Lect I T, 111MeS, Clark
141 Adv Oral Surgery (ar cr)
Ar, Clark, staff
142 Seminar—Oral Surgery (1 cr)
Ar, Clark
143 Research—Oral Surgery (ar cr)
Ar, Clark, staff
144 Probs—Oral Surgery (ar cr)
Ar, Clark, staff

Winter and Spring Quarters

- 82s Oral Surgery (1 cr; prereq 3rd yr dent)
Lect I W
83s Oral Surgery (1 cr; prereq 3rd yr dent)
Lect I F

91w,92s See 90f (lect 1 cr, clinic ar cr; prereq 90) Lect I F (w); I T (s); Clinic ar (w,s)

93w Adv Exodontia (1 cr) I T

141w,s See 141f

142w,s See 142f

143w,s See 143f

144w,s See 144f

Orthodontia (ORTH)

Fall Quarter

- 90 Orthodontics (1 cr; prereq 4th yr dent) Lect I M, 111MeS, Speidel
- 150 Adv Orthodontic Techniques (4 cr) Ar, Speidel, Steadman, McIver
- 151 Treatment Procedures—Orthodontics (2 cr) Ar, Speidel, Steadman, McIver
- 152 Case Analysis (2 cr) Ar, Speidel, Steadman, McIver
- 153 Treatment Planning (2 cr) Ar, Speidel, Steadman, McIver
- 154 Adv Clinical Orthodontics (ar cr) Ar, Speidel, Steadman, McIver
- 155 Osteology, Myology of Head (2 cr) Ar, Steadman
- 156 Growth of Head (2 cr) Ar, Speidel, Steadman, McIver
- 157 Comparative Anatomy of Head (1 cr) Ar, Steadman
- 158 Seminar—Orthodontics (1 cr) Ar, Speidel, Steadman, McIver
- 245 Probs Research—Orthodontics (ar cr) Ar, Speidel, Steadman, McIver

Winter and Spring Quarters

- 81w-82s Orthodontics (lect 1 cr, clinic ar cr; prereq 3rd yr dent) Lect I Th (w,s); Clinic ar (w,s)
- 91w-92s See 90f (lect 1 cr, clinic ar cr; prereq 90) Lect I M (w,s); Clinic ar (w,s)
- 150w,s See 150f
- 151w,s See 151f
- 152w,s See 152f
- 153w,s See 153f
- 154w,s See 154f
- 155w,s See 155f
- 156w,s See 156f
- 157w,s See 157f
- 158w,s See 158f
- 245w,s See 245f

Pedodontics (PEDS)

Fall Quarter

- 80 Pedodontics (1 cr; prereq 3rd yr dent) Lect I W, 113MeS, Wittich
- 90 Pedodontics (1 cr; prereq 4th yr dent) I Th, 113MeS

Practice Management (PRM)

Fall Quarter

- 92s Practice Mgt (no cr; prereq 4th yr dent) Lect I W

Restorative Dentistry (REST)

Fall Quarter

- 130 Adv Oral Anatomy (ar cr) Ar, Hall
- 131 Adv Oral Anatomy (ar cr) Ar, Hall
- 132 Adv Oral Anatomy (ar cr) Ar, Hall
- 133 Adv Oral Anatomy (ar cr) Ar, Hall
- 134 Adv Technical Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 135 Adv Technical Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 136 Adv Technical Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 137 Adv Dental Radiographic Technique (ar cr) Ar, Simon, staff
- 138 Adv Oral Diagnosis (ar cr) Ar, Simon
- 139 Adv Oral Pathology (ar cr) Ar
- 140 Preventive Dentistry (ar cr) Ar
- 230 Adv Clinical Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 231 Adv Clinical Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 232 Adv Clinical Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 233 Adv Clinical Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 234 Research—Probs in Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 235 Research—Probs in Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 236 Research—Probs in Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch
- 237 Research—Probs in Restorative Dentistry (ar cr) Ar, Simon, Wittich, Thom, Listiak, Radusch

Winter and Spring Quarters

- 130w,s,131w,s,132w,s See 130f, 131f, 132f
- 134w,s,135w,s,136w,s See 134f, 135f, 136f
- 137w,s See 137f
- 138w,s See 138f
- 139w,s See 139f
- 140w,s See 140f
- 230w,s,231w,s,232w,s,233w,s See 230f, 231f, 232f, 233f
- 234w,s,235w,s,236w,s,237w,s See 234f, 235f, 236f, 237f

Seminar (SEM)

Winter and Spring Quarters

- 92s Seminar Conference (no cr; prereq 4th yr dent) Lect I Th

COLLEGE OF EDUCATION

AGRICULTURAL EDUCATION (AGED)

Fall Quarter

- 1 **Introd Agricultural Education** (1 cr)
V M, 301Hr, Bjoraker
- 91 **Supervised Teaching Experience** (6 cr; pre-req sr, 82, C aver maj)
Ar, Kitts
- 101 **Young Farmer Education in Agriculture** (2 cr; prereq 81)
III TTh, 301Hr, Peterson, Teske
- 102 **Adult Education in Agriculture** (2 cr; pre-req 81)
II TTh, 301Hr, Kitts, Swanson
- 103 **Facilities, Materials** (3 cr; prereq 81)
III MWF, 301Hr, Peterson, Donahoo
- 104 **Planning Programs** (2 cr; prereq sr, 82)
Ar, Peterson, Bjoraker
- 141 **Supervised Farm Practice in Vocational Agriculture** (3 cr; prereq 10 cr educ)
II-IV S, 301Hr, Peterson, staff
- 221 **Field Probs** (3 cr)
Ar, Peterson, Kitts
- 232 **Research Agricultural Education** (3-9 cr; prereq 15 cr educ)
Ar, Peterson, Kitts
- 250 **Supervision of Vocational Agriculture** (1-3 cr; prereq cons instr)
Ar, Peterson, Kitts

Winter and Spring Quarters

- 1w See 1f
- 54w **Rural Education, Community Leadership** (2 cr; prereq soph) IV-V T or Th
Bjoraker
- 56s **Rural Youth Leadership** (3 cr; prereq soph)
V MWF Bjoraker, Swanson
- 81w,s **Teaching Agriculture** (3 cr; prereq Ed 55B) IV MWF (w) Kitts, Teske; ar (s) Kitts, Bjoraker
- 82s **Methods in Teaching Agriculture** (3 cr; prereq 81) III MWF, Kitts, Teske
- 91w,s See 91f
- 101w See 101f III WF Kitts, Teske
- 102w See 102f
- 103w See 103f Ar hrs
- 104w,s See 104f Ar (w) Peterson, Bjoraker; III TTh (s) Peterson, Donahoo
- 145w **Integrated Course of Study in Agriculture** (2 cr; prereq 10 cr educ) Ar Peterson
- 154w **Rural Education, Community Leadership** (2 cr; prereq 10 cr educ) Ar Peterson
- 221w,s See 221f
- 232w,s See 232f
- 286w **Current Probs in Agricultural Education** (3-6 cr; prereq cons instr) II-IV S Peterson, staff
- 291s **Seminar—Agricultural Education** (ar cr)
II-IV S Peterson, staff

ART EDUCATION (ARED)

Fall Quarter

- 14 **Introd Art Education** (2 cr)
VI MWF, 109J, Socha
- 17 **Survey of Art in Life, Education** (3 cr)
—1, I-II MWF, 213TNUH, Hastie
—2, III-IV MWF, 213TNUH
—3, VI-VII MWF, 213TNUH, Page
—4, VIII-IX MWF, 213TNUH
—5, VI-VIII TTh, 213TNUH
—6, III-IV TThs, 213TNUH
—7, I-II TThs, 213TNUH
- 56 **Prin, Experiences in Art Education** (5 cr)
III-IV MTWThF, 109J, Page, Hastie
- 84 **Teaching Art in Elem School** (3 cr; prereq 17, 18, 19)
—1, VII-VIII TTh, 109J, Page
—2, VII-VIII MW, 109J
- 86 **Teaching, Supervision of Art** (4 cr; †86-87-88; prereq Ed 55B)
IX-X T and ar, 109J, Hastie
- 189 **Application of Esthetic Theory in Education** (3 cr; prereq cons instr)
I-IV S, 109J, Hastie
- 295 **Probs in Art Education** (ar cr; prereq cons instr)
Ar
- 296 **Seminar—Art Education** (no cr; prereq cons instr)
IX-X F, 106J, staff

Winter and Spring Quarters

- 14s See 14f
- 17s See 17f VI-VII MWF; VIII-IX MWF; I-II TTh
- 18w-19s See 17f I-II MWF (w,s); I TThs (w); III-IV MWF (w,s); III TThs (w); VI-VII MWF (w); VIII-IX MWF (w); VI-VII TThs (s); VI-VIII TTh (w)
- 57w-58s See 56f
- 81w,s **Puppetry in Art Education Programs** (3 cr) IX-X MWF Farnam
- 84w,s See 84f
- 85w **Art in Life, Education** (3 cr; §17-18-19)
VI MTWThF
- 87w-88s See 66f (prereq 86)
- 151w **Curriculum Building in Art Education** (3 cr) I-IV S Hastie
- 156s **Intercultural Education Through Art** (3 cr)
IX-X Th Baker
- 185s **Adv Course in Teaching Art in Secondary School** (3 cr) I-IV S Hastie
- 295w,s See 295f
- 296w,s See 296f

CURRICULUM AND INSTRUCTION (EDCI)

Fall Quarter

- 58 Core Curriculum Foundations (1 cr; prereq cons instr)
—1, IX-X Th, 111Bu, Cary (for soph)
—2, IX-X Th, 103Bu, Davies (for jr)
- 60 Teaching of Reading in Elem School (3 cr; prereq Ed 71B)
—1, VI MWF, 202Pt, Bond
—2, VI MWF, 2P
- 61 Teaching Social Studies in Elem School (3 cr; prereq Ed 71C)
VII MWF, 202WeH
- 62A Teaching Arithmetic in Primary Grades (2 cr; prereq Ed 71B)
VI TTh, 112Bu
- 62B Teaching Arithmetic in Intermed Grades (3 cr; prereq Ed 71B)
VII MWF, 133Ph, Brueckner
- 63 Children's Literature (2 cr)
IX-X M, 206WeH, Smith
- 65 Teaching Science in Elem School (3 cr; prereq Ed 71B, 10 hrs nat sci)
VII-VIII T, VIII Th, 112Bu, Adolphsen
- 102 Teaching of Social Studies in Elem School (3 cr; prereq Ed 71C)
I-II S and hr ar, 111Bu, Wesley
- 105 Visual Aids in Teaching (3 cr; prereq sr)
IX-X T, 101WeH, Wendt
- 109 Audio-Visual Materials, Equipment Lab (3 cr; prereq 165 or concur regis)
IX W and 2 hrs lab ar, 6WeH, Wendt, Luce
- 113 High School Curriculum (3 cr; prereq* Ed 55A-B)
I-II S, 112Bu, Davies
- 133 Consumer Education in Schools (3 cr)
I-II S, 107NH, Price
- 136 Organization, Supervision of Distributive Education Programs (3 cr)
IX-X W and hr ar, 5ShH, Meyer
- 143 Teaching Supervision of Reading in Elem School (3 cr; prereq 9 cr educ)
4:30-6:30 W, 202WeH, Bond
- 145 Remedial Reading (3 cr; prereq recent course-reading or basic training counseling or school psy work)
VIII-IX T, VIII Th, 103Bu, Bond
- 150 Supervision, Improvement of Instruction (3 cr; prereq Ed 71C)
III-IV S and hr ar, 207NH, Brueckner
- 157 Practice in Supervision (3 cr; prereq cons instr)
Ar, Brueckner
- 171 Curriculum Lab Practice (2-6 cr; prereq* 170A or 170B)
Ar, Cook
- 174 Clinical Methods Practice in Speech Pathology (3 cr; prereq Spch 61, 67, 85, 162, 163 or concur regis)
VIII WF, hr ar, 306F, Bryngelson, staff
- 175 Clinical Methods Practice in Speech Pathology (3 cr; prereq Spch 61, 67, 85, 162, 163 or concur regis)
VIII WF, hr ar, 306F, Bryngelson, staff
- 176 Clinical Methods Practice in Speech Pathology (3 cr; prereq Spch 61, 67, 85, 162, 163 or concur regis)
VIII WF, hr ar, 306F, Bryngelson, staff
- 184 Supervision of Student Teaching (2 cr; prereq* 10 cr educ)
I-II S, 202TNUH, Grim
- 199E Internship (ar cr)
Ar, Grim
- 201 Probs in Teaching Social Studies (3 cr; prereq cons instr)
IX-X T, 112Bu, Wesley
- 205 Probs in Visual Education (ar cr; prereq* 105, 106)
Ar, Wendt
- 207 Probs in Radio Education (1-3 cr; prereq 107)
Ar, Tyler
- 215 Probs in School Health Education Program (ar cr; prereq cons instr)
Ar, Grout
- 216 Field Work in School Health Education Program (ar cr; prereq cons instr)
Ar, Grout
- 217 Seminar—School Health Education Program (ar cr; prereq cons instr)
Ar, Grout
- 225 Special Probs—Supervision, Instruction in Secondary Schools (ar cr; prereq cons instr)
Ar, Boardman, Keller
- 226 Seminar—Elem School Probs (no cr)
IX-X Th, 206UHS, Brueckner, Bond, Cook
- 228 Probs of Higher Education, Teacher Training (ar cr; prereq cons instr)
Ar, Grim, Eckert
- 238 Probs in Distributive Education (ar cr; prereq cons instr)
IX-X Th, 112Bu, Meyer
- 239 Probs in Business Education (ar cr; prereq cons instr)
IX-X Th, 202TNUH, Price
- 250 Higher Education in United States (3 cr; prereq* 18 cr educ)
I-II T, II Th, 103Bu, Eckert
- 261 Special Probs in Improvement of Instruction (ar cr; prereq cons instr)
Ar, Brueckner
- 265 Research in Supervision (ar cr; prereq cons instr)
Ar, Brueckner
- 271 Probs of Curriculum Construction (3-9 cr; prereq cons instr)
Ar, Cook
- 273 Probs in Reading (3-9 cr; prereq* 143 or 144)
Ar, Bond
- 284 Probs in Student Teaching (ar cr; prereq cons instr)
Ar, Grim

- 287 Adv Teaching of Science (3 cr)
III-IV S, 5ShH, P Johnson
- 294 Adv Course in Methods of Teaching English
(2 cr; prereq EdT 66A-B-C)
I-II S, 5ShH, Smith
- 296 Special Probs in Teaching English (ar cr)
Ar, Smith

Winter and Spring Quarters

- 58w,s See 58f IX-X Th (for soph) Cary; IX-X
Th (for jr) Davies
- 60s See 60f VI MWF Bond
- 61s See 61f Wesley
- 62Bs See 62Af VII MWF Brueckner
- 63w See 63f VI TTh Smith
- 64w,s Teaching English in Elem School (3 cr;
prereq Ed 71B) VI MWF Smith
- 65w,s See 65f VII T, VIII TTh (w) Boeck; VI
T, VII TTh (s) Adolphsen
- 104s Adult Education (2 cr) VIII-IX Th Nolte
- 105w,s See 105f III-IV S (w) Wendt; VII MWF
(s) Wendt
- 106w Coordinating a Visual Aids Program (3 cr;
prereq* 105) IX-X Th Wendt
- 107w,s Radio in Education (3 cr; prereq 9 cr
educ) IX-X T, hr ar (w); III MWF (s)
Tyler
- 109w,s See 109f Lect IX W and 2 hrs ar (w);
VII T and 2 hrs ar (s) Wendt, Luce
- 113w See 113f III-IV S Grim
- 119w Elem School Curriculum (3 cr; prereq Ed
71C) III-IV S Cook
- 122s Literature for Adolescents (2 cr; prereq*
55B) I-II S, Smith
- 125w,s Occupational Information Lab (1 cr; pre-
req cons instr) VII M Dugan
- 129s Prin, Probs of Teaching Social Hygiene
(3 cr; prereq 9 cr educ) VIII-IX M
Pearce, Griffiths, Smith
- 130w,s Probs of Childhood Education (2 cr; pre-
req 9 cr educ incl EdT 55) VIII WF
Fuller
- 132s Teaching Basic Business Subjects (3 cr)
IX-X W Price
- 134w Materials, Methods in Consumer Educa-
tion (3 cr; prereq* 133) I-II S, Price
- 135s Group Procedures in Guidance (3 cr;
prereq* EdPsy 33) VIII-IX Dugan
- 139w Coordination Techniques in Business Edu-
cation (3 cr) IX-X Th, hr ar Meyer
- 141s Cooperative Part-time Distributive Educa-
tion Classes (3 cr) IX-X Th, hr ar Meyer
- 144w Teaching Reading in Secondary Schools
(3 cr; prereq 9 cr educ) 4:30-6:30 Bond
- 145s See 145f 4:30-6:30 W Bond
- 149w Teaching, Supervision of Arithmetic in
Elem School (3 cr, §62A, 62B; prereq Ed
71C) III-IV S, hr ar Brueckner
- 151w Diagnosis, Treatment of Learning Diffi-
culties (3 cr; prereq 150 or basic training
in counseling or school psy work) II
MWF, Brueckner
- 157w,s Practice in Supervision (3 cr; prereq
cons instr) Ar Brueckner
- 168w Current Development in Social Studies
(2 cr; prereq grad) III-IV S Wesley
- 169w Extra-curricular Activities (4 cr; prereq*
Ed 55A-B) VI-VII TTh Davies
- 171w,s See 171f
- 173As Organizing Units of Instruction in Elem
School (3 cr; prereq 119 or teach exper)
III-IV S, hr ar Cook
- 174w,s See 174f
- 175w,s See 175f
- 176w,s See 176f
- 181w Foundations of Elem School Methods (3
cr; prereq 9 cr educ) IX-X M Brueckner
- 199Ew,s See 199Ef
- 201w,s See 201f
- 204s Social Studies Curriculum (2 cr) I-II S
Wesley
- 205w,s See 205f
- 207w,s See 207f
- 215w,s See 215f
- 216w,s See 216f
- 217w,s See 217f
- 225w,s See 225f
- 226w,s See 226f
- 228w,s See 228f
- 238w,s See 238f
- 239w,s See 239f
- 250w See 250f I-II S, hr ar Eckert
- 251w Curriculum Trends in American Colleges
(3 cr; prereq* 18 cr educ) I T, II TTh
Eckert
- 252s Effective College Teaching (3 cr; prereq*
18 cr educ) I T, II TTh; I-II S, hr ar
Eckert
- 254s Supervision of the Social Studies (3 cr)
IX-X M Wesley
- 261w,s See 261f
- 263w Research—Arithmetic Instruction (3 cr;
prereq 149) I-II S Brueckner
- 264s Research—Educational Diagnosis (3 cr; pre-
req 151) III-IV S Brueckner
- 265w,s See 265f
- 266s Supervision of High School Instruction (3
cr) IV MWF Boardman
- 271w,s See 271f
- 273w,s See 273f
- 285s Professional Education of Teachers (3 cr;
prereq 15 cr educ) III-IV S, hr ar Grim
- 296w,s See 296f

EDUCATION (EDUC)

Fall Quarter

- 55A Introd Secondary School Teaching (5 cr;
prereq 6 cr psy)
Lect I MWF, BuAud, Mork
—1, II-III TTh, 112Bu, Giles
—2, II-III TTh, 202WeH, Bergstrom
—3, II-III MW, 111Bu, Giles
—4, III-IV TTh, 111Bu, Stout

- 5, III-IV TTh, 207F, Ar
- 6, III-IV MW, 112Bu, Grim
- 7, VI-VII TTh, 103Bu, Eckert
- 8, VI-VII TTh, 111Bu, Boardman (for core majors)
- 9, VI-VII MW, 112Bu, Boardman
- 55B Introd Secondary School Teaching (5 cr; prereq 6 cr psy; nurs educ maj)
I MTWThF, 20ForH, Adolphsen
- 71A Introd Elem School Teaching (5 cr; prereq 6 cr psy)
Lect III MWF, 201WeH, Cook
- 1, I-II TTh, 9F, Wardeberg
- 2, I-II TTh, 202Pt, R Johnson
- 3, III-IV TTh, 5F, Wardeberg
- 4, III-IV TTh, 202Pt, R. Johnson
- 5, III-IV TTh, 207F, Ar
- 6, VI-VII TTh, 9F, Wardeberg
- 81 Introd Education for Public Health Nurses (3 cr; not open to educ degree cand)
III MWF, 113MeS Grout

Winter and Spring Quarters

- 55Aw See 55Af Lect I TThS Mork; Secs II-III TTh Banks; VI-VII TTh Stout; II-III MW Wesley; VI-VII TTh Banks
- 55Bw See 55Bf (prereq 55A) Lect I MWF Mork; Secs II-III TTh Bergstrom, Giles; II-III MW Giles; III-IV TTh Van Wagenen, Adolphsen; III-IV MW Adolphsen; VI-VII TTh Eckert, Adkins (for core majors); VI-VII MW Van Wagenen, Giles
- 55Bs See 55Bf (prereq 55A except for nurses) For nurs educ maj II MTWThF Adolphsen; for all others Lect I TThS Mork; Secs II-III TTh Banks; III-IV TTh; VI-VII TTh Bergstrom
- 71Bw-71Cs See 71Af (prereq 71A)
- 81w,s See 81f I MWF (w); III MWF (s); Grout

EDUCATIONAL ADMINISTRATION (EDAD)

Fall Quarter

- 124 Public School Admin (3 cr; prereq 9 cr educ)
I MWF, 202WeH, Neale
- 218 Recent Literature in Secondary Education (ar cr)
IX-X W, 111Bu, Boardman
- 225 Pupil Personnel Admin (3 cr; prereq 124)
I-II S 103Bu, Neale
- 228 Special Probs in Educational Admin (ar cr; prereq 225)
Ar, Neale
- 230 Public Relations for Schools (3 cr; prereq 225)
III-IV S, 103Bu, Neale
- 235 Seminar—Education Admin (no cr)
Ar, Neale
- 263 Organization of Secondary School (3 cr)
III MWF, 103Bu, Boardman

- 270 Special Probs in Secondary Education (ar cr)
Ar, Boardman, Keller, Stout

Winter and Spring Quarters

- 115 Organization of Elem School (3 cr; prereq 9 cr educ) I-II S Neale
- 167s Jr High School (3 cr; prereq 9 cr) III-IV S Davies
- 210s Financial Aspects of Public School Business Admin (3 cr; prereq 227) I MWF Neale
- 218w,s See 218f
- 226s School Plant Planning, Mgt (3 cr; prereq 227) I-II S Neale
- 227w Teacher, Employee Admin (3 cr; prereq 225) I MWF Neale
- 228w,s See 228f
- 235w,s See 235f
- 264w Admin of Instructional Activities in Secondary School (3 cr) IV MWF Boardman
- 265s Admin of Non-Instructional Activities in Secondary School (3 cr) III MWF Boardman
- 270w,s See 270f
- 274w Jr College (3 cr; prereq cons instr) III MWF Boardman

EDUCATIONAL PSYCHOLOGY (EPSY)

Fall Quarter

- 60 Introd Measurement, Statistics (3 cr; prereq 6 cr psy)
IV TThS, 112Bu, Van Wagenen
- 113 Psychology of Elem School Subjects (2 cr; prereq 9 cr psy, educ)
IX-X W, 103Bu, Van Wagenen
- 120 Basic Prins of Measurement (3 cr; prereq 60)
VII MWF, BuAud, Cook
- 125 Social Structure of Student Groups (3 cr)
VI-VII T, VII Th, 306,307ForH, Flanders
- 133 Basic Procedures in Student Personnel Work (3 cr; prereq sr, 9 cr educ)
III-IV S, 111Bu, Dugan, extra session VIII M required
- 142 Individual Mental Testing (3 cr; prereq 120)
VIII MWF, 103Bu, Delp
- 150 Psycho-Educational Clinic (ar cr; prereq 142 or EdCI 145, cons instr)
Ar, Delp
- 159 Personality Adjustments, Mental Hygiene (3 cr)
IV MWF, BuAud, Wrenn
- 182 Education of Exceptional Children (3 cr; prereq Ed 55B or 71C)
III-IV S, 101F, Delp
- 216 Statistical Methods in Education (3 cr)
II MWF, 112Bu, Johnson

- 216a **Statistical Methods in Education Lab** (2 cr)
 —1, II-III TTh, 221Bu, Johnson, Moonan
 (for students taking entire seq 213-217-
 218 concur)
 —2, VII-VIII TTh, 221Bu, Johnson, Moonan
 (for students electing one or more qtrs)
- 219 **Design, Analysis of Statistical Investigation**
 (3 cr; prereq* 218)
 IV MWF, 103Bu, Johnson
- 233 **Probs in Guidance, Personnel Work** (ar cr)
 Ar, Edwards, Wrenn, Dugan
- 240 **Probs of Measurement** (3 cr)
 Ar, Johnson
- 243 **Probs in Statistics for Students in Educa-
 tional Psychology** (3 cr)
 Ar, Johnson
- 250 **College Student Personnel Work** (3 cr; pre-
 req course in higher educ)
 III MWF, 5ShH, Wrenn
- 251 **College Student Personnel Work** (1-3 cr;
 prereq 250)
 VI-VII W, 5ShH, Wrenn
- 253 **Research Probs** (ar cr)
 Ar, staff
- 260 **Educational Psychology Seminar** (no cr)
 VIII-IX F, 111Bu, staff (meets 4 Fridays
 per quarter)
- 281 **Practice in Personnel Work** (sec 1, 3 cr, sec
 2, ar cr; prereq* 225, 226)
 —1, VI-VII F, and hr ar, 101EdH, Hagenah
 —2, Ar, Edwards, Wrenn
- 282 **Practice in High School Personnel Work**
 (3 cr; prereq* 120, 133)
 Ar, Dugan
- 290 **Individual Differences** (3 cr)
 VI MWF, 111Bu, Flanders

Winter and Spring Quarters

- 60s See 60f II MWF Van Wagenen
 -114w-115s See 113f
 120s See 120f
 125w,125s See 125f
- 134w **School Counseling Procedures** (3 cr; pre-
 req 120, 133, cons instr) IV MWF Dugan
- 140w **Instruments, Techniques of Measurement**
 (3 cr; prereq 120) VII-VIII TTh Cook
- 142s See 142f
- 144w **Individual Adult Testing** (3 cr; prereq 120)
 VIII MWF Delp
- 150w,s See 150f Ar Delp; VIII T, hr ar Bond
- 153s **Psychology of Adolescence** (3 cr; prereq
 Ed 55B) III MWF Edwards
- 159s See 159f III MWF Wrenn
- 183s **Education of Gifted Children** (2 cr; prereq
 Ed 55B or 71C) 4:30-6:30 T Bond
- 185s **Education of Auditorially Handicapped** (2
 cr; prereq 182) I-II S Delp
- 208w **Methods in Educational Research** (3 cr)
 VIII MW, hr ar Johnson
 -217w-218s See 216f
 -217aw-218as See 216af
 220w-221s **Adv Theory of Measurements** (2 cr;
 prereq 60, 216) IX-X T, Van Wagenen

- 225w,226s **Diagnosis, Counseling in Student Per-
 sonnel Program** (3 cr; prereq 133 or Psy
 130, concur regis 140) IV MWF Wrenn
- 233w,s See 233f
- 240w,s See 240f
- 243w,s See 243f
- 251w See 251f
- 253w,s See 253f
- 254s **Measurement, Evaluation in Higher Educa-
 tion** (3 cr) III-IV S, hr ar Johnson
- 260w,s See 260f
- 281w,s See 281f
- 282w,s See 282f
- 290s See 290f
- 293w **Psychology of Learning** (3 cr; prereq 12
 cr psy, educ psy) III MWF Mork

HISTORY AND PHILOSOPHY OF EDUCATION (HED)

Fall Quarter

- 71 **History of Education** (5 cr)
 IV MTWThF, 109Psy, Alexander
- 76 **Introd Philosophy of Education** (3 cr)
 VII MWF, 103Bu, Beck
- 101 **Historical Foundations of Modern Education**
 (3 cr)
 VI MWF, 103Bu, Alexander
- 141 **Critical Issues in Contemporary Education**
 (3 cr)
 IX-X W, 206WeH, Beck
- 179 **Critical Thinking for Teachers** (3 cr)
 IX-X M and hr ar, 112Bu, Cary
- 180 **School, Social Order** (3 cr; prereq sr)
 —1, VI TTh, VII Th, 202WeH, Beck
 —2, VIII MWF, 112Bu, Cary
- 241 **Probs in History, Philosophy of Education**
 (ar cr; prereq cons instr)
 Ar, Cary, Beck, Alexander

Winter and Spring Quarters

- 71w,s See 71f
- 102w **History of Modern Secondary, Higher Edu-
 cation** (3 cr) VI MWF Alexander
- 110w,s **Intercultural Education** (3 cr) I-II S (w);
 IX-X T (s) Cary
- 131w **Comparative Education** (3 cr) IX-X W
 Beck
- 155s **History of Education in United States** (3
 cr) VI MWF Alexander
- 178w **Educational Probs of American Democracy**
 (3 cr) IX-X T and hr ar Cary
- 180w,s See 180f VII-VIII T, VII Th (w,s) Beck;
 II MWF (s) Cary; III MWF (w) Beck;
 VIII MWF (w,s) Cary
- 182s **Comparative Philosophies of Education** (3
 cr) IX-X W
- 241w,s See 241f
- 242s **Seminar—Educational Philosophy** (3 cr)
 IX-X M Cary, Beck

HOME ECONOMICS EDUCATION (HEED)

Fall Quarter

- 90 **Child Training** (3 cr; prereq soph, Psy A or 1-2 or concur regis or 2)
IV MWF, 203HE, Peterson
- 91 **Observation, Materials, Teaching Home Economics** (5 cr; prereq HE 4, 21, 22, 41, Ed 55A-B, home exper, concur regis 93)
VIII MWF, IX M, hr ar, 114HE, Rose, Kafka, Ford
- 92 **Teaching Probs Home Economics** (2 cr; prereq sr, 91, 93, concur regis 94, 192, 194A)
Ar, Rose, Conference 8:45 a.m. first day of qtr
- 93 **Supervisor Teaching Home Economics** (3 cr; prereq 4, 21, 22, 41, Ed 55A-B, home exper, concur regis 91)
3 consec hrs MTWThF, Rose, Ford, Kafka, Thomson, others
- 94 **Supervised Teaching Home Economics** (6 cr; prereq 91, 93, concur regis 92, 192, 194A)
Ar, Rose, Ford, Kafka, others
- 95 **Field Experience for Home Demonstration Agents** (6 cr; prereq sr, 91, 93, cons HE head, dir agric ext)
Ar, Rose, others
- 192 **Evaluation Home Economics Education** (2 cr, grad 3 cr; prereq 91, 93, concur regis 92, 94, 194A, Ed 55B; grad, Ed 55B)
—1, VIII TTh, 213HE, Army, Rose (jr, sr, grad)
—2, II MWF, 114HE, Army (grad only)
- 194A **Adult Education Home Economics** (3 cr; prereq sr, 91, 93, concur regis 92, 94, 192)
Ar, Ford, Conference 8:45 a.m. first day of qtr
- 197 **Organization, Methods for Related Art Teaching** (1-3 cr; prereq sr, 91, HE 180 or concur regis, cons instr)
Ar, Esteros
- 199E **Internship** (ar cr; prereq grad)
Ar, Rose
- 243 **Trends in Home Economics** (3 cr; prereq cons instr)
III-IV S, 114HE, Rose
- 293 **Probs in Home Economics Education** (1-3 cr; prereq cons instr)
Ar, Rose, Esteros, Army, Ford
- 294 **Research Methods** (3-6 cr; prereq 192, cons instr)
VI MWF, 203HE, Army, Rose
- 295 **Seminar—Home Economics Education** (1-3 cr)
IX Th, 114HE, Army, Rose, Esteros

Winter and Spring Quarters

- 90s See 90f
91w,s See 91f

- 92w,s See 92f
93w,s See 93f
-94w,s See 94f
95w,s See 95f
192w,s See 192f
193As Home Economics Curriculum (2 or 3 cr; prereq* sr, cons instr, secondary school level) IX-X W Army, Rose
193Bw,s Home Economics Curriculum (2 or 3 cr; prereq sr, cons instr, college level) III MWF Army
194Aw,s See 194Af
194Bs Adult Education in Home Economics (3 cr; prereq* 194A) IX MF, 2 hrs ar Ford
195s Space, Equipment, Furnishings Materials for Home Economics Depts (3 cr; prereq sr, 91, 93, HE 49) Ar Rose, Kafka
197w,s See 197f
199Ew,s See 199Ef
243w,s See 243f
292s Probs in Evaluation (3 cr; prereq cons instr) Ar Army
293w,s See 293f
295w,s See 295f

INDUSTRIAL EDUCATION (IND)

Fall Quarter

- 1 **Basic Woodwork** (3 cr)
VIII-X TTh, 6Pt, Kavanaugh
- 5 **Basic Drawing** (3 cr)
II-IV TTh, 201TNUH, Nelson
- 10 **Basic Electricity** (3 cr)
III-IV MWF, 15TNUH, Kavanaugh
- 11 **Special Class Woodwork** (2 cr)
I-IV S, 6Pt, LaBerge
- 15 **Basic Graphic Arts** (3 cr)
VI-VII MWF, 14TNUH, Nelson
- 40 **Analysis** (2 cr)
IX-X W, 202TNUH, Micheels
- 50A **Directed Teaching** (3 cr; prereq 70, 80, Ed 55B)
Ar, Anderson
- 50B **Directed Teaching** (3 cr; prereq 70, 80, Ed 55B)
Ar, Anderson
- 50C **Directed Teaching** (3 cr; prereq 70, 80, Ed 55B)
Ar, Anderson
- 60 **Philosophy of Vocational Education** (2 cr)
IX-X M, 202TNUH, Widdowson
- 80 **Intro Industrial Arts** (2 cr)
IX-X F, 202TNUH, Nelson
- 100 **Industrial Instruction** (3 cr, \$70; prereq* grad)
III-IV S, 202TNUH, Smith
- 107 **Coordination** (3 cr; prereq* 60, 61 or 105)
IX-X T, 202TNUH, Widdowson
- 135 **Industrial Course Construction** (3 cr, \$40-42)
III MWF, 202TNUH, Micheels

- 200 Research Probs (3, 6 or 9 cr)
IV MWF, Smith, Micheels
- 250 Industrial Education Literature (3 cr; pre-
req cons instr)
II MWF, 202TNUH, Smith
- Dunwoody Shopwork, Drawing (ar cr)
Ar, Smith
- Off-Campus Courses, Services (ar cr)
Ar, Widdowson

Winter and Spring Quarters

- 1s See 1f
- 2w Machine Woodwork (3 cr; prereq 1)
VIII-X TTh Nelson
- 3s Shop Finishing (3 cr; prereq 2) VIII-X
TTh, Nelson
- 6w Applied Gen Drawing (3 cr; prereq 5)
II-IV TTh Kavanaugh
- 7s Building Construction Drawing (3 cr;
prereq 6) II-IV TTh Kavanaugh
- 11w,s See 11f
- 12w Electricity, Radio (3 cr; prereq 10) III-
IV MWF Kavanaugh
- 16w Adv Graphic Arts (3 cr; prereq 15) I-II
MWF Nelson
- 20w Craft Work A (3 cr) VI-VII MWF Nelson
- 21s Craft Work B (3 cr; prereq 20) VI-VII
MWF Nelson
- 42w Course Organization (3 cr; prereq 40)
III MWF Micheels
- 44s Equipment, Mgt (3 cr; prereq 42) IX-X
M Widdowson
- 50Aw,s-50Bw,s-50Cw,s See 50Af, 50Bf, 50Cf
- 61w Practice in Vocational Education (2 cr;
prereq 60) IX-X M Widdowson
- 70s Teaching Industrial Subjects (3 cr; pre-
req 42, Ed 55B) IX-X W Micheels
- 101s Tests in Industrial Subjects (3 cr; prereq
Ed 55B) II MWF Micheels
- 102s General Shop (2 cr) III-IV S Nelson
- 103w Instructional Aids (3 cr; prereq 70) III-
IV S Micheels
- 105w Admin of Industrial Education (3 cr) II
MWF Smith
- 109w Conference Leading for Industry (2 cr;
prereq cons instr) VIII-X T Widdowson
- 110s Vocational Guidance (3 cr; prereq Ed
55B) III MWF Smith
- 125s Philosophy, Practice of Industrial Educa-
tion (3 cr, §61) IX-X T Widdowson
- 172s Part Time Education (3 cr; prereq cons
instr) IX-X F Smith
- 200w,s See 200f
- 251w See 250f IX-X W Smith
- Dunwoody (w,s) See Dunwoody (f)
- Off-Campus Courses (w,s) See Off-Campus
courses (f)

METHODS AND STUDENT TEACHING (EDT)

Fall Quarter

- 51A Teaching Nursing (4 cr; prereq sr, Ed
55B)
I MWF and ar, 2309PoH, Boyle, Weise
- 51B Teaching Nursing (6 cr; prereq 51A)
I TTh and ar, 2309PoH, Boyle, Weise
- 52 Student Teaching in Secondary School (ar
cr; prereq Ed 55B, spec methods course)
Ar, Grim
- 53A Teaching Handicapped Children (4 cr;
prereq Ed 71C)
Ar, Bond
- 53B Teaching Handicapped Children (4 cr;
prereq 53A)
Ar, Bond
- 54A Student Teaching Elem School (4 cr;
+54A-B; prereq Ed 71C)
Ar, Chase, Curtis, Olson, Ready
- 54B Student Teaching Elem School (4 cr;
+54A-B; prereq 54A)
Ar, Chase, Curtis, Olson, Ready
- 55 Prin Early Childhood Education (3 cr; pre-
req CW 80 or concur regis)
VII MWF, 202Pt, Fuller
- 56 Methods, Observation Nursery School,
Kindergarten (5 cr; prereq 55 or concur
regis)
VIII MTWThF, 202Pt, Headley, Peterson
- 67 Student Teaching in Mathematics (2 cr;
prereq Ed 55B, C+ aver maj)
6 hrs ar MTWThF, D Johnson
- 67A Teaching Secondary School Mathematics
(3 cr, +67A-67B-67C; prereq Ed 55B)
IX-X MW, 105UHS, Donovan, Johnson
- 68 Student Teaching in Natural Science (2 cr;
prereq Ed 55B, C+ aver maj)
6 hrs ar MTWThF, Whiting
- 68A Teaching of Secondary Natural Science
(3 cr, +68A-B-C; prereq Ed 55B)
IX-X MW, 3UHS, Boeck
- 69 Student Teaching in Social Studies (2 cr;
prereq Ed 55B, C+ aver maj)
6 hrs ar MTWThF, West, others
- 69A Teaching of Social Studies in Secondary
School (3 cr, +69A-B-C; prereq Ed 55B)
IX-X MW, 207NH, Wesley
- 70 Student Teaching in Modern Language (2
cr; prereq Ed 55B, C+ aver maj)
V MWF, 202Pt, Cummings
- 70A Teaching Modern Languages (3 cr, +70A-
B-C; prereq Ed 55B)
IX-X MW, 110UHS, Birkmaier
- 71 Student Teaching in Latin (2 cr; prereq Ed
55B, C+ aver maj)
6 hrs ar MTWThF, Birkmaier
- 71A Teaching Latin (3 cr, +71A-B-C; prereq
Ed 55B)
IX-X MW, 110UHS, Birkmaier

- 72A Student Teaching in Distributive Education Subjects (2 cr, †72A-B-C; prereq Ed 55B, C+ aver maj)
Ar, Meyer
- 72B Student Teaching in Distributive Education Subjects (2 cr, †72A-B-C; prereq 72A, C+ aver maj)
Ar, Meyer
- 72C Student Teaching in Distributive Education Subjects (2 cr, †72A-B-C; prereq 72B, C+ aver maj)
Ar, Meyer
- 73A Student Teaching in Business Subjects (2 cr, †73A-B-C; prereq Ed 55B, C+ aver maj)
Ar, Price
- 73B Student Teaching in Business Subjects (2 cr, †73A-B-C; prereq Ed 55B, C+ aver maj)
Ar, Price
- 73C Student Teaching in Business Subjects (2 cr, †73A-B-C; prereq Ed 55B, C+ aver maj)
Ar, Price
- 75 Student Teaching in Language Arts in Secondary School (2 cr; prereq Ed 55B, C+ aver maj)
Ar, Burton
- 75A Teaching Language Arts in Secondary School (3 cr; prereq Ed 55B)
IX-X TTh, 202Pt, Smith
- 77 Teaching Nursery School (4 cr; prereq see col bul)
IX M, 213NH, Fuller
- 78 Teaching Kindergarten (4 cr; prereq see col bul)
IX M, 213NH, Fuller
- 79 Teaching Primary Grades (4 cr; prereq see col bul)
IX M, 213NH, Fuller
- 82 Teaching Bookkeeping, Gen Bus Subjects (2 cr; prereq Ed 55B or concur regis)
IX-X M, 5ShH, Price
- 84A Field Work—Recreational Leadership (2 cr)
V W, 3 hrs ar minors, 6 hrs ar maj, 215CH, Giles
- 84B Field Work—Recreational Leadership (2 cr)
V W, 3 hrs ar minors, 6 hrs ar maj, 215CH, Giles
- 84C Field Work—Recreational Leadership (2 cr)
V W, 3 hrs ar minors, 6 hrs ar maj, 215CH, Giles
- 85A Field Work—Recreational Leadership (1 cr minors, 2 cr maj)
V W, 3 hrs ar minors, 6 hrs ar maj, 215CH, Giles
- 85B Field Work—Recreational Leadership (1 cr minors, 2 cr maj)
V W, 3 hrs ar minors, 6 hrs ar maj, 215CH, Giles
- 85C Field Work—Recreational Leadership, (1 cr minors, 2 cr maj)
V W, 3 hrs ar minors, 6 hrs ar maj, 215CH, Giles
- 90A Teaching Distributive Education Subjects (2 cr; prereq cons instr)
IX-X T, 109Psy, Meyer
- 93 Student Teaching in Core Curriculum (2 cr; prereq Ed 55B, C+ aver maj)
Ar, Davies
- 93A Teaching of Core Curriculum (3 cr, †93A-B-C; prereq Ed 55B)
IX-X TTh, 5ShH, Davies

Winter and Spring Quarters

- 51Aw See 51Af
-51Bw,s See 51Bf
52w,s See 52f
53Aw,s-53Bw,s See 53Af, 53Bf
54Aw,s-54Bw,s See 54Af, 54Bf
57w Nursery School, Kindergarten Lab in Art, Literature, Social Studies (5 cr; prereq 56) VIII MTWThF Headley
- 58s Nursery School, Kindergarten Lab in Play Materials, Music, Science (5 cr; prereq 56) VIII MTWThF Headley
- 67w,s See 67f
-67Bw-67Cs (1 cr) See 67Af IX-X M or W D Johnson, for maj only
-68Bw-68Cs (1 cr) See 68 Af IX-X M Boeck
68w,s See 68f
68Ms Teaching Natural Science (3 cr; prereq Ed 55B, for minors only) VI MWF Boeck
69w,s See 69f
-69Bw-69Cs (1 cr) See 69Af IX MW Wesley
69Ms Teaching Social Studies (3 cr; prereq Ed 55B, for minors only) VI MWF West
70w,s See 70f
-70Bw-70Cs (1 cr) See 70Af IX-X M Birkmaier, for maj only
71w,s See 71f
-71Bw-71Cs (1 cr) See 71Af IX-X M Birkmaier, for maj only
72Aw,s-72Bw,s-72Cw,s See 72Af,72Bf,72Cf
73Aw,s-73Bw,s-73Cw,s See 73Af,73Bf,73Cf
74w Teaching Journalism (3 cr; prereq Jour 41 or 51) VII MWF Kildow
75w,s See 75f
-75Bw-75Cs (1 cr) See 75Af IX TTh, for maj only
77w,s See 77f
78w,s See 78f
79w,s See 79f
80s Teaching Typewriting (2 cr; prereq Ed 55B or concur regis) IX-X M Price
81w Teaching Shorthand (2 cr; prereq Ed 55B or concur regis) IX-X M Price
83w Methods, Materials, School Health Education (3 cr; prereq PH 59) III MWF Ericson
84Aw,s-84Bw,s-84Cw,s See 84Af, 84Bf, 84Cf
85Aw,s-85Bw,s-85Cw,s See 85Af, 85Bf, 85Cf
-90Bw-90Cs See 90Af
93w,s See 93f
-93Bw-93Cs (1 cr) See 93Af IX-X T

MUSIC EDUCATION (MUED)

Fall Quarter

- 4 Applied Instrumental Technique (2 cr; prereq* mus educ maj)
I MTWF, 4NMA, Ivory
- 50A Teaching Music in Primary Grades (2 cr)
—1, III TTh, 4ScH, Winslow
—2, II TTh, 4ScH, Winslow
- 60 Supervision, Teaching of Music (3 cr, †60-61-62; prereq sr, 50B, 53, Ed 55B, cons instr)
IX-X W, 4ScH, Winslow
- 61 Supervision, Teaching of Music (3 cr, †60-61-62; prereq sr, 50B, 53, Ed 55B, cons instr)
IX-X W, 4ScH, Winslow
- 62 Supervision, Teaching of Music (3 cr, †60-61-62; prereq sr, 50B, 53, Ed 55B, cons instr)
IX-X W, 4ScH, Winslow
- 65 Instrumentation (3 cr; prereq Mus 6T)
II TThS, 2ScH, Ivory
- 103E Psychological Foundation of Music Education (3 cr; prereq sr, cons instr)
IV MWF, 4ScH, Winslow
- 224E Seminar—Individual Research Probs (2-6 cr)
Ar, Winslow, Ivory
- 225E Adv Applied Music (2-4 cr; prereq entr exam)
Ar

Winter and Spring Quarters

- 5w-6s See 4f VI MTWF
- 50Aw See 50Af VIII-IX T Winslow
- 50Bw Teaching Music in Intermediate Grades (2 cr; prereq 50A) III TTh; VIII-IX Th Winslow
- 53s High School Methods (3 cr; prereq* 50B, Ed 55B) III MWF Winslow
- 59w Choral Literature, Conducting (2 cr; sr, 1 cr others) V TTh Winslow
- 60w,s-61w,s-62w,s See 60f,61f,62f
- 63w Band Conducting (2 cr; prereq* 4-5-6) VII TTh
- 64s Band Organization (3 cr; prereq* 4-5-6) VII MWF
- 65w See 65f
- 67s Teaching Instrumental Music in Elem School (2 cr; prereq 65) III MWF Ivory
- 68s Teaching Instrumental Music in Secondary School (2 cr; prereq 67) IV MWF Ivory
- 104Es Adv Topics in Vocal Music Education (3 cr; prereq sr, cons instr) IV MWF Winslow
- 105Ew Adv Topics in Instrumental Music Education (3 cr; prereq sr, cons instr) IV MWF Ivory
- 224Ew,s See 224Ef
- 225Ew,s See 225Ef

NURSING EDUCATION (NUED)

Fall Quarter

- 55 Operative Aseptic Technique (1 cr)
Ar
- 60 Ward Admin (5 cr)
VIII M, VIII-IX TTh, 111MeS, Grainger
- 63 Motion Study (2 cr)
Ar
- 65 Analysis of Nursing Care (4 cr)
VIII-IX WF, 111MeS, Hanson
- 66 Introd Adv Clinical Nursing (5 cr)
II-III TTh, 113MeS, Coe
- 67 Field Practice—Ward Admin (6 cr; prereq sr, 60, 65, 73, cons instr)
VII WF and ar, 111MeS, Grainger
- 68 Construction, Use of Examinations, Other Measurement in Basic Nursing Courses (3 cr)
VI MWF, 12MeS, Johnston
- 69 Survey of Conditions, Trends in Nursing (3 cr)
IV MWF, 113MeS, Densford
- 72 Application Prin of Learning to Clinical Instruction (3 cr)
VI MWF, Boyle
- 167 Studies, Experience in Ward Admin (8 cr; prereq 60, 65, 73, EdT 51B, cons instr)
VII WF and ar, 111MeS, Grainger
- 171 Curriculum of School of Nursing (3 cr; prereq 69, EdT 51A or concur regis, EdT 51B)
IV MF and ar, 104IA, Harrington
- 271 Probs in Curriculum (ar cr)
IX-X Th and ar, 113MeS, Harrington

Winter and Spring Quarters

- 29Aw,29Bs Adv Psychiatric Nursing (6 cr; prereq 66) Ar
- 33Aw,33Bs Adv Medical Nursing (6 cr; prereq 66) Ar
- 34Aw,34Bs Adv Obstetric Nursing (6 cr; prereq 66) Ar
- 40Aw,40Bs Adv Operating Room Nursing (6 cr; prereq 66) Ar
- 46Aw,46Bs Adv Rural Nursing (12 cr; prereq 66) Ar
- 47Aw,47Bs Adv Tuberculosis Nursing (11 cr for 47A, 10 cr for 47B; prereq 66) Ar
- 52Aw,52Bs Adv Surgical Nursing (6 cr; prereq 66) Ar
- 57Aw,57Bs Field Practice—Psychiatric Nursing (11 cr) Ar
- 59w Prin Psychiatric Nursing (5 cr) Ar Ledi-ger
- 60w,s See 60f
- 61Aw,61Bs Adv Pediatric Nursing (6 cr; prereq 66) Ar
- 65s See 65f
- 67w,s See 67f
- 69s See 69f
- 73w Prin Economics in Nursing Service Admin (1 cr; prereq sr) VII F Stephan

- 74w Sciences in Nursing Curriculum (5 cr; prereq cons instr) Ar Coe
 162w Personnel Work in Nursing (3 cr) VI MWF Johnston
 165w Probs in Nursing Care (ar cr) IX-X Th and ar Hanson
 167w,s See 167f
 171w,s See 171f
 190s Survey in Nursing Education (3 cr) IX-X Th and ar Harrington

PHYSICAL EDUCATION FOR MEN (PE)

Professional Courses

Courses above 100 listed under Physical Education for Women are open to men students

Fall Quarter

- 4C Track Fundamentals (1 cr)
 VII-VIII TTh, CH, Kelly
 5A Touch Football, Calisthenics, Tactics (1 cr)
 III-IV TTh, CH, Ostrander, Roning
 5B Gymnastics (1 cr)
 III MWF, CH, Ostrander
 6A Intramural Sports (1 cr)
 IV-V TTh, CH, Roning
 6C Aquatics (1 cr)
 IV MWF, CH, Thorpe
 7A Games, Relays (1 cr; prereq soph)
 II-III TTh, CH, Piper, Ostrander
 11A Survey Recreation Activities (1 cr; prereq recreational students)
 V M, CH, Giles
 23A Introd Recreation Leadership (1 cr; prereq 11A-B-C)
 V F, CH, Giles
 32 Introd Physical Education (3 cr)
 I MWF, CH, Bartelma
 45 Camp Craft (3 cr)
 VI MWF, CH, Ostrander
 49 Social Aspects of Leisure (3 cr; prereq 23A-B-C, cons instr)
 VII MWF, CH, Fitzgerald
 51 Mechanics of Movement (3 cr; prereq 50 or Anat 57)
 II MWF, CH, Osell
 55 Methods, Materials in Physical Education (4 cr; prereq 5A-B-C, 6A-B-C, 7A-B-C)
 III MWF, 3 hrs ar, CH, Bartelma
 56 Theory of Play (3 cr; prereq soph)
 VII MWF, CH, Giles
 60B Athletic Training Lab (1 cr; prereq 60A)
 30 hrs ar, Stein
 66 Officiating Football, Basketball (3 cr; prereq 4A-B)
 VI-VII TTh, CH, Nordly
 68 Basketball Coaching (2 cr; prereq 4B)
 II MWF, CH, Cowles
 69 Track Coaching (2 cr; prereq 4C)
 VI TTh, hr ar; CH, Kelly

- 73 Directed Teaching (2 cr; prereq see col bul)
 V M and hrs ar, CH, Bartelma
 74 Directed Teaching (2 cr; prereq see col bul)
 V M and hrs ar, CH, Bartelma
 75 Directed Teaching (2 cr; see col bul)
 V M and 5 hrs ar, CH, Bartelma
 105 Conservation of Natural Resources (2 cr)
 VIII-IX F, CH, Keller
 111 Recreation Areas, Facilities (3 cr; prereq 53)
 VI MWF, CH, Fitzgerald
 236 Recent Literature, Research in Physical Education, Recreation (3 cr; prereq cons instr)
 II MWF, CH, Nordly
 238 Admin of Physical Education in Colleges, Universities (3 cr; prereq 63, 233)
 III MWF, CH, Keller
 240 Legal, Financial Aspects of Recreation (3 cr)
 IV MWF, CH, Fitzgerald
 247 Probs in Health Education (ar cr)
 Ar, Nordly
 261 Seminar—Contemporary Probs in Physical Education, Recreation (ar cr)
 Ar, Fitzgerald

Winter and Spring Quarters

- 4Aw Football Fundamentals (1 cr) VII-VIII TTh Roning
 4Bs Basketball Fundamentals (1 cr) VII-VIII TTh Vancisin
 5Bw See 5Bf III-IV TTh, Piper, Ostrander
 5Cs Stunts, Contests, Softball, Baseball (1 cr) III-IV TTh Piper, Ostrander
 6Bw See 6Af
 6Cw,s See 6Cf IV MWF (w); V MWF (s) Thorpe
 7Bw Boxing, Wrestling (1 cr; prereq soph)
 II-III TTh Bartelma, Chisholm
 7Cs Recreational Games (1 cr; prereq soph)
 II-III TTh Ostrander, Osell
 8s Tennis, Golf (1 cr) IV-V TTh Brain, Bolstad
 9Aw Folk Dancing (1 cr) V-VI TTh
 9Bs American Country, Ballroom Dancing (1 cr) V-VI TTh Piper
 -11Bw-11Cs See 11Af
 -23Bw-23Cs See 23Af
 43s Camp Aquatics (2 cr) IV MWF Ostrander
 47s Camp Leadership (2 cr) VII MWF Osell
 52w Leadership in Social Activities (2 cr) VI TTh Ostrander
 55w,s See 55f
 57w Operation, Conduct of Play Centers (3 cr; prereq soph) VII MWF Giles
 58s Leadership in Community Recreation (3 cr; prereq 57) VII MWF Giles
 59s Instructor's Course in First Aid (3 cr; prereq 25 or 26) I MWF Osell
 60As Prevention, Care of Injuries (3 cr; prereq 50, 51, Anat 57) IV TThs Stein

- 60Bw,s See 60Bf
- 61s History of Physical Education (3 cr; pre-req soph) I MWF Keller
- 63s Organization, Admin of Physical Education (3 cr; prereq 32 or 101, 55) III MWF Piper
- 64Aw-64Bs Leadership in Nature Recreation (2 cr; prereq 15 cr NSci) VII-VIII F (w); V-VII Th (s) Thompson
- 65w Adapted Physical Education (3 cr; prereq 51, Anat 57) II MWF Osell
- 67s Football Coaching (2 cr; prereq 4A, exper on squad) II TThS Bierman
- 72w Baseball Coaching (2 cr; prereq* baseball exper) VI MWF Siebert
- 73w,s,74w,s,75w,s See 73f, 74f, 75f
- 78w Scout Leadership (2 cr) VII MW Osell
- 101w Prin Physical Education (3 cr; prereq 55) I MWF Keller
- 107w Camp Admin (3 cr; prereq* 54) IX-X W Keller, staff
- 110s Recreation Surveys (2 cr; prereq 57, 58) VI MWF Fitzgerald
- 112w Programming in Recreation (3 cr; prereq 58) VI MWF Fitzgerald
- 116s Community Recreation Resources, Organizations (3 cr; prereq 110, 111, 112) IV MWF Ostrander
- 121s Prin of Recreation Methods (3 cr; prereq EdT 84A-B-C, 85A-B-C) III MWF Fitzgerald
- 135s Tests, Measurements in Physical Education (3 cr; prereq 10 cr PE, EPsy 60) III MWF Keller
- 141w Hospital Recreation (3 cr; prereq cons instr) IX-X M Fitzgerald
- 233w Special Administrative Probs in Physical Education in Secondary Schools (3 cr; prereq 63) II MWF Nordly
- 234s Secondary School, College Curriculum in Physical Education (3 cr; prereq 63, 101) II MWF Nordly
- 241w Admin, Supervision of Public Recreation (3 cr; prereq cons instr) II TThS Fitzgerald
- 242s Community Organization for Recreation (3 cr; prereq cons instr) II TThS Fitzgerald
- 247w,s See 247f
- 261s See 261f VIII-IX MW Nordly
- 20C Orientation (½ cr)
VII T, 3NGW, Jaeger
- 25 First Aid (1 cr)
III MW for prof; II TTh for others, 201, 151NGW
- 26 Adv First Aid (1 cr; prereq phys educ maj)
I TTh, 201, 153aNGW
- 40A Modern Dance (1 cr)
II MWF, 151NGW, Bockstruck
- 40B Skills, Officiating of Softball, Volleyball (1 cr)
VI MWF, 153, 153aNGW, Hauptfuehrer
- 40C Apparatus, Functional Exercises (1½ cr)
I MTThF, 153NGW
- 51 Mechanics of Movement (3 cr; prereq 57)
II MWF, 3NGW, Wilson
- 57A Teaching Aquatics (1 cr; prereq 41A, 42A)
II TThS, 58, 201NGW, Spears
- 58 Introd Elem Physical Education Program (3 cr; prereq elem educ maj)
VIII MWF, 201, 153NGW
- 62 Teaching Physical Education Activities (3 cr; prereq PE minors, recreation maj)
V MTWThF, 151, 60, 201NGW, Hauptfuehrer
- 66 Adv Fundamentals of Physical Education (1 cr)
III MWF, 153NGW, Jaeger
- 80 Prin of Rhythm (3 cr; prereq cons instr)
VII MWF, 3NGW, Bockstruck
- 82 Prin of Physical Education (3 cr; prereq sr)
III MWF, 3NGW, Wilson
- 90A Student Teaching (2-3 cr; prereq Ed 55A-B)
II TTh and ar, 3NGW, Jaeger, Hauptfuehrer
- 90B Student Teaching (2-3 cr; prereq sr)
II TTh and ar, 3NGW, Jaeger, Hauptfuehrer
- 90C Student Teaching (2-3 cr; prereq sr)
II TTh and ar, 3NGW, Jaeger, Hauptfuehrer
- 94 Student Teaching in School Health Education (2 cr; prereq sr, EdT 83, cons instr)
Ar, Ericson
- 115 Recent Literature, Research in Mechanics of Movement (3 cr; prereq* undergrad kinesiology)
VIII-IX½ TTh, 3NGW, Wilson
- 118 Probs—Health, Phys Educ, Recreation (pre-req cons instr)
Ar, Baker, Ericson, Wilson
- 123 Adv Course in Methods of Teaching Physical Education (3 cr; prereq cons instr)
VIII-IX½ MW, 3NGW, Ericson
- 224 Research Probs in School Health Education, Physical Education for Women (ar cr; prereq cons dept grad advis)
Ar, Baker, Ericson, Wilson

PHYSICAL EDUCATION FOR WOMEN (PE)

Professional Courses

Courses above 100 open to both men and women

Fall Quarter

- 20A Badminton (½ cr)
V TTh, 60NGW, Tenney
- 20B Skills, Officiating of Fall Team Sports (1 cr)
II MWF, 60NGW, Hauptfuehrer

Winter and Spring Quarters

- 21Aw Adv Basketball (½ cr) VII TTh Hauptfuehrer
- 21Bw Rhythmic Fundamentals, Elem Folk Dance (1 cr) V-VI TTh Bockstruck

- 21Cw Recreational Activities (1 cr) VII MWF
Jaeger, Tinker
- 21Dw Stunts, Tumbling (1 cr) III MWF
- 21Ew Winter Sports (½ cr) VIII-IX Th Pataky
- 22As Folk, Ballroom Dance (1 cr) V-VI TTh
Bell
- 22Bs Golf, Track, Field (1 cr) VII MWF
- 22Cs Tennis (1 cr) III TTh Tenney
- 25w,s See 25f V MW (w); III TTh (s) for
prof; II TTh (s) for others
- 27s Instructor's Course in First Aid (1 cr;
IV MW
- 41Aw Adv Aquatics (1 cr) VII MWF Eibner
- 41Bw Officiating Basketball (½ cr) I TTh
Hauptfuehrer
- 42As Life Saving, Water Safety Instructor's
Course (1 cr; prereq 41A) VI MWF Spear
- 45w Lab Course Introd Elem Physical Educa-
tion Program (2 cr; prereq elem educ
maj) V MTWTh
- 47w Teaching of Dance, Rhythmic Activities
(3 cr; prereq cons instr) II MTWThF
Bockstruck
- 43s Teaching Individual Sports (2 cr; cons
instr) I MTWTh Jaeger
- 49s Teaching Team Sports (3 cr; cons instr)
II MTWThF Hauptfuehrer
- 53w Role of Physical Educator in Recreation
(3 cr; prereq phys ed maj) II MWF
Tinker
- 54s Camp Leadership (3 cr) II MWF
- 56s Adv Folk Dance (2 cr) III MWF
-57w,s See 57Af
- 58w,s See 58f VII MWF (w); VIII MWF (s)
- 60s Prin of Play (3 cr; prereq CW maj) VII
MWF Tinker
- 64s Teaching Group Gymnastics (1 cr; prereq
40C) I TThS Ericson
- 83w Methods, Materials of School Health Edu-
cation (3 cr; PH 59) III MWF Ericson
- 84w Physical Education Program for Elem,
Secondary Schools (3 cr; prereq maj,
minors) II MWF Jaeger
- 85s Remedial Activities in Physical Education
(3 cr) III MWF Wilson
- 87w Dance Composition (2 cr) VIII TTh Bell
- 88s Adv Probs in Dance Composition (2 cr)
VIII TTh and 2 hrs ar
- 89s Dance Production (3 cr; prereq cons instr)
VIII MWF Bockstruck
- 90Aw,s-Bw,s-Cw,s See 90Af-90Bf-90Cf
- 94w,s Student Teaching in School Health Edu-
cation (2 cr; prereq sr, cons instr) Ar
Ericson
- 95s Admin of Physical Education (3 cr; prereq
sr) IV MWF Baker
- 113w Physical Education in Elem Schools (3 cr;
prereq* elem teach exper) 3:00-4:30 TTh
Baker
- 114s School Health Education Program (3 cr;
prereq* 83 or PH50) 3:00-4:30 TTh Eric-
son
- 117w Adv Course in School Health Instruction
(3 cr; prereq* 83) 3:00-4:30 MW Ericson
- 118w,s See 118f
- 124s Supervision of Physical Education (3 cr;
prereq cons instr) III MWF Ericson
- 135s Tests, Measurements in Physical Educa-
tion (3 cr; prereq sr, EPsy 60) II MWF
Wilson
- 224w,s See 224f

GENERAL COLLEGE (GC)

Fall Quarter

- 1A Individual Orientation (4 cr)
-1, V MTThF, 10P, Gamelin
-2, VI MTThF, 10P, West
-3, VII MTThF, 10P, Gamelin
- 2 Vocational Orientation (5 cr; prereq cons
instr or counselor)
-1, I MTWThF, 122NH, Borow
-2, IV MTWThF, 122NH, Borow
- 3 Home Life Orientation (5 cr)
-1, II MTWThF, 5Lib, Anderson
-2, V MTWThF, 110P, Anderson
- 4 Probs of Contemporary Society (5 cr)
I MTWThF, 101WeH, McCune
- 6A Related Physical Sciences (5 cr, \$7A,B,
C,D; prereq*)
III MTWThF, 166Ph, Harris
- 7A Elements of Physics (5 cr, \$6A,B,C)
I MTWThF, 159Ph, Vaughan
- 7C Elements of Chemistry (5 cr, \$6A,B,C;
prereq*)
VIII MTWThF, 166Ph, Harris
- 8 Fundamentals of Mathematics (4 cr; prereq
1 yr elem algebra)
-1, I MTWTh, 112Bu, Benenson
-2, II MTWTh, 455C, Rassweiler
-3, VII MTWTh, 145Ph, Rassweiler
- 10A Human Biology: Fundamental Similarities
in Living World (3 cr)
-1, V MWF, 201WeH, Cieslak
-2, VI MWF, 201WeH, Cieslak
- 10C Human Biology: Healthful Living (3 cr)
I MWF, 201WeH, Cieslak
- 11A Basic Wealth: Natural Resources (3 cr)
II MWF, 201WeH, Kommedahl
- 16 Selecting, Furnishing a Home (3 cr)
VI MWF, 213NH, Myren
- 19A Probs of Business Transactions (4 cr)
-1, III MTWTh, 216NH, Rassweiler
-2, III MTWTh, 455C, Benenson

- 21 Gen Arts (3 cr)
V MWF, 213NH, Hill
- 22A Art Today (3 cr)
III MWF, 213NH
- 23A Art Lab (3 cr)
Lect IV T, 213 NH, Duncan
—1, Lab III-IV MW, 100NH, Duncan
—2, Lab VI-VII MW, 100NH, Duncan
—3, Lab VI-VII TTh, 100NH, Duncan
- 23B Introd Commercial Art (3 cr; prereq* 23A)
II-III TTh, 100NH
- 24A Music Today (2 cr)
—1, III TTh, 111NH, Yohe
—2, IV TTh, 111NH, Hill
- 25A Music Today (3 cr; prereq* 24A with grade of 50 pr)
VII-VIII MW, 111NH, Hill
- 25D Music Lab (2 cr; prereq for sec 2 is grade A or B in one qtr 25D or concur regis)
—1, VI MWF, 111NH, Yohe
—2, VI MTW, 111NH
- 26A Photography (3 cr)
Lect V T, 308MurH, Liebling
—1, Lab VI-IX T, 20MurH, Liebling
—2, Lab VI-IX Th, 20MurH, Liebling
- 27 Introd Leisure Time Activities (3 cr)
III MWF, 215CH, Gies
- 28 Film, Drama (3 cr)
II TTh, 213NH; VIII-IX Th, 105MurH, Graham
- 29AX Library Orientation (4 cr)
VII MTWTh, 3Lib, Methven
- 30A Literature Today: Individual, Literature (3 cr)
V MWF, 2P, Kivits
- 30B Literature Today: Critical Standards in Reading (3 cr; prereq 30A, 30C or 30D)
II MWF, 213NH, Wright
- 30C Literature Today: Themes in Current Literature (3 cr)
VII MWF, 213NH, Draxten
- 31A Writing Lab: Descriptive Writing (3 cr)
—1, I-II M, I WF, 216NH, Appel
—2, I TTh, I-II F, 209NH, Liebeler
—3, II-III M, III WF, 209NH, Bechtle
—4, II TW, II-III F, 216NH, Draxten
—5, IV MT, III-IV Th, 209NH, Wright
—6, IV MF, IV-V W, 216NH, Draxten
—7, V MF, IV-V T, 216NH, Sheldon
—8, V MTh, V-VI W, 209NH, Appel
—9, V-VI T, VI ThF, 209NH, Liebeler
—10, VI-VII M, VII TF, 209NH, Bechtle
—11, VII TTh, VI-VII F, 216NH, Kivits
—12, VIII-IX M, VIII WTh, 216NH, Appel
- 31B Writing Lab: Organization in Writing (3 cr; prereq 31A)
—13, I M, I-II W, 209NH, Bechtle
—14, I T, I-II Th, 216NH, Sheldon
—15, II-III T, II Th, 209NH, Wright
—16, VIII M, VII-VIII W, 209NH, Kivits
- 31C Writing Lab: Report Writing (3 cr; prereq 31A, 31B advised)
—17, VI T, V-VI Th, 216NH, Reisman
- 31D Writing Lab: Business Writing (3 cr; prereq 31A, 31B advised)
—18, IV W, IV-V F, 209NH, Liebeler
—19, VIII T, VII-VIII Th, 209NH, Sheldon
- 32A Oral Communication: Basic Prin (3 cr)
—1, I MWF, 107NH, Unes
—2, II MWF, 107NH, Unes
—3, II MWF, 111NH, Halvorson
—4, III MWF, 107NH, Olson
—5, IV MWF, 107NH, Halvorson
—6, V MWF, 107NH, Halvorson
—7, VI MWF, 107NH, Unes
—8, VII MWF, 107NH, Olson
—9, VIII MWF, 107NH, Olson
- 32B Oral Communication: Application of Speech (3 cr; prereq 32A)
—10, IV MWF, 10P, Unes
- 32C Oral Communication—Speech Organization (3 cr; prereq 32A)
—11, I T, IV TTh, 107NH, Olson
- 33A Oral Communication—Speech Studio (3 cr)
—12, VI-VII T, VII Th, 107NH, Halvorson
- 37 Social Trends, Probs (5 cr)
IV MTWThF, 201WeH, Fine
- 38 Gen Geography (5 cr)
VII MTWThF, 201WeH, Jennings
- 39 Gen Anthropology (3 cr)
VIII MWF, 213NH, Fine
- 40A Introd Philosophy (3 cr)
VII MWF, 211NH
- 41 Practical Application of Psychology (5 cr)
V MTWThF, NHAud, Jenkins
- 42A Human Development (3 cr)
VIII MWF, 211NH, Templin
- 43A Background of Modern World (5 cr)
III MTWThF, 211NH, McCune
- 43B Historical Biography (3 cr)
I MWF, 213NH, Moen
- 44A Formation of Public Opinion (3 cr)
III TThS, 308MurH, Ford
- 44B Current History (2 cr)
VI TTh, 201WeH, Gluek
- 45A Growth of American Democracy (5 cr)
—1, II MTWThF, 211NH, Stout
—2, V MTWThF, 211NH, Stout
- 45B American Economic, Social Development (3 cr)
VI MWF, 211NH, Gluek
- 45D Community Probs (1-3 cr; prereq cons instr)
Ar, Stout
- 46A American Citizen, His Government (3 cr)
IV MWF, 211NH
- 48A Probs of Consumption Economics (3 cr)
VII MWF, 4ME, Canoyer
- 49A Retailing, Selling: Salesmanship (5 cr; prereq* soph only)
Lect II M, 122NH, Determan
—1, Lab II-III TTh, 122NH, Determan
—2, Lab II-III MW, 122NH, Determan
—3, Lab 6:30-10:30 p.m. T, 122NH, Determan

INSTITUTE OF TECHNOLOGY

AERONAUTICAL ENGINEERING
(AERO)

Fall Quarter

- 1 Aeronautics (3 cr; prereq MM 24)
III MWF, 327AE
- 20 Flying (2 cr)
Ar
- 21 Flying (2 cr)
Ar
- 22 Flying (2 cr)
Ar
- 46 Orientation Course (2 cr; prereq sr or
cons dept)
Ar
- 83 Stresses in Simple Structures (4 cr; prereq
MM 128)
Lect II MWF, 211AE
Lab VI-VII T, 215AE
- 100 Aerodynamics (3 cr; prereq 1, MM 25)
IV MWF, 211AE
- 101 Aerodynamics (3 cr; prereq 100)
VI MWF, 327AE
- 102 Aerodynamics (3 cr; prereq 101)
III MWF, 309AE
- 103 Adv Aerodynamics (3 cr; prereq 102)
VI MWF, 309AE
- 106 Adv Aerodynamics (3 cr; prereq 102)
I MWF, 327AE
- 110 Vibration, Flutter (3 cr; prereq 115, MM 80)
I MWF, 227AE
- 115 Airplane Stresses (3 cr; prereq 83)
Lect III TTh, 211AE
Lab III-IV M, 215AE
- 116 Adv Airplane Stresses (3 cr; prereq 115
or MM 180)
I MWF, 309AE, Wise
- 120 Airplane Design (2 cr; prereq 83, 102)
IV TTh, 211AE
- 121 Airplane Design (2 cr; prereq 120)
II MF, 309AE
- 122 Airplane Design (2 cr; prereq 121)
VI MW, 227AE
- 123 Adv Airplane Design (2-5 cr; prereq 121)
Ar
- 126 Airscrew Propulsion (3 cr; prereq 120)
Ar, Stolarik
- 130 Aerodynamic Design Lab (2 cr; prereq
concur regis 120)
VII-IX TTh, 317AE
- 131 Airplane Design Lab (2 cr; prereq concur
regis 121)
VII-IX MW, 209AE
- 132 Airplane Design Lab (2 cr; prereq 131,
concur regis 122)
VII-IX MW, 317AE
- 135 Airplane Static Testing (2 cr; prereq 142)
Lect IV W, 327AE
Lab VII-IX F, 21AE

- 141 Aerodynamics Lab (2 cr; prereq 101)
VII-IX TTh, OSL, 19AE
- 142 Aircraft Installation I (2 cr; prereq 1)
Lect VI T, 19AE
Lab VII-IX Th, 209AE
- 143 Aircraft Installation II (3 cr; prereq concur
regis 130)
Lect VI Th, 211AE
Lab VII-IX MW, 215AE
- 155 Aeronautical Calculations (2 cr; prereq sr)
IV MF, 327AE
- 158 Physics of the Atmosphere (2 cr)
VII MWF, 227AE, Piccard
- 165 Adv Aeronautical Lab (2-4 cr; prereq* 141)
Ar, Akerman
- 173 Introd Meteorology (3 cr)
Ar, Mantiss
- 180 Instrumentation, Techniques for Supersonic
Flow (2 cr; prereq 106 or ME 134)
Ar, Bradfield
- 190 Seminar (1 cr; prereq 101)
VI Th, 227AE
- 191 Seminar (1 cr; prereq 190)
VI F, 227AE
- 193 Adv Probs in Aeronautical Engineering (2-
5 cr; prereq sr)
Ar
- 194 Adv Probs in Aeronautical Engineering (2-
5 cr; prereq 193)
Ar
- 195 Adv Probs in Aeronautical Engineering (2-
5 cr; prereq 194)
Ar
- 201 Aerodynamics of Compressible Fluid (3 cr;
prereq 106 or cons dept)
III MWF, 211AE
- 202 Aerodynamics of Compressible Fluid (3 cr;
prereq 106 or cons dept)
IV MWF, 309AE
- 240 Dynamics of Aircraft Structures (3 cr)
Ar, Wise
- 272 Research—Aeronautical Engineering (2-5 cr;
prereq cons instr)
Ar, Wise
- 273 Research—Aeronautical Engineering (2-5 cr;
prereq cons instr)
Ar, Wise
- 274 Research—Aeronautical Engineering (2-5 cr;
prereq cons instr)
Ar, Wise

Winter and Spring Quarters

- 1w Aeronautics (3 cr; prereq MM 24) Ar
- 20w,s Flying (2 cr) Ar
- 21w,s Flying (2 cr) Ar
- 22w,s Flying (2 cr) Ar
- 46w,s Orientation Course (2 cr; prereq sr or
cons dept) Ar
- 83s Stresses in Simple Structures (4 cr; pre-
req MM 128) Ar

- 100w,s Aerodynamics (3 cr; prereq 1, MM 25) Ar
- 101w,s-102w,s Aerodynamics (3 cr; prereq 100) Ar
- 104w Adv Aerodynamics (3 cr; prereq 103) Ar
- 106w,s Adv Aerodynamics (3 cr; prereq 102) Ar Upson
- 107s Aerodynamics of Viscous Fluids (3 cr; prereq 102) Ar Cronk
- 110s Vibration, Flutter (3 cr; prereq 115; MM 80) Ar
- 115w Airplane Stresses (3 cr; prereq 83) Ar
- 117w Adv Airplane Stresses (3 cr; prereq 115) Ar Wise
- 118s Adv Stresses on Aircraft Structures (3 cr; prereq 115) Ar Wise
- 119s Testing of Aircraft Structures, Models (3 cr; prereq 115) Ar Wise
- 120w,s Airplane Design (2 cr; prereq 83, 102) Ar
- 121w,s Airplane Design (2 cr; prereq 120) Ar
- 122w,s Airplane Design (2 cr; prereq 121) Ar
- 124w-125s Adv Airplane Design (2-5 cr; prereq 123) Ar Akerman
- 127w-128s Adv Probs in Aircrew Design (2-5 cr; prereq 126) Ar Stolarik
- 130w,s Aerodynamic Design Lab (2 cr; prereq concur regis 120) Ar
- 131w,s-132w,s Airplane Design Lab (2 cr; prereq concur regis 121) Ar
- 135w,s Airplane Static Testing (2 cr; prereq 142) Ar
- 140w,s Aeronautical Lab (4 cr; prereq 142) Ar
- 141w,s Aerodynamics Lab (2 cr; prereq 101) Ar
- 142s Aircraft Installation I (2 cr; prereq 1) Ar
- 155w,s Aeronautical Calculations (2 cr; prereq sr) Ar
- 158w,s Physics of the Atmosphere (2 cr) Ar
- 166w-167s Adv Aeronautical Lab (2-4 cr; prereq 165) Ar Akerman
- 174w Applied Meteorology (4 cr; prereq 173) Ar Mantiss
- 175s Adv Meteorology (4 cr; prereq 173) Ar Mantiss
- 180s Instrumentation, Techniques for Supersonic Flow (2 cr; prereq 106 or ME 134) Ar Bradfield
- 190w,s-191w,s-192w,s Seminar (1 cr; prereq 101) Ar
- 193w,s-194w,s-195w,s Adv Probs in Aeronautical Engineering (2-5 cr; prereq sr) Ar
- 201w-202w,s-203w Aerodynamics of Compressible Fluid (3 cr; prereq 106 or cons dept) Ar Braithwaite (w)
- 204s Supersonic Aerodynamics Lab (3 cr; prereq concur regis 201 or ME 134) Ar
- 220w High Speed Performance, Design (3 cr; prereq* 202) Ar Upson
- 272w,s-273w,s-274w,s Research—Aeronautical Engineering (2-5 cr; prereq cons instr) Ar

ARCHITECTURE (ARCH)

Fall Quarter

- AD I Architectural Design, Grade I (6 cr; prereq Soph for IT or Jr for SLA students)
- VI-VIII MTWThF and 3 hrs ar
- AD II Architectural Design, Grade II (6 cr; prereq AD I)
- VI-VIII MTWThF and 3 hrs ar, 306E
- AD III Architectural Design, Grade III (9 cr; prereq AD II)
- VI-VIII MTWThF, and 12 hrs ar, 411E
- AD IV Architectural Thesis (12 cr; prereq AD III)
- VI-VIII M and 33 hrs ar
- 40 Graphic Representation (6 cr; prereq see col bul)
- Lect VI MWF, 305E, Heath
Lab VII-IX MWF, VI-IX TTh, 317E
- 51 History of Architecture (4 cr; prereq soph for IT students, jr for SLA)
- IV MTWF, 305E
- 57 Building Materials, Methods (4 cr; prereq soph for IT students, jr for SLA)
- II MTWF, 305E, Jones
- 71 Building Equipment (2 cr)
- III TTh, IV Th, 305E, Close
- 101 Tutorial Work in History of Architecture (2 cr; prereq sr, 53)
- Ar
- 104 City Planning (3 cr; prereq sr)
- III MWF, 207ChE, Jones

Winter and Spring Quarters

- AD Iw,s Architectural Design, Grade I (6 cr; prereq 40, soph for IT students, jr for SLA) VI-VIII MTWThF, 18 hrs lab (w); VI-VIII MTWThF, II-IV S (s) McClure
- AD IIw,s Architectural Design, Grade II (6 cr; prereq AD I) VI-VIII MTWThF, II-IV S, 18 lab hr ar (w); VI-VIII MTWThF, II-IV S (s)
- AD IIIw,s Architectural Design, Grade III (9 cr; prereq AD II) VI-VIII MTWThF, II-IV S, 27 lab hr ar (w); VI-VIII MTWThF, II-IV S (s)
- AD IVw,s Architectural Thesis (12 cr; prereq AD III) VI-VIII MTWThF, II-IV M, 36 lab hr ar (w); VI-VIII MTWThF, II-IV M (s)
- 1s Intro Architecture (1 cr; prereq cons instr) III M McClure
- 52w-53s History of Architecture (4 cr; prereq 51) IV MTWF
- 58w-59s Building Materials, Methods, Part II (4 cr; prereq 57) II MTWF Jones
- 72w-73s Building Equipment (2 cr; prereq 71) III TTh, IV Th Close
- 102w-103s Tutorial Work in History of Architecture (2 cr; prereq 101) Lab ar
- 105w Professional Relation (3 cr; prereq sr) III-IV MW
- 106s City Planning (3 cr; prereq 104) Ar Jones

CHEMICAL ENGINEERING (CHEN)

Fall Quarter

- 31 **Chemistry of Engineering Materials** (2 cr; prereq InCh 11)
1 MWF, 207ChE, Preckshot
- 80 **Chemical Engineering Materials** (1 cr; prereq InCh 13)
1 TTh, 207ChE, Preckshot
- 101 **Unit Operations** (3 cr; prereq 80, AnCh 1, 2)
Lect II TTh, 207ChE, Stoppel
—1, Rec I MW, 104ChE
—2, Rec I MW, 105ChE
—3, Rec II MW, 104ChE
—4, Rec II MW, 105ChE
- 111 **Unit Operations Lab** (1 cr; prereq 101)
—1, Lab VI-IX M
—2, Lab VI-IX T
—3, Lab VI-IX W
—4, Lab VI-IX Th
- 117 **Chemical Engineering Equipment Design** (3 cr; prereq 103, MM 85, 87)
—Lect II MWF, 107, 108ChE, Bancroft
—1, Lab VI-IX T
—2, Lab VI-IX Th
- 119 **Chemical Engineering Thermodynamics** (3 cr; prereq 103)
—1, II MWF, 106ChE, Ceaglske
—2, IV MWF, 105ChE, Preckshot
- 131 **Inorganic Technology** (4 cr; prereq 102 for chem engin, 90 for chemists)
I MTWThF, 107, 108ChE, Madden
- 171 **Instrumentation, Control** (3 cr; prereq cons instr)
IV MWF, 103ChE, Ceaglske
- 191 **Seminar** (1 cr; prereq sr)
VII M, 207ChE, Staff
- 201 **Seminar** (1 cr)
VII M, 207ChE, Staff
- 205 **Adv Unit Operations** (3 cr; prereq 103)
Ar, Madden
- 214 **Adv Mathematics for Chemical Engineers, Chemists** (3 cr; prereq differ equations)
III MWF, 103ChE, Amundson
- 301 **Research—Chemical Engineering** (ar cr)
Ar, Staff

Winter and Spring Quarters

- 100s **Chemical Engineering Stoichiometry** (3 cr; prereq AnCh 1, 2) Ar
- 102w **Unit Operations** (5 cr; prereq 101) Ar
- 103s **Unit Operations** (5 cr; prereq 102) Ar
- 105s **Fuels, Combustion** (2 cr; prereq AnCh 1-2) Ar
- 112w **Unit Operations Lab** (1 cr; prereq 102) Ar
- 113s **Unit Operations Lab** (1 cr; prereq 103) Ar
- 118w See 117f (prereq 117)
- 120w See 119f (prereq 119)
- 121s **Chemical Engineering Economics** (3 cr; prereq 131) Ar
- 125s **Reaction Kinetics in Chemical Engineering** (3 cr; prereq cons instr) Ar

- 132w **Organic Technology** (3 cr; prereq 103, 131 for chem engin, 90 for chemists) Ar
- 154w-155s **Special Probs** (3 cr or more) Ar
- 172w See 171f
- 187s **Inspection Trip** (2 cr; prereq 131, 132) Ar
- 192w-193s See 191f
- 202w-203s See 201f
- 206w-207s See 205f
- 215w-216s See 214f
- 302w-303s See 301f

CHEMISTRY

Analytical Chemistry (ANCH)

Fall Quarter

- 2 **Quantitative Analysis** (5 cr; prereq InCh 13 for chemists, InCh 12 for chem engin)
Lect VI MWF, 225C, Herr
Lab VI-X T, VI-IX Th, 310C
- 7 **Quantitative Analysis** (4 cr; prereq InCh 11 or 12)
—1, Lect VI MWF, 410C, Meehan
Lab VII-IX MWF, 310C
—2, Lect VI TTh, 410C, I S 111C, O'Connor
Lab VII-X T, VII-IX Th, and 2 hrs from I-III T or Th, 310C
- 96 **Sr Thesis** (5 cr; prereq sr)
Ar
- 104 **Qualitative Inorganic Microanalysis** (3 cr; prereq 1-2)
Lect VI F, 315C, Sandell
Lab ar
- 106 **Gen Technical Analysis** (2 or 3 cr; prereq 1-2)
Ar, Sandell
- 109 **Rock Analysis** (3 cr; prereq 1-2, cons instr)
Ar, Peck
- 122 **Adv Analytical Chemistry** (2 cr; prereq 1-2)
III TTh, 115C, Meehan
- 123 **Adv Analytical Chemistry** (3 cr; prereq* 1-2)
Ar, Meehan
- 131 **Applications of Indicators in Neutralization Reactions, pH Determinations** (3 cr with lab, 2 cr without lab; prereq 1-2, PCh 103)
Lect VI MW, 111C, Kolthoff
Lab ar
- 134 **Voltammetry, Amperometric Titrations** (2 cr; prereq 133 or concur regis)
Ar, Kolthoff
- 135 **Seminar—Modern Probs in Analytical Chemistry** (1 cr; prereq 1-2, PCh 103)
IV T, 315C, Staff
- 201 **Selected Topics in Analytical Chemistry** (3 cr; prereq 1-2, 123)
Ar, Kolthoff
- 301 **Research—Quantitative Analysis** (ar cr)
Ar, Meehan, Kolthoff, Sandell

Winter and Spring Quarters

- 1w-2s Quantitative Analysis (5 cr; prereq InCh 13 for chemists, InCh 12 for chem engin) Lect VI MWF; Labs VII-IX MWF; I-III TTh and 3 consec hrs from VI-IX T or Th; VI-X T and VI-IX Th Meehan
- 7s See 7f (sec 2)
- 9w Quantitative Analysis (3 cr; prereq InCh 11 or 12) Lect VI TTh, VII-IX TTh, O'Connor
- 97w-98s See 96f
- 101w-102s Quantitative Analysis (5 cr; prereq InCh 13) VI-IX MWF Meehan
- 103s Quantitative Inorganic Microanalysis (3 cr; prereq 1-2) Lect VI F Sandell; Lab ar
- 105w Polarizing Microscope (3 cr; prereq PCh 101) Lect VI F Sandell; Lab ar
- 107w-108s See 106f
- 109w,s See 109f
- 127s Optical Methods Analytical Chemistry (2 cr; prereq PCh 103) III TTh Meehan
- 132w Electrometric Measurements, Titrations (3 cr with lab, 2 cr without lab; prereq 1-2, PCh 103) VI MW Kolthoff; Lab ar
- 133s Voltammetry, Amperometric Titrations (2 cr; prereq 1-2, PCh 103) VI MW Kolthoff
- 134w,s See 134f
- 136w-137s See 135f
- 138s Adv Volumetric Analysis (3 cr; prereq 131) Ar Kolthoff
- 140w Water Analysis (2 cr; prereq 1-2) Ar Sandell
- 202w-203s See 201f
- 302w-303s See 301f

Inorganic Chemistry (INCH)

Fall Quarter

- 1 Gen Inorganic Chemistry (4 cr, f1-2)
-1, Lect VII TWF, 225C, VII Th, 410C, Pray
Lab VI-IX M (IT)
-2, Lect VI MTWF, 100C, Pervier
Lab VI-IX Th (agric, pre-med, pre-dent, med tech)
-3, Lect VIII MWThF, 100C, Barber
Lab VI-IX T (SLA)
- 4 Gen Inorganic Chemistry (4 cr, f4-5; prereq entr cr in chem)
-1, Lect I MTWF, 100C, Heisig
Lab VII-X M (IT)
-2, Lect I MTWF, 225C, Lindeke
Lab II-V M (IT)
-3, Lect VII MTWF, 100C, Maynard
Lab VI-IX Th (pre-med, med-tech)
-4, Lect VII MTThF, 325C, Brasted
Lab VII-X W (nurs educ, PH nurs)
-5, Lect VIII MWF, 225C, VIII Th, 410C, Johnson
Lab VI-IX T (agric)
- 6 Gen Inorganic Chemistry (5 cr, f6-7)
Lect II MWF, 325C, I Th, 410C, O'Brien
Lab I-III TTh

- 9 Gen Inorganic Chemistry (5 cr, f9-10; prereq entr cr in chem)
Lect II MWF, I Th, 100C, Sneed
Lab I-III TTh
- 11 Semimicro Qualitative Analysis (4 cr; prereq 2, 5, 7, or 10)
-1, Lect V TThF, 225C, Barber
Lab II-V M (IT)
-2, Lect III MWF, 410C, Lindeke
Lab V-VIII W (IT, SLA)
- 12 Semimicro Qualitative Analysis (5 cr; prereq 2, 5, 7, or 10)
Lect IV MWF, 100C, Brasted
Lab III-V TTh
- 13 Semimicro Qualitative Analysis (5 cr; prereq 12)
Lect VI WF, 325C, VI-VII M, 455C, Heisig
Lab VII-VIII M, VII-IX WF
- 52 Seminar (1 cr; prereq sr)
III T, 215C, Staff
- 96 Sr Thesis (5 cr)
Ar
- 103 Adv Inorganic Chemistry (3 cr; prereq AnCh 1-2, OrCh 62)
VII MWF, 215C, O'Brien
- 134 Seminar (1 cr; prereq grad)
III T, 215C, Staff
- 301 Research—Inorganic Chemistry (ar cr)
Ar, Staff

Winter and Spring Quarters

- 1w-2s See 1f Lect II TThS, Pray, quiz VII Th, labs I-IV M (IT); VII-X T (agric)
- 2w See 1f (prereq 1)
- 5w See 4f (prereq 4)
- 6w-7s See 6f Lect II TThF Johnson, I M, lab I-III MW
- 7w See 6f (prereq 6)
- 10w See 9f (prereq 9)
- 11w See 11f (for SLA) Lect VI MWF, lab VI-IX Th Barber
- 11s See 11f Lect VII TWF, lab VI-IX M Johnson (IT); Lect I MWF, lab VII-X M Heisig (IT); Lect I MWF, lab II-V M Lindeke (IT); Lect VI MWF, lab VI-IX Th Pervier (SLA); Lect VIII MWF, lab VI-IX T Barber (SLA); Lect VII MWF, lab VI-IX Th Maynard (SLA); Lect VII MWF, lab VII-X T Brasted (SLA)
- 12s See 12f II MWF, lab I-III TTh Sneed
- 53w See 52f IV T Staff
- 54s See 52f
- 97w,98s See 96f
- 102s Semimicro Qualitative Analysis (3 cr; prereq AnCh 1-2) Ar Barber
- 104w-105s See 103f III TThS (w) Brasted; III MWF (s) Maynard
- 106w-107s Chemistry of Less Familiar Elements (3 cr; prereq AnCh 1-2, OrCh 62) VII MWF O'Brien
- 108s Nonaqueous Systems (3 cr; prereq AnCh 1-2, OrCh 62) II MWF Pray

- 109w-110s Synthetic Inorganic Chemistry (3-5 cr; prereq OrCh 63) Ar Heisig
 -135w-136s See 134f IV T (w); III T (s)
 -302w-303s See 301f

Organic Chemistry (ORCH)

Fall Quarter

- 61 **Elem Organic Chemistry** (4 cr, †61-62; pre-req 12-15 cr chem)
 -1, Lect I MTWF, 410C, Dodson
 Lab Conf II T, 410C
 -1, Lab VI-IX T, 390C (IT)
 -2, Lab VI-IX W, 390C (IT, Pharm)
 -3, Lab I-IV Th, 390C (IT, Pharm)
 -2, Lect III MWThF, 100C, Arnold
 Lab Conf III S, 100C
 -4, Lab VI-IX M, 390C (IT)
 -5, Lab II-V T, 390C (IT)
 -6, Lab VI-IX T, 390C (IT)
 -7, Lab VI-IX Th, 390C (IT)
- 63 **Elem Organic Chemistry** (3 cr; prereq 62) III MWThF, 325C, Parham
- 64 **Elem Organic Chemistry Lab** (3 cr; prereq 63 or concur regis)
 Lab Conf III S, 325C, Parham
 -1, Lab II-IV and VI-VIII T, 390C,
 -2, Lab VI-VIII TTh, 390C
- 96 **Senior Thesis** (5 cr; prereq 63, 64) Ar
- 102 **Characterization of Organic Compounds** (3 cr; prereq 1 yr org chem)
 Lect III M, 215C, Lauer
 Lab VI-VIII M and VI-VIII W or F, 390C
- 105 **Adv Organic Chemistry** (3 cr; prereq 64) IV MWF, 325C, Smith
- 110 **Adv Organic Qualitative Analysis** (3 cr; prereq grad, 102, cons instr)
 Ar, Koelsch
- 139 **Adv Organic Chemistry Lab Work** (2-5 cr; prereq 64, read german, cons instr)
 Ar, Arnold
- 141 **Reagents in Organic Chemistry** (3 cr; pre-req 64)
 IV MWF, 315C, Koelsch
- 151 **Organic Chemistry Seminar** (1 cr; prereq sr)
 7:45-8:45 p.m. W, 325C, Staff
- 201 **Organic Chemistry Seminar** (1 cr)
 7:45-8:45 p.m. W, 325C, Staff
- 205 **Theoretical Organic Chemistry** (3 cr; pre-req 107)
 I MWF, 325C, Lauer
- 301 **Research—Organic Chemistry** (ar cr; pre-req 110, cons div)
 Ar, Staff

Winter and Spring Quarters

- 61w-62s See 61f Lect IV MTWF; Lab conf IV Th; Labs VI-IX W; VI-IX Th; I-IV Th; VI-IX F Koelsch; Lect III MWThF; Lab conf III T; Labs VI-IX M; VI-IX T; VI-IX W; VI-IX Th; VI-IX F Dodson

- 62w See 61f (prereq 61)
 63s See 63f
 64s See 64f
 -97w-98s See 96f
- 101w **Intermed Organic Chemistry** (3 cr; pre-req 14 cr org chem) III MWF Lauer
- 106w-107s See 105f (prereq 105)
- 116w **Heterocyclic Compounds** (3 cr; prereq 64) III TThS Parham
- 130s **Organic Quantitative Analysis** (3 cr; pre-req 64, AnCh 1-2, cons instr) Ar Lauer
- 139w,s See 139f
 -152w-153s See 151f
 -202w-203s See 201f
 -206w See 205f
- 212s **Physico-Organic Chemistry** (4 cr; prereq* 107, PCh 103, calculus) I MWF Arnold
 -302w-303s See 301f

Physical Chemistry (PCH)

Fall Quarter

- 96 **Senior Thesis** (5 cr; prereq sr) Ar, Staff
- 101 **Physical Chemistry** (3 cr; prereq AnCh 1, 2, Phys 9, math thru differ, integ calculus)
 Lect-Rec IV MWFS, 410C, Crawford
- 104 **Physical Chemistry Lab** (1 or 2 cr; prereq 101 or concur regis)
 -1, Lect VI M, 325C, Livingston
 Lab VII-VIII M, VI-VIII W, 190C
 -2, Lect VI Th, 325C
 Lab VII-VIII Th, VI-VIII T, 190C
 -3, Lect VI M, 325C
 Lab III-IV T, II-IV Th, 190C
 -4, Lect VI Th, 325C
 Lab III-IV T or Th, VI-VIII F, 190C
- 107 **Elem Physical Chemistry** (3 cr; prereq. 2 yr col chem, 1 yr col phys, Math 7 or 16)
 Lect IV MWF, 225C, Lipscomb
 -1, Lab II-IV T, 190C
 -2, Lab II-IV Th, 190C
- 110 **Experimental Research Techniques I** (2 cr; prereq 103, cons instr)
 Ar, Wertz
- 113 **Fundamentals of Reaction Kinetics** (3 cr; prereq 103)
 III TThS, 315C, Livingston
- 116 **Adv Physical Chemistry** (3 cr; prereq 103)
 II TThS, 225C, Crawford
- 123 **Crystal Analysis** (3 cr; prereq 103)
 Ar, Lipscomb
- 128 **Colloid Chemistry** (3 cr; prereq 103)
 IV MWF, 111C, Reyerson
- 132 **Colloid Chemistry Lab** (1 or 2 cr; prereq 128 or concur regis)
 Ar, Reyerson
- 150 **Seminar** (1 cr; prereq sr, cons instr)
 7:30 p.m. M, 325C, Livingston

- 161 **Nuclear Chemistry, Radioactivity** (3 cr; prereq 103)
III MWF, 315C, O'Connor
- 204 **Kinetic Theory, Atomistics** (4 cr; prereq 103, calculus)
II MWF, 225C, MacDougall
- 211 **Adv Physical Chemistry Lab** (ar cr; prereq 103)
Ar, MacDougall, staff
- 221 **Colloid Seminar** (1 cr)
Ar, Reyerson
- 231 **Radioactivity Lab** (1 or 2 cr; prereq 161 or concur regis)
Ar, O'Connor
- 250 **Physical Chemistry Seminar** (1 cr)
7:30 p.m. M, 325C, Livingston
- 257 **Research Seminar—Crystal Structure** (ar cr)
Ar, Lipscomb
- 301 **Research—Physical Chemistry** (ar cr)
Ar, Staff

Winter and Spring Quarters

- 97w,98s See 96f
- 102w-103s See 101f (prereq 101)
- 105w-106s See 104f
- 108w See 107f (prereq 107)
- 111w,112s See 110f (prereq 110)
- 117w **Adv Physical Chemistry** (3 cr; prereq 116)
II TThS Livingston
- 118s **Adv Physical Chemistry** (3 cr; prereq 117)
II TThS Lipscomb
- 120w-121s **Introd Molecular Structure** (3 cr; prereq 103) Ar Crawford
- 124w See 123f (prereq 123)
- 129w **Absorption, Catalysis** (3 cr; prereq 128)
IV MWF Reyerson
- 130s **Colloids in Industry** (3 cr; prereq 128) IV MWF Reyerson
- 133w-134s See 132f
- 151w-152s See 150f
- 162w See 161f (prereq 161)
- 175s **Photochemistry** (3 cr; prereq 103, Phys 9)
I TThS Livingston
- 205w-206s See 204f
- 212w-213s See 211f
- 222w-223s See 221f
- 231w,s See 231f
- 251w-252s See 250f
- 302w-303s See 301f

CIVIL ENGINEERING (CE)

Fall Quarter

- 11 **Surveying** (3 cr; prereq MM 12, Draw 2)
—1, I-IV TTh, 210TNCE
—2, VII-X MW, 220TSCE
—3, VII-X TTh, 220TSCE
- 14 **Surveying** (3 cr; prereq 13)
—1, I-IV MW, 217E
—2, I-IV TTh, 217E
—3, I-IV WF, 229E
—4, VII-X MW, 210TNCE

- 5, VII-X MF, 229E
—6, VII-X TTh, 217E
—7, VII-X T, I-IV S, 229E
- 31 **Stresses in Structures** (3 cr; prereq MM 26)
—1, Lect II MWF, 227E, Cutts
Lab I-III T, 225E
—2, Lect II MWF, 227E
Lab I-III Th, 225E
—3, Lect VI MWF, 227E
Lab VII-IX M, 100TSE
—4, Lect VI MWF, 227E
Lab VII-IX Th, 225E
- 37 **Elem Structural Engineering** (3 cr; prereq MM 128)
Lect VI WF, 201Ex, Graves
Lab VII-VIII F, 220TSCE
- 38 **Elem Structural Design—Steel** (3 cr; prereq MM 93) III MWF, 305E, Graves
- 51 **Highways, Pavements** (3 cr; prereq concur regis MM 128)
—1, Lect I T, 201Ex, VI Th, 207ChE, Thomas
—2, Lect IV M, 201Ex, VI Th, 207ChE
—3, Lect VI T, 201Ex, VI Th, 207ChE
—1, Lab II-IV T, 113Ex
—2, Lab II-IV W, 113Ex
—3, Lab II-IV Th, 113Ex
—4, Lab V-VII W, 113Ex
—5, Lab V-VII F, 113Ex
—6, Lab VII-IX T, 113Ex
—7, Lab VII-IX Th, 113Ex
—8, Lab VIII-X M, 113Ex
- 52 **Highways, Pavements** (3 cr; prereq 51)
Lect IV TTh, 201Ex, Kersten
Lab VII-X Th, 210Ex
- 121 **Railway Engineering** (3 cr; prereq 22, MM 127)
—1, Lect II T, 227E, Klingel
—2, Lect IV Th, 227E
—1, Lab I-III MW, 220TNCE
—2, Lab VIII-IX MF, 220TNCE
—3, Lab VIII-IX TTh, 220TNCE
- 124 **Transportation** (3 cr; prereq 22)
Lect III TTh, 215E, Klingel
Lab VII-IX Th, 229E
- 130 **Statically Indeterminate Structures** (3 cr; prereq 33)
Lect VI MW, 207ChE, Anderson
—1, Lab V-VI T, 225E
—2, Lab V-VI T, 229E
—3, Lab V-VI F, 225E
—4, Lab V-VI F, 229E
- 137 **Structural Lab** (2 cr; prereq 130, 141)
Lect VII T, 227E, Graves
—1, Lab I-III Th, 229E
—2, Lab VII-IX T, 225E
- 141 **Reinforced Concrete** (3 cr; prereq 33)
—1, Lect IV MW, 207ChE, Wise
—2, Lect VII TTh, 207ChE
—1, Lab I-III W, 225E
—2, Lab I-III F, 225E
—3, Lab V-VII F, 220TNCE
—4, Lab VIII-X T, 210TSE
—5, Lab VIII-X W, 229E

- 146 **Concrete, Concrete Materials** (3 cr; prereq MM 141)
 —1, Lect V TTh, 201Ex, Thomas
 —2, Lect VII WF, 206E
 —1, Lab I-IV Th, 8Ex
 —2, Lab VII-X M, 8Ex
 —3, Lab VII-X Th, 8Ex
- 147 **Foundations** (3 cr; prereq 33, 141)
 III MWF, 227E, Anderson
- 153 **Soils in Highway Engineering** (3 cr; prereq 53)
 II MWF, 110TNCE, Kersten
- 158 **Airport Design** (3 cr; prereq 52)
 III MWF, 206E, Kersten
- 161 **Hydrology** (3 cr; prereq MM 129)
 —1, Lect I TTh, 120TNCE
 Lab I-IV M, 225E
 —2, Lect I TTh, 120TNCE
 Lab I-IV F, 217E
 —3, Lect III TTh, 227E
 Lab I-IV W, 220TSCE
 —4, Lect III TTh, 227E
 Lab I-IV S, 225E
 —5, Lect IV WF, 227E
 Lab I-IV T, 229E
 —6, Lect IV WF, 227E
 Lab I-IV Th, 220TNCE
 —7, Lect V MW, 227E
 Lab VII-X M, 220TSE
 —8, Lect V MW, 227E
 Lab VII-X Th, 210TSE
 —9, Lect VII TTh, 104E
 Lab VII-X W, 220TNCE
 —10, Lect VII TTh, 104E
 Lab VII-X F, 217E
- 162 **Water Supply** (3 cr; prereq 161, MM 129)
 —1, Lect IV T, V Th, 227E
 Lab VII-X F, 225E
 —2, Lect IV T, V Th, 227E
 Lab VII-X F, 210TNCE
- 163 **Sewerage, Sewage Treatment** (3 cr; prereq 162)
 —1, Lect V MW, 107ChE
 Lab VII-X M, 120TSCE
 —2, Lect V MW, 107ChE
 Lab VII-X M, 210TSCE
- 173 **Sanitary Engineering Probs—Water** (3 cr; prereq 162)
 VII MWTh, 227E, Schroepfer
- 179 **Sanitary Lab** (3 cr; prereq sr)
 Ar
- 180 **Sanitary Engineering Seminar** (1 cr; prereq sr)
 II-III Th, 205E, Schroepfer
- 183 **Open Channel Flow** (3 cr; prereq MM 86, or 129 or 130, 143)
 VIII-IX TF, HL, Straub
- 187 **Intermed Fluid Mechanics** (3 cr; prereq MM 86 or 129 or 130, 143)
 VI-VII TF, HL
- 234 **Adv Theory of Structures** (3-5 cr; prereq 132, 142)
 Ar, Anderson
- 243 **Dynamics of Structures** (3 cr; prereq 132)
 Ar, Wise
- 277 **Adv Sanitary Engineering—Sewage, Industrial Waste** (3-5 cr; prereq 174)
 Ar, Schroepfer
- 293 **Hydrodynamics** (3 cr; prereq* 187, differ equations or adv calculus)
 Ar, Silberman

Winter and Spring Quarters

- 11s,12w **Surveying** (3 cr; prereq MM 12, Draw 2) Ar
- 13s **Surveying** (3 cr; prereq 11) Ar
- 14s **Surveying** (3 cr; prereq 13) Ar
- 15w **Surveying** (2 cr; prereq 12) Ar
- 16s **Surveying** (2 cr; prereq 14) Ar
- 17s **Surveying** (3 cr; prereq MM 12) Ar
- 21w **Route Surveying** (2 cr; prereq 13) Ar
- 22s **Railway Engineering** (2 cr; prereq 21) Ar
- 32w **Design in Steel** (3 cr; prereq 31, Draw 23, MM 128) Ar
- 33s **Design in Timber** (3 cr; prereq 32) Ar
- 37w,s **Elem Structural Engineering** (3 cr; prereq MM 128) Ar
- 39w **Elem Structural Design—Steel, Timber** (3 cr; prereq 38) Ar
- 41s **Elem Structural Design—Concrete** (3 cr; prereq 39) Ar
- 51s-52w **Highways, Pavements** (3 cr; prereq concur regis MM 128) Ar
- 53w,s **Elements of Soil Mechanics** (3 cr; prereq 52) Ar
- 109s **Cadastral Surveying** (2 cr; prereq 16) Ar
- 112w **Aerial Surveying, Photogrammetry** (3 cr; prereq 23) Ar
- 121w,s **Railway Engineering** (3 cr; prereq 22, MM 127) Ar
- 122w,123s **Railway Engineering** (3 cr; prereq 22) Ar
- 131w **Structural Analysis** (2 cr; prereq 130) Ar
- 132s **Structural Design** (2 cr; prereq 131) Ar
- 137w,s **Structural Lab** (2 cr; prereq 130, 141) Ar
- 142w **Reinforced Concrete Design** (3 cr; prereq 130, 141) Ar
- 143s **Arch Analysis, Design** (3 cr; prereq 131, 142) Ar
- 146w,s **Concrete, Concrete Materials** (3 cr; prereq MM 141) Ar
- 147w,s **Foundations** (3 cr; prereq 33, 141) Ar
- 148w **Adv Concrete** (2 cr; prereq 146) Ar
- 151s **Adv Highway Lab** (3 cr; prereq 52) Ar
- 152s **Highway Design** (3 cr; prereq 52) Ar
- 158w **Airport Design** (3 cr; prereq 52) Ar
- 159w **Soil Mechanics** (3 cr; prereq 53) Ar
- 160w,s **Applied Hydraulics** (3 cr; prereq MM 129, 143) Ar
- 161w,s **Hydrology** (3 cr; prereq MM 129) Ar
- 162w,s **Water Supply** (3 cr; prereq 161, MM 129) Ar
- 163w,s **Sewerage, Sewage Treatment** (3 cr; prereq 162) Ar
- 166w **Water Power** (3 cr; prereq 161) Ar

- 174w Sanitary Engineering Probs-Sewage, Industrial Wastes (3 cr; prereq 163) Ar
 175s Industrial Waste Disposal (3 cr; prereq 163) Ar
 -181w-182s Sanitary Engineering Seminar (1 cr; prereq 180) Ar
 190w Mechanics of Similitude, Dimensional Analysis (3 cr; prereq* MM 127, 128, 86 or 129 or 130) Ar
 191w Hydraulic Motors, Pumps (3 cr; prereq* 187) Ar
 192s Natural, Artificial Waterways (3 cr; prereq* 183) Ar
 193s Hydraulic Measurements (3 cr; prereq* 187) Ar
 -235w Adv Theory of Structures (3-5 cr; prereq 132, 142) Ar
 -244s Dynamics of Structures Lab (3 cr; prereq 243) Ar
 245w Adv Probs in Bridge Design (3 cr; prereq 132) Ar
 251w-252s Adv Soil Mechanics Lab (3 cr; prereq 159 or concur regis) Ar
 261w-262s Water, Sewage Plant Design (3-5 cr; prereq 173 or 174) Ar
 -294w-295s Hydrodynamics (3 cr; prereq* 187, differ equations or adv calculus) Ar

DRAWING AND DESCRIPTIVE GEOMETRY (DRAW)

Fall Quarter

- 1 **Engineering Drawing** (3 cr; prereq solid geometry)
 -1, I-II MWThF, 110TSE
 -2, I-II MWThF, 120TSCE
 -3, III-IV TWThF, 120TSCE
 -4, III-IV TWThF, 210TSE
 -5, III-IV TWThF, 100TSE
 -6, III-IV TWThF, 110TSE
 -7, III-IV TWThF, 200TSE
 -8, V-VI MWThF, 120TSCE
 -9, V-VI MWThF, 210TSE
 -10, V-VI MWThF, 100TSE
 -11, VII-VIII TWThF, 120TSCE
 -12, VII-VIII TWThF, 210TSE
 -13, VII-VIII TWThF, 100TSE
 -14, VII-VIII TWThF, 110TSE
 -15, VII-VIII TWThF, 200TSE
 2 **Engineering Drawing** (3 cr; prereq 1)
 -1, I-II MTWF, 100TSE
 -2, V-VI MWThF, 110TSE
 3 **Descriptive Geometry** (3 cr; prereq 2, MM 11)
 -1, I-II MTWF, 200TSE
 -2, V-VI MWThF, 200TSE
 7 **Engineering Drawing** (3 cr; prereq solid geometry)
 -1, V-VI MWThF, 303AH
 -2, V-VI MWThF, 415C
 -3, VII-VIII MWThF, 303AH
 -4, VII-VIII MWThF, 415C

- 10 **Solid Geometry** (no cr; prereq plane geometry)
 -1, I MWF, 108AH
 -2, V MWF, 100TNCE
 -3, V MWF, 203E
 -4, VIII MWF, 206E
 -5, VIII MWF, 215E
 21 **Drafting** (2 cr; prereq 3)
 -1, III-IV MWF, 210TNCE
 -2, III-IV MWF, 210TSE
 -3, VII-VIII MWF, 210TSE
 22 **Structural Detailing** (2 cr; prereq 21)
 V-VI MWF, 210TNCE
 23 **Structural Detailing** (2 cr; prereq 22)
 I-II MWF, 210TSE
 28 **Drafting** (2 cr; prereq 3)
 I-II MWF, 210TNCE
 34 **Lettering** (1 cr; prereq 1)
 VI Th, 215E
 37 **Lettering for Engineers** (2 cr; prereq 2)
 III TTh, 210TSE
 38 **Reading Drawings** (2 cr; prereq 2)
 VII TTh, 206E
 44 **Lettering** (1 cr)
 IV T, 201E
 45 **Alphabets** (2 cr; prereq soph, 44)
 III TS, 220TNCE
 50 **Diagrams, Charts** (2 cr; prereq 1)
 IV TTh, 18E
 51 **Graphic Representation, Computation** (3 cr; prereq 2, MM 11)
 I MWF, 206E
 52 **Alignment Charts** (3 cr; prereq 2, MM 12)
 I TTh, 206E
 55 **Production Illustration** (2 cr; prereq 3)
 V-VI MWF, 210TSE
 118 **Short Course in Curve Fitting** (3 cr; prereq* 3, MM 25)
 Ar
 152 **Nomography** (3 cr; prereq 52, MM 25)
 Ar
 157 **Graphical Mathematics** (2 cr; prereq 3, MM 26)
 Ar
 159 **Graphical Mathematics** (2 cr; prereq 158)
 Ar

Winter and Spring Quarters

- 1w,s **Engineering Drawing** (3 cr; prereq solid geometry) Ar
 2w,s **Engineering Drawing** (3 cr; prereq 1) Ar
 3w,s **Descriptive Geometry** (3 cr; prereq 2, MM 11) Ar
 7w **Engineering Drawing** (3 cr; prereq solid geometry) Ar
 8w,s **Engineering Drawing** (3 cr; prereq 7) Ar
 10w,s **Solid Geometry** (0 cr; prereq plane geometry) Ar
 21w **Drafting** (2 cr; prereq 3) Ar
 22w,s **Structural Detailing** (2 cr; prereq 21) Ar
 23w,s **Structural Detailing** (2 cr; prereq 22) Ar
 28w **Drafting** (2 cr; prereq 3) Ar
 34w,s **Lettering** (1 cr; prereq 1) Ar

- 37w,s Lettering for Engineers (2 cr; prereq 2) Ar
- 38w,s Reading Drawings (2 cr; prereq 2) Ar
- 44w,s Lettering (1 cr) Ar
- 45w,s Alphabets (2 cr; prereq soph. 44) Ar
- 50w,s Diagrams, Charts (2 cr; prereq 1) Ar
- 51w,s Graphic Representation, Computation (3 cr; prereq 2, MM 11) Ar
- 52w,s Alignment Charts (3 cr; prereq 2, MM 12) Ar
- 55w,s Production Illustration (2 cr; prereq 3) Ar
- 118w,s Short Course in Curve Fitting (3 cr; prereq* 3, MM 25) Ar
- 152w,s Nomography (3 cr; prereq 52, MM 25) Ar
- 153w-154s Nomography (3 cr; prereq 152) Ar
- 158w-159s See 157f

ELECTRICAL ENGINEERING (EE)

Fall Quarter

- 11 Elements of Electrical Engineering (3 cr; prereq MM 24 or concur regis)
 - 1, III MWF, 138EE
 - 2, III MWF, 237EE
 - 3, III MWF, 238EE
 - 4, VII MWF, 138EE
 - 5, VII MWF, 238EE
- 12 Elements of Electrical Engineering
 - Lab (1 cr; prereq 11 or concur regis)
 - 1, I-II M, 9EE
 - 2, I-II W, 9EE
 - 3, I-II F, 9EE
 - 4, III-IV M, 9EE
 - 5, III-IV T, 9EE
 - 6, III-IV Th, 9EE
 - 7, V-VI T, 9EE
 - 8, VIII-IX M, 9EE
 - 9, VII-VIII Th, 9EE
- 15 Elements of Electrical Engineering (3 cr; prereq 13)
 - VI MWF, 138EE
- 16 Elements of Electrical Engineering
 - Lab (2 cr; prereq 14, concur regis 15)
 - 1, II-IV Th, 21EE
 - 2, V-VII T, 21EE
- 36 Electrical Engineering Survey (3 cr; prereq ME sr, Phys 9)
 - 1, Lect I TTh, 202ME
 - 2, Lect II TTh, 202ME
 - 3, Lect IV TTh, 106ME
 - 4, Lect VI TTh, 106ME
 - 5, Lect VII MW, 110ME
 - 1, Lab I-II M, 207bEE
 - 2, Lab I-II W, 207bEE
 - 3, Lab III-IV Th, 207bEE
 - 4, Lab V-VI F, 207bEE
 - 5, Lab VII-VIII T, 207bEE
 - 6, Lab VII-VIII Th, 207bEE
 - 7, Lab VII-VIII F, 207bEE

- 37 Electrical Engineering Survey (3 cr; prereq 36)
 - Lect III TTh, 202ME
 - 1, Lab I-II Th, 207aEE
 - 2, Lab V-VI Th, 207aEE
- 38 Electrical Engineering Survey (3 cr; prereq 37)
 - 1, Lect I TTh, 114ME
 - 2, Lect V TTh, 114ME
 - 3, Lect VII TTh, 106ME
 - 1, Lab III-IV T, 207cEE
 - 2, Lab III-IV Th, 207cEE
 - 3, Lab VIII-IX M, 207cEE
 - 4, Lab VIII-IX W, 207cEE
- 42 Electrical Engineering Survey (3 cr; prereq CE sr, Phys 8)
 - I MWF, 205E
- 43 Electrical Engineering Survey (3 cr; prereq Chem E sr, Phys 9)
 - 1, Lect I TTh, 202ME
 - 2, Lect II TTh, 202ME
 - 3, Lect IV TTh, 106ME
 - 4, Lect VI TTh, 106ME
 - 5, Lect VII MW, 110ME
 - 1, Lab I-II M, 207bEE
 - 2, Lab I-II W, 207bEE
 - 3, Lab III-IV Th, 207bEE
 - 4, Lab V-VI F, 207bEE
 - 5, Lab VII-VIII T, 207bEE
 - 6, Lab VII-VIII Th, 207bEE
 - 7, Lab VII-VIII F, 207bEE
- 44 Electrical Engineering Survey (3 cr; prereq 43)
 - Lect III TTh, 202ME
 - 1, Lab I-II Th, 207aEE
 - 2, Lab V-VI Th, 207aEE
- 45 Electrical Engineering Survey (3 cr; prereq 44)
 - 1, Lect I TTh, 114ME
 - 2, Lect V TTh, 114ME
 - 3, Lect VII TTh, 106ME
 - 1, Lab III-IV T, 207cEE
 - 2, Lab III-IV Th, 207cEE
 - 3, Lab VIII-IX M, 207cEE
 - 4, Lab VIII-IX W, 207cEE
- 46 Electrical Engineering Survey, Aeronautical Radio (3 cr; prereq AE sr, Phys 9)
 - Lect IV TTh, 238EE
 - 1, Lab I-II T, 207aEE
 - 2, Lab VI-VII W, 207aEE
 - 3, Lab VIII-IX Th, 207aEE
- 81 Electrical Engineering Measurements (3 cr; prereq 111)
 - Lect VI TTh, 238EE
 - Lab 2 hrs ar
- 109 Electric, Magnetic Fields (3 cr; prereq 15, 16)
 - 1, I MWF, 238EE
 - 2, VI MWF, 237EE
 - 3, VII MWF, 100TNC

- 111 **Electrical Engineering** (3 cr; prereq 15, 16)
 —1, II MWF, 138EE
 —2, VI MWF, 100TNCE
 —3, VII MWF, 335EE
- 112 **Electrical Engineering Lab** (1 cr; prereq concur regis 111)
 —1, I-II T, 107cEE
 —2, I-II Th, 107cEE
 —3, III-IV W, 107cEE
 —4, VI-VII T, 107cEE
 —5, VI-VII Th, 107cEE
- 113 **Electrical Engineering** (3 cr; prereq 111, 112)
 III TThS, 138EE
- 114 **Electrical Engineering Lab** (1 cr; prereq concur regis 113)
 —1, I-II T, 107bEE
 —2, III-IV W, 107bEE
- 115 **Electrical Engineering** (3 cr; prereq 113, 114)
 —1, II TThS, 237EE
 —2, III TThS, 238EE
- 116 **Electrical Engineering Lab** (1 cr; prereq concur regis 115)
 —1, I-II M, 107bEE
 —2, III-IV F, 107bEE
 —3, VI-VII W, 107bEE
- 117 **Engineering Electronics** (3 cr; prereq 111, 112)
 IV TThS, 138EE
- 118 **Engineering Electronics Lab** (1 cr; prereq concur regis 117)
 —1, I-II Th, 227EE
 —2, III-IV M, 227EE
- 119 **Engineering Electronics** (3 cr; prereq 117)
 —1, II TThS, 138EE
 —2, III TThS, 237EE
- 120 **Engineering Electronics Lab** (1 cr; prereq concur regis 119)
 —1, I-II W, 227EE
 —2, III-IV W, 227EE
 —3, VI-VII Th, 227EE
- 121 **Electrical Engineering** (3 cr; prereq 115, 116, 119)
 —1, I MWF, 100TNCE
 —2, I MWF, 335EE
 —3, V MWF, 138EE
 —4, V MWF, 237EE
- 122 **Electrical Engineering Lab** (2 cr; prereq 116, concur regis 121)
 —1, II-IV M, 107aEE
 —2, II-IV T, 107aEE
 —3, II-IV W, 107aEE
 —4, VI-VIII T, 107aEE
 —5, VI-VIII Th, 107aEE
 —6, VI-VIII F, 107aEE
- 123 **Electrical Engineering** (3 cr; prereq 121)
 II MWF, 238EE
- 124 **Electrical Engineering Lab** (2 cr; prereq 122, concur regis 123)
 —1, VII-IX M, 107aEE
 —2, VII-IX W, 107aEE
- 125 **Electrical Engineering** (3 cr; prereq 123)
 —1, IV MWF, 238EE
 —2, V MWF, 335EE
 —3, VIII MWF, 237EE
- 126 **Electrical Engineering Lab** (2 cr; prereq 124, concur regis 125)
 —1, I-III Th, 107aEE
 —2, I-III F, 107aEE
 —3, VI-VIII M, 107aEE
 —4, VII-IX T, 107aEE
- 127 **Transient Electrical Phenomena** (3 cr; prereq MM 80)
 —1, Lect I TTh, 138EE
 —2, Lect II TTh, 238EE
 —3, Lect VI TTh, 138EE
 —1, Lab I-II M, 129EE
 —2, Lab III-IV T, 129EE
 —3, Lab III-IV F, 129EE
 —4, Lab V-VI W, 129EE
 —5, Lab V-VI Th, 129EE
 —6, Lab VII-VIII M, 129EE
 —7, Lab VII-VIII T, 129EE
 —8, Lab VII-VIII Th, 129EE
- 128 **Transient Electrical Phenomena** (3 cr; prereq 127)
 Lect V TTh, 237EE
 —1, Lab I-II T, 129EE
 —2, Lab I-II Th, 129EE
- 129 **Transient Electrical Phenomena** (3 cr; prereq 128)
 —1, Lect IV TTh, 114ME
 —2, Lect VII TTh, 237EE
 —1, Lab I-II T, 9EE
 —2, Lab III-IV F, 9EE
 —3, Lab V-VI Th, 9EE
 —4, Lab VIII-IX T, 9EE
- 131 **Electronic Circuit Design** (3 cr; prereq for 5 yr maj 163, for 4 yr maj 121 or concur regis)
 VI MWF, 102ME
- 132 **Electric Design** (3 cr; prereq for 5 yr maj 125, for 4 yr maj 121 or concur regis)
 —1, II MWF, 237EE
 —2, VI MWF, 335EE
- 133 **Electronic Circuit Design** (3 cr; prereq 131)
 Lect III TTh, 335EE
 Lab III-IV M, 36EE
- 134 **Electric Design** (3 cr; prereq 132)
 IV MWF, 237EE
- 135 **Electronic Circuit Design** (3 cr; prereq 133)
 Lect II TTh, 114ME
 —1, Lab I-II M, 36EE
 —2, Lab I-II W, 36EE
 —3, Lab VI-VII W, 36EE
- 136 **Electric Design** (3 cr; prereq 134)
 II MWF, 335EE
- 138 **Power Systems** (3 cr; prereq for 5 yr maj 125, for 4 yr maj 121)
 —1, III MWF, 335EE
 —2, VII MWF, 114ME
- 139 **Power Systems** (3 cr; prereq 138)
 V MWF, 238EE

- 140 **Power Systems** (3 cr; prereq 139)
VII MWF, 2ME
- 141 **Central Stations** (3 cr; prereq for 5 yr maj
125, for 4 yr maj 121)
I MWF, 138EE
- 157 **Industrial Electronics** (3 cr; prereq 163)
Lect II TTh, 335EE
—1, Lab III-IV M, 35EE
—2, Lab III-IV Th, 35EE
—3, Lab VII-VIII T, 35EE
- 158 **Industrial Electronics** (3 cr; prereq for 5
yr maj 157, for 4 yr maj 163)
Lect VII TTh, 138EE
Lab III-IV W, 35EE
- 159 **Industrial Electronics** (3 cr; prereq 158)
Lect I TTh, 335EE
—1, Lab I-II F, 35EE
—2, Lab VIII-IX Th, 35EE
- 161 **Electric Communication** (4 cr; prereq 119)
Lect I TTh, 238EE
—1, Lab II-IV T, 307EE
—2, Lab VI-VIII W, 307EE
—3, Lab VII-IX T, 307EE
- 161-162 **Electric Communication** (6 cr; prereq
119 for 4 yr maj)
Lect IV MWThF, 335EE
—1, Lab VII-IX Th, 312EE
—2, Lab VII-IX F, 312EE
- 163-167 **Electric Communication** (6 cr; prereq
161-162 for 4 yr maj)
Lect I MWThF, 237EE
Lab I-III T, 321EE
- 168-169 **Radio Communication** (6 cr; prereq 163-
167 for 4 yr maj)
Lect VI MWThF, 19AE
—1, Lab I-III M, 308EE
—2, Lab II-IV T, 308EE
- 164 **Communication Circuits** (3 cr for 5 yr maj,
4 cr for 4 yr maj; prereq for 5 yr maj
concur regis 163; for 4 yr maj concur
regis 121)
Lect I TTh, 238EE
—1, Lab II-IV T, 307EE
—2, Lab VI-VIII W, 307EE
—3, Lab VII-IX T, 307EE
- 165 **Communication Circuits** (3 cr; prereq 164)
Lect IV TTh, 237EE
Lab VII-IX Th, 307EE
- 166 **Communication Circuits** (3 cr; prereq 165)
Lect VII TTh, 238EE
—1, Lab I-III W, 307EE
—2, Lab II-IV Th, 307EE
- 183 **Special Electrical Lab** (1-3 cr; prereq cons
instr)
Ar
- 187 **Communication Seminar** (1 cr; prereq cons
instr)
VII M, 133EE, Hartig
- 197 **Adv Electrical Design** (3 cr; prereq 136)
Ar, Tsang
- 211 **Adv Network Analysis** (3 cr; prereq cons
instr)
IV MWF, 138EE, Hartig
- 255 **Analysis of A.C. Power—Systems Circuits**
(3 cr; prereq 140)
VII MWF, 237EE, Caverley
- 261 **Adv Communication** (3 cr; prereq Phys
105)
VI MWF, 238EE, Shepherd
- 262 **Communication Seminar** (1 cr, prereq cons
instr)
VIII M, 133EE, Shepherd
- 291 **Electronics Seminar** (1 cr; prereq cons
instr)
VII T, 133EE, Van der Ziel
- Winter and Spring Quarters**
- 11w-13w,s-15s **Elements of Electrical Engineer-**
ing (3 cr; prereq MM 24 or concur regis)
Ar
- 12w-14w,s-16s **Elements of Electrical Engi-**
neering Lab (1 cr; prereq 11 or concur
regis) Ar
- 36w-37w,s-38w,s **Electrical Engineering Survey**
(3 cr; prereq ME sr, Phys 9) Ar
- 41s **Electrical Engineering Survey** (3 cr; pre-
req jr mines, Phys 8) Ar
- 42w,s **Electrical Engineering Survey** (3 cr; pre-
req CE sr, Phys 8) Ar
- 43w-44w,s-45w,s **Electrical Engineering Survey**
(3 cr; prereq Chem E sr, Phys 9) Ar
- 47w **Electrical Engineering Survey, Aeronauti-**
cal Radio (3 cr; prereq 46) Ar
- 81w,s **Electrical Engineering Measurements** (3
cr; prereq 111) Ar
- 100s **Inspection Trip** (2 cr; prereq sr) Ar
- 109w **Electric, Magnetic Fields** (3 cr; prereq 15,
16) Ar
- 111w **Electrical Engineering** (3 cr; prereq 15,
16) Ar
- 112w **Electrical Engineering Lab** (1 cr; prereq
concur regis 111) Ar
- 113w,s-115w,s **Electrical Engineering** (3 cr; pre-
req 111, 112) Ar
- 114w,s-116w,s **Electrical Engineering Lab** (1 cr;
prereq concur regis 113) Ar
- 117w,s-119w,s **Engineering Electronics** (3 cr;
prereq 111, 112) Ar
- 118w,s-120w,s **Engineering Electronics Lab** (1
cr; prereq concur regis 117) Ar
- 121w-123w,s-125w,s **Electrical Engineering** (3 cr;
prereq 115, 116, 119) Ar
- 122w-124w,s-126w,s **Electrical Engineering Lab**
(3 cr; prereq 116, concur regis 121) Ar
- 127w,s-128w,s-129w,s **Transient Electrical Pheno-**
mena (3 cr; prereq MM 80) Ar
- 131w,s-133w,s-135w,s **Electronic Circuit Design**
(3 cr; prereq for 5 yr maj 163, for 4 yr
maj 121 or concur regis) Ar
- 132w,s-134w,s-136w,s **Electric Design** (3 cr; pre-
req for 5 yr maj 125, for 4 yr maj 121 or
concur regis) Ar
- 138w,s-139w,s-140w,s **Power Systems** (3 cr; pre-
req for 5 yr maj 125, for 4 yr maj 121)
Ar

- 142w Electrical Transmission (3 cr; prereq for 5 yr maj 125, for 4 yr maj 141) Ar
- 151s Illuminating Engineering (3 cr; prereq concur regis 121) Ar
- 157w,s-158w,s-159w,s Industrial Electronics (3 cr; prereq 163) Ar
- 161-162w,s Electric Communication (6 cr; prereq 119 for 4 yr maj) Ar
- 162w Electric Communication (4 cr; prereq 161 for 5 yr maj) Ar
- 163-167w,s Electric Communication (6 cr; prereq 161-162 for 4 yr maj) Ar
- 163s Electric Communication (4 cr; prereq 162 for 5 yr maj) Ar
- 164w,s Communication Circuits (3 cr for 5 yr maj, 4 cr for 4 yr maj; prereq for 5 yr maj concur regis 163; for 4 yr maj concur regis 121) Ar
- 165w,s Communication Circuits (3 cr; prereq 164) Ar
- 166w,s Communication Circuits (3 cr; prereq 165) Ar
- 168-169w,s Radio Communication (6 cr; prereq 163-167 for 4 yr maj) Ar
- 184w-185s Special Electrical Lab (1-3 cr; prereq 183) Ar
- 188w-189s Communication Seminar (1 cr; prereq 187) Ar
- 198w Adv Electrical Design (3 cr; prereq 197) Ar
- 199s Adv Electrical Design (3 cr; prereq 198) Ar
- 212w-213s Adv Network Analysis (3 cr; prereq cons instr) Ar
- 256w-257s Analysis of AC Power—Systems Circuits (3 cr; prereq 140) Ar
- 263w-265s Adv Communication (3 cr; prereq Phys 105) Ar
- 264w-266s Communication Seminar (1 cr; prereq cons instr) Ar
- 292w-293s Electronics Seminar (1 cr; prereq cons instr) Ar

ENGINEERING ENGLISH (ENGL)

Fall Quarter

- 4 **Written, Spoken Communication** (3 cr; prereq placement test)
- 1, I MWF, 111AH
- 2, I MWF, 103ChE
- 3, II MWF, 108AH
- 4, II MWF, 111AH
- 5, II MWF, 227AE
- 6, III MWF, 202AH
- 7, III MWF, 104ChE
- 8, III MWF, 19AE
- 9, III TThS, 108AH
- 10, IV MWF, 111AH
- 11, IV MWF, 315AH
- 12, V MWF, 108AH
- 13, VI MWF, 108AH
- 14, VI MWF, 111AH
- 15, VI MWF, 202AH
- 16, VIII MWF, 108AH

- 5 **Written, Spoken Communication** (3 cr; prereq 4)
- III TThS, 120TNCE
- 6 **Written, Spoken Communication** (3 cr; prereq 5)
- 1, I MWF, 106ChE
- 2, IV MWF, 19AE
- 3, VII MWF, 108AH
- 85 **Adv Technical Communication** (3 cr; prereq 6)
- 1, II MWF, 100TSCE
- 2, III MWF, 100TSCE
- 3, V MWF, 111AH
- 4, VII MWF, 104E

Winter and Spring Quarters

- 4w,s-5w,s-6w,s **Written, Spoken Communication** (3 cr; prereq placement test) Ar
- 7w **Explorations in Literature** (3 cr; prereq 6) Ar
- 8s **Novels** (3 cr; prereq 6) Ar
- 9s **Technical Discussions** (3 cr; prereq 6) Ar
- 85w,s-86w,s **Adv Technical Communication** (3 cr; prereq 6) Ar

GENERAL ENGINEERING (GE)

Fall Quarter

- 21 **Orientation** (1 cr)
- VI T, NHAud, Johnson
- 70 **Slide Rule** (1 cr; prereq MM 11 or concur regis)
- VI T, 227E
- 101 **Contracts, Specifications** (3 cr; prereq sr)
- 1, III MWF, 215E, Fixen
- 2, IV MWF, 215E
- 3, VI MWF, 215E
- 103 **Professional Probs** (1 cr)
- VI Th, NHAud, Johnson

Winter and Spring Quarters

- 21s **Orientation** (1 cr) Ar
- 70w,s **Slide Rule** (1 cr; prereq MM 11 or concur regis) Ar
- 101w,s **Contracts, Specifications** (3 cr; prereq sr) Ar
- 103s **Professional Probs** (1 cr) Ar

GEOPHYSICS (GPHY)

Fall Quarter

- 108 **Introd Gen Geophysics** (3 cr; prereq Phys 9, Geol 2 or 11)
- Lect II MWF, 202AH

INDUSTRIAL ENGINEERING (IE)

Fall Quarter

- 150 **Elements of Industrial Engineering, Mgt** (3 cr; prereq* ME 15, 17)
- 1, II MWF, 110ME
- 2, III MWF, 208ME
- 3, IV MWF, 208ME
- 4, V MWF, 208ME

- 155 **Production Methods, Standards** (2 cr; prereq 150)
 -1, Lect I T, 110ME
 -2, Lect V Th, 110ME
 -1, Lab II-IV T, 180ME
 -2, Lab VI-VIII F, 180ME
 -3, Lab VI-VIII Th, 180ME
 -4, Lab VIII-X M, 180ME
- 166 **Industrial Plants Survey** (2 cr; prereq 155)
 -1, Lect I Th, 110ME
 -2, Lect III Th, 114ME
 -1, Lab I-III W, 180ME
 -2, Lab V-VII M, 180ME
 -3, Lab VIII-X T, 180ME
- 170 **Production Planning, Control** (3 cr; prereq 154, 155, or 156)
 IV MWF, 321ME, Whiston
- 172 **Elements of Quality Control** (3 cr; prereq 150, ME 115 advised)
 VI MWF, 130TNCE
- 180 **Elements of Supervision** (3 cr; prereq 150)
 VII MWF, 211AE
- Winter and Spring Quarters
- 150 **Elements of Industrial Engineering, Mgt**
 (3 cr; prereq* ME 15, 17) Ar
- 153w **Methods Analysis, Development** (3 cr; prereq 150) Ar
- 154s **Work Measurement, Production Standards**
 (3 cr; prereq 153) Ar
- 155w,s **Production Methods, Standards** (2 cr; prereq 150) Ar
- 156w **Methods Analysis, Work Measurement** (3 cr; prereq BA 184 or IE 150) Ar
- 166w,s **Industrial Plants Survey** (2 cr; prereq 155) Ar
- 170w,s **Production Planning, Control** (3 cr; prereq 154, 155, or 156) Ar
- 172w,s, **Elements of Quality Control** (3 cr; prereq 150, ME 115 advised) Ar
- 180s **Elements of Supervision** (3 cr; prereq 150) Ar
- 181w **Industrial Relations** (3 cr; prereq 150) Ar
- 182w **Industrial Safety, Hygiene** (3 cr; prereq 150)

MATHEMATICS AND MECHANICS

(MM)

Fall Quarter

- 9 **Higher Algebra** (no cr)
 V MTWThF, 305E
- 11 **College Algebra** (5 cr; prereq 9)
 -1, I MTWThF, 110 TNCE
 -2, II MTWThF, 201Ex
 -3, II MTWThF, 19AE
 -4, III MTWThF, 110TSCE
 -5, III MTWThF, 110Ex
 -6, IV MTWThF, 227AE
 -7, IV MTWThF, 15AE
 -8, IV MTWThF, 106ChE
 -9, IV MTWThF, 110ME
 -10, IV MTWThF, 104ChE
 -11, V MTWThF, 100TSCE

- 12, V MTWThF, 120TNCE
 -13, V MTWThF, 110Ex
 -14, VII MTWThF, 110TSCE
 -15, VII MTWThF, 215E
 -16, VII MTWThF, 205E
 -17, VIII MTWThF, 200TNCE
 -18, VIII MTWThF, 130TNCE
- 12 **Trigonometry** (5 cr; prereq 11)
 -1, II MTWThF, 107-108ChE
 -2, VIII MTWThF, 100TSCE
- 13 **Analytic Geometry** (5 cr; prereq 12)
 -1, II MTWThF, 103ChE
 -2, IV MTWThF, 110TSCE
 -3, V MTWThF, 200TNCE
 -4, VII MTWThF, 110Ex
- 24 **Calculus I—Differential** (5 cr; prereq 13)
 -1, I MTWThF, 100TSCE
 -2, I MTWThF, 110TSCE
 -3, III MTWThF, 105ChE
 -4, III MTWThF, 201Ex
 -5, IV MTWThF, 200TNCE
 -6, IV MTWThF, 110Ex
 -7, V MTWThF, 110TSCE
 -8, VI MTWThF, 104ChE
 -9, VI MTWThF, 105ChE
 -10, VII MTWThF, 201Ex
 -11, VIII MTWThF, 110TSCE
- 25 **Calculus II—Integral** (5 cr; prereq 24)
 -1, II MTWThF, 15AE
 -2, IV MTWThF, 100TSCE
 -3, VI MTWThF, 107ChE
- 26 **Technical Mechanics—Statics** (5 cr; prereq 25)
 -1, I MTWThF, 200TNCE
 -2, II MTWThF, 200TNCE
 -3, III MTWThF, 130TNCE
 -4, VI MTWThF, 100TSCE
 -5, VIII MTWThF, 110TNCE
- 80 **Elem Differential Equations** (3 cr; prereq 25)
 -1, I MWF, 201Ex
 -2, I MWF, 120TNCE
 -3, II MWF, 208ME
 -4, II MWF, 120TNCE
 -5, IV MWF, 130TNCE
 -6, IV MWF, 120TNCE
 -7, VII MWF, 120TNCE
 -8, VII MWF, 130TNCE
- 84 **Technical Mechanics** (5 cr; prereq 25 or 91)
 -1, V MTWThF, 110TNCE
 -2, VII MTWThF, 110TNCE
- 85 **Strength of Materials** (3 cr; prereq 26 or 84)
 -1, I MWF, 130TNCE
 -2, III MWF, 200TNCE
 -3, IV MWF, 110TNCE
 -4, VII MWF, 200TNCE
- 86 **Fluid Mechanics** (3 cr; prereq 26 or 84)
 -1, II MWF, 130TNCE
 -2, III MWF, 120TNCE
 -3, III MWF, 15AE
 -4, V MWF, 130TNCE
 -5, VI MWF, 200TNCE
 -6, VII MWF, 100TSCE

- 87 Materials Testing Lab** (1 cr; prereq 85 or concur regis)
 —1, I-II T, Ex
 —2, I-II F, Ex
 —3, III-IV T, Ex
 —4, VI-VII Th, Ex
 —5, VI-VII F, Ex
- 91 Calculus** (4 cr; prereq 13)
 —1, I MTWF, 305E
 —2, I MTWF, 110Ex
- 127 Technical Mechanics—Dynamics** (5 cr; prereq 26)
 —1, I MTWThF, 106E
 —2, I MTWThF, 215E
 —3, II MTWThF, 106E
 —4, III MTWThF, 100TNCE
 —5, V MTWThF, 106E
 —6, VI MTWThF, 15AE
 —7, VIII MTWThF, 104E
- 128 Strength of Materials** (5 cr; prereq 26)
 —1, I MTWThF, 104E
 —2, III MTWThF, 104E
 —3, IV MTWThF, 104E
 —4, IV MTWThF, 100TNCE
 —5, V MTWThF, 104E
 —6, VI MTWThF, 103ChE
 —7, VII MTWThF, 203E
- 129 Fluid Mechanics** (4 cr; prereq 26)
 III MTWF, 205E
- 130 Fluid Mechanics** (5 cr; prereq 26)
 —1, II MTWThF, 104E
 —2, III MTWThF, 106E
 —3, VI MTWThF, 110TNCE
 —4, VII MTWThF, 106E
- 132 Industrial Statistics** (3 cr; prereq 25)
 V MWF, 215E, McElrath
- 141 Materials Testing Lab** (1 cr; prereq 128 or concur regis)
 —1, I-II M, Ex
 —2, I-II W, Ex
 —3, I-II Th, Ex
 —4, III-IV W, Ex
 —5, III-IV Th, Ex
 —6, III-IV F, Ex
 —7, VI-VII M, Ex
 —8, VI-VII T, Ex
 —9, VIII-IX W, Ex
 —10, VIII-IX Th, Ex
- 143 Hydraulics Lab** (1 cr; prereq 86, 129, 130 or concur regis or ChEn 101)
 —1, I-II T, Ex
 —2, I-II Th, Ex
 —3, III-IV M, Ex
 —4, V-VI T, Ex
 —5, V-VI W, Ex
 —6, V-VI Th, Ex
 —7, VIII-IX T, Ex
- 150 Calculus III** (3 cr; prereq 25)
 —1, II MWF, 203E, Thompson
 —2, VI MWF, 205E, Loye
- 152 Calculus IV** (3 cr; prereq 150)
 IV MWF, 203E, Fulks
- 153 Calculus V** (3 cr; prereq 152)
 III MWF, 203E, Koehler
- 154 Vector Analysis** (3 cr; prereq 25)
 —1, III MWF, 110ME, Polansky
 —2, VI MWF, 106E, Wilcox
- 155 Vector Analysis, Dyadics with Applications** (3 cr; prereq 154)
 V MWF, 205E, Polansky
- 156 Elements of Tensor Analysis** (3 cr; prereq 154)
 IV MWF, 205E, Munro
- 161 Adv Technical Mechanics** (3 cr; prereq* 127)
 IV MWF, 206E, Koehler
- 167 Topics in Mathematics for Sr Aeronautical Engineers** (3 cr; prereq 26)
 III MWF, 227AE, Fulks
- 173 Elem Partial Differential Equations with Applications** (3 cr; prereq 80, 153)
 II MWF, 205E, Munro
- 181 Applied Elasticity** (3 cr; prereq 128)
 II MWF, 206E, Priestler
- 184 Elem Numerical Analysis in Engineering** (3 cr; prereq 80)
 V MWF, 206E, Munro
- 190 Prob Seminar** (3 cr; prereq cons instr)
 VI MWF, 104E, McElrath
- 193 Theory of Vibrations** (3 cr; prereq 80, 127, concur regis 152)
 VI MWF, 206E, Koehler
- 261 Functions of a Complex Variable** (3 cr; prereq 153)
 II-III TTh, 206E, Warchawski
- 277 Partial Differential Equations of First Order with Applications to Mechanics** (3 cr; prereq 127, 151, 153)
 II MWF, 215E, Warschawski
- Winter and Spring Quarters**
- 11w,s College Algebra (5 cr; prereq 9) Ar
 12w,s Trigonometry (5 cr; prereq 11) Ar
 13w,s Analytic Geometry (5 cr; prereq 11, 12) Ar
 24w,s Calculus I—Differential (5 cr; prereq 13) Ar
 25w,s Calculus II—Integral (5 cr; prereq 24) Ar
 26w,s Technical Mechanics—Statics (5 cr; prereq 25) Ar
 80w,s Elem Differential Equations (3 cr; prereq 25) Ar
 84w,s Technical Mechanics (5 cr; prereq 25 or 91) Ar
 85w,s Strength of Materials (3 cr; prereq 26 or 84) Ar
 86w,s Fluid Mechanics (3 cr; prereq 26 or 84) Ar
 87w,s Materials Testing Lab (1 cr; prereq 85 or concur regis) Ar
 90w,s Elem Engineering Statistics (3 cr; prereq 13) Ar
 92w Mechanics for Architects (4 cr; prereq 91) Ar
 93s Strength of Materials (4 cr; prereq 91, 92) Ar

- 127w,s Technical Mechanics—Dynamics (5 cr; prereq 26) Ar
- 128w,s Strength of Materials (5 cr; prereq 26) Ar
- 129w,s Fluid Mechanics (4 cr; prereq 26) Ar
- 130w,s Fluid Mechanics (5 cr; prereq 26) Ar
- 133w-134s Industrial Statistics (3 cr; prereq 132) V MWF McElrath
- 141w,s Materials Testing Lab (1 cr; prereq 128 or concur regis) Ar
- 143w,s Hydraulics Lab (1 cr; prereq 86, 129, 130 or concur regis or ChEn 101) Ar
- 150w,s Calculus III (3 cr; prereq 25) I MWF (w,s), III MWF (w), IV MWF (s)
- 151w,s Ordinary Differential Equations (3 cr; prereq 80) I MWF (s), III MWF (w)
- 152w,s Calculus IV (3 cr; prereq 150) II MWF (w), III MWF (s), IV MWF (w)
- 153w,s Calculus V (3 cr; prereq 152) II MWF (s), IV MWF (w), VI MWF (s)
- 154w,s Vector Analysis (3 cr; prereq 25) IV MWF (s), V MWF (w)
- 155w,s Vector Analysis, Dyadics with Applications (3 cr; prereq 154) III MWF (w), V MWF (s), VI MWF (w)
- 156w,s Elements of Tensor Analysis (3 cr; prereq 154) IV MWF (w), VI MWF (s)
- 162w-163s Adv Technical Mechanics (3 cr; prereq 161) IV MWF Koehler
- 167w,s Selected Topics in Mathematics for Aeronautical Engineers (3 cr; prereq 26) Ar
- 168w Elem Theory of Complex Variables (3 cr; prereq 152) III MWF
- 169s Mathematical Theory of Flow (3 cr; prereq 130) III MWF
- 174w-175s Elem Partial Differential Equations with Applications (3 cr; prereq 173) II MWF
- 182w-183s Applied Elasticity (3 cr; prereq 181) II MWF
- 185w-186s Adv Numerical Analysis in Engineering (3 cr; prereq 151, 153, 184) V MWF
- 194w-195s Theory of Vibrations (3 cr; prereq 193) VI MWF
- 262w-263s Functions of a Complex Variable (3 cr; prereq 153) II-III TTh
- 278w-279s Partial Differential Equations of First Order with Applications to Mechanics (3 cr; prereq 127, 151, 153) II MWF
- 8 Machine Shop Practice (2 cr; prereq InCh 2, 5, 7, or 10, Draw 2)
Lect II TTh, 2ME
Lab VIII-IX Th, 17IME
- 11 Materials, Processing I (2 cr; prereq InCh 2, 5, 7, or 10, Draw 2)
IV TTh, 18ME
- 12 Materials, Processing II (2 cr; see col bul)
Lect II WF, 18ME
—1, Lab I-III M, 70ME
—2, Lab VIII-X M, 70ME
—3, Lab VIII-X W, 70ME
- 13 Materials, Processing III (2 cr; see col bul)
Lect I TTh, 18ME
—1, Lab I-III F, 50ME
—2, Lab V-VII F, 50ME
—3, Lab VIII-X W, 50ME
- 14 Materials, Processing IV (2 cr; prereq 11, 12, 13, 16, 22 or concur regis)
Lect V TTh, 202ME
—1, Lab I-III X W, 17IME
—2, Lab VII-IX T, 17IME
—3, Lab VIII-X W, 17IME
- 15 Materials, Processing V (2 cr; prereq 14)
Lect III MW, 2ME
Lab II-IV F, 17IME
- 16 Materials, Processing VI (2 cr; prereq 11, Phys 7)
Lect VI MF, 202ME
—1, Lab I-III Th, 281ME
—2, Lab V-VII W, 281ME
—3, Lab VII-IX F, 281ME
- 17 Materials, Processing VII (2 cr; prereq 11, 12, 13, 16)
Lect I TTh, 4ME
—1, Lab II-IV Th, 251ME
—2, Lab V-VII M, 251ME
—3, Lab VIII-X W, 251ME
- 18 Materials, Processing (3 cr)
Lect IV TTh, 2ME
Lab VIII-X MF, ME Shops
- 20 Elem Machine Design (2 cr; prereq Draw 2)
—1, I-III MW, 314ME
—2, V-VII TTh, 314ME
—3, V-VII WF, 314ME
—4, VIII-X TTh, 314ME
—5, VIII-X WF, 314ME
- 21 Kinematics (2 cr; prereq Draw 3)
—1, II-IV MF, 308ME
—2, V-VII MW, 308ME
—3, VIII-X TTh, 308ME
- 22 Mechanisms (3 cr; prereq 21, MM 24)
—1, Lect I MW, 214ME
Lab I-III T, 308ME
—2, Lect III TTh, 214ME
Lab I-III W, 308ME
—3, Lect V MW, 202ME
Lab V-VII F, 308ME
—4, Lect VII MW, 202ME
Lab V-VII Th, 308ME
—5, Lect VIII TTh, 321ME
Lab VIII-X W, 308ME

MECHANICAL ENGINEERING (ME)

Fall Quarter

- 1 Metal Working (2 cr)
Lect II MW, 2ME
Lab VIII-X F, 50ME
- 4 Machine Woodworking (2 cr)
Lect VI TTh, 202ME
—1, Lab II-IV T, 271ME
—2, Lab VII-IX M, 271ME
—3, Lab VII-IX Th, 271ME

- 23 **Dynamics of Machinery** (3 cr; prereq 22, 127 or concur regis)
 -1, Lect I TF, 214ME
 Lab I-III Th, 308ME
 -2, Lect VI MF, 2ME
 Lab V-VII T, 308ME
 -3, Lect VII TTh, 321ME
 Lab VIII-X M, 308ME
- 24 **Elements of Machine Design** (3 cr; prereq MM 128)
 -1, Lect I MF, 2ME
 Lab I-III T, 314ME
 -2, Lect IV TTh, 214ME
 Lab II-IV F, 314ME
 -3, Lect V WF, 114ME
 Lab V-VII M, 314ME
 -4, Lect VII TTh, 114ME
 Lab VIII-X M, 314ME
- 26 **Mechanisms, Kinematics** (3 cr; prereq MM 24)
 -1, I MWF, 102ME
 -2, II MWF, 102ME
 -3, IV MWF, 102ME
 -4, V MWF, 102ME
 -5, VI MWF, 211AE
- 33 **Mechanical Engineering Lab I** (2 cr; prereq 131 or concur regis, regis Phys 7 for work-study program)
 -1, I-III TTh, 370ME
 -2, VIII-X WF, 370ME
- 34 **Mechanical Engineering Lab II** (2 cr; prereq 33, 132 or concur regis, regis Phys 8 for work-study program)
 -1, V-VII MW, 370ME
 -2, V-VII TTh, 370ME
 -3, VIII-X TTh, 370ME
- 35 **Mechanical Engineering Lab III** (2 cr; prereq 34)
 -1, II-IV MW, 370ME
 -2, II-IV TTh, 370ME
 -3, V-VII TTh, 370ME
 -4, VIII-X WF, 370ME
- 40 **Heat Engines** (3 cr; prereq Phys 7)
 Lect I WF, 211AE
 -1, Lab II-IV T, Ex
 -2, Lab V-VII T, Ex
 -3, Lab VII-IX Th, Ex
- 42 **Heat Engines** (4 cr; prereq Phys 7)
 IV MWThF, 202ME
- 50 **Auto, Airplane Engines** (3 cr; prereq soph)
 I MWF, 302ME
- 55 **Internal Combustion Engines** (3 cr; prereq 41)
 Lect V TTh, 321ME
 -1, Lab VIII-X T, 480ME
 -2, Lab VIII-X W, 480ME
- 70 **Mechanical Technology** (1 cr; prereq soph)
 IV TTh, 4ME
- 100 **Milling I** (3 cr; prereq 23, 132, MM130)
 III MWF, 102ME
- 105 **Milling Design I** (2 cr; prereq 100, 121, 160)
 V-VII TTh, 325ME
- 107 **Packaging, Handling of Materials** (3 cr; prereq 101, 104, 105)
 I MWF, 202ME
- 110 **Foundry Control Methods** (3 cr; prereq 12, InCh 16)
 Lect I TTh, 2ME
 Lab II-IV Th, 70ME
- 114 **Adv Welding** (3 cr; prereq 13)
 Ar
- 115 **Control of Manufacturing Standards** (3 cr; prereq 15)
 Ar
- 117 **Adv Plastics** (3 cr; prereq 17)
 Ar
- 121 **Machine Design** (2 cr; prereq 24)
 --1, I-IV T, 208ME
 --2, I-IV Th, 208ME
 --3, V-VIII T, 302ME
 --4, V-VIII Th, 302ME
 --5, VII-X M, 208ME
 --6, VI-IX W, 208ME
- 122 **Mechanical Engineering Design I** (2 cr; prereq 121)
 -1, VII-X F, 214ME
 -2, VII-X T, 208ME
- 123 **Mechanical Engineering Design II** (2 cr; prereq 121)
 I-IV F, 325ME
- 124 **Experimental Stress Analysis** (3 cr; prereq MM 128)
 Lect VI MF, 208ME
 Lab VII-IX W, 351ME
- 129 **Vibration Engineering** (3 cr; prereq MM 127)
 IV MWF, 357ME
- 131 **Thermodynamics** (3 cr; prereq MM 25, Phys 8)
 -1, I MWF, 208ME
 -2, II MWF, 106ME
 -3, IV MWF, 106ME
 -4, VII MWF, 106ME
- 132 **Thermodynamics** (3 cr; prereq 131)
 V MWF, 106ME
- 134 **Thermodynamics of Fluid Flow** (3 cr; prereq 132 or Phys 73)
 II MWF, 114ME, Hall
- 141 **Heat Power Engineering** (3 cr; prereq 132)
 -1, I MWF, 110ME
 -2, VI MWF, 110ME
- 142 **Adv Heat Power Engineering** (3 cr; prereq 141)
 I MWF, 321ME
- 147 **Design of Steam Machinery** (2 cr; prereq 141)
 II-IV MW, 325ME
- 149 **Adv Steam Lab** (2 cr; prereq 35, 141)
 -1, VII-X T, Ex
 -2, VII-X F, Ex

- 150 **Internal Combustion Engines** (4 cr; prereq 131)
 -1, Lect II MWF, 302ME
 Lab I-III T, 460ME
 -2, Lect IV MWF, 302ME
 Lab I-III Th, 460ME
 -3, Lect V MWF, 302ME
 Lab V-VII T, 460ME
 -4, Lect VI MWF, 321ME
 Lab VI-VIII Th, 460ME
 -5, Lect VII MWF, 321ME
 Lab VIII-X M, 460ME
- 150A **Internal Combustion Engines** (4 cr; prereq 131 or Phys 73)
 II MTWF, 327AE
- 151A **Adv Internal Combustion Engines** (2 cr; prereq 150 or 150A)
 IV TTh, 321ME
- 154 **Design of Internal Combustion Engines** (2 cr; prereq 121, 150)
 V-VII MW, 325ME
- 155 **Design of Internal Combustion Engines** (2 cr; prereq 154)
 V-VII MW, 325ME
- 157 **Gas Turbine, Jet Propulsion Power Plants** (3 cr; prereq 150 or 150A)
 V MWF, 321ME
- 158 **Aero Engine Testing** (2 cr; prereq 150 or 150A or concur regis)
 I-III TTh, 480ME
- 159 **Internal Combustion Engine Lab** (2 cr; prereq 150 or concur regis)
 -1, VII-X M, 480ME
 -2, VII-X Th, 480ME
 -3, VII-X F, 480ME
- 160 **Heating, Ventilation** (3 cr; prereq 132, MM 127, 129 or 130)
 -1, I MWF, 114ME
 -2, III MWF, 214ME
 -3, V MWF, 110ME
 -4, VII MWF, 102ME
- 161 **Heating, Ventilation, Air Conditioning Design** (2 cr; prereq 160)
 VI-VIII WF, 302ME
- 162 **Heating, Ventilation, Air Conditioning Design** (2 cr; prereq 161)
 I-III TTh, 302ME
- 165 **Adv Heating, Ventilation, Air Conditioning** (3 cr; prereq 160)
 III MWF, 114ME, Algren
- 169 **Heating, Ventilation Lab** (2 cr; prereq 35, 160 or concur regis)
 -1, I-IV Th, Ex
 -2, VII-X M, Ex
 -3, VII-X W, Ex
 -4, VII-X Th, Ex
- 170 **Tool Design** (2 cr; prereq 15, 171)
 V-VIII MW, 214ME, Crowder
- 180 **Refrigeration** (3 cr; prereq 132, 160 or concur regis)
 -1, I MWF, 106ME
 -2, II MWF, 214ME
 -3, IV MWF, 214ME
 -4, VI MWF, 106ME
- 181 **Adv Refrigeration** (3 cr; prereq 180)
 III MWF, 106ME
- 182 **Refrigeration Design** (2 cr; prereq 180)
 VIII-X TTh, 214ME
- 189 **Refrigeration Lab** (2 cr; prereq 180 or concur regis)
 -1, I-IV T, 362ME
 -2, VII-X T, 362ME
 -3, VII-X W, 362ME
- 190 **Seminar** (1 cr; prereq sr)
 Meet IX hour on Oct 2 in room 4ME for assignment to sect
- 191 **Seminar** (1 cr; prereq sr)
 Meet IX hour on Oct 2 in room 4ME for assignment to sect
- 192 **Seminar** (1 cr; prereq sr)
 Meet IX hour on Oct 2 in room 4ME for assignment to sect
- 194 **Adv Engineering Probs** (2-4 cr; prereq sr with C+ aver, cons division chief)
 Ar
- 198 **Industrial Instrumentation, Automatic Control** (3 cr; prereq sr)
 -1, Lect II MW, 321ME, LaJoy
 -2, Lect IV TTh, 302ME
 -1, Lab I-III Th, 359ME
 -2, Lab V-VII M, 359ME
 -3, Lab V-VII Th, 359ME
 -4, Lab VII-IX T, 359ME
 -5, Lab VIII-X M, 359ME
 -6, Lab VIII-X W, 359ME
- 199 **Servomechanisms** (3 cr; prereq MM 80, EE 37 or concur regis)
 III MWF, 302ME, LaJoy
- 221 **Adv Mechanical Engineering Design** (3 cr; prereq 121)
 III MWF, 202ME, Ryan
- 231 **Adv Thermodynamics** (3 cr; prereq 132)
 IV MWF, 114ME, Hall
- 252 **Adv Reciprocating Engines** (3 cr; prereq 151 or 151A)
 VIII MWF, 321ME, Murphy
- 265 **Adv Air Conditioning** (3 cr; prereq 160)
 II MWF, 202ME, Algren
- 280 **Theoretical Refrigeration** (3 cr; prereq 180)
 VI MWF, 114ME, Jordan
- Winter and Spring Quarters**
- 1w **Metal Working** (2 cr) Ar
 4w **Machine Woodworking** (2 cr) Ar
 6s **Machine Shop Practice** (2 cr) Ar
 8w,s **Machine Shop Practice** (2 cr; prereq Draw 2, InCh 2, 5, 7, or 10) Ar
 11w,s **Materials, Processing I** (2 cr; prereq In-Ch 2, 5, 7, or 10, Draw 2) Ar
 12w,s **Materials, Processing II** (2 cr; see col bul) Ar

- 13w,s Materials, Processing III (2 cr; see col bul) Ar
- 14w,s Materials, Processing IV (2 cr; prereq 11, 12, 13, 16, 22 or concur regis) Ar
- 15w,s Materials, Processing V (2 cr; prereq 14) Ar
- 16w,s Materials, Processing VI (2 cr; prereq 11, Phys 7) Ar
- 17w,s Materials, Processing VII (2 cr; prereq 11, 12, 13, 16) Ar
- 20w Elem Machine Design (2 cr; prereq Draw 2) Ar
- 21w,s Kinematics (2 cr; prereq Draw 3) Ar
- 22w,s Mechanisms (3 cr; prereq 21, MM 24) Ar
- 23w,s Dynamics of Machinery (3 cr; prereq 22, 127 or concur regis) Ar
- 24w,s Elements of Machine Design (3 cr; prereq MM 128) Ar
- 26w,s Mechanisms, Kinematics (3 cr; prereq MM 24) Ar
- 27s Machine Design (3 cr; prereq MM 128) Ar
- 33w Mechanical Engineering Lab I (2 cr; prereq 131 or concur regis, regis Phys 7 for work-study program) Ar
- 34w,s Mechanical Engineering Lab II (2 cr; prereq 33, 132 or concur regis, regis Phys 8 for work-study program) Ar
- 35w,s Mechanical Engineering Lab III (2 cr; prereq 34) Ar
- 38s Heat Engines (3 cr; prereq Phys 7) Ar
- 39s Heat Engine Lab (1 cr; prereq 38 or concur regis) Ar
- 40w Heat Engines (3 cr; prereq Phys 7) Ar
- 41w,s Heat Engines (3 cr; prereq 40) Ar
- 42w,s Heat Engines (4 cr; prereq Phys 7) Ar
- 50w,s Auto, Airplane Engines (3 cr; prereq soph) Ar
- 55s Internal Combustion Engines (3 cr; prereq 41) Ar
- 101w Milling II (3 cr; prereq 100) Ar
- 102s Milling III (3 cr; prereq 101) Ar
- 103w Milling Lab I (2 cr; prereq 35, 100 or concur regis) Ar
- 104s Milling Lab II (2 cr; prereq 103) Ar
- 106w Milling Design II (2 cr; prereq 104, 105) Ar
- 107s Packaging, Handling of Materials (3 cr; prereq 101, 104, 105) Ar
- 111w Adv Foundry Practice (3 cr; prereq 110, Phys 9, InCh 16) Ar
- 112w Plastic Processing (3 cr) Ar
- 113s Adv Machine Shop Practice (3 cr; prereq 15) Ar
- 117s Adv Plastics (3 cr; prereq 17) Ar
- 121w,s Machine Design (2 cr; prereq 24) Ar
- 122w,s Mechanical Engineering Design I (2 cr; prereq 121) Ar
- 123w,s Mechanical Engineering Design II (2 cr; prereq 121) Ar
- 124s Experimental Stress Analysis (3 cr; prereq MM 128) Ar
- 125w,s Machine Design Lab (2 cr; prereq 24) Ar
- 127s Lubrication (3 cr; prereq 121) IV MWF
- 128w Photoelastic Stress Analysis (3 cr; prereq MM 128) IV MWF
- 131w-132w,s Thermodynamics (3 cr; prereq MM 25, Phys 8) Ar
- 133s Heat Transmission (3 cr; prereq 132) Ar
- 134s Thermodynamics of Fluid Flow (3 cr; prereq 132 or Phys 73) Ar
- 138w Gen Lab (2 cr; prereq Min 122) Ar
- 141w,s Heat Power Engineering (3 cr; prereq 132) Ar
- 142w,s Adv Heat Power Engineering (3 cr; prereq 141) Ar
- 144s Steam Turbines (3 cr; prereq 132) Ar
- 146w Fuels, Combustion (3 cr; prereq 141) Ar
- 147w,s Design of Steam Machinery (2 cr; prereq 141) Ar
- 148w,s Design of Power Plant Units (2 cr; prereq 147) Ar
- 149w,s Adv Steam Lab (2 cr; prereq 35, 141) Ar
- 150w,s Internal Combustion Engines (4 cr; prereq 131) Ar
- 150Aw Internal Combustion Engines (4 cr; prereq 131 or Phys 73) Ar
- 151s Adv Internal Combustion Engines (3 cr; prereq 150) Ar
- 151As Adv Internal Combustion Engines (2 cr; prereq 150 or 150A) Ar
- 152w Diesel Engines (3 cr; prereq 55 or 150) Ar
- 154w,s Design of Internal Combustion Engines (2 cr; prereq 121, 150) Ar
- 154As Design of Airplane Engines (2 cr; prereq 150 or 150A) Ar
- 155w,s Design of Internal Combustion Engines (2 cr; prereq 154) Ar
- 156w High Speed Engine Testing (2 cr; prereq 158 or 159, C+ aver) Ar
- 157s Gas Turbine, Jet Propulsion Power Plants (3 cr; prereq 150 or 150A) Ar
- 158w Aero Engine Testing (2 cr; prereq 150 or 150A or concur regis) Ar
- 159w,s Internal Combustion Engine Lab (2 cr; prereq 150 or concur regis) Ar
- 160w,s Heating, Ventilation (3 cr; prereq 132, MM 127, 129 or 130) Ar
- 161w,s-162w,s Heating, Ventilation, Air Conditioning Design (2 cr; prereq 160) Ar
- 165w,s Adv Heating, Ventilation, Air Conditioning (3 cr; prereq 160) III MWF
- 169w,s Heating, Ventilation Lab (2 cr; prereq 35, 160 or concur regis) Ar
- 170w,s Tool Design (2 cr; prereq 15, 171) Ar
- 180w,s Refrigeration (3 cr; prereq 132, 160 or concur regis) Ar
- 181w,s Adv Refrigeration (3 cr; prereq 180) Ar
- 182w,s Refrigeration Design (2 cr; prereq 180) Ar
- 189w,s Refrigeration Lab (2 cr; prereq 180 or concur regis) Ar
- 190w,s,191w,s,192w,s Seminar (1 cr; prereq sr) Ar
- 198w,s Industrial Instrumentation, Automatic Control (3 cr; prereq sr) Ar

- 199s Servomechanisms (3 cr; prereq MM 80, EE 37 or concur regis) Ar
- 222w Applications of Elasticity in Mechanical Design (3 cr; prereq 121) III MWF
- 223s Adv Mathematical Theory in Mechanical Design (3 cr; prereq 121) III MWF
- 232w Adv Fluid Thermodynamics (3 cr; prereq* 134, MM 153) IV MWF
- 233s Adv Heat Transmission (3 cr; prereq* 133, MM 153) IV MWF
- 253w Adv Gas Turbines (3 cr; prereq 157) VIII MWF
- 255s Thermal Jets, Rockets (3 cr; prereq 134, 157) VIII MWF
- 266w Adv Ventilation, Air Distribution (3 cr; prereq* 160, 265) II MWF
- 267s Applied Heating, Ventilation, Air Conditioning (3 cr; prereq* 160) II MWF
- 281w Applied Refrigeration (3 cr; prereq 180) VI MWF
- 282s Reverse Applications of Refrigeration—Heat Pump (3 cr; prereq 180) VI MWF

MINES AND METALLURGY

Metallography (MET)

Fall Quarter

- 152 **Metallography for Aeronautical Engineers** (3 cr; prereq AE sr)
Lect I MW, 315AH
—1, Lab VI-VII W
—2, Lab VIII-IX W
- 153 **Metallography** (4 cr; prereq 12)
Lect II TThS, 315AH
—1, Lab VI-IX M
—2, Lab VI-IX Th
- 156 **Metallography for Mechanical, Mining, Petroleum Engineers** (3 cr; prereq jr)
Lect I MW, 315AH
—1, Lab VIII-IX W
—2, Lab VIII-IX F
- 159 **Dental Metallography**
II-III S, 111AH
- 160 **Metallography** (3 cr; prereq AnCh 1, 2)
Lect III MF, 315AH
—1, Lab VI-VII T
—2, Lab VIII-IX T
—3, Lab VI-VII F
—4, Lab VIII-IX F
- 163 **Adv Metallography** (3 cr; prereq 6 cr)
Lect II MWF, 306AH
- 166 **Lab** (1, 2 or 3 cr; prereq 155)
Ar
- 170 **Special Probs in Metallography** (1, 2 or 3 cr; prereq sr)
Ar
- 204 **Metallographic Research** (ar cr)
IV T, 315AH

Metallurgy (MET)

Fall Quarter

- 11 **Metallurgy of Pig Iron** (3 cr; prereq InCh 5)
IV MWF, 108AH
- 106 **Nonferrous Metallurgy** (3 cr; prereq inorg chem)
III MWF, 111AH
- 110 **Mineral Dressing** (3 cr; prereq. Geol 24)
Lect III TTh, 202AH
—1, Rec VII M, 202AH
—2, Rec VII T, 202AH
—3, Rec VII Th, 202AH
—1, Lab VI-VIII M, 203AH
—2, Lab VI-VIII T, 203AH
—3, Lab VI-VIII Th, 203AH
- 121 **Ore Testing** (2 cr; prereq 110)
Lect VI W, MEX
Lab VII-IX W, MEX
- 124 **Special Probs in Mineral Dressing** (ar cr; prereq 112)
Ar
- 134 **Adv Metallurgy** (4 cr; prereq 12)
Lect III MWF, 108AH
Lab VI-IX T, 5AH
- 216 **Seminar—Process Metallurgy** (1 cr)
Ar

Mining Engineering (MIN)

Fall Quarter

- 11 **Surveying** (3 cr; prereq Draw 3, MM 12)
Lect II MWF, VI Th, 315AH
- 111 **Elements of Mining** (3 cr; prereq 14)
I MTWF, 202AH
- 123 **Mine Plant** (2 cr; prereq 122)
II-IV W, I-III F, 303AH)
- 126 **Engineering Construction** (3 cr; prereq MM 127)
VI-IX TTh, 205AH
- 141 **Examination, Valuation** (3 cr; prereq 113 or PetE 112)
IV MTThF, 202AH
- 144 **Adv Mining** (2 cr; prereq 141)
Ar
- 145 **Adv Mining** (4 cr; prereq 144)
Ar

Petroleum Engineering (PETE)

Fall Quarter

- 111 **Oil Field Development** (3 cr; prereq concur regis Min 14)
I MTWF, 109AH
- 144 **Adv Petroleum Engineering** (2 cr; prereq Min 141)
Ar
- 145 **Adv Petroleum Engineering** (4 cr; prereq 144)
Ar

- 152 **Petroleum Production Technology** (3 cr; prereq 112)
Lect III M, 109AH
-1, Lab II-IV W, 112AH
-2, Lab I-III F, 112AH

TECHNICAL AID (TA)

Fall Quarter

- 11 **Engineering Drafting** (5 cr)
-1, VI-VIII MTWThF, 18E
-2, VI-VIII MTWThF, 101E
-3, VI-VIII MTWThF, 201E
- 14 **Engineering Drafting** (5 cr; prereq 13)
-1, I-III MTWThF, 18E
-2, I-III MTWThF, 101E
-3, I-III MTWThF, 201E
- 16 **Lettering** (2 cr)
-1, IV MWF, 18E
-2, IV MWF, 101E
-3, IV MWF, 201E
- 18 **Engineering Drawing** (2 cr)
VII-IX TTh, 210TNCE
- 21 **Applied Mathematics** (6 cr)
Lect I MTWThF, 227E
-1, Rec II MTWThF, 110TSCE
-2, Rec II MTWThF, 110Ex
-3, Rec II MTWThF, 100TNCE

- 24 **Applied Mathematics** (6 cr; prereq 23)
Lect IV MTWThF, 106E
-1, Rec VI MTWThF, 110Ex
-2, Rec VI MTWThF, 110TSCE
-3, Rec VI MTWThF, 120TNCE

- 34 **Technical Writing** (3 cr)
-1, III MWF, 106ChE
-2, III MWF, 321ME
-3, III MWF, 110TNCE

- 37 **Oral Composition** (3 cr; prereq 36)
-1, VII MWF, 305E
-2, VII MWF, 103ChE
-3, VII MWF, 111AH

- 80A **Shop Practice, Tools, Fittings** (2 cr)
Lect IV MW, 2ME
-1, Lab III-IV TTh, 50ME
-2, Lab VI-VII MW, 50ME

- 80B **Shop Practice Lab** (3 cr; prereq concur regis 80A)
Lect VI TTh, 2ME
-1, Lab V-VII F, 370ME
-2, Lab VIII-X M, 370ME

- 83 **Metal Processing** (2 cr; prereq 82)
Lect VIII MW, 202ME
-1, Lab VII-X T, 50ME
-2, Lab VII-X Th, 50ME

LIBRARY INSTRUCTION (LIB)

Fall Quarter

- 1 **Use of Books, Libraries** (2 cr)
-1, II MW, 3Lib, Russell
-2, IV MW, 3Lib, Moen
- 50 **Libraries, Society** (3 cr)
IV MWF, 5Lib, Shove
- 60 **Sources of Information about Library Materials** (3 cr)
III MWF, 5Lib, Hayner
- 61 **Library Practice** (3 cr; prereq 18 cr or lib exper)
Ar, Shove, Hayner
- 62 **Reference I** (2 cr)
III TTh, 5 Lib, Russell
- 70 **Reading Guidance** (3 cr)
I MWF, 5Lib, Hayner
- 81 **Theory of Bibliography** (2 cr)
I TTh, 5Lib, Simonton
- 85 **Special Probs** (1-3 cr; prereq cons dir)
Ar, McDiarmid, Shove, Hayner
- 151 **Invention, Spread of Printing** (2 cr)
Ar, Shove
- 255 **Seminar—Lib Admin** (3 cr)
Ar, Stanford
- 260 **Seminar—Adv Bibliography** (3 cr)
Ar, Shove

- 271 **Seminar—Library Work with Children, Young People** (3 cr)
Ar, Hayner
- 274 **Reading Guidance** (3 cr)
Ar

Winter and Spring Quarters

- 1w,s See 1f
61w,s See 61f
63w Reference II (3 cr; prereq 62) IV MWF
76s Library Service in Hospitals (3 cr) I TThS
77s Book Selection for Hospital Patients (3 cr) III MWF
79s Medical Reference Work (3 cr) II MWF Kingsley
80s Hospital Library Practice (4 cr; prereq 76, 77, 78, 79) Ar
82w Cataloging, Classification (4 cr) VII-VIII MWThF Hayner
84s Subject Cataloging, Classification (3 cr; prereq 81, 82) III MWF Simonton
85w,s See 85f
152w History of Printing to Modern Times (2 cr) Ar Shove
153s Prin of School Library Organization, Mgt (3 cr; prereq cons instr) II MWF Hayner
154s Prin Public Library Admin (3 cr; prereq Pol 121) I MWF Methven

- 155s Administrative Probs in College, University Library (3 cr; prereq Pol 121, EdAd 253) II MWF Shove
- 164s Reference III (2 cr; prereq 62, 63) I TTh Russell
- 165w Adv Bibliography (2 cr) III TTh Shove
- 171s Prin, Probs in Reading Guidance for Children (3 cr; prereq 70) IV MWF
- 172s Prin, Probs in Reading Guidance for Adolescents (3 cr; prereq 70) III MWF Hayner
- 173w Prin Probs in Adult Reading Guidance (3 cred; prereq 70) III MWF Methven
- 256w,257s See 255f
- 261w,262s See 260f
- 272w,273s See 271f
- 275w,276s See 274f

COLLEGE OF MEDICAL SCIENCES

ANATOMY (ANAT)

Fall Quarter

- 3 Elem Anatomy (4 cr; prereq regis 3 yr nurs or dent hyg, cons dept)
Lect I TThS, 06Bot, Cornwell
—1, Lab VIII-IX T, 301, 302, 303IA
—2, Lab VIII-IX Th, 301, 302, 303IA
- 58 Anatomy of Extremities (5 cr; prereq 3 or 4, regis PT)
Lect I MWF, 304IA, McDonald
Lab II-III MWF, 301IA
- 59 Systematic Anatomy (6 cr; prereq regis fresh dent)
Lect VI MWF, 15MeS, Hartmann
Lab VII-IX MWF, 301, 302, 303IA
- 100 Gross Human Anatomy (8 cr; primarily for fresh med)
Lect VI MTWTh, 102IA, Boyden
Lab VII-IX MTW, VII Th, 306, 307, 308, 312, 313IA
- 105 Microscopic Anatomy (9 cr; prereq 59 and regis soph dent; or 102)
Lect II MTWThF, 102IA, Rasmussen, Campbell
—1, Lab III-V M, VI-VIII WF, 212-215IA
—2, Lab VI-VIII M, III-V WF, 212-215IA
- 107 Human Embryology (5 cr; prereq regis fresh med; or 100-101)
Lect I TF, IV Th, 102IA, Wells
—1, Lab II-III ThS, 212-215IA
—2, Lab II-III T, I-II W, 212-215IA
- 149 Experimental Neurology (ar cr; prereq 111) Ar, Campbell
- 150 Special Topics in Neurology (ar cr; prereq 111)
Ar, Rasmussen
- 152 Prosecution (ar cr; prereq 100-101)
Ar, Boyden
- 153 Adv Anatomy (ar cr)
Ar, Staff
- 165 Hematology (4 cr; prereq* 103)
Lect VII TTh, 104IA, Sundberg
Lab IV-V and VIII-IX TTh, 213IA
- 201 Research—Anatomy (ar cr)
Ar, Staff
- 205 Anatomical Seminar (1 cr)
IV S, 226IA, Staff
- Winter and Spring Quarters
- 4s Elem Anatomy (5 cr; primarily for med tech, 5 yr nurs) Lect I MTWF Cornwell; Labs VIII-IX T; VIII-IX Th
- 5s Elem Anatomy for Students of Pharmacy (5 cr) Lect VI MTWTh Ferry; Lab VII-VIII MW
- 57s Elem Anatomy (4 cr; prereq phys educ maj) Lect III MWF McDonald; Lab IV MWF
- 101w See 100f Lect VI MWThF Boyden; Lab VII-IX MWF, VII Th
- 102s Anatomy of Head, Neck (6 cr; prereq 59)
Lect VI MWF Hartmann; Lab VII-IX MWF
- 103w Human Histology (4 cr; prereq 100 and regis fresh med; or 100-101) Lect I TF Kirschbaum; Dem II T, I Th; I M, II F; Labs II-III T, I-III Th; I-III M, II-III F
- 104s See 103w Lect VI TW Kirschbaum; Dems I M; II T; Labs I-III M; I-III T
- 111s Human Neurology (6 cr; prereq 103, 107, regis fresh med; or 103, 107 or Zool 150)
Lect VI MF Rasmussen; Labs II-III ThF; II-III W, VII-VIII F
- 132w Anatomical, Functional Aspects of Reproduction (2 cr) Ar Wells
- 134w Anatomy of the Newborn (3 cr; prereq 100, 101, 107) Ar Wells
- 149s See 149f
- 150w,s See 150f
- 152w See 152f
- 154w-155s See 153f
- 158s Special Histology, Neurology of Head Region (3 cr; prereq 111) Ar Rasmussen
- 159s Experimental Methods for Study of Neoplastic Growths (Ar cr; prereq 165) VIII-IX T Kirschbaum
- 160w Seminar—Probs of Reproduction (1 cr; prereq 107) Ar Wells
- 166w See 165f
- 167s Seminar—Hematology (1 cr; prereq 166) VIII Th Sundberg
- 202w-203s See 201f
- 206w-207s See 205f

BACTERIOLOGY AND IMMUNOLOGY (BACT)

Fall Quarter

- 53 Gen Bacteriology (5 cr; prereq soph, C+ aver in prereq courses, 10 cr chem, 4 cr biol sci)
Lect VII MWF, 15MeS, staff
Lab VIII-IX MWF, Ar
- 104 Sanitary Bacteriology (4 cr; prereq 53, 15 cr chem)
Lect I MWF, 214MH, Johansson
Lab II-III MWF, Ar
- 105 Prin Infectious Diseases (6 cr, primarily for soph med; prereq Anat 103, PhCh 100, or 101, or AgBi 120)
Lect I TThS, 12MeS, Syverton, others
Lab II-IV TThS, Ar
- 112 Gen Mycology (4 cr; prereq 53, 15 cr bact or 3 cr pl path)
Lect III MWF, 214MH, Roth
Lab IV-V MW, Ar
- 121 Physiology of Bacteria (3 cr; prereq 53, 8 cr or chem or biochem)
Lect III TThS, 214MH, Lones
- 124 Viruses, Rickettsia (4 cr; prereq 102 or 105, 116)
Lect VI TTh, 214MH, Syverton
Lab VII-VIII TTh, Ar
- 201 Research—Bacteriology, Immunology (ar cr)
Ar, Syverton
- 203 Seminar (1 cr)
4:15 Th, 214MH

Winter and Spring Quarters

- 1w Elementary Bacteriology (4 cr; offered by the Extension Division, open to PT, dent hyg without fee, by cons instr)
Lect I MWF; Lab II-III MWF
- 53w,s See 53f
- 100s Bacteriology for Dental Students (6 cr; prereq regis fresh dent) Lect I TThS;
Lab II-IV TThS
- 102w Medical Bacteriology (5 cr; prereq 53, no med students) Lect III MWF; Lab IV-V MWF
- 103s Soil Microbiology (4 cr; prereq 53, 8 cr org chem) Lect I MWF; Lab II-III MF
- 106w See 105f (5 cr) Lect I TTh; Lab II-IV TTh
- 113w Actinomycetes, Yeasts (3 cr; prereq 112)
Lect VII TTh; Lab VIII-IX TTh
- 114s Medical Mycology (3 cr; prereq 102) Lect I WF; Lab II-III WF
- 116s Immunology (3 cr; prereq 102 or 105) Lect VII-VIII TTh; Lab VIII-IX TTh
- 122w See 121f
- 123s Applied Bacteriology (3 cr; prereq 122) III TThS
- 203w,s See 203f
- 204w-205s Adv Bacteriology (3 cr; prereq 122 or concur regis, cons instr) Ar

BIOPHYSICS (BPHY)

Fall Quarter

- 138 Seminar—Gen Physiology, Biophysics (ar cr)
Ar, staff
- 170 Probs in Biophysics (ar cr)
Ar, Stenstrom
- 204 Research—Biophysics, Physiology of Radiation (ar cr)
Ar, Stenstrom
- 221 Research—Biophysics (ar cr)
Ar, Schmitt

Winter and Spring Quarters

- 138w,s See 138f
- 155,156,157w Biophysics (3 cr; prereq 28 cr in physics, biol, cons instr) Ar Schmitt
- 170w,s See 170f
- 204w,s See 204f
- 221w,s See 221f
- 223w,s See 223f

CANCER BIOLOGY (BIOL)

Fall Quarter

- 140 Seminar—Cancer Biology (1 cr)
Ar, Bittner
- 141 Seminar—Cancer Biology (ar cr)
Ar, Bittner
- 207 Research—Cancer Biology (ar cr)
Ar, Bittner

Winter and Spring Quarters

- 140w,s See 140f
- 141w,s See 141f
- 207w,s See 207f

CORRELATION CLINICS

Fall Quarter

- Sophomore Clinic (no cr)
IV W, Eustis amph, staff
- Applied Medicine for Seniors (no cr)
Ar

Winter and Spring Quarters

- s Freshman Clinic (no cr) April 27-July 7
VII W staff
- w,s, Sophomore Clinic (no cr) VIII F (w) I Th (s)
- w,s Applied Medicine for Seniors (no cr) Ar

MEDICAL TECHNOLOGY (MEDT)

Fall Quarter

- 51 Introd Medical Technology (2 cr; prereq regis med tech)
Ar, Evans

Winter and Spring Quarters

- 52w Introd Medical Technology (3 cr; prereq 51) Ar Evans
 61w,s, Introd Medical Technology (4 cr; prereq regis med tech) Ar

MEDICINE (MED)

Fall Quarter

- 104 Introd Internal Medicine (2 cr; prereq 101, 102, regis jr med)
 Ar, Watson, staff
 123 Dermatology, Syphilology (2 cr; prereq 101, 102, regis sr med)
 Ar, Michelson
 201 Clinical Medicine (ar cr)
 Ar, Watson, Fahr, Spink, Ebert, Tucker, Aagaard, Flink, Hoffbauer
 202 Diseases of Cardiovascular Apparatus (ar cr)
 Ar, Fahr
 203 Research—Medicine (ar cr)
 Ar, Watson, Fahr, Ebert, Tucker, Aagaard, Flink, Hoffbauer, Spink
 205 Tuberculosis (ar cr)
 Ar, Myers
 206 Clinical Conference (1 cr)
 Ar, Watson, Ebert, staff
 207 Clinical Pathological Conference (1 cr)
 Ar, Bell, Watson, Ebert, staff
 208 Clinical Radiological Conference (1 cr)
 Ar, Rigler, Watson, Ebert, staff
 209 Psychosomatic Medicine (1 cr)
 Ar, Hastings
 210 Infectious Disease Seminar (1 cr)
 Ar, Spink
 211 Electrocardiographic Conference (1 cr)
 Ar, Aagaard
 225 Clinical Dermatology, Syphilology (ar cr)
 Ar, Michelson, staff
 226 Dermatology and Allergy (ar cr)
 Ar, Michelson, staff
 227 Histopathology of Skin (ar cr)
 Ar, Michelson, staff
 228 Research—Dermatology, Syphilology (ar cr)
 Ar, Michelson, staff
 235 Adv Clinical Lab Medicine (ar cr; prereq Anat 165-166)
 Ar, Evans, staff
 236 Research on Clinical Laboratory Problems (ar cr)
 Ar, Evans, staff

Winter and Spring Quarters

- 101w Physical Diagnosis (3 cr; prereq Anat 100, Phsl 106, regis soph med) Lect VI TW; Labs III-IV MF; I-II WS Watson, staff
 102s Clinical Lab Medicine (5 cr; prereq regis soph med, PhCh 100, Path 101 or concur regis) Lect I MTF; Labs VI-VIII W; I-III W Evans, staff
 104w,s See 104f

- 110w Medicine Clinic (no cr; prereq regis sr med) Ar Watson, Barron, staff
 123w See 123f (1 cr) Ar
 201w,s See 201f
 202w,s See 202f
 203w,s See 203f
 205w,s See 205f
 206w,s See 206f
 207w,s See 207f
 208w,s See 208f
 209w,s See 209f
 210w,s See 210f
 211w,s See 211f
 225w,s See 225f
 226w,s See 226f
 227w,s See 227f
 228w,s See 228f
 235w,s See 235f
 236w,s See 236f

NURSING (NUR)

Fall Quarter

- 14 Introd Medical Sciences (2 cr)
 VII MW, 104IA, Coe
 17A Introd Clinical Nursing (7 cr)
 Lect II MTWThF, III MWF, PoH Amph, Love
 —1, Lab VII-IX M
 —2, Lab VII-IX Th
 —3, Lab VII-IX F
 20 Prin Nursing in Conditions of Skin (1 cr)
 IX MW, PoH Amph, Schey
 35 Prin, Communicable Disease Nursing (2 cr)
 Ar, Einerson
 36 Prin Tuberculosis, Tuberculosis Nursing (2 cr)
 Ar
 37A Maternal, Child Nursing (12 cr)
 Ar, Gautefald, Robertson
 37B Maternal, Child Nursing (12 cr; prereq 37A)
 Ar, Gautefald, Robertson
 39 Prin Gynecologic Nursing (1 cr)
 Ar, Robertson
 41 Prin Pediatrics, Pediatric Nursing (3 cr)
 VIII MWF, PoH Amph, Gautefald
 42 Prin of Obstetrics, Gynecology (3 cr)
 Ar, Robertson
 45 First Aid (1 cr)
 Ar, Reagen
 49 Prin Care in Eye Conditions (1 cr)
 Ar, Billings
 53 Field Practice in Public Health Nursing (1 cr)
 Ar, Burns, Griffin
 57A Medical, Surgical Nursing (12 cr)
 IV MTWTh, VI-VII MTWTh, PoH Amph, Brennan, Vennes
 67 Nursing Care of Neuropsychiatric Patients (8 cr)
 Ar, Anderson, Linehan

- 77 Medical, Surgical Nursing (8 cr)
Ar, Billings
- 78 Communicable Disease Nursing (4 cr)
Ar
- 106 Neuropsychiatric Nursing (4 cr)
VI-VII TTh, 1326PoH, VII F, PoH Amph,
Anderson, Linehan

Winter and Spring Quarters

- 17As See 17Af
- 17Bw Introd Clinical Nursing (4 cr; prereq
17A) Ar Love
- 35w,s See 35f
- 36w,s See 36f
- 37Aw,s See 37Af
- 37Bw,s See 37Bf
- 39w,s See 39f
- 41w,s See 41f
- 42w,s See 42f
- 45w,s See 45f
- 49w,s See 49f
- 53w,s See 53f
- 54w Introd Medical Sciences (2 cr) VIII MW
Coe
- 57As See 57Af
- 57Bw See 57Af (prereq 57A)
- 67w,s See 67f
- 77w,s See 77f
- 78w,s See 78f
- 106w,s See 106f
- 170w Prin Mental Health Applied to Nursing
Care of Mentally Ill (3 cr) Ar

OBSTETRICS AND GYNECOLOGY (OBST)

Fall Quarter

- 120 Obstetrics (2 cr; prereq regis sr med)
Ar, McKelvey, Holly, Kaiser, staff
- 201 Adv Obstetrics, Gynecology (ar cr)
Ar, McKelvey, staff
- 205 Adv Obstetrics, Gynecology (ar cr)
Ar, McKelvey, staff
- 209 Adv Obstetrics, Gynecology (ar cr)
Ar, McKelvey, staff

Winter and Spring Quarters

- 121w Obstetrics (1 cr; prereq 120) Ar Mc-
Kelvey, Holly, Kaiser, staff
- 123s Gynecology (1 cr; prereq regis sr med) Ar
McKelvey, Holly, Kaiser, staff
- 124w,s Introd Obstetrics, Gynecology (1 cr; pre-
req regis jr med) Ar McKelvey, staff
- 202w-203s See 201f
- 206w-207s See 205f
- 210w-211s See 209f

OPHTHALMOLOGY AND OTOLARYNGOLOGY

Ophthalmology (OPHT)

Fall Quarter

- 200 Refraction (3 cr)
Ar, Tracht
- 202 Clinical Ophthalmology (6 cr)
II-V MTWThF, Eye Clinic, staff
- 204 Ocular Muscles (2 cr)
II-IV W, Eye Clinic, Horns
- 206 Surgery of the Eye (3 cr)
I TWTh, EOR, staff
- 212 Seminar—Ophthalmology (1 cr)
Ar, Hansen

Winter and Spring Quarters

- 100w,s Ophthalmology (1 cr; prereq primarily
for sr med) Ar Hansen, staff
- 201w,s Adv Refraction (3 cr) Ar Tracht
- 202w,s See 202f
- 205w Perimetry (1 cr) Ar Schmidtke
- 206w,s See 206f
- 209s Neuro-Ophthalmoscopy (1 cr) Ar Baker,
staff
- 212w See 212f
- 214s Histology of Eye (2 cr) Ar Walsh

Otolaryngology (OTOL)

Fall Quarter

- 101 Otology (1 cr; prereq primarily for sr med)
Ar
- 230 Clinical Otology (3 cr)
III-IV MTWThF, ENT Clinic, Staff
- 231 Clinical Rhinology, Laryngology (3 cr)
III-IV MTWThF, ENT Clinic, Staff
- 232 Surgery of Ear, Nose, Throat (3 cr)
Ar, staff
- 235 Roentgenology of Head (1 cr)
Ar, Rigler
- 245 Allergy (1 cr)
Ar

Winter and Spring Quarters

- 102w Rhinology (1 cr; prereq primarily for sr
med) Ar Boies, staff
- 103s Laryngology (1 cr; prereq primarily for
sr med) Ar Boies, staff
- 230w,s See 230f
- 231w,s See 231f
- 232w,s See 232f
- 237w Endoscopy (2 cr) Ar staff
- 238s Pathology of Ear, Nose, Throat (2 cr) Ar
Hilger
- 241w,s Seminar—Otolaryngology (1 cr) Ar staff

PATHOLOGY (PATH)

Fall Quarter

- 101 Gen Pathology (8 cr; prereq histology, embryology, regis soph med)
Lect VII MTWThF, 102IA, staff
Dem I-III MWF, VIII MWF, 104IA
Lab I-IV MWF, VIII-IX MWF, 106,107, 108IA
- 104 Autopsies (ar cr; prereq regis jr, sr med; or grad, 102)
Ar, staff
- 107 Surgical Pathology (3 cr; prereq 102)
VIII-IX TTh, 104IA, Hebbel, McCartney
- 107A Surgical Pathology (3 cr; prereq 102)
Ar, Hebbel, McCartney
- 109 Clinical Pathological Conference (1 cr; regis sr med)
IX F, 104IA, Dawson
- 110 Seminar—Pathology (1 cr; prereq 102)
12:30-1:30 M, 104IA, staff
- 111 Conference on Autopsies (1 cr; prereq 102)
12:30-1:30 T, 104IA, Dawson
- 201 Research (ar cr)
Ar, staff

Winter and Spring Quarters

- 102w Special Pathology (8 cr; prereq 101, regis soph med) Lect VII MTWThF staff; Dem I,III MWFS; Lab I-IV MWFS
- 104w,s See 104f
- 105s Pathology for Students in Dentistry (8 cr; prereq regis dent) Lect I MTWThF, Lab II-III MTWF staff
- 107w See 107f VII-VIII TTh
107Aw,s See 107Af
- 107Bs Diseases of Heart (3 cr; prereq 102) Lect ar; Dem VII-VIII TTh Clawson
- 107Cw Diseases of Kidney (3 cr; prereq 102) Lect ar Hebbel; Dem III,VIII TTh McCartney
- 109w,s See 109f
- 110w,s See 110f
- 111w,s See 111f
- 201w,s See 201f

PEDIATRICS (PED)

Fall Quarter

- 120 The Normal Child (1 cr; prereq regis jr med)
Ar, McQuarrie, May, Ziegler, Adams
- 150 Physiology, Diseases of Newborn (1 cr)
Ar, Adams
- 152 Fundamental Prin Nutrition, Metabolism Applied to Children (1 cr)
Ar, McQuarrie, May, Ziegler, Lowe
- 154 Endocrinology Applied to Pediatrics (1 cr)
Ar, McQuarrie
- 156 Adv Study of Noncontagious Diseases of Childhood (1 cr)
Ar, McQuarrie, Adams, Huenekens, May

- 158 Adv Study of Contagious Diseases (1 cr)
Ar, Stoesser, Platou, Seham, Adams
- 160 Allergic Disorders in Childhood (1 cr)
1:30-3:00 W, OPD, Stoesser
- 162 Pediatric Psychiatry (1 cr)
III-IV TF, OPD, Jensen, Lippman, Hanson, Benton, Brown, Engel
- 163 Hematology of Infancy, Childhood (1 cr)
IX T, Hosp wards, May, Nelson
- 164 Rare, Unusual Diseases of Infancy, Childhood (1 cr)
Ar, McQuarrie, Platou
- 166 Weekly Seminar for Subjects Related to Pediatrics (1 cr)
IX M, 6th fl, West Hosp, Ziegler
- 167 Weekly Seminar for Review of Current Literature (1 cr)
Ar, McQuarrie, staff
- 168 Speech Disturbances in Childhood (1 cr)
Ar, Bryngelson, Brown, Arkola, Jensen
- 170 Rheumatic Infection, Heart Diseases in Childhood (1 cr)
Ar, OPD, Adams, Shapiro, Dwan, Good
- 202 Pediatric Clinic (1-7 cr)
Ar, McQuarrie, Stoesser, Adams, Jensen, May, Ulstrom, Engel
- 204 Residency in Pediatrics (1-7 cr)
Ar, McQuarrie, Huenekens, Platou, Seham, Top, Adams, Jensen, May, Richdorf, Good, Lowe
- 208 Pediatric Research (3-7 cr)
Ar, McQuarrie, Top, May, Jensen, Ziegler, Adams, and staff

Winter and Spring Quarters

- 121w Clinical Diagnosis in Infancy, Childhood (1 cr; prereq 120, regis jr med) Ar McQuarrie, Adams, Stenswick, Bryngelson, Cohen, Jensen, May
- 122s Diseases of Infancy, Childhood, Their Treatment (2 cr; prereq 121, regis jr med) Ar McQuarrie, Adams, Jensen, May, Stoesser, and staff
- 150w,s See 150f
- 152w,s See 152f
- 154w,s See 154f
- 156w,s See 156f
- 158w,s See 158f
- 160w,s See 160f
- 162w,s See 162f
- 163w,s See 163f
- 164w,s See 164f
- 166w,s See 166f
- 167w,s See 167f
- 168w,s See 168f
- 170w,s See 170f
- 202w,s See 202f
- 204w,s See 204f
- 208w,s See 208f

PHARMACOLOGY (PHCL)

Fall Quarter

- 10 Pharmacology for Nursing Students (2 cr, †9-10; prereq 9)
VI Th, 111MeS, Cranston
- 101 Intro Pharmacology (2 cr; prereq Phsl 107, regis dent or pharmacy)
I TTh, 15MeS, Wright
- 105 Gen Experimental Pharmacology (6 cr; prereq 101, regis vet med)
VI TTh, VIII-IX W, 129MH, O'Dell
- 109 Pharmacological Probs (ar cr; prereq 102)
Ar, Staff
- 110 Toxicology (2-5 cr; prereq 102)
Ar, Wright
- 111 Adv Toxicology (3 cr; prereq 110 or concur regis)
Ar, Wright
- 112 Spectrochemical Toxicology (3 cr; prereq 110)
Ar, Wright
- 123 Special Topics (ar cr)
Ar, staff
- 124 Pharmacology of Special Systems (ar cr)
Ar, staff
- 203 Research—Pharmacology (ar cr; prereq 102, cons instr)
Ar, staff
- 204 Adv Pharmacology (1 cr; prereq 101, cons instr)
Ar, staff
- 205 Gen Discussions in Pharmacology (1 cr; prereq 101 or 102, cons instr)
Ar, staff

Winter and Spring Quarters

- 9w Pharmacology for Nursing Students (2 cr, †9-10) VI TTh Cranston
- 10s See 10f
- 101w See 101f VI ThF Bieter
- 102s Gen Experimental Pharmacology (9 cr; prereq 101, regis soph med) Lect II MTF, IV M, III Th Bieter; Labs I-III W, III T; VI-VIII W, III F
- 105w See 105f (prereq regis dent or pharm)
I MTWF Wright; Labs II-IV MW; VI-VIII MW
- 106s Gen Pharmacology (2 cr; prereq 105, regis dent or pharm) VI TTh Wright
- 108s Prescription Writing (1 cr; prereq 102 or 106, regis dent, pharm, med) VI F Wright
- 109w,s See 109f
- 110w,s See 110f
- 111w,s See 111f
- 112w,s See 112f
- 123w,s See 123f
- 124w,s See 124f
- 203w,s See 203f
- 204w,s See 204f
- 205w,s See 205f

PHYSIOLOGICAL CHEMISTRY
(PHCH)

Fall Quarter

- 1 Physiological Chemistry for Nurses (4 cr)
Lect II MWF, 129MH
—1, Lab ar
—2, Lab ar
- 100 Physiological Chemistry (7 cr; prereq org, phys chem, phys, primarily for fresh med)
Lect IV MTWFS, 15MeS, Armstrong, others
—1, Lab I-III MW, 310MH
—2, Lab I-III ThS, 310MH
- 104 Physiological Chemistry (5 cr; prereq org chem, primarily for 1st yr dent)
IV MTWFS, 12MeS, Singer, Frame
- 153 Probs in Physiological Chemistry (ar cr; prereq 101)
Ar, staff
- 200 Seminar—Physiological Chemistry (1 cr)
V Th, 214MH, staff
- 205 Research—Physiological Chemistry (ar cr)
Ar
- 209 Histochemistry (3 cr; prereq* 101, histology)
IX MWF, 214MH, Glick
- 212 Histochemistry Lab (ar cr; prereq 101, cons instr)
Ar, Glick

Winter and Spring Quarters

- 50s Physiological Chemistry (4 cr, \$100-101; prereq inorg chem, primarily for phys educ, dent hyg, nurses) VI MTWTh Dunshee, Carr
- 101w Physiological Chemistry (6 cr, \$50; prereq 100) Lect IV MTWF Armstrong, others; Labs I-III MW; I-III ThS
- 102w Physiological Chemistry (6 cr; prereq org chem, primarily for vet med) Lect VI M, IV T, III-IV S Armstrong, others; Labs VII-IX M, I-III T; VI-VIII TTh
- 103s Physiological Chemistry (6 cr; prereq 102)
Lect IV TTh, VI TTh Armstrong, others; Labs VII-IX TTh; I-III TTh
- 105w Physiological Chemistry (6 cr; prereq 104)
Lect IV MTWF Singer; Lab VI-VIII WF
- 153w,s See 153f
- 200w,s See 200f
- 205w,s See 205f
- 211s Intermediary Metabolism (3 cr; prereq 101)
IX MWF Barnum
- 212w,s See 212f

PHYSIOLOGY (PHSL)

Fall Quarter

- 4 Human Physiology (4 cr, \$106-107; prereq 1 qtr zool, 1 qtr chem, for academic, HE, pharmacy)
III MWF, IV F, 129MH

- 60 Human Physiology (6 cr, §106-107; prereq physiol chem, human or mammalian anat, primarily for med tech, 5 yr nurs, PT) Lect I TTh, II MFS, 214MH Lab II-IV W
- 113 Probs in Physiology (ar cr; prereq 107) Ar
- 124 Seminar—Neurophysiology (2 cr; prereq 107 with grade B, or spec exam) IX-X T, 113MeS
- 201 Seminar—Physiology (ar cr) V M, 214MH
- 202 Readings—Physiology (ar cr) Ar
- 203 Research—Physiology (ar cr) Ar

Winter and Spring Quarters

- ←4s See 4f VII-VIII TTh
- ←60w See 60f Lect I MWThF, II F; Lab II-IV W
- 101w Human Physiology (10 cr, §106-107; pre-req physiol chem, anat, primarily for dent) Lect VI MTWThF, IV S; Conf I F; Labs I-III S, VII-IX Th; II-IV F, VII-IX T
- 106-107s Human Physiology (10 cr, §106-107, §4, 60, 101; prereq concur regis 107, org chem, zool, neuro-anatomy, primarily for fresh med, grad) Lect IV MTWThFS; Conf VI Th; Dem VIII-IX W; Labs I-III MWS; I-III TThF
- 113w,s See 113f
- 124w See 124f (1 or 2 cr) IX T
- 201w,s See 201f
- 202w,s See 202f
- 203w,s See 203f

PSYCHIATRY AND NEUROLOGY

Neurology (NPSY)

Fall Quarter

- 101 Neurology (1 cr; prereq regis jr med) Ar
- 145x Reading in Neurology (ar cr) Ar, Baker
- 150 Adv Neuropathology (ar cr) Lect VII Th, 304IA, Tichy Lab VIII-X Th, Path Lab, Tichy
- 151 Survey of Neuropathology (ar cr) Ar, Tichy
- 155 Therapeutics in Neurology (2 cr; prereq regis jr med) Ar, Resch
- 171B Neurology (2 cr; prereq regis SW, PT) VI-VII Th, 15MeS, Baker
- 208 Clinical Neurology (ar cr) Ar, Baker
- 209 Research—Neurology (ar cr) Ar, Baker
- 210 Adv Neuropathology (2 cr) Lect VII Th, 304IA, Tichy Lab VIII-X Th, Path Lab, Tichy

- 212 Survey of Neuropathology (1 cr) Ar, Tichy
- 220 Adv Clinical Neurology (ar cr) Ar, Baker
- 225 Neuro-ophthalmology (1 cr) Ar, Baker
- 226 Neurological-Neurosurgical Conference (1 cr) Ar, Staff
- 228 Research—Neuropathology (ar cr) Ar, Staff
- 231 Applied Electroencephalography, Myography (2 cr) Ar, Zarling
- 232 Applied Neurooentgenology (2 cr) Ar, Staff
- 233 Applied Neuropathology (1 cr) Ar, Baker
- 238 Neurological Clinical Pathological Conference (1 cr) Ar, Baker
- 240 Neuropathology Conference (1 cr) Ar, Baker
- 241 Neuroradiology (1 cr) Ar, Staff

Winter and Spring Quarters

- 101w See 101f
- 102s Psychiatry (2 cr; prereq regis jr med) Ar Hathaway
- 145xw,s See 145xf
- 150w See 150f
- 151w,s See 151f
- 155w,s See 155f
- 208w,s See 208f
- 209w,s See 209f
- 210w See 210f
- 212w,s See 212f
- 220w,s See 220f
- 225w See 225f
- 226w,s See 226f
- 228w,s See 228f
- 230w Electroencephalography (1 cr) Ar Zarling
- 231w,s See 231f
- 232w,s See 232f
- 233w,s See 233f
- 238w,s See 238f
- 240w,s See 240f
- 241w See 241f

Psychiatry (NPSY)

Fall Quarter

- 120 Psychosomatics (1 cr; prereq regis fresh med) VI F, PoH Amph, Hastings, others
- 121 Intro Psychiatry in Practice of Medicine (2 cr; prereq regis soph med) VI TTh, Eustis amph, Hastings, others
- 145 Reading in Psychiatry (ar cr) Ar, Hastings
- 171A Psychiatry (2 cr; prereq regis nurs) VI-VII T, 15MeS, Hastings

- 203x Clinical Psychiatry (ar cr)
Ar, Staff
- 208y Clinical Child Psychiatry (ar cr)
Ar, Jensen
- 209 Research—Psychiatry (ar cr)
Ar, Hastings
- 215 Seminar — Application of Psychological
Methods (ar cr)
Ar, Hathaway
- 219 Personality Structure, Normal, Abnormal
(1 cr)
Ar, Hathaway
- 221 Psychometric Clerkship (2 cr)
Ar, Hathaway
- 222 Interviewing Techniques in Psychiatry (1
cr)
Ar, Hathaway
- 227 Clinical Seminar for Psychologists (1 cr)
Ar, Schofield
- 236 Normal Personality Development, Psycho-
pathology (1 cr)
Ar, Challman
- 237 Psychoanalytic Therapy (1 cr)
Ar, Lippman
- 243 Prolonged Psychotherapy (1 cr)
Ar, Staff
- 244 Seminar—Psychosomatic Medicine (1 cr;
prereq MD degree, cons instr) Ar,
Aldrich
- 245 Case Conference in Psychiatry, Neurology
for psychologists (1 cr; prereq* clinical
psych, grad)
Ar, staff

Winter and Spring Quarters

- 105w Psychiatric, Neurologic Clinic (1 cr; pre-
req regis sr med) Ar Hastings, Baker,
staff
- 120w,s See 120f
- 121w See 121f (1 cr)
- 145w,s See 145f
- 208xw,s See 208xf
- 208yw,s See 208yf
- 209w,s See 209f
- 214w,s Psychiatric, Neurologic Disorders of
Childhood (1 cr) 1:30-2:30 T Jensen
- 215w,s See 215f
- 219w,s See 219f
- 221w,s See 221f
- 222w,s See 222f
- 227w,s See 227f
- 236w,s See 236f
- 237w,s See 237f
- 243w,s See 243f
- 244w,s See 244f
- 245w,s See 245f

PUBLIC HEALTH (PH)

Fall Quarter

- 3 Personal Health (2 cr, §GC 10C)
VI MW, BuAud, Thomson

- 50 Personal, Community Health (3 cr, §3, 4,
52, 100 or GC 10C)
VIII MWF, 15MeS, Thomson
- 51 Community Hygiene (3 cr, §4, 50, 52 or
100; prereq 3 or GC 10C)
IV MWF, 102IA, Cowan
- 52a Health Care of Family (2 cr, §4, 50, 51;
prereq Bact 53, Phsl 4, regis HE)
VI MW, 313HE, Todd
- 52b Home Nursing, Family Care (1 cr; prereq
concur regis 52a)
—1, VII-VIII T, 01MeH, Sandve
—2, VII-VIII Th, 01MeH
- 57 Health of Infant, Preschool Child (2 cr;
prereq 4 or 50 or 51 or 52 or 53 or 100)
II MF, 111MeS, Boynton
- 60 Tuberculosis, Its Control (2 cr; prereq 4
or 50 or 51 or 52 or 53 or 100, 62, regis
nurs or cons instr)
IV TS, 129MH, Myers
- 62 Prin Public Health Nursing I (5 cr; prereq
100 or concur regis, regis PH nurs or
cons instr)
—1, I MWF, 15MeS, I TTh, 104IA, Taylor
—2, VI-VII MW, VI F, 129MH
- 65 Field Work in School Nursing (ar cr; pre-
req 53 or 100, 62, 67, regis PH nurs)
Ar, Vroom
- 66 Field Work in Rural Nursing (ar cr; prereq
53 or 100, 62, 67, regis PH nurs)
Ar, Vroom
- 67 Field Work in Urban Nursing (ar cr; pre-
req 53 or 100, 62, regis PH nurs)
Ar, Vroom, Palmer, staff
- 69 Nursing in Health Programs for School
Aged Children (3 cr; prereq 53 or 100,
62, 63 or concur regis or cons instr)
IV MWF, 214MH, Taylor
- 70 Practice Teaching in Home Nursing or
Child Care for Public Health Nurses (ar
cr; prereq* 67, Ed 81)
Ar, Sandve
- 91 Prin Human Function (4 cr, †90-91; prereq
8 cr chem, 4 cr anat, primarily for PH,
phys educ students)
Lect IV MWF, 111MeS, Henschel
Lab VII-VIII T, Bact Lab
- 95 Prin Human Nutrition (3 cr; prereq 3 cr
chem, 10 cr biol)
IV MWF, 304IA, Anderson
- 100 Elements of Preventive Medicine, Public
Health (5 cr for PH nurs, nurs, pre-SW,
SW, hosp admin; prereq 3 or 50, course
in bact)
Lect II MWF, 15MeS, Anderson
—1, III TTh, 111MeS, Thomson
—2, VI TTh, 304IA, Taylor
- 101 Public Health Admin, Field Work (2 cr;
prereq regis sr med)
Ar, Thomson
- 102 Environmental Sanitation I (3 cr; prereq 50
or 51 or 53 or 100 or concur regis)
I TThS, 129MH, Pierce, Olson

- 103 Public Health Bacteriology (ar cr; prereq Bact 102, 116, cons instr)
II-III MWF, SBH Lab, Bauer
- 104 Epidemiology I (3 cr; prereq see PH bul)
I MWF, 129MH, Top
- 110 Biometric Principles (3 cr; prereq sr, 18 cr biol sci or math through anal geom, concur regis 111)
III TThS, 129MH, Treloar
- 111 Biostatistics Lab (2 cr; prereq concur regis 110)
—1, I-II MWF, 118MH
—2, III-IV MWF, 118MH
—3, VI-VII MWF, 118MH
—4, VIII-IX MWF, 118MH
—5, I-II TThS, 118MH
—6, VII-IX TTh, 118MH
- 117 Sanitary Biology (3 cr; prereq cons instr)
Ar, Olson
- 119 Field Practice in Environmental Sanitation (ar cr; prereq cons instr)
Ar
- 123 Topics in Public Health (ar cr; prereq cons instr)
Ar, Staff
- 126 Industrial Health Probs (3 cr; prereq* 53 or 100, InCh 2)
VI MWF, 214MH, Foker
- 127 Industrial Health Probs—Nursing Aspects (1 cr; prereq concur regis 126)
VII M, 214MH, Henriksen
- 129 Field Work in Industrial Nursing (ar cr; prereq 67)
Ar, Vroom
- 138 Field Work in Child Hygiene (ar cr; prereq sr, cons instr)
Ar, Spock, Mouw, staff
- 139 Field Work in Mental Hygiene (ar cr; prereq cons instr)
Ar, von Bergen
- 140 Vital Statistics (3 cr; prereq concur regis 104, cons instr)
VI-VIII T, 109ForH, VI Th, 113MeS, VII-VIII Th, 129MH, Treloar, Elveback
- 152 Industrial Hygiene Engineering (3 cr; prereq cons instr)
Ar, Pierce
- 161 History, Development of Hospitals (6 cr)
III-IV MWF, 105TSP, Hamilton, Stephan
- 162 Prin Organization, Mgt of Hospitals (6 cr)
VI-VII MWF, 105TSP, Hamilton, Stephan
- 168 Orientation to Medical Sciences (3 cr)
I MWF, 105TSP, Thomson
- 171 Probs in Public Health Nursing (ar cr; prereq* 170)
Ar, Taylor
- 173 Field Work in Supervision in Public Health Nursing (ar cr; prereq* 170, for PH nurs)
Ar, Vroom, staff
- 174 Supervision Lab (ar cr; prereq PH nurs)
Ar, Taylor
- 181 Prin, Methods in Community Health Education (ar cr; prereq cons instr)
Ar, Grout, staff
- 190 Field Work in Community Health Education Program (ar cr; prereq see PH bul)
Ar, Grout, staff
- 194 Human Factors in Industry (3 cr; prereq see PH bul)
IV MWF, Brozek
- 200 Research (ar cr; prereq cons instr)
Ar, Staff
- 201 Topics in Biometry (ar cr; prereq* 120, 130)
Ar, Treloar, staff
- 210 Seminar—Public Health (ar cr)
IX M, Staff
- 211 Seminar—Biometry (ar cr)
Ar, Treloar
- 215 Maternal, Child Health (ar cr; prereq physicians only, cons instr)
Ar, Boynton
- 220 Reading Probs of Physiological Hygiene (ar cr; prereq cons instr)
Ar, Keys, staff
- 227 Probs in Community Health Education Program (ar cr; prereq cons instr)
Ar, Grout, staff

Winter and Spring Quarters

- 3w,s See 3f VI MW (w); VI MW; VI TTh (s)
- 4w,s Health Probs of Community (2 cr; prereq 3 or GC 10C) VI TTh (w); I TTh (s)
Fox
- 50w See 50f III MWF
- 51w See 51f
- 52as See 52af
- 52bw,s See 52bf
- 55w Nursing, Social Probs in Gonorrhea, Syphilis Control (2 cr; prereq 53 or 100, 62, or Soc 50-51 for pre-SW maj, regis PH nurs, soc maj) VII MW Taylor
- 58s Maternal, Child Hygiene (3 cr; prereq 53 or 100, 62, regis nurs) VIII MWF and 1 hr ar Boynton
- 59w,s Health of School Child (3 cr; prereq 3, 4; or 3, 51; or GC 10, 51; or 50 or 52 or 100) IV MWF (w); VII MWF (s) Thomson, Anderson
- 60s See 60f
- 62w See 62f III-IV TTh, III S
- 63w,s Prin Public Health Nursing II (5 cr; prereq 62, 53 or 100 or concur regis, regis PH nurs or cons instr) II-III MW, II F (w); VI-VII MW, VI F (s) Taylor
- 64w,s Cancer Nursing, Nursing in Other Chronic Diseases (3 cr; prereq PH nurs or cons instr) IV MWF (w); IV TThS (s) Maloy
- 65w,s See 65f
- 66w,s See 66f
- 67w,s See 67f
- 69s See 69f
- 70w,s See 70f
- 80w Elem Vital Statistics (3 cr; prereq* PH nurs) VII-VIII TTh Treloar

- 90s Statistics in Medicine (2 cr; prereq* regis soph med) Lect III M Treloar; Labs VII-VIII½ M; VII-VIII½ F
- 92w Prin Human Function (4 cr, †91-92; prereq 91) IV MWF, VI T Taylor
- 100s See 100f (for med students); IV TThF and II Th; for others Lect II MWF; Rec III TTh or VI TTh
- 101w,s See 101f
- 102s See 102f
- 103w,s See 103f
- 105w Epidemiology II (3 cr; prereq see PH bul) III TThS Top
- 106w Public Health Admin (3 cr; prereq 53 or 100, for physicians, engin, nurs, SW, others with cons instr) I TThS Anderson
- 107w Child, Adult Hygiene (3 cr; prereq 53 or 100, for physicians, grad in PH nurs, Med-SW) I-IV MW Boynton, staff
- 110w,s See 110f II MWF
- 111w,s See 111f III-IV MWF; VI-VII MWF; III-IV TThS
- 112w Water Supply Sanitation (4 cr, §114; prereq 102, 100 or 104) Ar Whittaker, Pierce, Olson
- 113s Sewage, Excreta, Waste Disposal (4 cr, §114; prereq 102, 100 or 104) Ar Whittaker, Pierce, Olson
- 114w Environmental Sanitation II (2 cr, §112, 113, 116; prereq 102, for physicians, nurs, vet med, others by cons) I-IV W; VI-IX MF Whittaker, Pierce, Olson
- 115w Food Sanitation (3 cr; prereq 102, 100 or 104) Ar Olson
- 116s Public Health Engineering Admin (2 cr, §114; prereq 102, 100 or 104, 106, two of 112, 113, 115) Ar Whittaker
- 118s Sanitary Biology (3 cr; prereq 117) Ar Olson
- 119w,s See 119f
- 120s Correlation Analysis (3 cr; prereq 110, concur regis 121) III TThS Hartman
- 121s Correlation Lab (2 cr; prereq concur regis 120) I-II MWF; VIII-IX MWF; I-II TThS; VII-IX TTh Hartman
- 122s Public Health Admin Probs (3 cr; prereq 106) II TThS Anderson
- 123w,s See 123f
- 125s Community Health Education Program (3 cr; prereq 53 or 100 or 104, 106 or concur regis) III TThS Grout
- 129w,s See 129f
- 130w Random Sampling Distributions (3 cr; prereq 110, concur regis 131) III TThS Thornton
- 131w Sampling Lab (2 cr; prereq concur regis 130) I-II MWF; VIII-IX MWF; I-II TThS; VII-IX TTh Thornton
- 133w,s Mental Hygiene (3 cr; prereq 62 or PH nurs exper) I TThS (w); I MWF (s) Wood
- 135s Conservation of Hearing (1 cr; prereq 53 or 100, 62 or concur regis) I F Boies, staff
- 136s Sight Conservation (1 cr; prereq 53 or 100, 62 or concur regis) I W Hansen, staff
- 137s Dental Health (1 cr; prereq 53 or 100, 62 or concur regis) I M Jordan
- 138w,s See 138f
- 139w,s See 139f
- 141s Social, Economic Aspects of Medical Care (3 cr; prereq cons instr) IV TThS Mickey
- 142s Medical Economics (2 cr; prereq regis sr med) VII MF Mickey
- 150w Life Tables (3 cr; prereq cons instr) Ar Elveback
- 152w,s See 152f
- 153s The Hospital, the Community (1 cr; prereq cons instr) IV M Stephan, Hamilton
- 163w Prin Organization, Mgt of Hospitals (6 cr; prereq 162) III-IV MTWThFS Stephan, Hamilton
- 164s Prin Organization, Mgt of Hospitals (6 cr; prereq 163) VI-VII TWThF Stephan, Hamilton
- 165w Hospitals in Community Organization (1 cr) VI-IX T Stephan
- 166w Hospital Clerkship (3 cr) Ar Stephan
- 167s Mgt Probs in Hospital Admin (4 cr; prereq 163, concur regis 164) II-III MWF, II TTh, VI-VII M Hamilton
- 170w Supervision in Public Health Nursing (3 cr; prereq* 53 or 100, 133, or PH nurs exper) IV TThS Taylor
- 171w,s See 171f
- 173w,s See 173f
- 174w,s See 174f
- 181w,s See 181f
- 190w,s See 190f
- 191w Science of Human Nutrition (3 cr; prereq 8 cr org chem or biochem, 91, 92 or Phsl 103, cons instr) Ar Anderson, Keys
- 192w Physiology of Exercise (4 cr; prereq 92 or Phsl 103, cons instr) Ar Keys, staff
- 200w,s See 200f
- 201w,s See 201f
- 210w,s See 210f
- 211w,s See 211f
- 215w,s See 215f
- 220w,s See 220f
- 227w,s See 227f

RADIOLOGY AND PHYSICAL MEDICINE

Physical Medicine (PMED)

Fall Quarter

- 1 Orientation to Occupational Therapy (1 cr) Ar, Hansen
- 50 Physics for Physical Therapy (2 cr; prereq regis PT)
I TTh, Marvin
- 55 Process of Rehabilitation (2 cr; prereq regis OT)
VI WF, 101TNHS, Hansen

- 57 Ethics, Administration (1 cr; prereq regis PT)
IV T, Kottke, staff
- 60 Theory, Technique of Thermo-, Photo-, Hydro-, Electrotherapy (5 cr; prereq regis PT)
Lect II-III TTh, Hamilton, staff
—1, Lab I-III S
—2, Lab III MW, VII MW
- 65 Theory, Technique of Muscle Re-education (4 cr; prereq regis PT)
Lect IV WF, Green
Lab I-II WF
- 69 Anatomy Applied to Techniques of Poliomyelitis (2 cr; prereq regis PT)
I-II M, Knapp, Kottke
- 71 Theory of Occupational Therapy (2 cr; prereq regis OT)
IV WF, 101TNHS, Hansen
- 78 Prin, Practice of Occupational Therapy (3 cr; prereq regis OT)
Lab ar, Johnson, Phelps
- 81 Rehabilitation (2 cr)
Lect IV Th, Ladd
Lab VI-VII F
- 82 Physiology of Muscles, Nerves, Circulation (3 cr; prereq regis PT)
III MWF, Kottke, Kubicek
- 122 Physical Therapy (1 cr; prereq regis sr med)
Ar, Knapp
- 125 Physical Medicine Clinic (1 cr; prereq regis jr, sr med)
Clinic ar, Knapp, Kottke, Lecklitner
- 130 Probs in Physical Medicine for Jr, Sr Medical Students (ar cr)
Ar, Knapp, Kottke, Kubicek
- 200 Physical Medicine (ar cr)
Ar, Knapp, Kottke, Lecklitner
- 203 Poliomyelitis Clinic (ar cr; prereq for physicians)
Clinic ar, Kottke, Knapp
- 204 Peripheral Vascular Disease Clinic (ar cr; prereq for physicians)
Clinic ar, Kottke
- 210 Research—Physical Medicine (ar cr)
Ar, Kottke, Kubicek, Knapp
- 220 Seminar—Physical Medicine (ar cr)
Ar, Knapp
- Winter and Spring Quarters**
- 1w Orientation to Occupational Therapy (1 cr) Ar
- 58w Asepsis, Bandaging, Contagious Technique (1 cr; prereq regis PT) Ar
- 61s Theory, Technique of Physical Medicine Applied to Medical Sciences (5 cr; prereq regis PT, OT) Ar
- 63s Junior Clinic Physical Medicine (1 cr; prereq regis PT, OT) Ar
- 64w Senior Clinic in Physical Medicine (1 cr; prereq regis PT) Ar
- 68w Applied Anatomy (3 cr; prereq regis PT) Ar
- 70w Theory, Technique of Massage (3 cr; prereq regis PT) Ar
- 72w Theory of Occupational Therapy (3 cr; prereq regis OT) Ar
- 73s Theory of Occupational Therapy (2 cr; prereq regis OT) Ar
- 74s Therapeutic Recreation (1 cr; prereq regis OT) Ar
- 75s Plastic Processes (3 cr; prereq regis OT) Ar
- 76w Techniques of Occupational Therapy (3 cr; prereq regis OT) Ar
- 77s Orthopedics for Occupational Therapists (3 cr; prereq regis OT) Ar
- 80w Theory, Technique of Therapeutic Exercises (5 cr; prereq regis PT) Ar
- 83w Theory, Technique of Muscle Function, Measurements, Tests (5 cr; prereq regis med, PT, OT) Ar
- 90s Conference (1 cr; prereq regis PT) Ar
- 91s Clinical Practice (18 cr; prereq regis PT) Ar
- 92w Preliminary Hospital Practice in Occupational Therapy (3 cr; prereq regis OT) Ar
- 95w Clinical Training (18 cr; prereq regis OT) Ar
- 96s Clinical Training (18 cr; prereq regis OT) Ar
- 122w,s See 121f
- 125w,s See 125f
- 130w,s See 130f
- 200w,s See 200f
- 203w,s See 203f
- 204w,s See 204f
- 210w,s See 210f
- 220w,s See 220f
- Radiology (RAD)**
- Fall Quarter**
- 102 X-ray Conference (1 cr)
X T, Eustis amph Hosp, Rigler
- 111 Medical Roentgenologic Conference for Medical Clerks (1 cr)
II M, Todd amph Hosp, Rigler
- 124 Pediatric-Roentgenologic Conference for Pediatric Clerks (1 cr)
II T, Eustis amph Hosp, Rigler
- 137 Surgical Roentgenologic Conference for Surgical Clerks (1 cr)
II S, Todd amph Hosp, Rigler
- 163a Neurosurgical-Roentgenologic Conference for Neurosurgical Clerks (1 cr)
VI F, Todd amph Hosp, Peterson
- 208 Seminar—Radiology (1 cr)
X Th, Eustis amph Hosp, Rigler
- 211 Roentgen Diagnosis of Diseases of Gastrointestinal Tract (ar cr)
IX W, M109Hosp

- 212 Roentgen Diagnosis in Obstetrics, Gynecology (ar cr)
IX W, M109Hosp
- 213 Roentgen Diagnosis of Pulmonary Diseases (ar cr)
IX W, M109Hosp
- 214 Roentgen Diagnosis of Diseases of Bones, Joints (ar cr)
IX W, M109Hosp
- 215 Roentgen Diagnosis of Diseases of Gallbladder, Urinary Tract (ar cr)
IX W, M109Hosp
- 216 Roentgen Diagnosis of Traumatic Lesions of Skeleton (ar cr)
IX W, M109Hosp
- 217 Theory, Practice of Radiation Therapy (ar cr)
IX W, M109Hosp
- 220 Urologic-Roentgenologic Conference for Graduate Students (1 cr)
X M, M109Hosp, Rigler
- 236 Radio Isotope Seminar (1 cr)
V W
- 240 Radiation Therapy Conference (1 cr)
IX Th, M109Hosp, Stenstrom

Winter and Spring Quarters

- 102w,s See 102f
- 104w,s Roentgen, Radium Therapy (1 cr) IX T Stenstrom
- 107s Biophysics (1 cr; prereq regis soph med) VI F Stenstrom
- 111w,s See 111f
- 121w,s Roentgen Diagnosis, Radiation Therapy (2 cr; prereq regis jr med) Ar Rigler, Stenstrom
- 124w,s See 124f
- 126w Clinical Lectures in Roentgen Diagnosis, Therapy (1 cr; prereq 121, regis sr med) Ar Rigler, Stenstrom
- 137w,s See 137f
- 163aw,s See 163af
- 201s Roentgen Diagnosis of Diseases of Head, Upper Respiratory Tract (1 cr) 7:00-9:00 p.m. Th Peterson
- 208w,s See 208f
- 211w,s See 211f
- 212w,s See 212f
- 213w,s See 213f
- 214w,s See 214f
- 215w,s See 215f
- 216w,s See 216f
- 217w,s See 217f
- 220w,s See 220f
- 236w,s See 236f
- 240w,s See 240f

SURGERY

Anesthesia (ANES)

Fall Quarter

- 207 Gen Anesthesia (12 cr)
Daily, 212TCH, Hosp, Knight, staff

- 208 Regional Anesthesia (1 cr)
Daily, 212TCH, Hosp, Knight, staff
- 209 Pre- and Postoperative Evaluation (2 cr)
Daily, 212TCH, Hosp, Knight, staff
- 210 Research—Anesthesia (ar cr)
Daily, 212TCH, Hosp, Knight, staff
- 211 Seminar—Anesthesia (2 cr)
Daily, 212TCH, Hosp, Knight, staff

Winter and Spring Quarters

- 207w,s See 207f
- 208w,s See 208f
- 209w,s See 209f
- 210w,s See 210f
- 211w,s See 211f

General Surgery (SURG)

Fall Quarter

- 101 Out-Patient Clinic in Surgery (1 cr)
All day, W305 Hosp, Wangenstein, staff
- 102 Applied Surgical Anatomy on Cadaver (1 cr)
Ar, Rice, staff
- 105 Proctoscopy, Sigmoidoscopy (1 cr)
All day, W305 Hosp, Bernstein, staff
- 121B First Aid (2 cr; prereq regis soph med)
Lect VI M, Eustis amph Hosp, Wangenstein
—1, Lab VI W, Eustis amph Hosp
—2, Lab VI F, Eustis amph Hosp
- 122 Basic Prin Involved in Diagnosis, Treatment, Prognosis of Fractures, Dislocations (1 cr; prereq regis jr med)
Ar
- 129 Surgical Clinic for Juniors (1 cr; prereq regis jr med)
Ar
- 134 Tumor Clinic (1 cr)
Mon, Thur, W307 Hosp, Hay, Kremen
- 135 Surgical Ward Conference (1 cr)
Ar, Wangenstein, staff
- 137 Roentgenologic-Surgical Conference (1 cr)
I S, Todd amph Hosp, Wangenstein, staff
- 138 Medico-Surgical Pathological Conference (1 cr)
Wed, Todd amph Hosp, Wangenstein, Watson, Dawson
- 205 Surgical Diagnosis (1 cr)
Daily, W305 Hosp, Hosp Wards, Wangenstein, staff
- 208 Surgical Service (1 cr)
Daily, W305 Hosp, Hosp Wards, Wangenstein, staff
- 211 Operative Surgery (1 cr)
Daily, Main Oper Rm Hosp, Wangenstein, staff
- 216 Surgical Research (1 cr)
Daily, 401-428MH, Wangenstein, Toon, staff
- 217 Surgical Seminar (1 cr)
I W, Wangenstein, staff
- 245 Surgical Literature Conference (1 cr)
8:45 W, Wangenstein, staff

- 248 Surgical Pathology (1 cr)
Daily, Path Lab, Main Oper Rm Hosp,
Ar, staff
- 251 Surgical Anatomical Conference (1 cr)
III S, Todd amph Hosp, Staff
- 254 Surgical Review Conference (1 cr)
IV S, Todd amph Hosp, Staff

Winter and Spring Quarters

- 101w,s See 101f
102w,s See 102f
105w,s See 105f
121s Prin Surgery (3 cr; prereq regis soph
med) Ar
129w,s See 129f
134w,s See 134f
135w,s See 135f
137w,s See 137f
138w,s See 138f
-206w-207s See 205f
-212w-213s See 211f
216w,s See 216f
217w,s See 217f
-246w-247s See 245f
-249w-250s See 248f
-252w-253s See 251f
-255w-256s See 254f

Neurosurgery (NSUR)

Fall Quarter

- 305 Neurosurgical Diagnosis (3 cr)
II-IV MTh, Neurosurgery Clinic, W312 Hosp,
Peyton, French
- 308 Neurosurgical Service (3 cr)
Daily, Hosp Wards, Peyton, French
- 311 Operative Neurosurgical Surgery (3 cr)
Daily, Main Oper Rm Hosp, Peyton, French
French
- 316 Neurosurgical Research (3 cr)
II-IX MTWThF, 401MH, Peyton, French
- 318 Neurosurgical Conference (3 cr)
1:30-3:30 F, Todd amph Hosp, Peyton,
French

Winter and Spring Quarters

- 127w Surgical Diseases of Nervous System (1
cr; prereq regis jr med) Ar
305w,s See 305f
308w,s See 308f
311w,s See 311f
316w,s See 316f
318w,s See 318f

Orthopedics (OPED)

Fall Quarter

- 140 Orthopedic Surgery in Children (1 cr; pre-
req sr med)
Ar
142 Lectures in Orthopedic Surgery (1 cr;
prereq regis sr med)
Ar
405 Orthopedic Diagnosis (1 cr)
VI-VIII TTh, W111 Hosp, Cole, staff
408 Orthopedic Service (1 cr)
Daily, Hosp Wards, Cole, staff
411 Orthopedic Operative Surgery (1 cr)
Wed a.m. Sat a.m., West Oper Rm Hosp,
Cole, staff
416 Orthopedic Research (1 cr)
Daily, 401-428MH, Cole, staff

Winter and Spring Quarters

- 140s See 140f
142s See 142f

Urology (UROL)

Fall Quarter

- 173 Clinic in Urology (1 cr; prereq regis sr
med)
Ar
250 Urological Surgery (ar cr)
Daily, Main Oper Rm Hosp, Creevy, staff
251 Cystoscopy, Urological Diagnosis (ar cr)
Daily, M515 Hosp, Creevy, staff
252 Urological Conference (ar cr)
Daily, M515 Hosp, Creevy, staff
253 Research—Urology (ar cr)
Daily, M515 Hosp, 401MH, Creevy, staff
254 Urological Seminar (ar cr)
Daily, M515 Hosp, Creevy, staff
255 Urological Radiological Conference (ar cr)
Sat, Todd amph Hosp, Creevy, staff
256 Urological Pathological Conference (ar cr)
Wed, Todd amph Hosp, Creevy, staff

Winter and Spring Quarters

- 173w See 173f
250w,s See 250f
251w,s See 251f
252w,s See 252f
253w,s See 253f
254w,s See 254f
255w,s See 255f
256w,s See 256f

MILITARY SCIENCE AND TACTICS (MIL)

Fall Quarter

- 1 First Year Basic Course (1 cr)
 -1, III MWF, Gymnasium, Crocker, Swatosh
 -2, VIII MWF, Gymnasium, Crocker, Swatosh, Switch
 -3, VI M, 202WuH, VIII Th, 201WuH, Zagelow (for Pharmacy students)
- 4 Second Year Basic Course (1 cr; prereq 3)
 -1, III MWF
 --Artillery, 101A, Pully
 --Engineering, 9A, Aliotta
 --Ordnance, T-1A, Wood
 --Quartermaster, 201A, Coleman
 --Signal Corps, 206A, Copley
 --Transport, 103A, Bitler
 -2, VII MWF
 --Artillery, 101A, Pully
 --Engineering, 9A, Aliotta
 --Ordnance, T-1A, Wood
 --Quartermaster, 201A, Coleman
 --Signal Corps, 206A, Copley
 --Transport, 103A, Bitler
 -3, IX M
 --Pharmacy, 201WuH, Zagelow
- 151 First Year Adv Course (3 cr, pharm 1 cr; prereq 6)
 -1, I MTWThF
 --Artillery, 101A, Pully
 --Engineering, 9A, Aliotta
 --Ordnance, T-1A, Wood
 --Quartermaster, 201A, Coleman
 --Signal Corps, 206A, Copley
 --Transport, 103A, Bitler
 -2, IV MTWThF
 --Artillery, 101A, Pully
 --Engineering, 9A, Aliotta
 --Ordnance, T-1A, Wood

- Quartermaster, 201A, Coleman
 --Signal Corps, 206A, Copley
 --Transport, 103A, Bitler
 -3, VIII T
 --Pharmacy, 201WuH, Zagelow
- 154 Second Year Adv Course (3 cr, pharm 1 cr; prereq 153)
 -1, II MTWThF
 --Artillery, 101A, Pully
 --Engineering, 9A, Aliotta
 --Ordnance, T-1A, Wood
 --Quartermaster, 201A, Coleman
 --Signal Corps, 206A, Copley
 --Transport, 103A, Bitler
 -2, VI MTWThF
 --Artillery, 101A, Pully
 --Engineering, 9A, Aliotta
 --Ordnance, T-1A, Wood
 --Quartermaster, 201A, Coleman
 --Signal Corps, 206A, Copley
 --Transport, 103A, Bitler
 -3, IX Th
 --Pharmacy, 201WuH, Zagelow

Winter and Spring Quarters

- 2w See 1f (prereq 1)
 3s See 1f (prereq 2) III M, VIII-IX T; VIII M, VII-IX T
 -5w See 4f (prereq 4)
 6s See 5f (prereq 5) III M, VIII-IX T; VIII M, VIII-IX T
 -152w See 151f (prereq 151)
 153s See 151f (prereq 152) I MWF, VIII-IX T; IV MWF, VIII-IX T
 -155w See 154f (prereq 154)
 156s See 154f (prereq 155) II MWF, VIII-IX T; VI MWF, VIII-IX T

NAVAL SCIENCE (NAV)

Fall Quarter

- 11 Naval Orientation (3 cr)
 -1, Lect III MWF, 205A, Tracy
 -2, Lect IV MWF, 205A
 -3, Lect VII MWF, 205A
 Lab, VIII-IX T
- 21 Naval Weapons (3 cr)
 -1, Lect II MWF, 202A, Kelsey
 -2, Lect VI MWF, 202A
 -3, Lect VII MWF, 202A
 Lab, VIII-IX T
- 51 Navigation (3 cr)
 -1, Lect III MWF, 12A, Rawie
 -2, Lect VI MWF, 12A
 -3, Lect VII MWF, 12A
 Lab, VIII-IX T

- 61 Naval Machinery (3 cr)
 -1, Lect II MWF, 12A, Putman
 -2, Lect IV MWF, 12A
 Lab, VIII-IX T
- 64 American Military History, Policy (3 cr)
 Lect Ar, Lewis
 Lab VIII-IX T
- 67 Naval Supply (4 cr)
 Lect II-III TTh, 202A, Wells
 Lab VIII-IX T

Winter and Spring Quarters

- 12w Naval Orientation (3 cr) Lect III MWF; IV MWF; VII MWF Tracy; Lab VII-IX T

- 13s Naval Orientation (3 cr) Lect III MWF; IV MWF; VII MWF Tracy; Lab VIII-IX T
- 22w Naval Weapons (3 cr) Lect II MWF; VI MWF; VII MWF Kelsey; Lab VIII-IX T
- 23s Naval Weapons (3 cr) Lect II MWF; VI MWF; VII MWF Kelsey; Lab VIII-IX T
- 52w Navigation (3 cr) Lect III MWF; VI MWF; VII MWF Rawie; Lab VIII-IX T
- 53s Navigation (3 cr) Lect III MWF; VI MWF; VII MWF Rawie; Lab VIII-IX T
- 54w History of the Art of War (3 cr) Lect Ar MWF Lewis; Lab VIII-IX T
- 55s History of the Art of War (3 cr) Lect Ar MWF Lewis; Lab VIII-IX T
- 62w Diesel Engines, Ship Stability (3 cr) Lect II MWF; IV MWF Putman; Lab VIII-IX T
- 63s Naval Justice, Leadership (3 cr) Lect II MWF; IV MWF Putman; Lab VIII-IX T
- 65w Amphibious Warfare (3 cr) Lect Ar MWF Lewis; Lab VIII-IX T
- 66s Amphibious Warfare (3 cr) Lect Ar MWF Lewis; Lab VIII-IX T
- 68w Navy Supply (4 cr) Lect II-III TTh Wells; Lab VIII-IX T
- 69s Navy Supply (4 cr) Lect II-III TTh Wells; Lab VIII-IX T

COLLEGE OF PHARMACY

PHARMACEUTICAL CHEMISTRY
(PHMC)

Fall Quarter

- 1 Inorganic Pharmaceutical Products (4 cr; prereq* soph, InCh 12)
Lect II WF, 202WuH, Soine
—1, Lab VI-VIII MW, 301WuH, Soine
—2, Lab I-III Th, VI-VIII F, 301WuH, Soine
- 54 Quantitative Pharmaceutical Chemistry (5 cr; prereq sr, 2, InCh 12, OrCh 62)
Lect II TTh, I W, 202 WuH, DiGangi
—1, Lab VI-VIII TF, 1WuH
VI TF, 201WuH, DiGangi
—2, VI-VIII MW, 1WuH, VI MW, 201WuH, DiGangi
- 161 Organic Pharmaceutical Products (3 cr; prereq jr, OrCh 2)
VII MWF, 202WuH, Gisvold
- 201 Pharmaceutical Chemistry Seminar (1 cr)
Ar, Gisvold
- 202 Adv Analytical Methods (3-5 cr; prereq 165)
Ar, Rogers, Netz
- 205 Chemistry of Medicinal Products (3-6 cr; prereq* 163, OrCh 2)
Ar, Gisvold
- 208 Carbohydrates, Glycosides (3-5 cr; prereq* 163)
Ar, Gisvold
- 209 Alkaloids (3-5 cr; prereq* 163)
Ar, Soine
- 210 History of Pharmaceutical Chemistry (3 cr)
Ar, Netz
- 213 Special Probs (ar cr; prereq* 163)
Ar
- 214 Research—Pharmaceutical Chemistry (ar cr)
Ar

Winter and Spring Quarters

- 2w See 1f (prereq 1) Lect VI M, II F; Labs VI-VIII WF; VII-IX M, I-III Th Soine
- 53s Pharmaceutical Biochemistry (5 cr; prereq sr, OrCh 62) Lect I MWF; Lab VII-IX T, II-IV F DiGangi
- 55w See 54f (prereq 54) Lect VII-VIII T, VII Th; Labs II-IV WF, II WF; II-IV MTh, II MTh DiGangi
- 162w-163s See 161f (prereq 161) II TTh, VI T, IV F (s); III M, I T, IV Th (w)
- 164w-165s Special Analytical Methods (3 cr; prereq sr, 2, 54, OrCh 62) Lect VI Th (w) DiGangi; VII M (s) Soine; Labs II-IV T, VI-VIII Th (w) DiGangi; II-IV TTh (s) Soine
- 201w,s See 201f
- 203w,204s See 202f
- 206w,207s See 205f
- 209s Alkaloids (3-5 cr; prereq* 163) Ar Soine
- 211s Terpenes, Carotinoids, Tannins, Anthocyanins (3-5 cr; prereq* 163) Ar DiGangi
- 212w Fats, Waxes, Sterols, Related Compounds (3-5 cr; prereq* 163) Ar
- 213w,s See 213f
- 214w,s See 214f

PHARMACOGNOSY (PHCG)

Fall Quarter

- 1 Vegetable Drug Histology, Microscopy (2 cr; prereq soph, Bot 2)
Lect II M, 202WuH, Smyithe
—1, Lab VI-VIII F, 104WuH, Smyithe
—2, Lab VI-VIII M, 104 WuH, Smyithe
- 54 Drug Collection, Medicinal Plant Study (3 cr; prereq jr, 3, Bot 2)
Lect I TTh, 202WuH, Fischer
—1, Lab II-IV T, 104WuH, Fischer, Smyithe
—2, Lab III-V W, 104WuH, Fischer, Smyithe

- 55 Identification, Medicinal Properties of Vegetable Drugs (3 cr; prereq jr, 3, Bot 2) II T, III Th, 202WuH, VI F, 104WuH, White
- 59 Biological Products (3 cr; prereq sr, Bact 53) I MF, IV MWF, 202WuH, Fischer
- 201 Adv Pharmacognosy (3-5 cr; prereq 56, 57) Ar, Fischer
- 204 Research—Pharmacognosy (ar cr) Ar, Fischer, Rogers
- 205 Microscopy of Foods (3-5 cr; prereq 56, 57) Ar, Fischer, Rogers
- 207 Special Pharmacodynamic Methods (3-5 cr) Ar, White
- 209 Adv Experimental Drug Testing Techniques (ar cr) Ar, White
- Winter and Spring Quarters
- 2w-3s See 1f (2 cr (w) 3 cr (s); prereq 1) Lect II M (w); II WF (s); Labs II-IV T (s); II-IV Th (s) VII-IX M (w); VI-VIII F (w)
- 56w See 55f (prereq 55) III TTh, V F White
- 57s Antibiotics, Glandular Products (3 cr; prereq jr, 2, Phsl 4) III TTh, IV W White
- 60w-61s Pharmacognosy, Pharmaco-Histology (3 cr; prereq sr, 54) Lect VI Th (w); VII M (s); Labs II-IV T, VI-VIII F (w); II-IV TTh (s) Fischer
- 162w Biological Assay of Drugs (3 cr; prereq sr, 57, PhmC 56) Lect VI Th; Lab II-IV T, VI-VIII F White
- 164s Insecticides, Fungicides (3 cr; prereq sr, 162) VII M, II TTh Fischer
- 202w,203s See 201f
- 204w,s See 204f
- 206w Technical Microscopy (3-5 cr; prereq 56, 57) Ar Fischer
- 208w See 207f
- 210w-211s See 209f
- 54 Pharmaceutical Preparations (5 cr; prereq jr, 2, 3, PhmC 2) Lect VIII MWF, 202WuH, Hadley
—1, Lab III-V MW, 302WuH, Hadley
—2, Lab II-IV T, VI-VIII Th, 302 WuH, Hadley
- 57 History of Pharmacy (1 cr; prereq jr) VI T, 202WuH, Almin
- 58 Prescription Compounding (5 cr; prereq sr, 56, PhmC 2, 163, Phcg 57) Lect III MWF, 202WuH, Netz
—1, Lab VI-VIII MW, 203WuH, Almin
—2, Lab VI-VIII TF, 203WuH, Almin
- 65 Cosmetics (2 cr; prereq sr, 56, OrCh 62) IV TTh, 202WuH, Netz
- 70 First Aid (1 cr; prereq sr) VI-VII Th, 202, 201WuH, Hartmann
- 73 Special Probs (ar cr; prereq sr, 56, PhmC 163) Ar, Netz, Hadley, Almin
- Winter and Spring Quarters
- 3s Pharmaceutical Calculations (3 cr; prereq soph) II M, V W, IX Th Netz
- 55w-56s See 54f (prereq 54) Lect I M, IV TTh (s); II T, III WF (w); Labs I-III M, VI-VIII Th (s); I-III WF (s); VI-VIII MW (w); VI-VIII TTh (w)
- 59w-60s See 58f (4 cr (w), 4 cr (s); prereq 58) Lect VI T, VII Th (w); VII WF (s) Netz; Labs II-IV MW Almin (s) Netz (w); II-IV WTh (w) Almin; VII-IX T, II-IV F (s) Netz
- 64s Pharmaceutical Jurisprudence (2 cr; prereq sr) I TTh Bachelder
- 66w-67s Pharmaceutical Manufacturing (3 cr; prereq sr, 56) Lect VI Th (w); VII M (s); Labs II-IV T, VI-VIII F (w); II-IV TTh (s)
- 68w-69s Hospital Pharmacy (3 cr; prereq sr, 58) Lect VI Th (w); VII M (s); Labs II-IV T, VI-VIII F (w); II-IV TTh (s) Bruce
- 71s Pharmaceutical Specialties (3 cr; prereq sr, PhmC 163) VI MWF Soine
- 72w Veterinary Products (3 cr; prereq sr, 56) Lect IV T, I Th, VI F Hadley
- 73s Special Probs (ar cr; prereq sr, 56, PhmC 163) Ar Netz, Almin, Hadley

PHARMACY (PHCY)

Fall Quarter

- 1 Orientation (2 cr)
V MW, 202WuH, Rogers
- 2 Pharmaceutical Latin (1 cr; prereq soph) III T, 202WuH, Almin

PHYSICAL EDUCATION FOR MEN (PE)

Nonprofessional Courses

Fall Quarter

- 1A Physical Education (1 cr)
—1, Boxing, Wrestling, Handball, Squash, Touchball
II MWF; III MWF; IV MWF; V MWF;

- VI MWF, Gym CH, Chisholm, staff
—2, Bgn Swimming
- II MWF; VII MWF; III TThS, Pool CH, Boyce, Thorpe
—3, Adapted Activities (prereq cons instr)
III MWF; IV MWF; VIII MWF, So Tower Stad, Osell

- 2A Physical Education (1 cr)
 -1, Bowling
 II TThS, Bowl Alley CMU, Young
 -2, Intermed Swimming (prereq ability to swim 50 yds)
 II TThS; VI MWF, Pool CH, Boyce, Thorpe
 -3, Adv Swimming (prereq ability to swim 100 yds)
 III MWF, Pool CH, Boyce
 -4, Wrestling
 VIII MWF 207 No Tower Stad, Bartelma
 -5, Boxing
 VIII-IX MWF, 204 No Tower Stad, Chisholm
 -6, Square, Folk Dancing (coed)
 II MWF; VII MWF, NGW
 -7, Ballroom Dancing (coed)
 III TTh, NGW
 -8, Handball, Squash
 VII MWF, Gym CH
 -9, Skating
 II-IV MWF; II-IV TThS
 -10, Gymnastics, Weight Lifting
 VIII MWF, Stad, Ostrander

Winter and Spring Quarters

- 1Bw Sports Education (1 cr)
 Basketball, Volleyball, Stunts II MWF; III MWF; IV MWF; V MWF; VI MWF
 Chisholm, staff
 Bgn Swimming II MWF Boyce; VII MWF Thorpe; III TThS Boyce
 Adapted Activities III MWF; IV MWF; VIII MWF Osell

- 1Cs Sports Education (1 cr)
 Swimming, Track, Softball II MWF; III MWF; IV MWF; V MWF; VI MWF
 Chisholm, staff
 Bgn Swimming II MWF Boyce; III TThS Boyce
 Adapted Activities III MWF; IV MWF; VIII MWF Osell
 -2Bw Sports Education (1 cr)
 Bowling II TThS Young
 Intermed Swimming (prereq ability to swim 50 yds) II TThS Boyce
 Adv Swimming (prereq ability to swim 100 yds) III MWF, Boyce
 Badminton III T; III-IV Th Brain
 Wrestling VIII MWF Bartelma
 Square, Folk Dancing III MWF
 Ballroom Dancing III TTh
 Gymnastics, Weight Lifting VIII MWF Ostrander
 Basketball VII MWF Vancisin
 Golf III-IV MWF; II-III TThS Bolstad
 Skating II-IV MWF; II-IV TThS
 -2Cs Sports Education (1 cr)
 Advanced Swimming VII MWF Thorpe
 Life Saving (prereq ability to swim 440 yds) III MWF Bolstad
 Golf III MWF; III TThS Bolstad
 Handball, Squash IV MWF
 Square, Folk Dancing II MWF; VII MWF
 Ballroom Dancing III TTh
 Intermed Swimming II TThS
 Boxing VIII-IX MWF Chisholm
 Tennis II MWF; III MWF Brain

PHYSICAL EDUCATION FOR WOMEN (PE)

Nonprofessional Courses

Fall Quarter

Aquatics

- Swimming, Bgn
 -1, II MWF, 51NGW (1½ cr)
 -2, III MWF, 51NGW (1½ cr)
 -3, III TTh, 51NGW (1 cr)
 Swimming, Adv Bgn
 -1, IV MWF, 51NGW (1½ cr)
 -2, VI MWF, 51NGW (1½ cr)
 Swimming, Intermed
 VIII MWF, 51NGW (1½ cr)
 Swimming, Intermed Adv
 -1, III MWF, 58NGW (1½ cr)
 -2, VII TTh, 58NGW (1 cr)
 Swimming, Adv
 VIII MWF, 58NGW (1½ cr)
 Red Cross Life Saving
 IV MWF, 58, 201NGW (1½ cr)

Body Building

- Individual Body Building
 -1, I MWF, 153A, 201NGW (1½ cr)
 -2, III MWF, 153A, 201NGW (1½ cr)
 -3, III TTh, 153A, 201NGW (1 cr)
 -4, VIII MWF, 153A, 201NGW (1½ cr)
 -5, VI TTh, 153A, 201NGW (1 cr)
 Archery, Elem
 -1, VII MW, 60NGW (1 cr)
 -2, VI MWF, 60NGW (1½ cr)
 Badminton, Elem
 -1, IV MWF, 60NGW (1½ cr)
 -2, V TTh, 153NGW (1 cr)
 -3, I MWF, 60NGW (1½ cr)
 -4, II TTh, 153NGW (1 cr)
 Bowling
 -1, II MWF, 201NGW, CMU (1½ cr)
 -2, III MWF, 201NGW, CMU (1½ cr)
 -3, II TTh, 201NGW, CMU (1 cr)
 -4, III TTh, 201NGW, CMU (1 cr)

CLASS SCHEDULE

- Fencing
 —1, II TTh, 60NGW (1 cr)
 —2, IV TTh, 60NGW (1 cr)
 —3, VIII MWF, 60NGW (1½ cr)
 Social Games, Mixers
 —1, III TTh, 153, 201NGW (1 cr)
 —2, VI TTh, 153, 201NGW (1 cr)
- Rhythms
 Ballroom Dance, Elem
 III TTh, 151NGW (1 cr)
 Sq, Folk Dance
 —1, II MWF, 201, 153NGW (1½ cr)
 —2, VII MWF, 201, 151NGW (1½ cr)
 —3, I MWF, 201, 151NGW (1½ cr)
 Modern Dance, Elem
 —1, IV MWF, 151, 201NGW (1½ cr)
 —2, VI MWF, 151, 201NGW (1½ cr)
 —3, VIII MWF, 151, 201NGW (1½ cr)
- Team Sports
 Field Hockey
 III TTh, 60NGW (1 cr)
 Volleyball
 VI TTh, 151NGW (1 cr)
 8 Horseback Riding, Elem (1 cr)
 VIII T (s), IX T (s)
- Winter and Spring Quarters
 Archery, Elem (1 cr) V TTh (w); VI TTh (s)
 Archery, Elem, Intermed (1 cr) II TTh (s)
 Badminton, Elem (1½ cr) II MWF (w); III MWF (w); V MWF (w)
 Badminton, Intermed (1½ cr) IV MWF (w)
 Ballroom Dance, Elem (1 cr) III TTh (w,s)
 Basketball (1½ cr) I MWF (w); (1 cr) VI TTh (w)
 Bowling (1½ cr) II MWF (w); (1½ cr) III MWF (w); (1 cr) II TTh (w); (1 cr) III TTh (w)
 Canoeing (1½ cr) III MWF (s); (1 cr) VI TTh (s)
 Fencing (1½ cr) VI MWF (w); (1 cr) II TTh (w); (1 cr) VI TTh (w)

- Folk, Square Dance (1½ cr) II MWF (s); III MWF (w); VII MWF (s)
 Golf, Elem (1½ cr) I MWF (s); (1½ cr) V MWF (s); (1½ cr) VI MWF (s); (1 cr) V TTh (s)
 Golf, Intermed (1½ cr) VIII MWF (s); (1 cr) VII TTh (s)
 Golf, Adv Ar (s)
 Individual Body Building (1½ cr) II MWF (w); (1½ cr) III MWF (s); (1½ cr) IV MWF (w); (1½ cr) VI MWF (w); (1 cr) II TTh (w); (1 cr) III TTh (w)
 Modern Dance, Elem (1½ cr) IV MWF (w,s); VI MWF (w); VIII MWF (s)
 Modern Dance, Intermed, Adv (1½ cr) VI MWF (w,s)
 Red Cross Life Saving (1½ cr) V MWF (s)
 Riflemarksmanship (1 cr) I TTh (w); II TTh (w); III TTh (w)
 Skating, Elem (1 cr) VIII M (w); IX M (w)
 Skiing, Elem (1 cr) VIII Th (w); IX Th (w)
 Softball (1½ cr) III MWF (s); (1 cr) IV TTh (s)
 Swimming, Bgn (1½ cr) III MWF (w); (1½ cr) IV MWF (s); (1 cr) II TTh (s)
 Swimming, Adv Bgn (1½ cr) VI MWF (s); (1 cr) III TTh (w,s); (1 cr) VI TTh (w)
 Swimming, Intermed (1½ cr) II MWF (s); VI MWF (w); VIII MWF (s)
 Swimming, Intermed Adv (1½ cr) VIII MWF (w)
 Swimming, Adv Diving (1½ cr) IV MWF (s)
 Swimming, Adv Speed (1 cr) VII TTh (w)
 Swimming, Adv Synchronized (1½ cr) VIII MWF (s)
 Tap Dance, Elem (1 cr) VII TTh (w)
 Tennis, Elem (1½ cr) I MWF (s); (1½ cr) II MWF (s); (1½ cr) IV MWF (s); (1½ cr) VI MWF (s); (1 cr) III TTh (s); (1 cr) VI TTh (s); (1 cr) VIII TTh (w)
 Tennis, Intermed, Adv (1½ cr) III MWF (s); (1 cr) V TTh (s)
 Water Safety Instructors' Course (1½ cr) VII MWF (s)

COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

AMERICAN STUDIES (AMST)

Fall Quarter

- 90 Proseminar in American Studies (2 cr; prereq sr, cons instr)
 VIII-IX W, 103F, Bowron
- 200 Introd American Studies (2 cr; prereq MA cand in amer stud)
 VIII-IX T, 103F, McDowell
- 210 Seminar—American Studies (3 cr; prereq cons instr)
 VIII-IX W 108F, Smith
- 250 Readings in American Civilization (ar cr; prereq cons dept chair)
 Ar, McDowell, others

Winter and Spring Quarters

- 91w-92s See 90f
 -201w-202s See 200f
 -211w-212s See 210f
 -251w-252s See 250f

ANTHROPOLOGY (ANTH)

Fall Quarter

- 1 Introd Anthropology (5 cr)
 VI MTWThF, 13 ForH, Kelly
- 54 Social Organization (3 cr)
 I MWF, 9 ForH, Wallis

- 109 Gen Linguistics (4 cr; prereq 2 courses above 50 in foreign lang)
Lect II MWF, 305 ForH, Spencer
Lab VIII-X T, 305 ForH, Spencer
- 110 Physical Anthropology (3 cr)
III MWF, 9 ForH, Wilford
- 113 Character of Cultures (3 cr)
VII MWF, 9 ForH, Wallis
- 122 Probs in Anthropology (ar cr; prereq cons instr)
Ar, Staff
- 125 Peoples of SE Asia, Indonesia (3 cr)
IV TThS, 9 ForH, Spencer
- 165 Psychological Phases of Culture (3 cr)
IV MWF, 9 ForH, Spencer
- 166 History of Anthropological Theory, Method (3 cr; prereq 1 or 2, 40 or 42)
II TThS, 9 ForH, Wallis
- 172 Indians of South America (3 cr)
VIII MWF, 9 ForH, Kelly
- 204 Seminar—Anthropology (3 cr)
Ar, Staff

Winter and Spring Quarters

- 1w See 1f VII MTWThF Wallis
- 2w,s Introd World Ethnology (5 cr) VI MTWThF Kelly (w); VII MTWThF Spencer (s)
- 56s Primitive Science (3 cr) III MWF Wallis
- 80w American Indian (3 cr) IV MWF Spencer
- 81w Archeology of North America (3 cr) III MWF Wilford
- 106s European Prehistory (3 cr) III TThS Kelly
- 111w Adv Physical Anthropology (3 cr; prereq* 110 or Zool 22 or 175 or course in human anat) II MWF Wallis
- 117s Anthropology, Contemporary Probs (3 cr) IV MWF Kelly
- 118w Indian Civilization of Mexico, Central America (3 cr) VII MWF Kelly
- 119s Contact of Cultures (3 cr) II MWF Wallis
-123w-124s See 122f
- 129s Economic Activities in Primitive Culture (3 cr) II MWF Kelly
- 131w Islamic Culture Sphere (3 cr) III TThS Spencer
- 161s Primitive Religion (3 cr) VII MWF Wallis
- 169w Peoples of the South Seas (3 cr) IV TThS Spencer
- 171s Peoples of NE Asia, NW North America (3 cr) VI MWF Spencer
- 205w-236s See 204f

ART (ART)

Fall Quarter

- 1 Prin Art (4 cr)
Lect III MWF, NHAud, Torbert, faculty
-1, Lab I-II T, 203TSF
-2, Lab III-IV T, 203TSF
-3, Lab V-VI T, 203TSF
-4, Lab VII-VIII T, 203TSF

- 5, Lab IX-X T, 203TSF
-6, Lab I-II Th, 203TSF
-7, Lab III-IV Th, 203TSF
-8, Lab V-VI Th, 203TSF
-9, Lab VII-VIII Th, 203TSF
-10, Lab IX-X Th, 203TSF
- 10 Photography (3 cr; prereq soph)
Lect V T, 308MurH, Liebling
-1, Lab I-IV M, 20MurH, Liebling
-2, Lab I-IV W, 20MurH, Downs (art, art educ maj)
- 20 Drawing, Painting I (2 cr; prereq 1)
-1, I-II MW, 417E, Young
-2, III-IV MW, 207aJ, Quirt
-3, III-IV TTh, 207bJ, Doseff
- 21 Drawing, Painting I (2 cr; prereq 20)
-1, I-II MW, 207aJ, Quirt
-2, I-II TTh, 207bJ, Doseff
- 23 Drawing, Design I (5 cr; prereq 1 or concur regis)
-1, I-III MWF, 104J, Morris
-2, VI-VIII MWF, 104J, Downs
-3, I-III TThS, 104J, Parker
- 24 Drawing, Design I (5 cr; prereq 1 or concur regis)
-1, I-III MWF, 11J
-2, VI-VIII MWF, 2J, Sabean
-3, I-III TThS, 2J, Frazier
- 25 Drawing, Design I (5 cr; prereq 23)
IV-VI TThS, 104J, Collins
- 40 Sculpture I (3 cr; prereq 1)
-1, I-II MWF, 405E, Rood
-2, VI-VIII TTh, 405E, 25C, Frazier
- 41 Sculpture I (3 cr; prereq 40)
IV-V MWF, 405E, Sabean
- 42 Sculpture I (3 cr; prereq 40)
IV-V MWF, 405E, Sabean
- 50 Pictorial Design (3 cr; prereq 25, cons instr)
V-VII TTh. 200aJ, Booth
- 53 Design II (3 cr; prereq 23, 24, 25)
I-II TThS, 11J, Morton
- 56 Renaissance, Baroque Art 1300-1500 (3 cr; prereq* 1)
IV MWF, 207NH, Arnason
- 60 Drawing, Painting II (3 cr; prereq* 21 or 25)
-1, VI-VIII TTh, 207bJ, Doseff
-2, I-II TThS, 200aJ, Arnest
-3, III-IV MWF, 417E, Young (watercolor)
- 60A Drawing, Painting II (2 cr; prereq 21, architects only)
II-IV ThS, 417E, Young
- 61 Drawing, Painting II (3 cr; prereq 60)
VI-VII MWF, 207aJ
- 61A Drawing, Painting II (2 cr; prereq 60A)
II-IV ThS, 417E, Young
- 62 Drawing, Painting II (3 cr; prereq 61)
VI-VII MWF, 207aJ
- 62A Drawing, Painting II (2 cr; prereq 61A)
II-IV ThS, 417E, Young
- 63 Probs in Basic Design, Drawing (5 cr)
VII-IX MWF, 203TSF, Torbert

- 66 **Modern Art** (3 cr; prereq* 1)
VII MWF, NHAud, Arnason
- 70 **Drawing, Painting III** (3 cr; prereq 62)
—1, VI-VII MWF, 200aJ, Morris
—2, III-V TTh, 200bJ, Arnest
—3, VI-VIII TTh, 200bJ, Parker
- 71 **Drawing, Painting III** (3 cr; prereq 70)
—1, VI-VII MWF, 200aJ, Morris
—2, III-V TTh, 200bJ, Arnest
—3, VI-VIII TTh, 200bJ, Parker
- 72 **Drawing, Painting III** (3 cr; prereq 71)
—1, VI-VII MWF, 200aJ, Morris
—2, III-V TTh, 200bJ, Arnest
—3, VI-VIII TTh, 200bJ, Parker
- 73 **Presentation Techniques** (3 cr; prereq* 53-54, 55, architects no prereq)
VII-IX TTh, 104J, Collins
- 80 **Sculpture II** (3 cr; prereq 42)
—1, III-IV MWF, 24F, Rood
—2, VI-VII MWF, 24F, Rood
- 81 **Sculpture II** (3 cr; prereq 80)
—1, III-IV MWF, 24F, Rood
—2, VI-VII MWF, 24F, Rood
- 82 **Sculpture II** (3 cr; prereq 81)
—1, III-IV MWF, 24F, Rood
—2, VI-VII MWF, 24F, Rood
- 83 **Design, Photography** (3 cr; prereq* 53-54, 55)
VI-VIII MW, 104J Lab, Liebling (art, art educ maj)
- 87 **Textile Design: Weaving** (3 cr; prereq* 23)
VI-VII MWF, 4J, Berglund
- 88 **Textile Design: Weaving** (3 cr; prereq 87)
VIII-IX MWF, 4J, Berglund
- 90 **Printmaking** (3 cr; prereq* 62)
—1, II-IV MW, 203J, Visiting Artist
—2, VI-VIII MW, 203J, Visiting Artist
—3, VI-VIII TTh, 203J, Morton
- 91 **Printmaking** (3 cr; prereq 90)
—1, II-IV MW, 203J, Visiting Artist
—2, VI-VIII MW, 203J, Visiting Artist
—3, VI-VIII TTh, 203J, Morton
- 92 **Printmaking** (3 cr; prereq 91)
—1, II-IV MW, 203J, Visiting Artist
—2, VI-VIII MW, 203J, Visiting Artist
—3, VI-VIII TTh, 203J, Morton
- 93 **Ceramic Processes** (3 cr; prereq* 25, 55 or 42)
—1, I-II TThS, 10J, Forst
—2, III-IV TThS, 10J, Forst
—3, VI-VIII TTh, 10J, Forst
- 97 **Textile Design: Printing Processes** (3 cr; prereq* 23)
II-III MWF, 2J, Berglund
- 103 **Design in Industry** (3 cr; prereq* 53-54, 55)
VI-VIII TTh, 2J
- 106 **Art in Egypt, Mesopotamia, Greece** (3 cr; prereq 9 cr art hist; or 9 cr lit or hist, cons instr)
II MWF, 207NH, Eitner
- 110 **Advanced Drawing** (3 cr; prereq 62)
VI-VIII TTh, 207aJ, Arnest
- 116 **Origins of Renaissance Art** (3 cr; prereq 9 cr art hist; or 9 cr lit or hist, cons instr)
VI MWF, 207NH, Eitner
- 136 **Art in the United States** (3 cr; prereq 9 cr art hist; or 9 cr lit or hist, cons instr)
VIII MWF, 207NH, Tselos
- 140 **Metal Sculpture, Jewelry** (3 cr; prereq* 55)
III-IV TThS, 11J, Morton
- 141 **Metal Sculpture, Jewelry** (3 cr; prereq* 140)
III-IV TThS, 11J, Morton
- 142 **Metal Sculpture, Jewelry** (3 cr; prereq 141)
III-IV TThS, 11J, Morton
- 146 **European, American Architecture 1775-1850** (3 cr; prereq 1, 9 cr art hist; or 1, 9 cr lit or hist, cons instr)
V MWF, 207NH, Tselos
- 150 **Probs in Painting** (ar cr; prereq 72, cons instr)
—1, I-IV S and Ar, 200bJ, Quirt
—2, VI-VII MWF, 200aJ, Morris
—3, III-V TTh, 200bJ, Arnest
—4, VI-VIII TTh, 200bJ, Parker
- 151 **Probs in Painting** (ar cr; prereq 150)
—1, I-IV S and Ar, 200bJ, Quirt
—2, VI-VII MWF, 200aJ, Morris
—3, III-V TTh, 200bJ, Arnest
—4, VI-VIII TTh, 200bJ, Parker
- 152 **Probs in Painting** (ar cr; prereq 151)
—1, I-IV S and Ar, 200bJ, Quirt
—2, VI-VII MWF, 200aJ, Morris
—3, III-V TTh, 200bJ, Arnest
—4, VI-VIII TTh, 200bJ, Parker
- 156 **European, American Painting 1775-1850** (3 cr; prereq 1, 9 cr art hist; or 1, 9 cr lit or hist, cons instr)
VII MWF, 207NH, Tselos
- 180 **Probs in Sculpture** (ar cr; prereq* 82, 102, or 142)
Ar, Rood
- 181 **Probs in Sculpture** (ar cr; prereq 180)
Ar, Rood
- 182 **Probs in Sculpture** (ar cr; prereq 181)
Ar, Rood
- 190 **Probs in Printmaking** (ar cr; prereq* 92)
Ar, Visiting Artist, Morton
- 191 **Probs in Printmaking** (ar cr; prereq 190)
Ar, Visiting Artist, Morton
- 192 **Probs in Printmaking** (ar cr; prereq 191)
Ar, Visiting Artist, Morton
- 193 **Adv Probs in Design** (3 cr; prereq* one design course beyond 53-54, 55)
Ar
- 200 **Adv Probs in Studio Work** (ar cr; prereq cons instr)
Ar, Staff
- 201 **Adv Probs in Studio Work** (ar cr; prereq cons instr)
Ar, Staff
- 202 **Adv Probs in Studio Work** (ar cr; prereq cons instr)
Ar, Staff

- 206 Seminar—European, American Architecture (3 cr; prereq cons instr)
Ar, Tselos
- 216 Seminar—European, American Painting (3 cr; prereq cons instr)
Ar, Arnason, Tselos
- 236 Seminar—Probs in Art History, Criticism (ar cr; prereq cons instr)
Ar, Arnason, Tselos

Winter and Spring Quarters

- 1w,s See 1f
- 2w Masters of Art (3 cr; prereq 1) III MWF Arnason
- 3s Elements of Art Criticism (3 cr; prereq 2) III MWF Arnason, others
- 10w,s See 10f
- 20w,s See 20f
- 21w,s See 21f
- 23w,s See 23f
- 24w,s See 24f
- 25w,s See 25f
- 40w,s See 40f
- 41w,s See 41f
- 42w,s See 42f
- 51w-52s See 50f (prereq 50)
- 54w See 53f (prereq 53)
- 55s See 53f (prereq 23, 24, 25)
- 57w Renaissance, Baroque Art 1500-1650 (3 cr; prereq* 1) II TTh and hr ar
- 58s Renaissance, Baroque Art 1650-1800 (3 cr; prereq* 1) II TTh and hr ar
- 60w,s See 60f
- 60Aw,s-61Aw,s-62Aw,s See 60Af, 61Af, 62Af
- 61w,s See 61f
- 62w,s See 61f (prereq 61) ar
- 64w Probs in Design (5 cr; prereq 63) VII-IX MWF Torbert
- 65s Use of Drawing, Painting, Design in Commerce, Industry (5 cr; prereq 64) VII-IX MWF Torbert
- 67w Modern Art: Realism, Impression (3 cr; prereq* 1) IV MWF Tselos
- 68s Modern Art: Contemporary Art in Europe, America (3 cr; prereq* 1) IV MWF, Tselos
- 70w,s-71w,s-72w,s See 70f, 71f, 72f
- 74w-75s See 73f (prereq 73)
- 78s Art of China (3 cr; prereq 1; or 9 cr lit or hist, cons instr) IV TTh and ar Mather
- 80w,s-81w,s-82w,s See 80f, 81f, 82f
- 84w-85s See 83f (prereq 83)
- 87s See 87f
- 88w See 88f
- 89w,s Textile Design; Weaving (3 cr; prereq 88) VIII-IX MWF Berglund
- 90w,s-91w,s-92w,s See 90f, 91f, 92f
- 93w,s See 93f
- 94w,s-95w,s Ceramic Design (3 cr; prereq 93) III-IV TThS Forst
- 98w Textile Design (3 cr; prereq 23) ar Berglund

- 101w-102s Ceramic Sculpture (3 cr; prereq 25, 42, 93) VI-VIII TTh Forst
- 104w-105s See 103f (prereq 103)
- 107w Roman, Early Christian, Byzantine Art (3 cr; prereq 9 cr art hist; or 9 cr lit or hist, cons instr) II MWF Eitner
- 108s Romanesque, Gothic Art (3 cr; prereq 9 cr art hist; or 9 cr lit or hist, cons instr) II MWF Eitner
- 110w,s-111w,s-112w,s See 110f, 111f, 112f
- 117w Development of Renaissance Art (3 cr; prereq 9 cr art hist; or 9 cr lit or hist, cons instr) VI MWF Eitner
- 118s High Renaissance in Italy, the North (3 cr; prereq 9 cr art hist; or 9 cr lit or hist, cons instr) VI MWF Eitner
- 137w See 136f
- 138s See 136f
- 140w,s See 140f
- 141w,s See 141f
- 142w,s See 142f
- 147w European, American Architecture 1850-1900 (3 cr; prereq 1, 9 cr art hist; or 9 cr lit or hist, cons instr) VII MWF Tselos
- 148s Modern Architecture 1900-1950 (3 cr; prereq 1, 9 cr art hist; or 9 cr lit or hist, cons instr) VII MWF Tselos
- 150w,s-151w,s-152w,s See 150f, 151f, 152f
- 157w European, American Painting 1850-1900 (3 cr; prereq 1, 9 cr art hist; or 1, 9 cr lit or hist, cons instr) V MWF Arnason
- 158s Modern European, American Painting 1900-1950 (3 cr; prereq 1, 9 cr art hist; or 1, 9 cr lit or hist, cons instr) V MWF Arnason
- 168s History of Graphic Arts (3 cr; prereq 1, 9 cr art hist; or 1, 9 cr lit or hist, cons instr) I MWF Eitner
- 180w,s-181w,s-182w,s See 180f, 181f, 182f
- 190w,s-191w,s-192w,s See 190f-191f-192f
- 194w-195s See 193f (prereq 193)
- 200w,s-201w,s-202w,s See 200f-201f-202f
- 207w-208s See 206f
- 217w-218s See 216f
- 237w-238s See 236f

ASTRONOMY (AST)

Fall Quarter

- 11 Descriptive Astronomy (5 cr; §51)
IV MTWF, 133Ph, Luyten
- 101 Celestial Mechanics (3 cr; prereq Math 51, cons instr)
II MWF, Luyten

Winter and Spring Quarters

- 11s See 11f
- 20w Astronomy for Celestial Navigation (5 cr)
III MTWF, 3 hr lab, Luyten
- 51w Gen Astronomy (3 cr; prereq Math 6) IV
MWF Luyten

- 52w Astrophysics (4 cr; prereq 51 or 11, Math 6, cons instr) II MTWF Luyten
 53s Stellar Astronomy (3 cr; prereq 51 or 11, Math 6, cons instr) II MWF Luyten

BOTANY (BOT)

Fall Quarter

- 1 Gen Botany** (3 cr)
 —1, Lect III TTh, 150Ph
 —2, Lect VI TTh, 06Bo
 —1, Lab III-IV TTh, 1,4,5Bo
 —2, Lab V-VI TTh, 1,4,5Bo
 —3, Lab VII-VIII TTh, 1,4,5Bo
 —4, Lab IX-X TTh, 1,4,5Bo
 —5, Lab I-II WF, 1,4,5Bo
 —6, Lab III-IV WF, 1,4,5Bo
 —7, Lab V-VI WF, 1,4,5Bo
 —8, Lab VII-VIII WF, 1,4,5Bo
- 50 Gen Plant Ecology** (3 cr; prereq 3 or 5 or NSci 9)
 Lect III MW, 06Bo, Cooper
 —1, Lab I-II MW, 214Bo
 —2, Lab IV-V MW, 214Bo
- 110 Gymnosperms** (3 cr; prereq* sr, 52 or 54)
 II-IV TTh, 401Bo, Ownbey
- 113 Minnesota Flora** (3 cr; prereq* 52)
 —1, VI-VIII MW, 401Bo, Ownbey
 —2, VI-VIII TTh, 401Bo, Morley
- 119 Nuclear Cytology** (3 cr; prereq* 10 cr bot or zool, elem course in genetics)
 Lect IV MW, 211Z, Yerganian
 —1, Lab II-III MW, 202Bo
 —2, Lab VI-VII MW, 202Bo
- 121 Developmental Anatomy** (5 cr; prereq 10 cr bot)
 II-IV MWF, 209Bo
- 130 Gen Plant Ecology** (3 cr; prereq sr, 10 cr bot)
 Lect III MW, 211Z, Cooper
 —1, Lab I-II MW, 214Bo
 —2, Lab IV-V MW, 214Bo
- 131 Field Ecology** (5 cr; prereq 50 or 130 or For 3, 4)
 VI-VIII MWF, 214Bo, Cooper, Lawrence
- 140 Adv Survey of Plant Physiology** (3 cr; prereq* elem bot or zool; pl physiol; org chem or biochem)
 1:00-2:15 TTh, 110Bo, Frenkel
- 170 Water Relations of Plants** (3 cr; prereq* sr, 51 or 140, 20 cr chem or biochem, PCh 103 or 108)
 II-III½ TTh, 110Bo, Brown, Frenkel
- 173 Adv Physiology Lab** (2 cr; prereq sr, 170 or concur regis)
 —1, VI-X T, 104Bo, Brown, Frenkel
 —2, VI-X Th, 104Bo, Brown, Frenkel
- 197 Probs** (1-5 cr; prereq 20 cr nat sci, cons instr)
 Ar
- 201 Research Probs—Morphology of Vascular Plants** (1-5 cr)
 Ar, Abbe
- 205 Research Probs—Taxonomy, Floristic Plant Geography** (1-5 cr)
 Ar, Ownbey, Morley
- 209 Research Probs—Paleobotany** (1-5 cr)
 Ar
- 221 Research Probs—Ecology** (1-5 cr)
 Ar, Cooper, Lawrence
- 225 Research Probs—Plant Physiology** (1-5 cr)
 Ar, Brown, Frenkel
- 229 Research Probs—Cytology** (1-5 cr)
 Ar, Yerganian
- 240 Seminar—Morphology** (1 cr)
 Ar, Abbe
- 243 Seminar—Taxonomy** (1 cr)
 Ar, Ownbey, Morley
- 246 Seminar—Paleobotany** (1 cr)
 Ar
- 249 Seminar—Ecology** (1 cr)
 Ar, Cooper, Lawrence
- 252 Seminar—Plant Physiology** (1 cr)
 Ar, Brown, Frenkel

Winter and Spring Quarters

- 2w-3s See 1f (prereq 1)
- 12w Plants Useful to Man** (3 cr) IV TThS
 Lawrence
- 51s Gen Plant Physiology** (4 cr; prereq 3 or 5 or NSci 9, 2 qtr inorg chem) Lect VI MW, Frenkel; lab III-IV MW; VII-VIII MW; conf VI F
- 52s Elem Taxonomy** (3 cr; prereq 3 or 5 or NSci 9) VI-VIII MW Ownbey, Morley
- 53w Introductory Plant Anatomy** (3 cr; prereq 3 or 5 or NSci 9) II-IV TTh Abbe
- 54s Survey of Plant Kingdom** (5 cr; prereq 3 or 5 or NSci 9) II-IV MWF Abbe
- 112w Aquatic Flowering Plants** (3 cr; prereq* 10 cr bot or zool) Lect IV MW; lab ar Ownbey
- 114w Phyletic Taxonomy of Angiosperms** (3 cr; prereq* 52 or 54) VI-VIII TTh Morley
- 115s Minnesota Spring Flora** (3 cr; prereq* 52 or 176) VI-VIII TTh Morley
- 118w Extranuclear Cytology** (3 cr; prereq* 10 cr bot or zool) VI-VII MWF Yerganian
- 120s Research Methods in Cytology** (3-5 cr; prereq 3 or 5, 118 or 119, cons instr) Lect III MWF; lab ar Yerganian, Hansen
- 125w Morphogenesis** (5 cr; prereq 10 cr) II-IV MWF Abbe
- 132w Morphological Ecology** (5 cr; prereq 50 or 130 or For 3, 4) VI-VIII MWF Cooper
- 133s Ecological Plant Geography** (5 cr; prereq 50 or 130 or For 3, 4) VI-VIII MWF Cooper
- 171w Mineral Nutrition of Plants** (3 cr; prereq* sr, 51 or 140, 20 cr chem or biochem, PCh 103 or 108) II-III½ TTh Brown, Frenkel

- 172s Plant Growth (3 cr; prereq* sr, 51 or 140, 20 cr chem or biochem, PCh 103 or 108)
II-III½ TTh Brown, Frenkel
-174w-175s See 173f (prereq 171-172 or concur regis)
-198w-199s See 197f
-202w-203s See 201f
-206w-207s See 205f
-210w-211s See 209f
-222w-223s See 221f
-226w-227s See 225f
-230w-231s See 229f
-241w-242s See 240f
-244w-245s See 243f
-247w-248s See 246f
-250w-251s See 249f
-253w-254s See 252f

CLASSICS

Classics (CLAS)

Courses for which no knowledge of Greek or Latin is required

Fall Quarter

- 31 Greek, Latin Drama (2 cr; prereq soph)
IV MW, 6F, McDonald
42 Greek Mythology (2 cr; prereq soph)
V MW, 6F, Anderson
106 Introd Study of Language (3 cr; prereq any 2 courses above 50 in foreign lang)
VII MWF, 103F, Swanson
191 Classical Literary Traditions (3 cr; prereq 9 cr engl above C or foreign lit)
V MWF, 201F, DeWitt

Winter and Spring Quarters

- 24s Technical Terms of Science, Medicine, Humanities (3 cr; prereq soph) Lect IV MW, quiz IV F (med, chem, biol sciences) or V F (hum, soc sci, engin)
Swanson
32w See 31f
43s Ancient Mythology in Relation to Literature, Art (2 cr; prereq soph) V MW, Anderson
-107w See 106f (prereq 106)
108s Cultural Aspects of Language (3 cr; prereq any 2 courses above 50 in foreign lang)
VIII MWF Swanson
122w Introd to Greek Archeology (3 cr) VIII MWF McDonald
123s Introd to Roman Archeology (3 cr) VIII MWF McDonald
192w,193s See 191f

Greek (GRK)

Fall Quarter

- 1 Bgn Greek (5 cr, †1-2)
II MTWThF, 103F, McDonald

- 51 Lucian (3 cr; prereq 3)
IX MWF, Anderson
171 Reading (3 cr; prereq cons dept)
Ar, Swanson
211 Seminar—Greek Epic (3 cr)
Ar, McDonald

Winter and Spring Quarters

- 2w See 1f (prereq 1)
3s Selections from Attic Prose (5 cr; prereq 2) II MTWThF McDonald
52w Homer (3 cr; prereq 3) IX MWF
53s Plato—Apology, Selections (3 cr; prereq 3) IX MWF Swanson
73s New Testament (3 cr; prereq any two of 51, 52, 53) II TThS
-122w-123s See 121f (prereq 121)
172w,173s See 171f
-212w-213s See 211f

Latin (LAT)

Fall Quarter

- 1 Bgn Latin (5 cr, †1-2)
IV MTWThF, 108F, Swanson
21 Introd Latin Reading (5 cr; prereq 1 or 2 yrs high school lat; or cons dept)
III MTWThF, 103F, Forbes
30 Selected Readings from Prose, Poetry (5 cr; prereq 3 or 21; or 2 or 3 yrs high school lat; or cons dept)
IV MTWThF, 103F, Forbes
81 Latin Literature (3 cr; prereq 40 or 4 yr high school lat)
Ar, Forbes
111 Adv Prose Composition (2 cr, †111-112-113; prereq 73)
Ar
171 Reading (3 cr; prereq cons dept)
Ar, DeWitt
201 Seminar—Cicero (3 cr)
Ar

Winter and Spring Quarters

- 2w See 1f (prereq 1)
3s Intermed Latin (5 cr; prereq 2 or 1 yr high school lat) IV MTWThF Swanson
30w See 30f
40w,s Vergil (5 cr; prereq 30, or 3 yrs high school lat, or cons dept) II MTWThF (w); III MTWThF (s) Forbes
73s Prose Composition (2 cr; prereq 3 or 4 yr high school lat, or cons dept) Ar
-82w-83s See 81f
-112w-113s See 111f (prereq 111)
133s Vulgar Latin (3 cr; prereq cons instr)
III MWF Swanson
172w,173s See 171f
-202w-203s See 201f

ENGLISH

Composition (COMP)

Fall Quarter

- 4 **Fresh Composition** (3 cr; prereq assign to category 1, 2, or 3. 4-5-6 corresponds to GED test 1)
 -1, I MWF, 107F
 -2, II MWF, 305F
 -3, III MWF, 253TSF
 -4, IV MWF, 114F
 -5, V MWF, 202F
 -6, VI MWF, 9F
- 5 **Fresh Composition** (3 cr; prereq 4)
 I MWF, 305F
- 6 **Fresh Composition** (3 cr; prereq 5)
 -1, VII MWF, 107F
 -2, VIII MWF, 206F
- 7 **Composition Review** (3 cr; prereq 6 or Comm 3; or Engl C with cons instr)
 V MWF, 303F, Christie
- 27 **Adv Writing** (3 cr, †27-28 or 27-29; prereq see col bul)
 -1, I MWF, 205F, Steinmann (pre-law)
 -2, II MWF, 206F, Schmidt
 -3, III MWF, 205F, Macdonald
 -4, IV MWF, 107F, del Plaine
 -5, V MWF, 205F, Engelhart
 -6, V MWF, 107F, del Plaine (pre-med)
 -7, VI MWF, 4F, Ross
 -8, VII MWF, 205F, Helton
 -9, II TThS, 205F, Perry
- 28 **Adv Writing** (3 cr, †27-28 or 27-29; prereq see col bul)
 -1, I MWF, 207F, Johnson
 -2, II MWF, 205F, R Smith
 -3, III MWF, 307F, O'Connor
- 29 **Adv Writing** (3 cr; prereq 27)
 III MWF, 107F, del Plaine
- 58 **Business Reports, Letters** (3 cr; prereq 6 or Comm 3 or Engl C or exempt, regis BA or cons instr)
 -1, II MWF, 5F, Guthrie, others
 -2, III MWF, 5F
 -3, IV MWF, 5F
 -4, VI MWF, 5F
- 67 **Probs of Style** (3 cr; prereq B aver in two qtrs of 27, 28, 29, 65)
 VI MWF, 108F, Atkins
- 101 **Writing Fiction** (3 cr; prereq* jr, sr, 6 cr above 50, others cons instr, grad none)
 -1, VIII-IX M, 304F, Blum
 -2, VIII-IX W, 304F, Ross
- 104 **Writing Poetry** (3 cr; prereq* jr, sr, 6 cr above 50 or Engl 120-121, grad none, others cons instr)
 VIII-IX Th, 205F, Unger
- 200 **Seminar—Writing** (3 cr; prereq cons instr)
 -1, IX-X M, 204F, Coxe
 -2, VII-VIII Th, 304F, Ross (Workshop)

Winter and Spring Quarters

- 5w-6s See 4f (prereq 4)
 4w-5s See 4f IV TThS; V MWF; VIII MWF
 4s See 4f IV TThS; V MWF; VIII MWF
 -6w See 5f (prereq 5)
 7w,s See 7f
- 27w-28s See 27f II MWF Smith; III MWF del Plaine (w), Helton (s); IV MWF Sweetser (w), Macdonald (s); VI MWF Gudas (w), Macdonald (s)
- 27w See 27f I MWF Johnson; II MWF (legal sec) Steinmann; IV MWF (legal sec) Johnson; V MWF (med sec) del Plaine
- 27s See 27f I MWF Atkins; II MWF del Plaine; III MWF (legal sec) Steinmann; IV MWF Britz; V MWF (legal sec) Johnson; VI MWF (med sec) del Plaine
- 28w See 27f Hessler
- 29s See 29f II TThS Hessler
- 58w,s See 58f I MWF (s); II MWF (w,s); IV MWF (w,s); VI MWF (w,s); VIII MWF (w) Guthrie, others
- 65w **Writing of Research Papers, Articles** (3 cr; prereq 6 or Comm 3 or Engl C, and 6 addtl cr engl or comp; or 10 cr Engl 21-22-23; B aver in prereq courses) VI TTh, ar Buckley
- 68w See 67f (prereq 67)
- 102w-103s See 101f
- 105w-106s See 104f Unger (w); Coxe (s)
- 201w-202s See 200f (prereq 200) Coxe (w); Warren (s)

English (ENGL)

Fall Quarter

- A **Fresh English** (5 cr; prereq assign to category 1 or 2. ABC corresponds to GED tests 1, 4)
 -1, I MTWThF, 303F
 -2, II MTWThF, 3F
 -3, III MTWThF, 209TSF
 -4, IV MTWThF, 206F
 -5, V MTWThF, 206F
 -6, VI MTWThF, 113F
 -7, VII MTWThF, 213F
 -8, VIII MTWThF, 209F
- B **Fresh English** (5 cr; prereq A)
 II MTWThF, 304F
- C **Fresh English** (5 cr; prereq B)
 VI MTWThF, 110F
- 21 **Introd Literature** (5 cr; prereq C or Comp 6 or Comm 3 or exempt)
 -1, III MTWThF, 308F, Moore
 -2, VI MTWThF, 308F, Buckley
- 37 **Modern Literature** (3 cr; prereq C or Comp 6 or Comm 3 or exempt)
 VII MWF, 2P, Montgomery
- 52 **English Novel** (3 cr; prereq C; or Comp 6 or Comm 3, and 6 addtl crs; or 10 cr in 21-22-23)
 VII MWF, 206F, Moore

- 55 **Shakespeare: Comedies** (3 cr; prereq see col bul)
 —1, II MWF, 107F, Moore
 —2, II TThS, 107F, Atkins
 —3, VI MWF, 2F, Hessler
 —4, VII MWF, 110F, Buckley
 —5, VIII MWF, 303F, Marx
- 56 **Shakespeare: Tragedies** (3 cr; prereq see col bul)
 —1, II MWF, 303F, Johnson
 —2, VI MWF, 303F, Armstrong
- 57 **Shakespeare for Language Arts Minors in Education** (3 cr; prereq see col bul)
 VII MWF, 303F, Christie
- 66 **Literature of the Bible** (3 cr; prereq C; or Comp 6 or Comm 3, and 6 addtl cr; or 10 cr in 21-22-23)
 III MWF, 110F, Jackson
- 73 **American Literature** (3 cr; prereq C; or Comp 6 or Comm 3, and 6 addtl cr; or 10 cr in 21-22-23)
 —1, II MWF, 308F, Turpie
 —2, VII MWF, 301F, Smith
- 75 **Chaucer** (4 cr; prereq C; or Comp 6 or Comm 3, and 6 addtl cr; or 10 cr in 21-22-23)
 II MWThF, 321F, Clark
- 97 **Independent Reading** (3 cr; prereq cons instr)
 Ar, Hessler
- 100 **Old English** (4 cr; prereq 6 cr above C)
 I MTWF, 321F, Clark
- 104 **Emerson, Thoreau** (3 cr; prereq 6 cr above C)
 III MWF, 3F, Turpie
- 109 **Romantic Poets: Early 19th Century** (3 cr; prereq 6 cr above C)
 IV TThS, 107F, Jackson
- 114 **Midwest Literature** (3 cr; prereq 6 cr above C)
 II MWF, 204F, Buckley
- 123 **Technique of the Novel** (3 cr; prereq 6 cr above C, cons instr)
 IX-X T, 204F, Gray
- 126 **Drama: 1660-1870** (3 cr; prereq 6 cr above C)
 IV MWF, 204F, Hillhouse
- 137 **19th Century English Literature** (3 cr; prereq 6 cr above C)
 II TThS, 204F, Erdman
- 142 **20th Century Literature** (3 cr; prereq 6 cr above C)
 I MWF, 204F, O'Connor
- 152 **Medieval, Early Elizabethan Drama** (3 cr; prereq 55-56)
 IV MWF, 205F, Brown
- 154 **American Novel** (3 cr; prereq 6 cr above C)
 III TThS, 205F, Bowron
- 159 **American Colonial Literature** (3 cr; prereq 6 cr above C)
 VII MWF, 207 F, Hornberger
- 162 **Milton** (3 cr; prereq 21-22 or 55-56)
 III MWF, 204F, Hessler
- 165 **Intro Modern English** (3 cr; prereq 6 cr above C)
 VI MWF, 205F, Allen
- 175 **History of English Verse** (3 cr; prereq 6 cr above C)
 IV MWF, 110F, Jackson
- 184 **Interpretation of Drama** (3 cr; prereq 6 cr above C, 55-56 advised)
 IX-X W, 303F, Bentley
- 187 **18th Century Literature** (3 cr; prereq 6 cr above C)
 II MWF, 207F, Monk
- 191 **Imagery, Symbolism in English, American Literature** (3 cr; prereq 6 cr above C)
 IV MWF, 207F, Atkins
- 193 **Poetry of W B Yeats** (3 cr; prereq 6 cr above C)
 VI MWF, 204F, Unger
- 197 **17th Century Literature** (3 cr; prereq 6 cr above C)
 III MWF, 303F, Unger
- 202 **Elizabethan Nondramatic Literature** (3 cr; prereq sr, cons dept)
 VI MWF, 206F, Brown
- 204 **Rise, Development of Standard English** (3 cr; prereq 100, sr, cons dept)
 VII-VIII T, VII Th, 303F, Allen
- 234 **Studies in Medieval English Culture** (3 cr)
 IX-X Th, 312Lib, Clark
- 256 **Spenser, Milton** (3 cr; prereq see col bul)
 IX-X T, 312Lib, Brown
- 259 **19th Century Novel I** (3 cr)
 IX-X Th, 339Lib, Hillhouse
- 265 **American Romanticism II** (3 cr; prereq cons instr)
 VIII-IX W, 4F, McDowell
- 274 **Age of Queen Anne** (3 cr)
 IX-X T, 304F, Monk
- 277 **American Realism** (3 cr; prereq cons instr)
 VIII-IX F, 108F, Smith
- 281 **English Romantic Movement** (3 cr)
 IX-X W, 312Lib, Erdman
- 297 **Independent Reading** (3 cr; prereq MA degree or equiv)
 Ar, Staff

Winter and Spring Quarters

- Bw-Cs See Af (prereq A)
 Aw-Bs See Af I MTWThF
 As See Af II MTWThF
 -Cw See Bf (prereq B)
 -22w-23s See 21f III MTWThF Moore; IV MTWThF Montgomery; VI MTWThF Buckley
 -38w-39s See 37f
 -53w See 52f
 55w-56s See 55f III TThS Hessler; VI MWF Armstrong (w), Atkins (s); VII MWF Christie
 55s See 55f II MWF Atkins; VI MWF Unger; VII MWF Unger

- 56w See 55f (prereq* see col bul)
 57s See 57f VI MWF Bean
 -67w See 66f
 -74w See 73f
 73w-74s See 73f II MWF McDowell
 75w.s See 75f III MWThF Atkins (w); IV MWThF Jackson (s)
 -98w-99s See 97f (prereq 97)
 100s See 100f Armstrong
 102w Readings—Old English Prose, Verse (3 cr; prereq 100) I MWF Clark
 103s Beowulf (3 cr; prereq 100) I MWF Clark
 105w Hawthorne, Melville (3 cr; prereq 6 cr above C) III MWF Marx
 106s Whitman, Mark Twain (3 cr; prereq 6 cr above C) III MWF Marx
 -110w See 109f
 113s American Short Story (3 cr; prereq 6 cr above C) IV MWF Turpie
 115s Development of English Prose Style (3 cr; prereq 6 cr above C) III MWF Brown
 120w-121s Interpretation of Poetry (3 cr; prereq 6 cr above C) VII MWF Unger (w); Warren (s)
 -121w See 120f (prereq 120)
 -124w-125s See 123f (prereq 123)
 -127w See 126f (prereq 126)
 129s Modern Drama: 1880 to Present (3 cr; prereq 55-56 or 127) IV MWF Hillhouse
 130w-131s English Poetry 1832-1914 (3 cr; prereq 6 cr above C) III TThS Montgomery
 134s Origins of American Naturalism (3 cr; prereq 6 cr above C) VI MWF Bowron
 136s Adv Shakespeare (4 cr; prereq 55-56) IV MTWF Brown
 -138w-139s See 137f (prereq 137)
 -143w See 142f
 151s Recent Poetry (4 cr; prereq 6 cr above C) VII MWThF Jackson
 -155w See 154f
 156s American Drama (3 cr; prereq 6 cr above C) VII MWF Hornberger
 -160w See 159f
 162w.s See 162f IV MWF (w) Steinmann; II MWF (s) Unger
 165w See 165f
 166s Historical Backgrounds of Modern English (3 cr; prereq 165) VI MWF Allen
 170w Shakespeare's Later Contemporaries (3 cr; prereq 55-56) IV MWF Brown
 174s American English (3 cr; prereq 6 cr engl lit incl lang, above C) VII MWF Allen
 -176w See 175f
 181s Recent Trends in Literary Criticism (3 cr; prereq 6 cr above C) I MWF O'Connor
 182w Far West in Literature (3 cr; prereq 6 cr above C) II MWF H N Smith
 -185w-186s See 184f (prereq 184)
 -188w-189s See 187f
 -198w-199s See 197f (prereq 197) Unger (w); Monk (s)

- 200w-201s Adv Chaucer (3 cr; prereq 75, sr with cons dept) VI MWF Clark
 -203w See 202f
 -205w-206s See 204f
 -235w-236s See 234f
 -257w-258s See 256f
 -260w-261s See 259f
 -266w-267s See 265f
 -275w-276s See 274f
 -278w-279s See 277f Hornberger (w); Smith (s)
 -282w-283s See 281f
 -298w-299s See 297f

GENERAL STUDIES

Communication (COMM)

Fall Quarter

- 1 **Communication** (4 cr; prereq assignment to Category 1, 2 or 3. Corresponds to GED Test 1)
 -1, I MTWF, 115TNM
 -2, II MTWF, 107TNM
 -3, III MTWF, 115TNM
 -4, IV MTWF, 107TNM
 -5, V MTWF, 115TNM
 -6, VI MTWF, 115TNM
 -7, VII MTWF, 115TNM
 -8, VIII MTWF, 115TNM
 2 **Communication** (4 cr; prereq 1)
 V MTWF, 106TNM
 3 **Communication** (4 cr; prereq 2)
 V MTWF, 107TNM

Winter and Spring Quarters

- 2w-3s See 1f (prereq 1)
 1w-2s See 1f I MTWF; V MTWF; VII MTWF
 1s See 1f II MTWF; V MTWF
 -3w See 2f (prereq 2)

Family Life (FL)

Fall Quarter

- 1 **Prep for Marriage** (3 cr)
 -1, II MWF, 259TSF, Dyer, Hansen, Koontz, Neubeck, others
 -2, V MWF, 259TSF, Dyer, Hansen, Koontz, Neubeck, others
 -3, VII MWF, 259TSF, Dyer, Hansen, Koontz, Neubeck, others
 -4, II TThS, 259TSF, Dyer, Hansen, Koontz, Neubeck, others
 14 **Nutrition, Food Mgt** (5 cr)
 IX MTWFThF, X TTh, 5UHS, Shepard
 15 **The Home—Its Furnishings** (3 cr)
 IV MWF, 213NH, Ludwig
 20 **Consumer Education** (3 cr)
 II MWF, 218P, Price
 25 **Child Development, Adjustment** (3 cr)
 III MWF, 207NH, Brieland

Winter and Spring Quarters

- 1w,s See 1f
 14w,s See 14f
 15w,s See 15f VIII MWF (w); IV MWF (s)
 20w,s See 20f
 25w,s See 25f

Humanities (HUM)

Fall Quarter

- 1 Humanities—Modern World I (5 cr)
 —1, I MTWThF, 2ForH, Kwiat
 —2, I MTWThF, 206WeH, Taylor
 —3, II MTWThF, 2ForH, Coxe
 —4, II MTWThF, 206WeH, Livingston
 —5, III MTWThF, 206WeH, Ramsland
 —6, III MTWThF, 225C, Neumaier
 —7, IV MTWThF, 2ForH, Ames
 —8, IV MTWThF, 206WeH, Monk
 —9, V MTWThF, 2ForH, Turnbull
 —10, VI MTWThF, 206WeH, Bryan
 —11, VII MTWThF, 2ForH, Linnell
 —12, VIII MTWThF, 2ForH, Neumaier
- 2 Humanities—Modern World II (5 cr; pre-req 1)
 III MTWThF, 2ForH, Bowditch
- 3 Humanities—Modern World III (5 cr; pre-req 2)
 VII MTWThF, 206WeH, Blum
- 4 Humanities—Modern World IV (5 cr; pre-req 1 or 2 or 3)
 IV MTWThF, 107ChE, Swanson
- 11 Greek Heritage (5 cr)
 III MTWThF, 157TSF, Livingston
- 21 American Life I (3 cr)
 —1, II MWF, 6F, Orr
 —2, III MWF, 207F, Davies
 —3, III MWF, 9F, Bowron
 —4, VII MWF, 6F, Turpie
- 51 Humanities—Modern World (5 cr, §1)
 —1, II MTWThF, 4ME, Bentley
 —2, III MTWThF, 18ME, Wood
 —3, VI MTWThF, 2ForH, Wolf
- 61 Greek Heritage (5 cr, §11)
 —1, II MTWThF, 308MurH, Ames
 —2, IV MTWThF, 2P, DeWitt
- 71 Humanities—United States (3 cr, §21)
 VII MWF, 110P, Marx
- 131 Proseminar (2 cr; pre-req sr)
 Ar, Kwiat

Winter and Spring Quarters

- 1w,s See 1f I MTWThF (w); III MTWThF Bowditch (s); IV MTWThF Swanson (w); VI MTWThF Blum (w) Ar (s)
- 2w,s See 2f (pre-req 1) I MTWThF Kwiat, Taylor (w) Ar (s); II MTWThF Coxe, Livingston (w); III MTWThF Ramsland, Neumaier (w); IV MTWThF Ames, Gray (w) Swanson (s); V MTWThF Turnbull (w); VI MTWThF Bryan (w) Blum

(s); VII MTWThF Linnell (w); VIII MTWThF Neumaier (w)

- 3w,s See 3f (pre-req 2) I MTWThF Kwiat (s); II MTWThF Coxe, Livingston (s); III MTWThF Bowditch (w), Ramsland, Neumaier (s); IV MTWThF Gray, Ames (s); V MTWThF Turnbull (s); VI MTWThF Bryan (s); VII MTWThF Linnell (s)
- 4w,s See 4f IV MTWThF Livingston (w) Ar (s)
- 12w-13s See 11f
- 22w American Life II (3 cr) II MWF Kwiat; III MWF Davies, Bowron, others; VII MWF Turpie
- 23s American Life III (3 cr) II MWF Kwiat; III MWF Davies, Bowron, others; VII MWF Turpie
- 52w-53s See 51f (§2-3)
- 62w-63s See 61f (§12-13)
- 72w-73s See 71f (§22-23)
- 132w-133s See 131f

Natural Science (NSCI)

Fall Quarter

- 1 Orientation in Natural Sciences (5 cr)
 II MTWTh and 1 hr ar, 166Ph, Graubard
- 4 Physical World (3 cr)
 Lect IV MWF, 166Ph, Buchta
 Lab sec will be assigned during first 2 days of class
- 7 Gen Biology (3 cr; †7-8-9)
 Lect V WF, 06Bo
 —1, Lab I-II TTh
 —2, Lab III-IV MS
 —3, Lab IX-X MF
- 171 Development of the Sciences (3 cr; pre-req* 1 yr biol, 1 yr phys sci)
 IV MWF, 143Ph, Graubard

Winter and Spring Quarters

- 2w-3s See 1f (pre-req 1)
- 5w-6s See 4f (pre-req 4)
- 8w-9s See 7f (†7-8-9; pre-req 7) Lect V WF; Labs III-IV MS (w); III-IV MF (s); IX-X MF (w,s)
- 172w-173s See 171f (pre-req 171)

Personal Orientation (PO)

Fall Quarter

- 1 How to Study (2 cr)
 —1, I MWF, 109TSF, Harrell
 —2, II MWF, 109TSF, Harrell
 —3, VI MWF, 109TSF, Renzaglia
 —4, VII MWF, 109TSF, Renzaglia
- 11 Choosing a Vocation (2 cr)
 II TTh and 1 hr ar, 209TSF, Hewer

Winter and Spring Quarters

- 1w,s See 1f
 11w,s See 11f

Social Science (SSCI)

Fall Quarter

- 1 **Introd Social Science** (4 cr)
 —1, I MWF, 3ForH, Nelson
 —2, II MWF, 3ForH, Nelson
 —3, II MWF, 110P, Calhoun
 —4, III MWF, 210P, Calhoun
 —5, III MWF, 7ForH, Endleman
 —6, III MWF, 3ForH, Prell
 —7, IV MWF, 111Bu, Nelson
 —8, IV MWF, 455C, Prell
 —9, V MWF, 123ForH, Endleman
 —10, VI MWF, 103ForH, Calhoun
 —11, VII MWF, 103ForH, Endleman
 —12, II TTh, III Th, 20ForH, Naftalin
 —13, VII TTh, VIII T, 20ForH, Sibley
- 2 **Introd Social Science** (4 cr; prereq 1)
 —1, II MWF, 9ForH, Albertal
 —2, IV MWF, 18ME
- 3 **Introd Social Science** (4 cr; prereq 2)
 —1, III MWF, 302MurH, Potter
 —2, VI MWF, 109ForH, Potter
 —3, II TThS, 123ForH
- 11 **Intl Relations** (3 cr)
 III MWF, 153TSF, Turner
- 81 **Public Affairs Forum** (3 cr)
 IV MWF, V F, 305F, Ziebarth

Winter and Spring Quarters

- 1w-2s See 1f III MWF Potter; VI MWF Potter; II TThS Potter
- 1s See 1f II MWF Albertal; IV MWF Potter
- 2w-3s See 1f (prereq 1)
- 3w See 2f (prereq 2)
- 12w-13s See 1f
- 82w-83s See 81f

GEOGRAPHY (GEOG)

Fall Quarter

- 1 **Physical Resources** (5 cr; §old 11)
 Lect III MWF, 116ForH, Borchert
 —1, Lab I TTh, 209ForH
 —2, Lab II TTh, 209ForH
 —3, Lab III TTh, 209ForH
 —4, Lab IV TTh, 209ForH
 —5, Lab V TTh, 209ForH
 —6, Lab VI MW, 209ForH
 —7, Lab VII MW, 209ForH
 —8, Lab VIII MW, 209ForH
- 4 **Human Geography** (5 cr; §old 45)
 VI MTWThF, 257ForH, Kress
- 41 **Commercial Production** (5 cr)
 Lect IV MWThF, 13ForH, Weaver
 —1, Rec VI Th, 209ForH
 —2, Rec VII Th, 209ForH
 —3, Rec II F, 209ForH
 —4, Rec III F, 209ForH
 —5, Rec VI F, 209ForH
 —6, Rec VII F, 209ForH

- 60 **Maj Relief Patterns of the Continents** (2 cr; prereq 1)
 VI MW, 256ForH, Borchert
- 90 **Readings** (ar cr; prereq 12 cr geog, cons instr)
 Ar, Staff
- 101 **Western, Central Europe** (3 cr; prereq* 5 cr geog)
 III MWF, 257ForH, Broek
- 109 **Middle America** (3 cr; prereq* 5 cr geog)
 IV MWF, 257ForH, Waibel
- 112 **Western Anglo-American** (3 cr, §old 71; prereq* 5 cr)
 II MWF 257ForH, Weaver
- 133 **Introd Climatology** (3 cr; prereq* 1)
 VIII MWF, 257ForH, Borchert
- 143 **Political Geography** (3 cr, §old 43; prereq* 12 cr geog, hist, pol sci)
 VII MWF, 257ForH, Broek
- 251 **Seminar—Urban Geography** (ar cr)
 VIII-IX T, 218ForH, Broek
- 254 **Seminar—Settlement, Colonization in Brazil** (ar cr)
 VIII-IX Th, 218ForH, Waibel
- 301 **Research Probs** (ar cr)
 Ar, Staff

Winter and Spring Quarters

- 1w,s See 1f Kress (w), Borchert (s)
- 4s See 4f
- 41w,s See 41f
- 47s **Minnesota** (3 cr; prereq* 5 cr) I MWF Kress
- 70w **Introd Cartography** (3 cr; §old 111; prereq soph with C aver, 10 cr) VII-VIII TTh Borchert
- 90w,s See 90f
- 106w **Scandinavia** (3 cr; prereq* 5 cr) I MWF Kress
- 107w **Soviet Union** (3 cr; prereq* 5 cr) VI MWF Borchert
- 110w **South America** (3 cr; prereq* 5 cr) IV MWF Waibel
- 113w **Eastern Anglo-America** (3 cr; §old 71; prereq* 5 cr) II MWF Weaver
- 118s **Africa** (3 cr; old 103; prereq* 5 cr) IV MWF Waibel
- 121w **India, Southeast Asia** (3 cr; §old 120; prereq* 5 cr) III MWF Broek
- 128s **Polar Regions** (3 cr; §old 125; prereq* 1) II MWF Weaver
- 134w **Adv Climatology** (3 cr; prereq* 133 or Aero 173) VIII MWF Borchert
- 136w **Geography of Vegetation** (3 cr; prereq* 1 or Bot 50, or For 2,3,4) II MWF Waibel
- 143w See 143f
- 150s **Agricultural Geography** (3 cr; prereq* 1 or 41, 10 addtl cr geog or econ) I MWF Waibel
- 160s **Development of Geographic Thought** (3 cr; §old 155; prereq sr, 15 cr) III MWF Broek

- 170s Field Course (3 cr; prereq sr, 15 cr) ar S
Broek, Borchert
- 252w Seminar—White Settlement in Tropics
VIII-IX Th Waibel, others
- 253s Seminar—Central America VIII-IX Th
Waibel
- 301w.s See 301f

GEOLOGY (GEOL)

Fall Quarter

- A Gen Geology Lab** (2 cr; prereq 1 or concur regis)
—1, I-II TTh, 22P
—2, VI-VII MW, 22P
—3, VI-VII TTh, 22P
- B Gen Geology Lab** (2 cr; prereq A)
III-IV TTh, 22P
- 1 Gen Geology** (3 cr, #1-2 except forestry students)
—1, III TThS, 110P
—2, VI MWF, 210P
- 2 Gen Geology** (3 cr, #1-2; prereq 1)
IV MWF, 110P
- 5 Engineering Geology** (3 cr, for IT students)
I MWF, 2P
- 8 Earth Features, Their Meaning** (5 cr, \$1, NSci 6)
II MTWThF, 2P, Thiel
- 23 Mineralogy** (5 cr; prereq soph qtr col chem)
Lec I MWF, 110P, Gruner
Rec VIII T, 110P
—1, Lab VI-VII TTh, 100P
—2, Lab IX-X TTh
—3, Lab VII-VIII MW
- 70 Geologic Field Methods** (2 cr; prereq 25, trig)
Ar, Goldich, Swain
- 101 Sedimentation** (3 cr; prereq 24)
VII MWF, 210P, Thiel
- 106 Petrography** (3 cr; prereq 25)
Lec IV T, 210P, Goldich
Rec IV Th, 210P
—1, Lab VI-VII TTh, 200P
—2, Lab Ar
—3, Lab Ar
- 107 Invertebrate Paleontology** (3 cr; prereq* 25)
Lec VI T, 110P, Bell
Lab VII-VIII TTh, 105P
- 110 Economic Geology** (3 cr; prereq 25)
I TTh, VI F, 110P, Schwartz
- 118 Prin of Geomorphology** (3 cr; prereq A, 2)
I MWF, 210P, Wright
- 121 Crystallography** (3 cr; prereq trig, 1 yr col chem)
Ar, Gruner
- 125 Structural Geology** (3 cr; prereq 25)
II TThS, 210P, Wright
- 146 Soil Mineralogy** (4 cr; prereq 1 qtr col chem)
Ar, Gruner
- 153 Subsurface Stratigraphy** (3 cr; prereq 151)
Lect II T, 110P, Swain
Lab VIII-X MF, 101P
- 170 Geologic Probs** (ar cr; prereq cons maj advs)
Ar, Staff

Winter and Spring Quarters

- As See Af I-II TTh; III-IV TTh; VI-VII TTh
-Bw See Af (prereq A)
- 1w-2s See 1f IV TThS Zumberge (w), Bell (s); VII MWF Swain (w), Yardley (s)
- Aw-Bs See Af I-II MW; III-IV MW; VIII-IX TTh
- 1s See 1f III TThS Zumberge; VI MWF Swain
- 2w See 1f (prereq 1) III TThS Bell, VI MWF Swain
- 8w,s See 8f III MTWThF (w); II MTWTh (s)
Thiel
- 24w See 23f (prereq 23)
- 25s Rock Study (2 cr; prereq soph, 24) lect I T; rec I S; lab II TTh; other secs ar Goldich
- 61w Blowpipe Analysis (3 cr; prereq 24) 6 hrs
Ar Gruner
- 100s Northern Minnesota Field Work (3 cr; prereq 25) Ar Wright
- 102w Methods of Study of Sediments (3 cr; prereq 101, 106) lect VI T; lab VII-VIII TTh Thiel
- 103w-104s Micropaleontology (3 cr; prereq 107)
Ar Swain
- 108w-109s Adv Invertebrate Paleontology (3 cr; prereq 107) Ar Bell
- 111w See 110f (prereq 110)
- 112s Petroleum Geology (3 cr; prereq sr, 125, 151) I TThS Swain
- 114s Minnesota, Adjoining Areas (3 cr; prereq 25) IV MWF Thiel
- 119bw Geomorphology of Western United States
3 cr; prereq 118 or 125) IV MWF Wright
- 120s Glacial Geology (3 cr; prereq A, 2) II MWF Wright
- 124w Metamorphic Geology (3 cr; prereq 131)
II MWF Schwartz
- 131w-132s Petrology (4 cr; prereq 106) lect III MW; rec III F; lab VI-VII WF Goldich
- 137s Prin Chemical Geology (3 cr; prereq 25)
Ar Gruner
- 140w-141s Applied Petrography (3 cr; prereq 131) lect II F (w), IV W (s); lab VIII-IX MW Goldich
- 144w Geologic Maps (3 cr; prereq 125) lab VI-VIII MW Wright
- 145s Aerial Photographs (3 cr; prereq A, 2)
VI-VIII TTh Wright
- 147w See 146f (prereq 146)
- 151w-152s Stratigraphy (3 cr; prereq 107) II TThS Bell
- 161w Adv Mineralogy (3 cr; prereq 25, 121)
Ar Gruner
- 166w-167s Mineralogy (3 cr; prereq sr, 111, 131) VI-VII MTTh (w); ar (s) Schwartz

170w,s See 170f

175s Field Work—Glacial Geology, Geomorphology (3 cr; prereq 118, 120) Ar Wright

-212w-213s See 211f

215s Adv Prin of Economic Geology (3 cr; prereq 111) Ar Schwartz

GERMAN (GERM)

Fall Quarter

- 1 **Bgn German** (5 cr)
 -1, I MTWThF, 209F
 -2, II MTWThF, 209F
 -3, III MTWThF, 209F
 -4, IV MTWThF, 209F
 -5, V MTWThF, 209F
 -6, VI MTWThF, 209F
- 1a **Bgn Conversational German** (5 cr)
 Demonstration III MTWThF, 213F
 Lab Drill IV MTWThF, 209½F
- 1b **Bgn Reading German** (5 cr)
 II MTWThF, 213F
- 2 **Bgn German** (5 cr; prereq 1 or 1 yr high school German)
 -1, III MTWThF, 206F
 -2, VII MTWThF, 209½F
- 3 **Bgn German** (5 cr; prereq 2 or 2 yr high school German)
 -1, I MTWThF, 209½F
 -2, II MTWThF, 209½F
 -3, V MTWThF, 209½F
 -4, VI MTWThF, 213F
- 4 **Intermed German** (5 cr; prereq 3 or 3a or 3b, or 3 yr high school German)
 -1, III MTWThF, 209½F
 -2, IX MTWThF, 209½F
- 24 **Chemical German** (3 cr; for chemists, miners)
 IV MWF, 106TNN
- 24a **Chemical German** (4 cr; for pharmacy agric students)
 IV MTWF, 115C
- 27 **Chemical Prose** (3 cr; prereq 1 yr col German or 2 yr high school German, for chemists, miners, pharmacy students)
 IV MWF, 213F
- 41 **Reading German Chemical Periodicals** (2 cr; prereq 26)
 IV TTh, 213F
- 50 **Composition** (2 cr; prereq 4)
 VI MF, 209½F, Downs
- 53 **Conversation** (2 cr; prereq 4)
 VI TTh, 209½F, Menze
- 56 **Essay Writing** (3 cr; prereq 52)
 III TThS, 208F, Pfeiffer
- 63 **Classical Drama** (3 cr; prereq 60 or 4 with grade B)
 IV MWF, 208F, Ramras
- 66 **Adv German Conversation** (2 cr; prereq 3a or 55)
 VI TTh, 208F

70 **Survey of Literature** (3 cr; prereq 3 cr above 59)
 III MWF, 208F

73 **Classics in Translation** (2 cr)
 VII MF, 208F, Downs

90 **German Civilization, Culture** (3 cr; prereq 3 cr above 59)
 II MWF, 208F

110 **Middle High German** (3 cr; prereq sr, 70, 11 cr above 59)
 VIII-IX W, 208F, Downs

143 **Classical Period—Goethe** (3 cr; prereq sr, 71, 11 cr above 59)
 VIII-IX Th, 208F, Ramras

163 **20th Century Novel** (3 cr; prereq sr, 72, 11 cr above 59)
 VIII-IX T, 208F, Pfeiffer

173 **German, French Literary Relations** 17th, 18th, 19th, 20th Centuries (3 cr; prereq sr, 70, 11 cr above 59)
 VIII-IX M, 208F, Wood

Winter and Spring Quarters

-2w-3s See 1f (prereq 1)

1w-2s See 1f I MTWThF; II MTWThF

1s See 1f I MTWThF; II MTWThF

-2aw-3as See 1af (prereq 1a)

-2bw-3bs See 1bf (prereq 1b)

-3w See 2f (prereq 2)

4w,s See 4f I MTWThF (w); III MTWThF (s); VI MTWThF (w); VII MTWThF (s)

20w,s **Reading, Speaking German** (5 cr; prereq 4) III MTWThF

-25w-26s See 24f (prereq 24)

-25aw-26as See 24af (prereq 24a)

-28w-29s See 27f (prereq 27)

33s **Medical German** (5 cr; premed; prereq 3 or 3a or 3b) II MTWThF

-42w-43s See 41f (prereq 41)

-51w-52s See 50f (prereq 50)

-54w-55s See 53f (prereq 53)

-57w See 56f (prereq 56)

58s **Pronunciation** (2 cr; prereq 4) III TTh Downs

59w,s **Pronunciation, Diction** (1-2 cr; prereq 3, cand for German play) Ar

60w **Modern Writers** (3 cr; prereq 4) III MWF Menze

62s **19th Century Prose** (3 cr; prereq 3 cr above 59) II MWF Pfeiffer

64w **19th Century Drama** (3 cr; prereq 3 cr above 59) IV MWF Ramras

65s **Modern Drama** (3 cr; prereq 3 cr above 59) IV MWF Ramras

-67w-68s See 66f (prereq 66)

-71w-72s See 70f (prereq 70) III MWF Menze (w), Pfeiffer (s)

-74w-75s See 73f (prereq 73) VII MF Wood (w), Pfeiffer (s)

77s **Faust I** (3 cr; prereq 63, 3 addtl cr above 59) II MWF Wood

80w **History of German Language** (3 cr; prereq 6 cr above 60) II MWF Downs

- 91w-92s See 90f (prereq 90)
 -111w-112s See 110f (prereq 110)
 -144w-145s See 143f (prereq 143)
 -164w-165s See 163f (prereq 163)
 -174w-175s See 173f (prereq 173)

HISTORY (HIST)

Fall Quarter

- 1 Civilization of the Modern World (3 cr)**
 Lect II TTh, BuAud, Wolf
 -1, I M, 104ForH
 -2, I T, 6ForH
 -3, I W, 104ForH
 -4, I Th, 6ForH
 -5, II M, 6ForH
 -6, II W, 6ForH
 -7, II F, 6ForH
 -8, II S, 104ForH
 -9, III T, 6ForH
 -10, III W, 104ForH
 -11, III Th, 6ForH
 -12, IV T, 6ForH
 -13, IV Th, 6ForH
 -14, VI M, 104ForH
 -15, VI W, 211Z
 -16, VI Th, 5ForH
 -17, VII M, 104ForH
 -18, VII T, 107ForH
 -19, VII W, 104ForH
 -20, VII Th, 107ForH
- 3 Civilization of the Modern World (3 cr)**
 Lect II MW, 103ForH, Bowditch
 -1, II T, 6ForH
 -2, II Th, 6ForH
 -3, II F, 315C
 -4, VI T, 104ForH
 -5, VI Th, 104ForH
- 4 English History (3 cr)**
 Lect II MW, BuAud, Burt
 -1, I T, 104ForH
 -2, I Th, 104ForH
 -3, II T, 106ForH
 -4, II Th, 104ForH
 -5, III T, 104ForH
 -6, III Th, 104ForH
 -7, VII T, 7ForH
 -8, VII Th, 104ForH
- 11 Medieval History (3 cr; prereq maj music or art)**
 IV MWF, 103ForH, Thompson
- 14 Ancient Civilization (3 cr)**
 VII TWTh, 111ForH, Jones
- 14a Ancient Civilization with Readings (5 cr)**
 VII MTWThF, 111ForH, Jones
- 20 American History (3 cr; prereq soph)**
 -1, Lect II TTh, 116ForH, Osgood
 -2, Lect VIII TTh, 123ForH, Davies
 -1, II F, 7ForH
 -2, IV T, 104ForH
 -3, IV Th, 104ForH
 -4, VI F, 7ForH
- 5, VI W, 104ForH
 -6, VI F, 104ForH
 -7, VII F, 104ForH
 -8, VIII M, 104ForH
- 50 Ancient Civilization (3 cr, §14)**
 VII TWTh, 111ForH, Jones
- 53 Civilization of the Modern World (3 cr, §1)**
 Lect II TTh, BuAud, Wolf
 -1, II M, 104ForH
 -2, II W, 104ForH
 -3, II F, 5ForH
 -4, III M, 104ForH
 -5, IV W, 104ForH
 -6, VII T, 104ForH
- 56 English History (3 cr, §4)**
 Lect II MW, BuAud, Burt
 -1, II T, 104ForH
 -2, II F, 104ForH
- 59 American History (3 cr, §20)**
 -1, Lect II TTh, 116ForH, Osgood
 -2, Lect VIII TTh, 123ForH, Davies
 -1, II W, 315C
 -2, III Th, 106ForH
 -3, VII W, 16ForH
- 62 Cultural History of China from 600 AD to Present (3 cr)**
 VII MWF, 108ForH, Mather
- 65 Medieval European History (3 cr)**
 III MWF, 111ForH, Krey
- 70 English Constitutional History (3 cr; prereq see col bul)**
 -1, I MWF, 109ForH, Thompson
 -2, I MWF, 103ForH, Willson
- 76 Canadian History (3 cr)**
 III TThS, 107ForH, Burt
- 86 American Colonies (3 cr)**
 II MWF, 111ForH, Tyler
- 90 American West (3 cr)**
 III TThS, 111ForH, Osgood
- 93 American Diplomatic History (3 cr)**
 VI MWF, 111ForH, Beatty
- 97 Minnesota, the Northwest (3 cr)**
 III MWF, 123ForH, Jordan
- 100b History—Rome (3 cr)**
 I TThS, 106ForH, Jones
- 103 Medieval European History (3 cr)**
 III MWF, 111ForH, Krey
- 106a Continental Europe (3 cr)**
 IV MWF, 111ForH, Steefel
- 109 Europe in the 20th Century (3 cr)**
 I MWF, 116ForH, Deutsch
- 112 Economic History of Europe (3 cr)**
 I TThS, 107ForH, Heaton
- 118a Scandinavia during World War II (3 cr; prereq* 106a-107a-108a or 122-123-124)**
 VI MWF, 107ForH
- 120 Modern France (3 cr; prereq 9 cr hist or 15 cr soc sci or maj French)**
 VI MWF, 108ForH, Bowditch
- 122 History of Scandinavian Countries (3 cr)**
 II MWF, 12F
- 125 Russia (3 cr)**
 IV MWF, 107ForH, Anderson

- 125a Middle East: Early Times to 1520 (3 cr; prereq 1, 2, 3)
III MWF, 106ForH, Anderson
- 128a Modern England: 1714 to 1783 (3 cr)
II MWF, 107ForH, Willson
- 131 Economic Development in Scandinavian Countries in Last Half-Century (3 cr; prereq* a course econ theory, hist)
VI MWF, 12F
- 143 American Folklore (3 cr)
I MWF, 111ForH, Jordan
- 146 American Economic, Social History (3 cr)
II TThS, 107ForH, Loehr
- 149 Social, Intellectual History of United States (3 cr)
III MWF, 20ForH, Tyler
- 154 Canadian History, Canadian-American Relations (3 cr)
III TThS, 107ForH, Burt
- 157 Latin-American History (3 cr)
VIII MWF, 107ForH, Beatty
- 170 Readings in Ancient History (3 cr, †170-171-172; prereq sr)
VIII-IX T, 207ForH, Jones
- 173 Readings in Medieval, Renaissance History (3 cr, †173-174-175; prereq sr)
VIII-IX W, 207ForH, Krey
- 176 Readings in 17th Century France (3 cr, †176-177-178; prereq sr, knowl French)
VIII-IX M, 206ForH, Wolf
- 176a Russian History (3 cr; †176a-177a-178a; prereq* sr, 125-126-127, knowl Russian, German, or French)
VII-VIII M, 208ForH, Anderson
- 176b Scandinavian History (3 cr, †176b-177b-178b; prereq sr)
VI-VII W, 208ForH
- 176c Recent European History (3 cr; †176c-177c-178c; prereq* sr, course in 20th cent Europe)
VI-VII W, 207ForH, Deutsch
- 179 Readings in European Economic History since 1700 (3 cr, †179-180-181; prereq sr)
VI-VII T, 206ForH, Heaton
- 182 Readings in English History, Tudor, Stuart Periods (3 cr, †182-183-184; prereq sr)
VIII-IX Th, 208ForH, Willson
- 185 Early American Social, Intellectual History (3 cr, †185-186-187; prereq sr)
VI-VII Th, 206ForH, Tyler
- 185a West in American History (3 cr, †185a-186a-187a; prereq sr)
VIII-IX M, 207ForH, Osgood
- 185b American Diplomatic History (3 cr, †185b-186b-187b; prereq sr)
VI-VII Th, 305ForH, Beatty
- 185c Third Party Movements since Civil War (3 cr, †185c-186c-187c; prereq sr)
—1, VI-VII T, 208ForH, Stephenson
—2, VI-VII Th, 312Lib, Stephenson
- 185d Minnesota, the Northwest (3 cr; prereq sr)
VIII-IX W, 208ForH, Jordan
- 188 American Economic History (3 cr; prereq sr)
VI-VII Th, 207ForH, Loehr
- 191 Readings in Canadian History (3 cr; prereq sr)
VIII-IX Th, 207ForH, Burt
- 194 Readings in Latin-American History (3 cr, †194-195-196; prereq sr, knowl Spanish)
VI-VII T, 207ForH, Beatty
- 200 Historical Bibliography, Criticism (3 cr)
IV TThS, 105ForH, Steefel, others
- 208 Seminar—American History (3 cr, †208-209-210)
VIII-IX T, 208ForH, Loehr
- 208a Seminar—American History (3 cr, †208a-209a-210a)
VIII-IX F, 208ForH, Osgood
- 208b Seminar—American History (3 cr, †208b-209b-210b)
VII-VIII F, 207ForH, Stephenson
- 221 Seminar—Economic History (3 cr, †221-222-223)
VI-VII Th, 208ForH, Heaton
- 224 Seminar—Modern European History (3 cr, †224-225-226; prereq* knowl French or German)
VI-VII M, 207ForH, Steefel
- 230 Seminar—Ancient History (3 cr, †230-231-232)
VIII-IX F, 206ForH, Jones

Winter and Spring Quarters

- 1w-2s See 1f lect II MW Bowditch; rec I F; II Th; II F; III Th; III F
- 2w-3s See 1f
- 5w-6s See 4f
- 12w-13s See 11f
- 15w-16s See 14f
- 15Aw-16As See 14Af
- 17s Modern Economic, Social Probs (5 cr; prereq 3d qtr fr) lect II TThS; rec III TTh; VIII TTh Heaton
- 21w-22s See 20f
- 51w-52s See 50f (§15-16)
- 54w-55s See 53f (§2-3)
- 57w-58s See 56f (§5-6)
- 60w-61s See 59f (§21-22)
- 63w See 62f
- 66w-67s See 65f
- 68w-69s American History since 1900 (3 cr)
VII MWF Davies
- 71w-72s See 70f
- 77-78s See 76f
- 83as American Agricultural History (3 cr; prereq soph) I TThS Loehr
- 87w-88s See 86f
- 89s Economic History of Modern War (3 cr)
VI MWF Bowditch
- 91w-92s See 90f
- 94w-95s See 93f
- 98w-99s See 97f
- 101bw-102bs See 100bf
- 107aw-108as See 106af

- 110w-111s See 109f
 -113w-114s See 112f
 118w-119s World War II (3 cr) II MWF Deutsch
 118as See 118af
 -121w See 120f
 -123w-124s See 122f
 -126w-127s See 125f
 -126aw-127as See 125af
 -129aw-130as See 128af
 -144w-145s See 143f
 -147w-148s See 146f
 -150w-151s See 149f
 -158w-159s See 157f
 168w-169s Readings in Works of Great Historians (3 cr; prereq sr) IV TThS Steefel
 -171w-172s See 170f (†170-171-172)
 -174w-175s See 173f (†173-174-175)
 -177w-178s See 176f (†176-177-178)
 -177aw-178as See 176af (†176a-177a-178a)
 -177bw-178bs See 176bf (†176b-177b-178b)
 -177cw-178cs See 176cf (†176c-177c-178c)
 -180w-181s See 179f (†179-180-181)
 -183w-184s See 182f (†182-183-184)
 -186w-187s See 185f (†185-186-187)
 -186aw-187as See 185af (†185a-186a-187a)
 -186bw-187bs See 185bf (†185b-186b-187b)
 -186cw-187cs See 185cf (†185c-186c-187c)
 -186dw-187ds See 185df (†185d-186d-187d)
 -189w-190s See 188f (†188-189-190)
 -192w-193s See 191f (†191-192-193)
 -195w-196s See 194f (†194-195-196)
 -209w-210s See 208f (†208-209-210)
 -209aw-210as See 208af (†208a-209a-210a)
 -209bw-210bs See 208bf (†208b-209b-210b)
 -222w-223s See 221f (†221-222-223)
 -225w-226s See 224f (†224-225-226)
 -231w-232s See 230f (†230-231-232)

JOURNALISM (JOUR)

Fall Quarter

- 10 **Photography** (3 cr; prereq soph, jour maj only)
 Lect V T, 308MurH, Liebling
 Lab VI-IX M, 20MurH, Liebling
 11 **Introd Reporting** (3 cr; prereq see col bul)
 -1, I MWF, 308MurH
 -2, IV MWF, 311MurH, Ford
 13 **Introd Reporting for Majors** (3 cr; prereq see col bul)
 -1, I-II MWF, 212MurH, Hage
 -2, III-IV MWF, 212MurH
 -3, VI-VII MWF, 212MurH
 -4, VI-VIII TTh, 212MurH, Charnley
 15 **Newspaper Reporting** (3 cr; prereq see col bul)
 III-IV MWF, 210MurH, Gerald
 51 **News Editing** (3 cr; prereq 15 or B aver in 13-14; or 13, 18 for adver maj)
 Lect V T, 105MurH, Kildow
 -1, Lab I-II TTh, 206MurH
 -2, Lab I-II WF, 206MurH, Jensen
 -3, Lab III-IV MW, 206MurH, Emery
 -4, Lab VIII-IX TTh, 207MurH, Emery
 -5, Lab VI-VII WF, 206MurH
 -6, Lab VIII-IX TTh, 206MurH
 55 **Advertising, Newspaper Typography** (3 cr; prereq jour maj, sr col stand, for others 11 or 13 and 41)
 -1, Lect VII M, 302MurH, Barnhart
 -1, Lab VIII-IX MW, 315-320MurH, Barnhart
 -2, Lect V Th, 105MurH, Wilson
 -2, Lab I-II MW, 315-320MurH, Wilson
 -3, Lab I-II TTh, 315-320MurH, Wilson
 -4, Lab VI-VII WF, 315-320MurH, Wilson
 59 **Typography Workshop** (2 cr; prereq 55, 65, cons instr)
 Ar, Wilson
 65 **Graphic Arts** (3 cr; prereq cons maj advis)
 IV MWF, 105MurH, Wilson
 66 **Pictorial Journalism** (3 cr; prereq 10, 13, cons instr)
 Lect VIII M, 311MurH, Kildow
 Lab VIII-IX WF, 20MurH, Kildow
 67 **Radio News Writing** (3 cr; prereq 15)
 Lect VII WF, 302MurH, Jensen
 Lab III-IV, days ar, 207MurH, Jensen
 73 **Magazine Writing, Editing** (3 cr; prereq 15 or 18)
 -1, VI MWF, 302MurH, Charnley
 -2, VIII MWF, 302MurH, Hage
 76 **Critical Writing** (3 cr; prereq cons instr)
 II TThS, 311MurH, Ford
 78 **Public Relations** (3 cr; prereq sr, 51, 55, 73; or 41, 55, 69)
 I MWF, 105MurH, Emery
 86 **Advertising Copy Writing** (3 cr; prereq 41 or 51, and 55, 65)
 -1, VII MWF, 311MurH, Seehafer
 -2, III TThS, 311MurH, Seehafer
 93 **Weekly Editorial Admin** (3 cr; prereq 51 or concur regis)
 II TThS, 105MurH, Barnhart
 104 **Adv Newspaper Advertising** (3 cr; prereq 51, 94, cons instr)
 II MWF, 105MurH, Barnhart
 111 **Int'l Communications** (3 cr; prereq* 51, hist or pol sci course in int'l relations)
 IV MWF, 308MurH
 113 **Mass Communication** (3 cr; prereq* sr, jour maj)
 I MWF, 311MurH, Swanson
 118C **Readings in Journalism** (3 cr; prereq sr, jour maj with B aver, cons instr)
 Ar, Casey
 120 **Development of Radio Communications** (3 cr; prereq for jour maj, 15; for speech-radio maj, 13 or cons instr)
 III TThS, 105MurH, Charnley
 130 **Communication Agencies, Public Opinion** (3 cr; prereq 15 cr soc studies)
 III MWF, 105MurH, Casey

- 140 Interpretation of Contemporary Affairs (3 cr; prereq sr, 51, 15 cr soc studies)
Lect VI TTh, 105MurH, Staff
-1, VI TTh, VII T, 206MurH
-2, VI TTh, VII T, 207MurH, Emery
-3, VI TTh, VII T, 302MurH, Gerald
-4, VI TTh, VII T, 308MurH, Hage
-5, VI TTh, VII T, 311MurH, Jensen
-6, VI TTh, VII T, 405MurH
- 210 Research—Mass Communications Probs (2 or 3 cr; prereq cons dir of school)
Ar, Swanson

Winter and Spring Quarters

- 10w,s See 10f
11w See 11f II TThS Ford
13w See 13f I-II MWF Jensen; III-IV MWF; VI-VII MWF
14w,s-15s Newspaper Reporting (3 cr; prereq see col bul)
18w,s Prin Advertising (3 cr; prereq soph, 13, C aver, Comp 27-28 or concur regis) I TThS (w); III TThS (s) Seehafer
41w Editing for Nonmajors (3 cr; prereq jr, 11 or 13, SLA students with cons dept) lect VI MW Ford; labs I-II T Hage; I-II Th Hage; III-IV W Ford; VI-VII F Hage; VIII-IX W Wilson
51w,s See 51f lects V T Swanson (w,s); labs I-II TTh Emery (w), ar (s); VI-VII TTh (w); VIII-IX MW (s) Jensen
52w,s News Editing (3 cr; prereq 51, 55) lect V T Kildow (w), Ar (s); labs III-IV MF (w,s); III-IV ThS (w); VI-VII MW Emery (w), Ar (s); VIII-IX TTh (w); VIII-IX TF (s)
55w,s See 55f lect V Th; labs I-II MW; I-II TTh; VI-VII WF Wilson
58w Adv Typography (2 cr; prereq 55, cons instr) VI-VII TTh Barnhart
59s See 59f
65s See 65f
66w,s See 66f
67w,s See 67f lect VII WF Charnley (w), Jensen (s); lab III-IV Ar
68s Probs in Radio Writing (3 cr; prereq see col bul) VI MWF Charnley
69s Newspaper, Magazine Articles (3 cr; prereq 41) I MWF Ford
73s See 73f I MWF Kildow; VI MWF Hage
74w Magazine Writing, Editing (3 cr; prereq 55, 73, cons instr) VI MWF Charnley
82s Supervision of School Publications (3 cr; prereq 41 or 51) VII MWF Kildow
86w,s See 86f VII MWF Seehafer
87w Radio Advertising (3 cr; prereq sr, 18, 120, cons instr; or 69, BA 88, cons instr) III MWF Seehafer
88w Radio, Television Station Admin (3 cr; prereq* 120) I MWF Paulu
90s Mass Communications, the News (3 cr; no jour maj) III TThS Charnley
- 94w,s Newspaper Advertising (3 cr; prereq 51, 55; or 41, 55, cons instr) II TThS Barnhart (w); III TTh, 1 hr ar Gerald (s)
95s Circulation, Newspaper Mgt (3 cr; prereq 51) II TThS Barnhart
101w,s Reporting Public Affairs (3 cr; prereq sr, 51) III TThS (w); III MWF (s) Hage
103s Literary Aspects of Journalism (3 cr; prereq cons instr) IV MWF Ford
104s See 104f
109w-110s History of Journalism (3 cr) II MWF Ford, Emery
112w Comparative Foreign Journalism (3 cr; prereq* 111) II MWF Staff
115w,s Communication Media Analysis (3 cr; prereq 51, cons instr; or Econ 5 or Psy 70, cons instr) III MWF (s); VI MWF Swanson (w)
118As Adv Reporting of Public Affairs (3 cr; prereq sr, 101 cons instr) VI-IX MW
118Bs Projects in Media Analysis (3 cr; prereq sr, 115, cons instr) VIII-IX TF Swanson
118Cw,s See 118Cf
121w The Press in a Dynamic Society (3 cr; prereq* 15 or 18) IV MWF Gerald
-131w See 130f (prereq 130)
-141w See 140f (prereq 140)
142s Current Communications Problems (3 cr; prereq sr, 51) VI-VII TTh Staff
150s Public Relations in Community Services (2 cr; §78; prereq sr, cons maj advis, instr) VIII-IX Th Emery
177s Freedom of Press, Communications Law (3 cr; prereq* 51) IV MWF Gerald
205s Topics in Intl News Communications (3 cr; prereq cons dir of school) Ar Casey
208w Communications Agencies as Social Institutions (3 cr; prereq cons advis) Ar Gerald

LINGUISTICS AND COMPARATIVE PHILOLOGY

Chinese (CHIN)

Fall Quarter

- 1 Bgn Chinese (5 cr)
V MTWThF 108F, Mather
51 Intermed Chinese (3 cr; prereq 3)
Ar, Mather

Winter and Spring Quarters

- 2w-3s See 1f (prereq 1)
-52w-53s See 51f (prereq 51)

Japanese (JAP)

Fall Quarter

- 1 Bgn Japanese (5 cr)
V MTWThF, 4F, Syro-Boyarsky
51 Adv Japanese (3 cr; prereq 3)
VIII M, VIII-IX F, 4F, Syro-Boyarsky

- 56 Composition (2 cr; prereq 3)
II-III T, 4F, Syro-Boyarsky
- 61 Adv Japanese Reading (3 cr; prereq 53)
Ar, Syro-Boyarsky

Winter and Spring Quarters

- 2w-3s See 1f (prereq 1)
- 52w-53s See 51f (prereq 51)
- 57w-58s See 56f (prereq 56)
- 62w-63s See 61f (prereq 61)

Linguistics (LING)

Fall Quarter

- 124 Introd Biblical Hebrew (3 cr)
Ar
- 131 Introd Sanskrit (3 cr; prereq sr, cons instr; grad 2 sr col courses in early indo-european lang, pref greek, gothic, or latin)
Ar, Magner
- 151 Honors Course (1-3 cr; prereq cons instr)
Ar
- 201 Directed Readings (1-3 cr)
Ar

Winter and Spring Quarters

- 125w-126s See 124f
- 132w See 131f
- 152w-153s See 151f
- 202w-203s See 201f

Russian (RUSS)

Fall Quarter

- 1 Bgn Russian (5 cr)
VII MTWThF, 8F, Magner
- 51 Adv Russian (3 cr; prereq 3)
VI MWF, 10F, Niemi
- 56 Conversation (3 cr; prereq 3)
VII MWF, 108F
- 61 Composition (2 cr; prereq 3)
VI TTh, 10F, Niemi
- 71 Rapid Reading of Russian Literature (3 cr; prereq* 53)
Ar, Niemi
- 101 Russian Literature (3 cr; prereq 8 cr lit)
V MWF, 10F, Niemi
- 131 Adv Interp—Pushkin to Tolstoy (3 cr; prereq* 73)
Ar, Niemi

Winter and Spring Quarters

- 2w See 1f (prereq 1)
- 3s Intermed Russian (5 cr; prereq 2) VII MTWThF Niemi
- 52w-53s See 51f (prereq 51)
- 57w-58s See 56s (prereq 56)
- 62w-63s See 61f (prereq 61)
- 72w-73s See 71f (prereq 71)
- 102w-103s See 101f (prereq 101)
- 132-133s See 131f (prereq 131)

MATHEMATICS (MATH)

Fall Quarter

- 1 Higher Algebra (5 cr; prereq see col bul)
—1, I MTWThF, 301F
—2, III MTWThF, 301F
—3, VI MTWThF, 301F
—4, VIII MTWThF, 104F
- 6 Trigonometry (5 cr; prereq plane geom and 1)
—1, II MTWThF, 102F
—2, VII MTWThF, 109F
- 7 College Algebra (5 cr, §8 or 15; prereq 6 or high school trig, cons dept)
—1, II MTWThF, 105F
—2, VI MTWThF, 104F
- 8 Commerce Algebra (5 cr, §7 or 15; prereq 1)
—1, IV MTWThF, 301F
—2, VII MTWThF, 105F
- 15 Elem Mathematical Analysis (5 cr, §7 or 8; prereq plane geom and 1 or high school algebra)
—1, III MTWThF, 104F
—2, V MTWThF, 104F
- 30 Analytic Geometry (5 cr; prereq 6, 7 or 6, 8, or 16, 155)
IV MTWThF, 101F
- 49 Analytic Geometry, Calculus I (5 cr; prereq 6, 7, or 6, 8 or 15, 16)
I MTWThF, 105F
- 50 Calculus I (5 cr; prereq 30)
—1, III MTWThF, 105F
—2, VI MTWThF, 105F
- 51 Calculus II (5 cr; prereq 50)
I MTWThF, 109F
- 60 Synthetic Metric Geometry (3 cr; prereq 30)
VII MWF, 104F, Carlson
- 105 Intermed Calculus (5 cr; prereq 51)
V MTWThF, 105F, Gibbens
- 106 Differential Equations (3 cr; prereq 51)
III TThS, 102F
- 110 Tutorial Course, Adv Mathematics (3-6 cr; prereq 51)
Ar
- 121 Mathematical Theory of Statistics (3 cr; prereq 51)
IV MWF, 105F, Donsker
- 136 Solid Analytic Geometry (3 cr; prereq 50 or concur regis)
II MWF, 104F, Hatfield
- 144 Fourier Series, Orthogonal Functions (3 cr; prereq 51)
IV TThS, 105F, Loud
- 170 Introd Modern Algebra (3 cr; prereq* 51)
III MWF, 102F, Nering
- 206 Theory of Functions (3 cr; prereq 107 or old course 107-108 or cons instr)
II TThS, 104F, Gelbaum
- 212 Point Set Topology (3 cr; prereq 206)
II MWF, 109F, Olmsted
- 245 Introd Lebesgue Integrals (3 cr; prereq 208)
IV MWF, 102F, Graves

- 246 Introd Wiener Integrals (3 cr; prereq 208, cons instr)
II TThS, 109F, Cameron
- 271 Theory of Linear Differential, Integral Equations (3 cr; prereq 208)
IV TThS, 102F, Cameron

Winter and Spring Quarters

- 1w,s See 1f I MTWThF (w,s); V MTWThF (w,s) VI MTWThF (w)
- 6w,s See 6f I MTWThF (s); III MTWThF (w); V MTWThF (s); VI MTWThF (w,s)
- 7w,s See 7f II MTWThF (w); III MTWThF (s); VI MTWThF (s); VII MTWThF (w)
- 8w,s See 8f I MTWThF (w); V MTWThF (s); VIII MTWThF (w)
- 15w-16s See 15f-16w I MTWThF; V MTWThF
- 16w See 15f (prereq 15)
- 20w,s Mathematics of Investment (5 cr; prereq 8 or 6, 7 or 15, 16) I MTWThF (s); IV MTWThF (w); VII MTWThF (w); VIII MTWThF (s)
- 21s Introd Mathematics of Life Insurance (3 cr; prereq 20) I MWF
- 30w,s See 30f II MTWThF (w,s); VI MTWThF (w); VII MTWThF (s)
- 50w,s See 50f II MTWThF (s); IV MTWThF (w); VI MTWThF (s)
- 50aw Analytic Geometry, Calculus II (5 cr; prereq 49) I MTWThF
- 51w,s See 51f III MTWThF (w); IV MTWThF (s); VI MTWThF (w)
- 51as Analytic Geometry, Calculus III (5 cr; prereq 50a) I MTWThF
- 62w Introd Theory of Equations (3 cr; prereq 50 or concur regis and cons instr) VII MWF Carlson
- 105w,s See 105f I MTWThF (w); III MTWThF (s); VI MTWThF (s)
- 106w See 106f V MWF Gibbens
- 107s Adv Calculus (5 cr; prereq 105; or 50, 51 with grades A; acquaint with solid anal geom or cons instr) V MTWThF Gibbens
- 109w Theory of Numbers (3 cr; prereq 51) II MWF Hatfield
- 110w,s See 110f
- 122w-123s See 121f (prereq 121)
- 145w-146s See 144f (prereq 144)
- 171w-172s See 170f (prereq 170)
- 187s Non-Euclidean Geometry (3 cr; prereq 51) II MWF Carlson
- 207w-208s See 206f (prereq 206)
- 213w See 212f (prereq 212)
- 214s Topological Algebra (3 cr; prereq 213, either 120 or 170) II MWF Kalisch
- 217w-218s Mathematical Theory of Probability (3 cr; prereq 245) IV MWF Graves
- 237w-238s Adv Mathematical Statistics (3 cr; prereq 123, 245) VIII MThF Bearman
- 247w Integration in Function Space (3 cr; prereq 245, cons instr) II TThS Cameron

- 257s Seminar in Integration in Function Space (3 cr; prereq 247) II TThS Cameron
- 272w-273s See 271f

MUSIC (MUS)

Fall Quarter

- A Piano (no cr; prereq cons dir)
Ar
- D Voice (no cr; prereq cons dir)
Ar
- 1 Fundamentals of Music (2 cr, for non-music maj)
I MTWTh, 3ScH, Berryman
- 1T Music Theory (3 cr; prereq see col bul)
-1, II MTWThF, 3ScH, Fetler
-2, III MTWThF, 3ScH, George
-3, VII MTWThF, 103ScH, 3ScH, Fetler, George
- 3T Music Theory (3 cr; prereq 2T)
V MTWThF, 3ScH
- 4T Music Theory (4 cr; prereq 3T)
-1, I MTWThF, 103ScH, Malcolm
-2, III MTWThF, 103ScH, Malcolm
-3, VI MTWThF, 103ScH, George
- 6T Music Theory (4 cr; prereq 5T)
V MTWThF, 103ScH, Malcolm
- 10 Introd Music (4 cr)
Lect III MWF, SchAud
Lab III TTh, SchAud
- 11 Piano—Individual Lessons (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, SchAud, Hunter, Kendall, Rymer, Stephens
- 11C Piano—Class Lessons (2 cr; prereq cons instr)
Lect VIII Th, SchAud, Hunter
-1, II TTh, 205ScH
-2, III TTh, 205ScH
-3, VI TTh, 205ScH
- 12 Voice—Individual Lessons (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, SchAud, Birnbach, Hull, Schuessler
- 12C Voice—Class Lessons (2 cr; prereq cons instr)
Lect VIII Th, SchAud, Schuessler
-1, III TTh, 211ScH
-2, VI TTh, 211ScH
-3, VII MW, 211ScH
- 13 Violin (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, SchAud, Cullen, Drujan
- 14 Viola (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, SchAud, Barton
- 15 Cello (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, SchAud, Meltzer
- 16 Double Bass (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, SchAud, Fitch

- 17 Flute (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Arnegard, Winkler
- 18 Oboe (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Angelucci
- 19 Clarinet or Saxophone (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Handlon, Fitch
- 20 Bassoon (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Santucci
- 21 Trumpet (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Greco, MacKay
- 22 French Horn (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Linder
- 23 Trombone (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, MacKay
- 24 Tuba (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, MacKay
- 25 Percussion (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Denecke
- 26 Harp (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud
- 27 Organ (2-4 cr; prereq entr exam, see col bul)
VIII Th and lesson hrs ar, ScHAud, Jennings, Berryman
- 31 Music Literature (2 cr)
II MWF, ScHAud, Ivory
- 34 History of Music (2 cr; prereq soph)
II MWF, 4ScH
- 37 Keyboard Harmony (1 cr; prereq 3T)
II TTh, 103ScH, Jennings
- 40 Orchestra (1 cr; prereq cons dir)
7:30 p.m. T, NMAud, Oberg
- 43 University Chorus (1 cr, †43-44-45; prereq cons dir)
—1, IV MW, 4NMA; 7:30 p.m. T, NHAud, Aliferis
—2, VIII MW, 7:30 p.m. T, NHAud, Aliferis
- 43StP Farm Music Ensembles (1 cr)
4:30-5:45 TTh, 102Hr, Rymer
- 46 Concert Band (1 cr; prereq cons dir)
—1, IX MTTh, 4NMA
—2, IX MWF, 5NMA
- 50 Music—18th Century (2 cr; prereq 35)
III TTh, 104ScH
- 53 Romantic Movement (2 cr; prereq 35)
VII WF, 104ScH, Kendall
- 56 Bach, Beethoven (3 cr; prereq sr, 34-35-36)
VI-VII TTh, 104ScH
- 60 Instrumental Ensemble (2 cr)
VI MWF, 104ScH, Stephens, Ivory
- 63 Vocal Ensemble (2 cr; prereq 6 cr in 12 or 12C)
VIII M, 209ScH; VIII WF, 104ScH, Hull
- 66 The Chamber Singers (1 cr; prereq cons instr)
VII MWF, 4ScH, Aliferis
- 70 Normal Piano (2 cr; prereq 2 yr piano)
I MWF, 104ScH, Kendall
- 73 Adv Harmony (2 cr; prereq 6T)
III MW, 2ScH, Aliferis
- 76 Form, Analysis (3 cr; prereq 6T)
II MWF, 104ScH, Stephens
- 77 Composition (2 cr; prereq 6T, 98)
IV TTh, 103ScH, Fetler
- 80 Adv Normal Piano (2 cr; prereq sr, 72)
VIII-IX MW, 103ScH, Kendall
- 83 Adv Composition (2 cr; prereq sr, 79)
Ar, Fetler
- 86 Orchestration (2 cr; prereq 6T)
II WF, 215ScH, Aliferis
- 90 Adv Instrumental Ensemble (2 cr; prereq sr, 62)
VI MWF, 104ScH, Stephens, Ivory
- 93 Improvisation (1 cr; prereq 6T, 12 cr organ, 27 or cons instr)
II TTh, 206ScH, Berryman
- 96 Counterpoint (2 cr; prereq 6T)
IV MWF, 103ScH, Fetler
- 200 Basis of Musical Expression (3 cr; prereq 58)
VIII-IX M, 104ScH, VIII-IX F, 103ScH
- 205 Composition in Larger Forms (3 cr; prereq 85)
Ar
- 209 Adv Topics in Musical Analysis (3 cr; prereq 76)
II MWF, 2ScH, Oberg
- 212 Special Probs in Music (3-9 cr; prereq 202 or 211)
Ar, Oberg

Winter and Spring Quarters

- Bw-Cs See Af (prereq A)
-Ew-Fs See Df (prereq D)
1w,s See 1f
1Tw-2Ts See 1Tf V MTWThF
-2Tw-3Ts See 1Tf (prereq 1T)
4Tw-5Ts See 4T V MTWThF Malcolm
-5Tw-6Ts See 4Tf (prereq 4T)
10w,s See 10f
11w,s See 11f
11Cw,s See 11Cf
12w,s See 12f
12Cw,s See 12Cf
13w,s See 13f
14w,s See 14f
15w,s See 15f
16w,s See 16f
17w,s See 17f
18w,s See 18f
19w,s See 19f
20w,s See 20f
21w,s See 21f
22w,s See 22f

- 23w,s See 23f
 24w,s See 24f
 25w,s See 25f
 26w,s See 26f
 27w,s See 27f
 -32w-33s See 31f
 -35w-36s See 34f
 -38w-39s See 37f (prereq 37)
 -41w-42s See 40f
 -44w-45s See 43f (prereq 43)
 -44StPw-45StPs See 43StPf (prereq 43StP)
 -47w-48s See 46f
 -51w-52s See 50f (prereq 50f)
 -54w-55s See 53f (prereq 53)
 -57w-58s See 56f (prereq 56)
 -61w-62s See 60f (prereq 60)
 -64w-65s See 63f (prereq 63)
 -67w-68s See 66f (prereq 66)
 -71w-72s See 70f (prereq 70)
 -74w-75s See 73f (prereq 73)
 -78w-79s See 77f (prereq 77)
 -81w-82s See 80f (prereq 80)
 -84w-85s See 83f (prereq 83)
 -87w-88s See 86f (prereq 86)
 -91w-92s See 90f (prereq 90)
 -94w-95s See 93f (prereq 93)
 -97w-98s See 96f (prereq 96)
 -201w-202s See 200f
 -206w-207s See 205f
 -210w-211s See 209f
 -212w,s See 212f

PHILOSOPHY (PHIL)

Fall Quarter

- 1 Probs of Philosophy (5 cr, §1A; prereq* soph)
 -1, I MTWThF, 308F
 -2, IV MTWThF, 308F, Hospers
 1A Sel Probs of Philosophy (3 cr, §1; prereq* soph)
 VI MWF, 105MurH, Wiggins
 2 Logic (5 cr, §2A; prereq* soph)
 Lect III MWF, 110P, Brodbeck
 -1, III TTh, 305F
 -2, IV TTh, 305F
 3 Ethics (5 cr, §3A; prereq* soph)
 -1, II MTWThF, 301F, Swanson
 -2, VII MTWThF, 321F, Terrell
 50 Gen History of Philosophy (5 cr)
 III MTWThF, 2P, Holmer
 70 Philosophies of Social Reform (3 cr, §Pol 162)
 IV MWF, 210P, Wiggins
 81 Science, Civilization (3 cr; prereq* sr)
 IV MWF, 322F, Brodbeck
 101 Prin Philosophy (4 cr, §1, 2; prereq sr)
 III MTThF, 322F, Hospers
 106 Plato (3 cr; prereq* 50)
 VIII MWF, 322F, Hospers
 110 Rationalism (3 cr; prereq* 50 or 51 or 52)
 VII MWF, 307F, Sellars

- 114 Introd American Philosophy (3 cr)
 VI MWF, 321F, Brodbeck
 115 Contemporary Philosophy (3 cr; prereq*)
 IV MWF, 307F, Terrell
 117 Readings in Recent Philosophy (3 cr; prereq* 52)
 Ar
 147 Elements of Symbolic Logic, Semantics (4 cr; prereq* 2)
 III MTThF, 321F, Feigl
 170 Philosophy of History (3 cr; prereq 6 cr phil or 10 cr hist)
 VII MWF, 322F, Holmer
 180 History of Religion (3 cr; prereq 6 cr phil)
 VI MWF, 322F, Holmer
 191 Seminar—Philosophy (3 cr; prereq* 9 cr phil)
 Ar, Feigl, Sellars, and others
 220 Seminar—Philosophical Analysis (3 cr; prereq* 143)
 Ar, Sellars
 230 Adv History of Philosophy (3 cr; prereq see col bul)
 Ar, Sellars
 244 Seminar—Philosophy of Psychology (3 cr; prereq cons instr)
 VIII-X T, 307F, Feigl, Meehl
 250 Seminar—Philosophy of Social Sciences (3 cr; prereq cons instr)
 VIII-X Th, 307F, Feigl

Winter and Spring Quarters

- 1w See 1f I MTWThF; VII MTWThF Terrell
 1s See 1f Lect III MWF Terrell and quiz III TTh; IV TTh; or V MTWThF Swanson
 -2Aw-3As See 1Af
 2w See 2f Lect III MWF Brodbeck and quiz III TTh; IV TTh; or V MTWThF Terrell
 2s See 2f II MTWThF Brodbeck; VII MTWThF Terrell
 3w,s See 3f I MTWThF (s); II MTWThF Swanson (w); IV MTWThF Wiggins (w,s)
 4s Introd Philosophy of Art (4 cr; prereq Art 1 or Mus 10) III MTThF Hospers
 51w-52s See 50f
 71s Design for America (5 cr; prereq* sr) III MTWThF Wiggins
 73w Philosophy of Law (3 cr; prereq soph, 6 cr) III MWF Wiggins
 -82w-83s See 81f
 -102w See 101f (prereq 101)
 -107w See 106f (prereq 106)
 111w Empiricism (3 cr; prereq* 52) VI MWF Hospers
 113w Kierkegaard, Scandinavian Philosophy (3 cr; prereq* 50 or 51 or 52) VIII MWF Holmer
 114Aw American Philosophy since James (3 cr; prereq* 114) VI MWF Brodbeck
 115As 19th Century Thought (3 cr; prereq cons instr) VI MWF Brodbeck
 -118w-119s See 117f (prereq 117)

- 135s Philosophy in Modern Literature (3 cr)
VI MWF Terrell
- 143w Theory of Knowledge (4 cr; prereq* 2)
III MTThF Feigl
- 153s Philosophy of Science (4 cr; prereq* 2) III
MTThF Feigl
- 159w-160s Prin Esthetics (3 cr; prereq cons
instr) IV-V½ TTh Hospers
- 164s Ethical Theory (3 cr; prereq* 50 or 51 or
52) VIII MWF Sellars
- 181w Psychology of Religion (3 cr; prereq 6
cr) VI MWF Holmer
- 182s Philosophy of Religion (3 cr; prereq 6
cr) VI MWF Holmer
- 192w-193s See 191f
- 221w-222s See 220f
- 231w-232s See 230f
- 241s Seminar—Philosophy of Physical Sciences
(3 cr; prereq cons instr) Ar Feigl
- 245w-246s See 244f
- 251w See 250f

PHYSICS (PHYS)

Fall Quarter

- 1 Intro Physical Science (3 cr, †1-2; prereq
high school algebra, plane geom)
III MWF, 150Ph, Kruglak
- 1a Intro Physical Science with Lab (4 cr,
†1a-2a; prereq high school algebra, plane
geom)
Lect III MWF, 150Ph, Kruglak
Lab secs will be assigned during first 2
days of class
- 4 Gen Physics (5 cr; prereq see col bul)
Lect and quiz I MTWThF, 166Ph, Nafe
Lab secs will be assigned during first 2 days
of class
- 6 Gen Physics (5 cr; prereq 5)
Lect and quiz VI MTWThF, 133Ph
Lab secs will be assigned during first 2 days
of class
- 7 Gen Physics (5 cr; prereq regis in differ
calculus)
—1, Lect II MTWThF, 150Ph, Ney
—2, Lect VI MTWThF, 150Ph, Freier
Lab secs will be assigned during first 2 days
of class
- 8 Gen Physics (5 cr; prereq 7)
Lect and quiz VII MTWThF, 166Ph, Blair
- 101 Theoretical Physics (5 cr; prereq 15 cr phys,
Math 106 or concur regis)
I MTWThF, 133Ph, Nier
- 107 Modern Physics (3 cr; prereq 15 cr phys,
Math 51)
VI MWF, 166Ph, Nafe
- 110 Modern Experimental Physics (3 cr; pre-
req 144)
VI-IX TTh, 149Ph, Schmitt
- 114 Elem Physical Investigation (3 cr; prereq
15 cr phys, Math 51, cons dept chair)
Ar
- 131 Geometrical Optics (3 cr; prereq 15 cr phys,
Math 51)
II TThS, 145Ph, Valasek
- 134 Experimental Optics (3 cr; prereq 15 cr
phys)
Lect VII T, 143Ph, Valasek
Lab VIII-IX and VII-IX Th, Valasek
- 144 Electricity Measurements (3 cr; prereq 15
cr phys, Math 51)
Lect III TThS, 133Ph, Wall
—1, Lab VI-IX M
—2, Lab VI-IX T
—3, Lab VI-IX Th
- 181 Atomistics, Elem Quantum Mechanics (3 cr;
prereq* sr, 105, Math 107)
IV MWF, 145Ph, Tate
- 191 Intro Mathematical Physics (3 cr; prereq
sr, 105, 5 cr Math 107-108)
III MWF, 145Ph, Hill
- 207 Electrodynamics, Theoretical Optics (3 cr)
Ar, Weinberg
- 210 Quantum Mechanics (3 cr)
VI MWF, 145Ph
- 243 Statistical Mechanics (3 cr)
Ar, Wall

Winter and Spring Quarters

- 2w-3s See 1f (prereq 1)
- 2aw-3as See 1af (prereq 1a)
- 5w-6s See 4f (prereq 4)
- 4s See 4f Lect and quiz III MTWThF Valasek;
Labs V-VI M; VII-VIII M; I-II T; V-VI
T; VII-VIII T; IX-X Th Wall, assistants
- 8w-9s See 7f (prereq 7)
- 7w-8s See 7f Lect and quiz VII MTWThF;
Labs I-II M; V-VI M; I-II T; III-IV T;
IX-X T; VIII-IX Th; I-II F; IX-X F
Wall, assistants
- 9w See 8f (prereq 8)
- 73w Intermed Thermodynamics (3 cr; prereq
15 cr, Math 51) II MWF Nier
- 103w-105s See 101f (prereq 101)
- 109w-111s See 107f (prereq 107)
- 110w,s-112w,s Modern Experimental Physics
(3 cr; prereq 144) VI-IX TTh Schmitt
- 114w,s-116w,s-118w,s See 114f, 116f, 118f
- 133w Physical Optics (3 cr; prereq 15 cr, Math
51) II TThS Valasek
- 134w See 134f
- 136w,s Spectrum Analysis (3 cr; prereq 15 cr)
VII-IX TTh Valasek
- 183w-185s See 181f (prereq 181)
- 192w-193s See 191f (prereq 191)
- 208w-209s See 207f
- 211w-212s See 210f
- 244w-245s See 243f

POLITICAL SCIENCE (POL)

Fall Quarter

- A State in the Modern World (3 cr, †A-B,
§9-10, or 15)
III MWF, 4ME, Lippincott

- C State in the Modern World (3 cr; §7; prereq B)
II MWF, 20ForH
- 1 American Govt, Politics (3 cr, §1-2, §5)
-1, IV MWF, 150Ph, Christensen
-2, I TThS, 123ForH, Warp
- 5 American Govt, Politics (5 cr, §1-2)
VI MTWThF, 4ME, de Grazia
- 25 World Politics (3 cr)
VI MWF, NHAud, Mills
- 51 Field Work in Govt, Politics (3 cr, §51-52; prereq 9 cr pol, res Minn)
III-IV T, 122ForH, Naftalin
- 80 Nat'l Govt in United States (3 cr, §1-2, 5)
IV MWF, 109ForH, Short
- 91 Honors Work in Sel Fields (ar cr; prereq 18 cr pol, cons maj advis)
Ar
- 101 Prin American Constitution I (3 cr; prereq 1-2 or 5)
III MWF, 103ForH, Anderson
- 116 Local Govt (3 cr, §116-117; prereq* 9 cr pol)
I MWF, 105ForH, Anderson
- 120 Municipal Functions (3 cr; prereq 6 cr pol)
II TThS, 103ForH, Ludwig
- 124 Recent Social Legislation (3 cr; prereq 6 cr pol)
VII MWF, 109ForH, Christensen
- 131 Public Admin (3 cr; prereq 6 cr pol)
II MWF, 13ForH, Short
- 137 American Political Parties (3 cr; prereq 6 cr pol or 12 cr soc sci)
II MWF, 116ForH, Christensen
- 141 European Govts (3 cr, §141-142; prereq 6 cr pol or 12 cr soc sci)
IV MWF, 20ForH, McClosky
- 145 Govt, Politics of Scandinavian Countries (3 cr; prereq* C)
VII MWF, 12F, Skodvin
- 149 Govt, Politics of British Empire (3 cr; prereq* 6 cr pol)
III MWF, 109ForH, Mills
- 153 Japanese Govt, Politics (3 cr; prereq* 6 cr pol)
II MWF, 109ForH, Quigley
- 160 American Political Thought (3 cr; prereq* 6 cr pol or 12 cr soc sci)
III TThS, 13ForH, Sibley
- 164 Political Thought: Greece, Rome (3 cr; prereq* 6 cr pol or 12 cr soc sci)
IV TThS, 109ForH, Sibley
- 167 Political Behavior (3 cr; prereq* 6 cr pol)
III MWF, 107ForH, de Grazia
- 175 Conduct of American Foreign Relations (3 cr, §175-176; prereq 9 cr pol or Hist 93-94-95)
III TThS, 109ForH, McLaughlin
- 180 Int'l Law (3 cr, §180-181; prereq* 9 cr pol)
I TThS, 109ForH, McLaughlin
- 184 Int'l Organization I (3 cr; prereq* 6 cr pol)
I MWF, 13ForH, Levi
- 210 Seminar—Public Admin (3 cr, §210-211-212; prereq cons staff)
3:30-5:20 TTh, 308ForH, Ludwig, Short, Warp
- 216 Seminar—Comparative European Govt (3 cr; prereq* 12 cr pol)
VII-VIII M, 309ForH, McClosky
- 225 Readings in Classics of Politics (3 cr; prereq* 12 cr incl 6 cr pol theory)
VIII-IX TTh, 309ForH, Lippincott
- 229 Scope, Methods of Political Science (3 cr; prereq* 12 cr pol)
VIII-IX W, 123ForH, Anderson
- 238 Int'l Law, Diplomacy I (3 cr; prereq* 181, sr cons instr)
3:30-5:30 F, 309ForH, McLaughlin
- 242 Colonization, Imperialism (3 cr; prereq* 196)
IX-X W, 309ForH, Mills
- 245 Seminar—Far Eastern Gov't, Politics (3 cr; prereq 153-154)
VII-VIII W, 309ForH, Quigley
- 248 Seminar—Int'l Organization (3 cr; prereq cons instr)
V-VI M, 309ForH, Levi
- Winter and Spring Quarters
- Aw,Bs See Af III MWF
-Bw-Cs See Af (prereq A)
1w-2s See 1f I MWF
-2w-3s See 1f (prereq 1)
5w,s See 5f
25s See 25f
-52w-53s See 51f
85s Probs of World Politics (3 cr; prereq* 25 or Hist 1-2-3) II MWF Mills
-92w-93s See 91f (prereq 91)
- 102w Prin American Constitution II (3 cr; prereq 101) III MWF Anderson
- 103s Prin American Constitution III (3 cr; prereq 101 or 102) III MWF Anderson
- 108w Legislative Organization, Procedure (3 cr; prereq 6 cr) IV MWF Short
-117w See 116f (prereq 116)
- 118s Local Govt: Legal Status, Powers, Responsibilities (3 cr; prereq* 116) I MWF Anderson
- 121w Municipal Admin (3 cr; prereq* 120) II TThS Ludwig
- 122s Municipal Probs (3 cr; prereq* 121) II TThS Ludwig
- 126w-127s Govt, Economic Order (3 cr; prereq 9 cr) IV TThS Warp
- 129w Social Legislation, Institutions in Scandinavian Countries (3 cr; prereq* Soc 1) VI MWF
- 132w Public Admin: Personnel (3 cr; prereq 131) II MWF Short
- 133s Public Admin: Financial (3 cr; prereq* 131) II MWF Short
-142w See 141f (prereq 141)
- 143s Govt of USSR, Adjacent States (3 cr; prereq 6 cr) VI MWF McClosky

- 150w Govt, Politics of British Empire (3 cr; prereq* 6 cr) III MWF Mills
- 151s British Probs of Closer Union (3 cr; prereq* 149, 150 with grade C+) III MWF Mills
- 154w Chinese Govt, Politics (3 cr; prereq* 6 cr) IV MWF Quigley
- 155w-156s Govt, Intl Relations in Latin America (3 cr; prereq* 6 cr) II MWF Christensen
- 161w Probs of Democracy (3 cr; prereq* 6 cr; or 12 cr soc sci) III TThS Sibley
- 162s Recent Political Thought (3 cr, §Phil 70; prereq* 6 cr; or 12 cr soc sci) III TThS Sibley
- 165w Political Thought: Middle Ages (3 cr; prereq* 6 cr; or 12 cr soc sci) IV TThS Sibley
- 166s Political Thought: Early Modern (3 cr; prereq* 6 cr; or 12 cr soc sci) IV TThS Sibley
- 168w-169s See 167f (prereq 167)
- 171w Scandinavian Foreign Policy (3 cr; prereq* 6 cr hist or pol sci) VII MWF
- 176w-177s See 175f (prereq 175)
- 181w-182s See 180f (prereq 180)
- 185w Intl Organization II (3 cr; prereq 6 cr) I MWF Levi
- 186s Intl Organization III (3 cr; prereq 6 cr) I MWF Levi
- 187s Probs of European Reconstruction (3 cr; prereq 6 cr) IV-V M and hr ar Levi
- 194s Far East in Intl Relations (3 cr; prereq* 6 cr) IV MWF Quigley
- 204w-205s Seminar—Public Law (3 cr, †204-205; prereq* 18 cr) VI-VII½ Warp
- 211w-212s See 210f (prereq 210)
- 214w Seminar—Political Parties (3 cr; prereq* 12 cr) VIII-IX W Christensen
- 217w-218s See 216f
- 226w-227s See 225f
- 239w Intl Law, Diplomacy II (3 cr; prereq* sr, 181, cons instr) 3:30-5:30 F McLaughlin
- 240s Intl Law, Diplomacy III (3 cr; prereq* sr, 181, cons instr) 3:30-5:30 F McLaughlin
- 243w-244s See 242f
- 246w-247s See 245f
- 249w See 248f
- 4, V-VI MW, 211Psy
- 5, VII-VIII MW, 211Psy
- 6, III-IV MW, 211Psy
- 7, IX-X TTh, 211Psy
- 8, IX-X MW, 211Psy
- 9, III-IV TS, 211Psy
- 56 **Psychology of Advertising** (3 cr; prereq 2, Econ 7)
II MWF, NHAud, Longstaff
- 65 **Adv Gen Psychology** (3 cr; prereq 2)
VII MWF, 115Psy, MacCorquodale
- 70 Prin Psychological Measurement (3 cr; prereq 2, 5)
IV MWF, 115Psy, Clark
- 90 Readings in Psychology (ar cr; prereq 2, 3 addtl cr, cons instr)
Ar, Staff
- 101 **Experimental Psychology** (3 cr, †101-102; prereq 2, 5 or equiv in another sci)
Lect VII M, 109Psy, Tinker
—1, Lab VII-VIII W
—2, Lab VII-VIII F
- 108 Systems of Psychology (3 cr; prereq sr, cons instr, adv work in psy)
Ar, Elliott
- 125 **Psychology of Individual Differences** (3 cr; prereq sr, 2, 5, or 5 cr stat)
—1, II MWF, 115Psy, Paterson
—2, II MWF, 202WeH, Jenkins
- 127 Projects in Individual Differences (ar cr; prereq sr, 126)
Ar, Paterson, Longstaff
- 128 **Psychology of Learning** (3 cr; prereq 9 cr psy)
II MWF, 103Bu, Heron
- 130 **Vocational, Occupational Psychology** (3 cr; prereq 9 cr psy)
Lect I MW, 211Psy
Lab V-VI F, 211Psy
- 135 Occupational Counseling (2 cr; prereq* sr, 9 cr)
VIII-IX M, 115Psy, Stone
- 144 **Abnormal Psychology** (3 cr, †144-145; prereq 9 cr or 6 cr psy, Zool 3 or 12 cr soc sci)
—1, IV TThS, NAud, Bird
—2, IV TThS, 166Ph, Rosen
- 151 Animal Psychology (5 cr; prereq 2, 5 or equiv in another sci)
VI MTWThF, 115Psy, Heron
- 160 **Psychology in Personnel Work** (3 cr; prereq* 2, 5, or 3 cr stat, Econ 7)
—1, III MWF, 115Psy, Longstaff
—2, III MWF, 202WeH
- 171 Clinical Psychology (3 cr, †171-172; prereq sr, 125, 144 or EPsy 120 or 5 cr stat and 6 addtl cr psy or educ psy)
VI MWF, 202WeH, Meehl
- 203 History of Psychology II: American (1 cr)
II S, 109Psy, Tinker
- 207 Group Dynamics (2 cr; prereq cons instr)
VIII-IX Th, 301Psy, Schachter

PSYCHOLOGY (PSY)

Fall Quarter

- A **Elem Psychology** (5 cr, §1-2, GC 41; prereq see col bul)
V MTWThF, NHAud, Jenkins
- 1 **Gen Psychology** (3 cr, §A or GC 41, †1-2; prereq soph)
—1, III MWF, BuAud, Elliott
—2, V MWF, BuAud, Elliott
- 4 **Psychology Lab** (2 cr, †4-5; prereq soph, 1-2 or concur regis)
—1, I-II TTh, 211Psy, Tinker, others
—2, V-VI TTh, 211Psy
—3, VII-VIII TTh, 211Psy

- 210 Research Probs (ar cr)
Ar, Staff
- 220 Seminar—Structure, Dynamics of Personality (2 cr)
VIII-IX W, 301Psy, Meehl
- 230 Field Work in Psychometrics, Applied Psychology (ar cr)
Ar, Staff
- 235 Clinical Practice in Student Counseling Bureau (ar cr)
Ar, Berdie
- 240 Seminar—Student Personnel Work (1 cr)
Ar, Williamson
- 243 Experimental Psychodynamics (3 cr)
VII MWF, 301Psy, Russell
- 250 Topics in Psychology (ar cr)
Ar, Staff
- 256 Adv Psychology of Advertising (3 cr)
II MWF, NHAud, Longstaff
- 260 Seminar—Applications of Psychological Methods to Study of Psychiatry (1 cr)
Ar, Hathaway
- 270 Adv Psychological Measurement (3 cr)
IV MWF, 115Psy, Clark
- 271 Seminar—Recent Literature of Psychology (1 cr)
VIII-IX alt F, MacCorquodale
- 290 Theory of Projective Methods (3 cr)
Ar, Rosen
- 295 Seminar—Individual Differences, Applied Psychology (1 cr)
VIII-IX alt W, Paterson
- Winter and Spring Quarters**
- Aw,s See Af V MTWThF (s); IV-V½ MWF (w) Longstaff
- 1w-2s See 1f II MWF MacCorquodale; VIII MWF Heron
- 1-2s General Psychology (6 cr; prereq soph)
IV MTWThFS, Russell
- 2w,s See 1f (prereq 1)
- 3s Psychology Applied to Daily Life (3 cr; prereq 2) III MWF Longstaff, others
- 4w-5s See 4f I-II MW; III-IV ThS Tinker, others
- 4-5s Introd Lab Psychology (4 cr; prereq 1-2 or 2 or concur regis) V-VI MTThF; VII-VIII MTThF; IX-X MTThF; I-II TThFS Tinker, others
- 5w See 4f (prereq 4)
- 52s Genetic Psychology (3 cr; prereq 2) IV MWF Heron
- 55s Psychology of Sensation (3 cr; prereq 2) IV MWF Tinker
- 56w See 56f VII MWF Longstaff
- 70s See 70f VI MWF Clark
- 86s Biographical Psychology (3 cr; prereq sr, 12 cr) III MWF Elliott
- 91w,92s See 90f
- 102w-103s See 101f (prereq 101, f101-102)
- 114w Human Behavior (3 cr; prereq sr, 2; 5 or Zool 3, or Phil 1) II TThS Elliott
- 126w See 125f (prereq 125)
- 125,126s Psychology of Individual Differences (6 cr) II MTWThFS Jenkins
- 127w,s See 127f
- 129w See 128f (prereq 128)
- 130w,130s See 130f Lect IV T and IX W (s) or IX F (w) Paterson; labs V-VI F (w); V-VI W (s); VII-VIII F (w); VII-VIII W (s)
- 136w-137s See 135f (prereq for 136, same as 135; for 137, 130)
- 140w Social Psychology (3 cr; prereq 2, 5, 9 cr soc sci) II TThS Bird
- 145w See 144f (prereq 144)
- 147s Political Psychology (3 cr; prereq 2, 5, 9 cr soc sci) III TThS Bird
- 148w Physiological Psychology (3 cr; prereq* 2, 5, or Zool 3) IV MWF Hathaway
- 152w,153s Individual Investigations in Animal Psychology (3 cr; prereq 151) Ar Heron
- 160w See 160f
- 167w Techniques, Probs of Public Opinion Analysis (3 cr; prereq for sr, 140 or 147; for grad, a course in stat) VII MWF Clark
- 168s Research in Public Opinion Analysis (3 cr; prereq sr, 167) Ar Clark
- 172w See 171f (prereq 171)
- 204w-205s See 203f (f203-204-205)
- 208w-209s See 207f
- 211w-212s See 210f
- 216w,217s See 215f
- 219s Psychology of Personality (3 cr) Ar Rosen
- 221w-222s See 220f
- 231w-232s See 230f
- 236w-237s See 235f
- 241w,242s See 240f
- 244w See 243f
- 246s Adv Abnormal Psychology (3 cr; prereq 145, 171) Ar Bird
- 251w-252s See 250f
- 256w Adv Psychology of Advertising (3 cr) Ar Longstaff
- 258w-259s See 257f
- 261w-262s See 260f
- 270s See 270f
- 272w-273s See 271f
- 274s Preclinical Practicum in Clinical Psychology (2 cr; prereq maj clinical psych, 172, 291 or concur regis) Ar Schofield, staff
- 286s Adv, Biographical Psychology (3 cr) Ar Elliott
- 291 Practicum in Interpretation of Projective Techniques (3 cr; prereq 290, written cons instr) Ar Rosen
- 296w-297s See 295f
- 299w Tabulating Equipment Lab (1 cr; prereq PH 110, 111) Ar Clark

ROMANCE LANGUAGES

French (FREN)

Fall Quarter

- 1 Bgn French (5 cr, §1a)
 -1, I MTWThF, 202F
 -2, IV MTWThF, 226F
 -3, VI MTWThF, 226F
- 1a Bgn French: Conversational Section (5 cr, §1)
 Dem III MTWThF, 227F, Sirich
 -1, Lab VI MTWThF, 227F
 -2, Lab VII MTWThF, 4F
- 2 Bgn French (5 cr, §2a; prereq 1 or 1 yr high school fren)
 III MTWThF, 202F
- 3 Intermed French (5 cr, §3a; prereq 2 or 2 yr high school fren)
 -1, III MTWThF, 201F
 -2, VII MTWThF, 227F
- 4 Intermed French (5 cr; prereq 3 or 3a or 3 yr high school fren)
 -1, II MTWThF, 227F
 -2, VI MTWThF, 11F
- 50 French Pronunciation (3 cr; prereq 4)
 II TTh and hr ar, 203F, Sullivan
- 53 French Composition (3 cr; prereq 4)
 VI MWF, 201F, Fermaud
- 63 Adv French Composition (3 cr; prereq 53 or 20 with grade B)
 III MWF, 10F
- 70 Survey of French Literature (3 cr, §73-74; prereq 4)
 IV MWF, 201F, Clefton
- 75 French Civilization, Culture (3 cr; prereq 4)
 III MWF, 6F, Fermaud
- 103 French Syntax, Composition (1 cr; prereq 63 or concur regis)
 VI F, 203F Barton
- 110 19th Century Prose (3 cr; prereq 72 or 74)
 II MWF, 201F, Barton
- 115 17th Century Literature (3 cr; prereq 72 or 74)
 IV MWF, 4F, Fermaud
- 118 18th Century Literature (3 cr; prereq 72 or 74)
 IV TTh, V Th, 201F, Sirich
- 121 16th Century Literature (3 cr; prereq* 9 cr lit courses above 74)
 Ar, Desgranges
- 130 French Romantic Poetry—Hugo (3 cr; prereq 72 or 74)
 VII MWF, 201F, Clefton
- 171 History of French Language (1 cr, †171-172-173; prereq* 1 yr lat)
 Ar, Brackney
- 181 Movement of Ideas in French Literature (3 cr; prereq 72 or 74)
 IX-X W, 301Lib, Desgranges
- 201 Old French Phonology, Morphology (2 cr)
 VIII-IX T, 302F, Brackney

- 204 Readings in Old French Literature (2 cr)
 Ar, Brackney

Winter and Spring Quarters

- 2w See 1f (prereq 1)
 1w-2s See 1f-2w III MTWThF; VII MTWThF
 1s See 1f III MTWThF; VII MTWThF
 -2aw See 1af (prereq 1a)
 -4w See 3f (prereq 3)
 3w-4s See 3f-4w III MTWThF
 3s See 3f I MTWThF; IV MTWThF; VI MTWThF
 3as Intermed French—Conversational Section (5 cr, §3; prereq 2a) Dem III MTWThF; Labs VI MTWThF; VII MTWThF
- 20s Oral, Written French (5 cr; prereq* 4, 4 yr high school fren) VI MTWThF
 50w See 50f
 52s Pronunciation, Diction (1-2 cr; prereq 4, cand for fren play) Ar Wirtz
 54w-55s Conversation (3 cr; prereq 53 or 20) VI MWF Fermaud
 -64w See 63f (prereq 63)
 65s Adv Conversation (3 cr; prereq 63) III MWF
 -71w-72s See 70f (prereq 70)
 73w-74s Survey of French Literature (5 cr; prereq 4) III MTWThF Brackney
 -76w-77s See 75f (prereq 75)
 -104w-105s See 103f (prereq 103)
 107s Cours de Style (3 cr; prereq* 64) Ar
 111w 19th Century Drama (3 cr; prereq 72 or 74) II MWF Barton
 112s 19th Century Poetry (3 cr; prereq 72 or 74) II MWF Clefton
 -116w-117s See 115f (prereq 115)
 -119w-120s See 118f
 -122w-123s See 121f (prereq 121)
 159w Contemporary French Novel II (3 cr; prereq 72 or 74) VII MWF Fermaud
 -172w-173s See 171f (prereq 171)
 -182w-183s See 181f
 -202w-203s See 201f
 -205w-206s See 204f
 -208w-209s See 207f
 -226w-227s See 225f

Italian (ITAL)

Fall Quarter

- 1 Bgn Italian (4 cr, §5)
 IV MTWF, 302F, Nissen
- 4 Intermed Italian (4 cr; prereq 3)
 II MTWF, 302F, Nissen
- 73 Boccaccio (3 cr; prereq 3 or 4 or 2, cons instr)
 III MWF, 302F, Nissen

Winter and Spring Quarters

- 2w See 1f (prereq 1)
 3s Intermed Italian (4 cr; prereq 2 with grade C) IV MTWF Nissen

- 5w Reading Knowledge of Italian (5 cr, §1; prereq knowl of fren, lat, or span) II MTWThF Nissen
- 70w Survey of Italian Literature II (3 cr; prereq 3 or 4, or 2 with cons instr) III MWF Nissen
- 73s Boccaccio (3 cr; prereq 3 or 4, or 2 with cons instr) III MWF Nissen
- 160w See 159f

Portuguese (PORT)

Fall Quarter

- 1 Bgn Portuguese (5 cr)
VII MTWThF, 226F, Luckey

Winter and Spring Quarters

- 2w See 1f (prereq 1)
- 3s Intermed Portuguese (5 cr; prereq 2) VII MTWThF Luckey
- 70w-71s Brazilian Literature, Culture in English (3 cr; prereq soph with C aver, 9 cr in any lit) Ar Luckey

Spanish (SPAN)

Fall Quarter

- 1 Bgn Spanish (5 cr, §1a)
-1, I MTWThF, 11F
-2, IV MTWThF, 227F
-3, VI MTWThF, 107F
- 1a Bgn Spanish: Conversational Section (5 cr, §1)
Dem II MTWThF, 10F, Mills
Lab VII MTWThF, 302F
- 2 Bgn Spanish (5 cr, §2a; prereq 1 or 1 yr high school span)
II MTWThF, 202F
- 3 Intermed Spanish (5 cr, §3a; prereq 2 or 2 yr high school span)
-1, II MTWThF, 226F
-2, IV MTWThF, 11F
- 4 Intermed Spanish (5 cr; prereq 3 or 3a or 3 yr high school span)
-1, II MTWThF, 11F
-2, IV MTWThF, 202F
- 53 Spanish Composition (3 cr; prereq 4)
-1, II MWF, 8F, Floripe
-2, III MWF, 226F, Mills
- 60 Adv Spanish Composition (3 cr; prereq 53 or 20 with grade B)
II MWF, 322F, LeFort
- 65 Literature of Spain (3 cr, §68-69; prereq 4)
VI MWF, 202F, Grismer
- 70 Latin American Civilization, Culture (3 cr; prereq* 5 cr above 4)
-1, IV MWF, 203F, LeFort
-2, III TThS, 6F, Cuneo
- 74 Literature of Spanish America (3 cr; prereq 3-4)
II MWF, 9F, Irving
- 103 Spanish Syntax, Composition (1 cr; prereq 60 or concur regis)
IV T, 205F, Irving

- 110 19th Century Literature (3 cr; prereq 67 or 69)
IV MWF, 10F, Floripe
- 140 Contemporary Latin American Literature (3 cr; prereq survey lit of spain or latin amcr)
VIII MWF, 302F, LeFort
- 155 16th Century Literature (3 cr; prereq 67 or 69)
VII MWF, 202F, Grismer
- 230 Research Methods, Materials (1 cr)
X M, Grismer
- 241 Old Spanish Philology (2 cr)
IX-X T, Grismer
- 247 Hispano Arabic Culture (2 cr)
IX-X F, 203F, Irving
- 250 Spanish Seminar (2 cr)
VIII-IX W, 203F, Floripe

Winter and Spring Quarters

- 1w-2s See 1f-2w III MTWThF; VII MTWThF
- 1s See 1f II MTWThF; VII MTWThF
- 2w See 1f (prereq 1)
- 2aw See 1af (prereq 1a)
- 3w-4s See 3f-4w II MTWThF
- 3s See 3f I MTWThF; IV MTWThF
- 3as Intermed Spanish—Conversational Section (5 cr, §3; prereq 2a) Dem II MTWThF; Lab VII MTWThF
- 4w See 3f (prereq 3)
- 20w,s Oral, Written Spanish (5 cr; prereq* 4 or 4 yr high school span) III MTWThF (s) VII MTWThF (w)
- 52w Pronunciation, Diction (1-2 cr; prereq* 4, cand for span play) Ar Cuneo
- 54w-55s Conversation (3 cr; prereq 53 or 20)
II MWF Floripe; III MWF Mills
- 56s Phonetics, Diction (3 cr; prereq 53 or 20)
Lect IV TTh, lab VII TTh LeFort
- 57w,s Commercial Spanish (5 cr; prereq 53 or 20) VII MTWThF Cuneo
- 61w-62s Adv Conversation (3 cr; prereq 60) II MWF LeFort
- 66w-67s See 65f (prereq 65)
- 68w-69s Survey Literature of Spain (5 cr; prereq 4) VI MTWThF Luckey
- 71w-72s See 70f (prereq* 70)
- 75w-76s See 74f (prereq 74)
- 104w-105s See 103f (prereq 103)
- 111w-112s See 110f (prereq 110)
- 141w-142s See 140f (prereq 140)
- 156w-157s See 155f (prereq 155)
- 231w-232s See 230f
- 242w-243s See 241f
- 248w-249s, See 247f
- 251w-252s See 250f
- 254w-255s See 253f

SCANDINAVIAN (SCAN)

Fall Quarter

- 1 Bgn Norwegian (5 cr)
VI MTWThF, 103F, Eikaas

- 4 Adv Norwegian (3 cr; prereq 3)
VII MWF, 5F, Eikaas
- 7 Bgn Swedish (5 cr)
II MTWThF, 2F, Lorenzen
- 10 Adv Swedish (3 cr; prereq 9)
III MWF, 4F, Lorenzen
- 51 19th Century Literature (2 cr; prereq 6 or
12, or 8 cr lit, no knowl scan lang)
III MW, 12F, Gustafson
- 171 Ibsen—Bgn of Modern Drama (3 cr; prereq
6 or 12, or 8 cr lit, no knowl scan lang)
IV MWF, 12F

Winter and Spring Quarters

- 2w See 1f (prereq 1)
- 3s Intermed Norwegian (5 cr; prereq 2) VI
MTWThF Eikaas
- 5w-6s See 4f (prereq 4)
- 8w See 7f (prereq 7)
- 9s Intermed Swedish (5 cr; prereq 8) II
MTWThF Lorenzen
- 11w-12s See 10f (prereq 10)
- 22w-23s Scandinavian Life Today, Yesterday
(3 cred; no knowl scan lang) V MWF
Gustafson, staff
- 52w Contemporary Literature (2 cr; prereq 6
or 12, or 8 cr in any lit) Ar Gustafson
- 61s Norwegian Conversation (3 cr; prereq 3)
Ar Eikaas
- 71s Swedish Conversation (3 cr; prereq 12)
Ar Lorenzen
- 172w Strindberg, Drama in Revolt, Transition
(3 cr; prereq 6 or 12; or 8 cr in any lit)
IV MWF Gustafson
- 173s Contemporary Scandinavian Theater (3 cr;
prereq 6 or 12; or 8 cr in any lit) IV
MWF Gustafson
- 192w-193s See 191f (prereq 191)
- 219w-220s See 218f
- 222w-223s See 221f

SOCIAL WORK (SW)

Fall Quarter

- 200 Field of Social Work (3 cr)
V TThS, 122ForH
- 205 Topics in Social Work (ar cr)
IX-X TTh, 122ForH, Mueller
- 209 Seminar—Social Agencies, Institutions (ar
cr)
Ar
- 210 Initial Field Training (ar cr; prereq 220
or 282A or concur regis)
Ar, Staff
- 215 Adv Field Training (ar cr; prereq 221 or
282B)
Ar, Staff
- 216 Adv Field Training (ar cr; prereq 221 or
282B)
Ar, Staff
- 217 Adv Field Training (ar cr; prereq 221 or
282B)
Ar, Staff

- 219 Seminar for Field Training Supervisors (ar
cr; prereq supervision of students in
field work)
Ar, Staff
- 220 Case Work I (3 cr; prereq 200, concur regis
in 210)
—1, II TThS, 108ForH, Whitmore
—2, IV TThS, 106 ForH, Whitmore
- 222 Adv Case Work (2 cr; prereq 221)
—1, IV-V T, 108ForH
—2, IV-V Th, 108ForH
- 227 Seminar—Case Work in Psychiatric Set-
ting (ar cr; prereq 221, concur regis in
215-216-217)
VI-VII T, 409ForH
- 228 Seminar—Social Case Recording (ar cr)
IX-X T, 409ForH, Dyer
- 229 Seminar—Case Work Supervision (ar cr;
prereq 222)
Ar, Dyer
- 236 Personality Development as it Affects So-
cial Work (2 cr; prereq 220)
VI-VII T, 103ForH
- 259 Seminar—Medical Social Work (ar cr; pre-
req 221, concur regis in 222)
VI-VII T, 407ForH, Mueller
- 266 Seminar—Child Welfare (ar cr)
IX-X Th, 409ForH, Guilford
- 267 Public Welfare I (3 cr)
I TThS, 103ForH, Guilford
- 269 Seminar—Public Welfare Admin (ar cr;
prereq 268)
IX-X F, 409ForH, Kidneigh
- 276 Legal Aspects of Social Work (3 cr)
I TThS, 108ForH
- 282A Prin Group Work I (3 cr; prereq 210 or
concur regis)
IV TThS, 123ForH, Konopka
- 284 Use of Program in Groups II (1 cr; prereq
282A)
VI Th, 108ForH, Pernell
- 286 Therapeutic Group Work (2 cr; prereq 285
or 221)
IX-X T, 108ForH, Konopka
- 289 Seminar—Group Work (ar cr)
IX-X Th, 407ForH, Konopka
- 293 Special Studies in Social Work (ar cr)
Ar, Staff
- 300 Gen Seminar in Social Work (ar cr)
IX-X W, 407ForH, Staff

Winter and Spring Quarters

- 201s History, Theory of Social Work (3 cr) I
TThS
- 206w,207s See 205f
- 209w,s See 209f
- 211w-212s See 210f
- 215w,s-216w,s-217w,s See 215f, 216f, 217f
- 219w,s See 219f
- 220s See 220f IV TThS Dyer
- 221w,s Case Work II (2 cr; prereq 220, 236,
concur regis in 211) II-III T Whitmore;
II-III Th Whitmore

- 222w See 222f
 225w,s Seminar—Family Case Work (ar cr; prereq* 221) VI-VII T Dyer
 226w Seminar—Case Work in Health Probs (ar cr; prereq* 221) IX-X T Mueller
 227w,s See 227f
 229s See 229f
 236w See 236f
 239s Seminar—Psychiatric Social Work (2 cr; prereq 230, 235, 236) Ar Hinckley
 250s Medical Information for Social Workers (3 cr; prereq PH 50 or 51) IX T and VIII-IX Th Mueller, medical staff
 259w,s See 259f
 260w The Child, the State (3 cr) VI-VII T and II S Guilford
 262s Prin of School Social Work (2 cr; prereq 221 or 282B) IX-X T Laabs
 266w,s See 266f
 268w Public Welfare II (3 cr; prereq 267) IV TThS Guilford
 269w,s See 269f
 275w Prin Social Work Admin (3 cr) I TThS Kidneigh
 279s Seminar—Admin, Community Organization (ar cr; prereq 275, 280) IX-X M Kidneigh
 280s Community Organization (3 cr; prereq* 282) I TThS Kidneigh
 282As See 282Af
 282Bw Prin Group Work II (2 cr; prereq 211 plus 282A, 236 or concur regis) II-III T Konopka
 283w Use of Program in Groups I (2 cr; prereq 282A) II-III Th Pernell
 284s See 284f
 285s Group Work III (2 cr; prereq 282B) II TTh Konopka
 287w Supervision, Admin in Group Work I (2 cr; prereq 285) VI-VII T Pernell
 288s Supervision, Admin in Group Work II (2 cr; prereq 287) VI-VII T Konopka
 289w,s See 289f
 293w,s See 293f
 299w,s Seminar—Recent Research in Social Work (ar cr) Ar
 300w,s See 300f

SOCIOLOGY (SOC)

Fall Quarter

- 1 **Intro Sociology** (5 cr)
 Lect II TThS, NHAud, Monachesi, others
 —1, I WF, 7ForH
 —2, II MW, 7ForH
 —3, IV MW, 7ForH
 —4, VI MW, 7ForH
 —5, VII MW, 7ForH
 —6, III TTh, 7ForH
 1A **Intro Sociology** (3 cr, for agric forestry HE students)
 III TThS, 302Hr

- 2 **Intermed Sociology** (5 cr; prereq 1 or 1A)
 Lect I MWF, 211NH, Caplow, others
 —1, I WF, 107ForH
 —2, II TTh, 7ForH
 —3, IV MW, 105ForH
 —4, IV TTh, 7ForH
 14A **Rural Sociology** (3 cr; prereq 1 or 1A, for agric, forestry, HE students)
 IV TThS, 102Hr, Nelson, Marshall
 45 **Social Statistics** (5 cr, §Econ 5; prereq 1 or 1A)
 Lect IV MWF, 123ForH
 —1, VI-VII MW, 123ForH
 —2, VI-VII TTh, 123ForH
 49 **Social Probs** (3 cr; prereq 1 or 1A)
 I MWF, NHAud, Martindale
 50 **Areas of Social Work** (3-4 cr; prereq 49)
 III TThS and 3 hr of obser for seq D students, 116ForH
 53 **Elements of Criminology** (3 cr; prereq 1 or 1A)
 II MWF, 123ForH, Vold
 91 **Case Method: Study of Human Probs** (3 cr; prereq 50 or 51, or cons maj advis)
 I TThS, 116ForH
 101 **Criminal Theories** (3 cr; prereq* 1, 53, 15 cr soc sci, CW, educ, phil, or psy)
 IV MWF, 3ForH, Vold
 120 **Social Psychology** (3 cr; prereq* 1, 15 cr soc sci, CW, educ, phil, or psy)
 I TThS, 111ForH, Rose
 123 **Intergroup Relations** (3 cr; prereq* 1, 15 cr soc sci, CW, educ, phil, or psy)
 III TThS, 123ForH, Rose
 141 **The Family** (3 cr; prereq* 1, 15 cr soc sci, CW, educ, phil, or psy)
 IV TThS, 116ForH, Johnson
 146 **Industrial, Occupational Sociology** (3 cr; prereq 1, 15 cr soc, psy, pol sci, or econ)
 IV MWF, 8ForH, Caplow
 160 **Rural Community Organization** (3 cr; prereq* 1, 15 cr soc sci, CW, educ, phil, or psy)
 I MWF, 123ForH, Nelson
 170 **Analytical Social Theory** (3 cr; prereq* 1, 15 cr soc sci, CW, educ, phil, or psy)
 III MWF, 8ForH, Martindale
 180 **Methods of Social Research** (3 cr; prereq 45)
 III TThS, 105ForH, Gross
 182 **Statistical Methods** (3 cr; prereq* grad, 1, 15 cr soc sci, educ, CW, phil, or psy)
 II TThS, 105ForH, Chapin
 184 **Field Work, Lab Training in Social Research** (2 cr; prereq 45 or 182 or concur regis)
 Ar, Gross
 200 **Seminar—Probs in Criminology** (2 cr)
 VIII-IX Th, 406ForH, Vold
 201 **Seminar—Social Psychology** (2 cr)
 VIII-IX T, 406ForH, Rose
 202 **Seminar—Urban Sociology** (2 cr)
 VIII-IX M, 406ForH, Caplow

- 203 Seminar—Social Theory (2 cr)
VI-VII W, 406ForH, Martindale
- 206 Seminar—Statistical Theory, Relation to
Social Theory, Practice (2 cr)
VIII-IX F, 406ForH, Chapin
- 209 Seminar—Probs in Population Research (2
cr)
Ar, Marshall
- 215 Seminar—Rural Social Policy (2 cr)
Ar, Nelson
- 218 Methodological Probs in Sociological Re-
search (2 cr)
VI-VII Th, 406ForH, Gross
- 234 Seminar—Juvenile Delinquency, Treatment
(2 cr)
IX-X T, 407ForH, Monachesi
- 238 Prin Sociology (3 cr, †238-239)
3:00-5:30 M, 407ForH, Monachesi

Winter and Spring Quarters

- 1w,s See 1f
- 1Aws See 1Af I TThS (s); III TThS (w)
- 2w,s See 2f Lect I MWF (s); I TThS (w);
secs I WF; II TTh; IV MW; IV TTh
- 14w,s Rural Sociology (3 cr; prereq 1 or 1A
IV MWF Nelson, Marshall)
- 14Aw See 14Af
- 45w,s See 45f
- 49w,s See 49f-s I MWF (s); II MWF (w)
Martindale
- 51w See 50f
- 50w-51s See 50f-51w I TThS and 3 hrs ob-
servation for seq D students
- 53w,s See 53f
- 91s See 91f IV TThS Ar Winslow
- 98w-99s See 99f
- 100s Contemporary Penology (3 cr; prereq* 1,
53, 15 cr soc sci, CW, educ, phil, or
psy) IV MWF Vold
- 103s Juvenile Courts, Probation (3 cr; prereq
53) III TThS Monachesi
- 104w Police Probs, Practices in United States
(3 cr; prereq* 1, 53, 15 cr soc sci, CW,
educ, phil, or psy) VII MWF Vold
- 111w Population Trends (3 cr; prereq* 1,
15 cr soc sci, CW, educ, phil, or psy)
VII MWF Marshall
- 112s Population Policy (3 cr; prereq sr, 1, 15
cr soc sci, CW, educ, phil, or psy) III
MWF Marshall
- 115w Social Aspects of Housing, Standards of
Living (3 cr; prereq* sr, 1, 15 cr soc sci,
CW, educ, phil, or psy) III TThS Caplow
- 116s Population Theory in Scandinavian Coun-
tries (3 cr; prereq* 1) Ar
- 117s Scandinavian Folk Movements (3 cr; pre-
req* 1) VII MWF
- 120w See 120f II TThS Rose
- 122w Sociology of Conflict (3 cr; prereq* 1, 15
cr soc sci, CW, educ, phil, or psy) IV
MWF Vold
- 123s See 123f

- 124s Social Mobility (3 cr; prereq* 1, 15 cr soc
sci, CW, educ, phil, or psy) II TThS
Gross
- 140w,s Social Organization (3 cr; prereq* 1,
15 cr soc sci, CW, educ, phil, or psy)
II TThS Chapin
- 141w,s See 141f
- 144w Social Stratification (3 cr; prereq* 1, 15
cr soc sci, CW, educ, phil, or psy) II
TThS Gross
- 145s Urban Sociology (3 cr, †old 7 or 118,
prereq 1, 15 soc sci) IV MWF Caplow
- 161s Rural Community Analysis (3 cr; sr pre-
req* 1, 15 cr soc sci, cons instr) VI T,
VI-VII Th Marshall
- 162w,s Rural Social Institutions (3 cr; prereq*
1, 15 cr soc sci, CW, educ, phil, or psy)
I MWF; IV MWF Nelson
- 171w Social Life, Cultural Change (3 cr; pre-
req* 1, 15 cr soc sci, CW, educ, phil, or
psy) IV MWF Martindale
- 172s Backgrounds of Modern Social Thought
3 cr; prereq* 1, 15 cr soc sci, CW, educ,
phil, or psy) III MWF Martindale
- 181s Probs in Rural Social Research (2 cr;
prereq* sr 1, 15 cr soc sci, educ, CW,
phil, or psy) VIII-IX M Nelson
- 183 Probs in Social Measurement (3 cr; prereq
45 or 182) IV TThS Gross
- 185w-186s See 184f (prereq 184) Ar Gross
- 200w,s See 200f
- 201w,s See 201f
- 202w,s See 202f
- 204w-205s See 203f
- 207w-208s See 206f
- 210w-211s See 209f
- 216w Seminar—Rural Community (ar cr) Ar
Nelson
- 217s Seminar—Rural Social Theory (ar cr) Ar
Nelson
- 218w,s See 218f
- 234w,s See 234f
- 239w See 238f
- 240w,s See 240f

SPEECH (SPCH)

Fall Quarter

- 1 Fundamentals of Speech (3 cr, †1-2; pre-
req* soph)
- 1, I MWF, 311F, Gilkinson, staff
- 2, II MWF, 311F
- 3, III MWF, 2F
- 4, IV MWF, 2F
- 5, VI MWF, 311½F
- 6, VII MWF, 311F
- 7, VIII MWF, 305F
- 8, II TThS, 311½F
- 9, III TThS, 303F
- 2 Fundamentals of Speech (3 cr, †1-2); pre-
req 1)
- III MWF, 109TSF, Gilkinson, staff

- 3 **Fundamentals of Speech** (3 cr; prereq* soph, 2)
II MWF, 306F, Gilkinson, staff
- 5 **Fundamentals of Speech** (5 cr; prereq* soph)
—1, III MTWThF, 311F, Gilkinson, staff
—2, IV MTWThF, 311F
- 6 **Fundamentals of Speech** (5 cr; prereq 5)
—1, V MTWThF, 306F, Gilkinson, staff
—2, VI MTWThF, 311F
- 9 **Freshman Discussion, Debate** (1 cr; by petition, fresh with C aver)
Ar, Bystrom
- 31 **Introd Theater** (3 cr; prereq soph, 2 or 5 or concur regis)
II MWF, 19ScH, Whiting
- 32 **Bgn Acting** (3 cr; prereq soph, 31)
II TThS, 19ScH, Moulton
- 34 **Stagecraft** (3 cr, §34, 71-72-73, 91-92-93, 111-112-113; prereq soph, 31)
II T, I-II Th, 3rd fl NH, Walker
- 55 **Speech Writing, Platform Speaking** (3 cr; prereq 3 or 6)
—1, III MWF, 304F, Gilkinson
—2, VII MWF, 304F, Gilkinson
- 61 **Personal Development through Speech** (3 cr; prereq 2 or 5, Psy 2) VII MWF, 308F, Bryngelson
- 65 **Radio Speech** (3 cr; prereq 3 or 6)
II MWF, 302MurH, Ziebarth
- 66 **Radio Drama** (3 cr; prereq 3 or 6, 65 advised)
IV MWF, 302MurH, Engar
- 67 **Phonetics** (3 cr; prereq 2 or 5)
I MWF, 306F, Fletcher
- 71 **Play Production** (3 cr, §34, 91, 111; prereq 2 or 5, 31, 32)
IV MWF, 302NH, Graham
- 78 **Adv Acting** (3 cr; prereq 32)
II MWF, 302NH, Graham
- 81 **Interpretative Reading** (3 cr; prereq 2 or 5)
—1, IV MWF, 306F, Thompson
—2, VI MWF, 306F, Goodman
- 83 **Interpretative Reading** (3 cr; prereq 81)
III TThS, 306F, Goodman
- 93 **Stage Costuming** (3 cr, §34, 73, 43; prereq 31)
III TThS, 302NH, Moulton
- 97 **Intercollegiate Oratory, Debate** (1-3 cr; by petition soph with C aver)
Ar, Howell
- 101 **Argumentation, Persuasion** (3 cr; prereq 2 or 5, Psy 2, 10 cr soc sci)
—1, III MWF, 306F, Howell
—2, VI MWF, 305F, Howell
- 106 **Discussion** (3 cr; prereq 3 or 6)
VII MWF, 305F, Howell
- 111 **Stage Direction** (3 cr, §34, 71, 91; prereq sr, 33, 34, 91-92-93, cons instr)
III MWF, 19ScH, Whiting
- 115 **Playwriting, Production** (3 cr; prereq sr, 33, cons instr)
II MWF, 10ScH, Thompson
- 119 **Introd Speech Correction** (3 cr; prereq 2 or 6)
II TThS, 306F, Henrikson
- 122 **Introd Research** (3 cr; prereq sr, 3 or 6, Psy 2)
II TThS, 308F, Gilkinson
- 141 **Anatomy, Physiology of Voice Mechanism** (3 cr; prereq 3 or 6, 67, Psy 2, 5)
VII MWF, 306F, Fletcher
- 152 **Hearing Disorders** (3 cr; prereq* 3 or 6, 61, 67, Psy 2)
IV MWF, 8F, Lassman
- 164 **Clinical Methods in Speech Pathology** (3 cr, §EdCI 174; prereq sr, 3, 61, 67, 85, 162, or concur regis in 163) VIII WF and ar, 306F, Bryngelson
- 171 **History of the Theater** (3 cr; prereq sr, 3 or 6, 31)
VII T, VI-VII Th, 19ScH, Graham
- 181 **Readings in Speech** (ar cr; prereq 3 or 6, 6 addtl cr, cons instr)
Ar, Staff
- 191 **Technical Stage Probs** (3 cr; prereq 113)
III-IV S, Whiting
- 201 **Gen Seminar** (ar cr)
Ar, Gilkinson
- 207 **Seminar—Rhetoric, Persuasion** (ar cr)
Ar, Howell
- 221 **Seminar—Oral Interpretation of Literature** (ar cr)
Ar, Thompson
- 231 **Seminar—Adv Speech Probs** (ar cr)
Ar, Gilkinson
- 241 **Seminar—Radio Research** (ar cr)
Ar, Ziebarth
- 261 **Seminar—Speech Pathology** (ar cr)
Ar, Henrikson
- 271 **Seminar—Hearing** (ar cr)
Ar, Lassman
- 291 **Research—Special Probs** (ar cr)
Ar, Staff
- Winter and Spring Quarters**
- 1w-2s See 1f-2w II MWF; III MWF; IV MWF; VII MWF; VIII MWF; II TThS Gilkinson, others
- 1s See 1f II TThS; IV MWF; VI MWF Gilkinson, others
- 2w See 1f (prereq 1)
- 3w,s See 3f I MWF (s); II MWF (s); III MWF (w,s); VI MWF (s); VII MWF (s) Gilkinson, others
- 5w-6s See 5f-6w IV MTWThF; VI MTWThF; VII MTWThF Gilkinson, others
- 5s See 5f III MTWThF; IV MTWThF; VIII MTWThF Gilkinson, others
- 6w See 5f (prereq 5)
- 9w,s See 9f
- 31s See 31f
- 32w-33s See 32f-33w II MWF Whiting (w); ar (s); II TThS; III TThS
- 33w See 32f
- 34s See 34f

- 51s Adv Public Speaking (3 cr; prereq 3 or 6)
II MWF Gilkinson
- 56w-57s See 55f (prereq 55)
- 61s See 61f
- 65w,s See 65f
- 66w,s See 66f
- 67w,s See 67f
- 72w-73s See 71f (prereq 71)
- 73w-79s See 78f-79w III MWF Graham
- 79w See 78f (prereq 78)
- 82w-83s See 81f (prereq 81)
- 81w-82s See 81f-82w III TThS
- 91w Stage Design (3 cr, §34, 71, 11, prereq
31) III TThS; IV TS
- 92s Stage Lighting (3 cr, §34, 72, 112; prereq
31) III TThS; IV TS
- 93s Stage Costuming (3 cr, §34, 73, 43; prereq
31) III TThS; IV TS
- 97w,s See 97f
- 102w-103s See 101f (prereq 101)
- 106w,s See 106f
- 109s Classical Rhetoric (3 cr; prereq 103, Psy
140) III TThS Smith
- 112w-113s See 111f
- 116w See 115f (prereq 115)
- 117s Writing Radio Drama (3 cr; prereq sr,
32, cons instr) III MWF Thompson
- 124w Experiments in General Speech (3 cr;
prereq 3 or 6, Psy 2) II TThS Gilkinson
- 126s History, Criticism of Public Address (3
cr; prereq 3 or 6, Psy 2) II TThS Gil-
kinson
- 131w Creative Dramatics (3 cr; prereq* 31,
EdCI 63 advised) VI MWF Graham
- 132s Children's Theater (3 cr; prereq* 31) VI
MWF Graham
- 142w Physical Bases of Speech (3 cr; prereq 3
or 6, 67, Psy 2, 5) VII MWF
- 143s Speech Instrumentation (3 cr; prereq 3
or 6, 67, Psy 2, 5) VII MWF
- 153w Audiometry, Hearing Aids (3 cr; prereq*
3 or 6, 61, 67, 152, Psy 2) IV MWF Lass-
man
- 155s Lip Reading, Methods (3 cr; prereq* 3 or
6, 61, 67, Psy 2) IV MWF Lassman
- 162w-163s Speech Pathology (3 cr, †162-163;
prereq 3 or 6, 61, 67, 85) VI T; VI-VII
Th Bryngelson (w); Henrikson (s)
- 165w-166s See 164f (prereq 164)
- 169w Speech, Language in Human Behavior (3
cr; prereq cons instr) VIII MWF Hen-
rikson
- 172w-173s See 171f (prereq 171)
- 182w-183s See 181f (prereq 181)
- 192w-193s See 191f (prereq 191)
- 211w,s See 201f
- 218w,209s See 207f
- 212w,213s See 211f
- 222w,223s See 221f
- 232w,233s See 231f
- 242w,243s See 241f
- 262w,263s See 261f

- 271s Seminar—Hearing (3 cr; prereq 153, 155,
cons instr) Ar Lassman
- 292w-293s See 291f

ZOOLOGY (ZOO)

Fall Quarter

- 1 Gen Zoology (3 cr, †1-2-3)
—1, Lect II TTh, 06Bo, Minnich
—2, Lect IV WF, 06Bo
—3, Lect VII TTh, 06Bo, Olson
—1, Lab I-II MF, 101Z, 107Z
—2, Lab III-IV MF, 101Z, 107Z
—3, Lab VII-VIII MF, 101Z, 107Z
—4, Lab III-IV TTh, 101Z, 107Z
- 14 Gen Zoology (3 cr, †14-15; prereq regis
agric, forestry, HE, nurs, or pharmacy)
Lect VII TTh, 150Ph, Dawson
—1, Lab V-VI TTh, 101Z, 107Z, Dawson
—2, Lab VIII-IX TTh, 101Z, 107Z, Dawson
- 21 Histology (5 cr; prereq soph, 3)
Lect I TThS, 313Z, Olson
—1, Lab II-IV TTh, 201Z
—2, Lab VI-VIII TTh, 201Z
- 51 Introd Animal Parasitology (5 cr; prereq 3)
Lect VI MWF, 313Z, Wallace
—1, Lab I-II MWF, 201Z, 202Z, 208Z
—2, Lab III-IV MWF, 208Z
—3, Lab VII-VIII MWF, 201Z, 202Z, 208Z
- 83 Introd Genetics, Eugenics (3 cr; prereq 3
or 10 cr bot)
II MWF, 06Bo, Reed
- 100 Zoological Techniques (ar cr; prereq grad)
Ar
- 112 Adv Gen Physiology (3 cr; prereq 15 cr,
cons instr)
Lect VI MF, 211Z, Steinbach
Lab VI-IX W, 18Z
- 117 Animal Ecology (3 cr; prereq 15 cr zool
or ent)
Lect VI-VII TTh, 211Z, Eddy
Lab VIII TTh, Sub3Z
- 121 Ichthyology (3 cr; prereq 15 cr)
Lect IX-X F, 211Z, Eddy
Lab VII-VIII MW, Sub3Z
- 125 Adv Gen Entomology (3 cr; prereq 15 cr)
Lect I TTh, 211Z, Mickel
Lab I-III S, 401Z
- 128 Insect Physiology (4 cr; prereq 15 cr zool
or ent, cons instr)
Lect VI WF, 15CofH, Richards
Lab VII-IX WF, 15CofH
- 144 Medical Entomology (3 cr; prereq 15 cr
incl 52, cons instr)
Lect VII TTh, 208Z, Burroughs
Lab VIII-IX TTh, 208Z
- 170 Adv Genetics (3 cr; prereq* 15 cr incl 83)
—1, VII-IX MW, 313Z, Reed
—2, VII-IX TTh, 313Z, Reed
- 183 Physiology of Development (4 cr; prereq sr,
cons instr)
Ar, Spratt

- 197 Probs (ar cr; prereq 3, spec requir)
Ar
- 201 Research—Entomology (ar cr)
Ar
- 211 Research—Ecology (ar cr)
Ar
- 217 Research—Physiology (ar cr)
Ar
- 221 Research—Biophysics (ar cr)
Ar
- 229 Research—Histology (ar cr)
Ar
- 233 Research—Embryology (ar cr)
Ar
- 237 Research—Cytology (ar cr)
Ar
- 241 Research—Protozoology (ar cr)
Ar
- 251 Research—Genetics (ar cr)
Ar
- 261 Research—Parasitology (ar cr)
Ar
- 291 Gen Seminar (ar cr)
Ar
- 296 Seminar—Special Research Fields (ar cr)
Ar
- Winter and Spring Quarters**
- 2w-3s See 1f (prereq 1)
- 15w See 14f (prereq 14)
- 22w Comparative Anatomy (5 cr; prereq soph, 3) Lect III TThS Eddy; Labs VI-VIII TTh; VI-VIII MW; III-IV MWF
- 50s Introd General Physiology (5 cr; prereq* soph, 3 or 15 cr bot, 10 cr chem) I-II TThS; IV-V TThS; VI-VIII TTh
- 52w Introd Entomology (5 cr; prereq 3) Lect VIII MWF Mickel; Labs VI-VII MWF; IX-X MWF
- 53s Fauna of Central United States (5 cr; prereq 3) Lect VIII MWF Eddy; Labs VI-VII MW and VI-IX F; IX-X MW and VII-X F
- 57w-58s Introd Ornithology (3 cr, †57-58; prereq 3 or 15) Lect VII TTh Warner; Labs V-VI TTh; VIII-IX TTh
- 59w Comparative Embryology (5 cr; prereq 3, 21) Lect I TTh; Conf II S or III S; Labs II-IV TTh; VI-VIII TTh Spratt
- 81s Invertebrate Zoology (3 cr; prereq 3) Lect II WF; Lab I-II TTh Dawson
- 82w Organic Evolution (3 cr; prereq 3 or Bot 3) II MWF Dawson
- 83s See 83f Merrell
- 109w Sense Organs (3 cr; prereq 15 cr, cons instr) Lect and dem IV MWF Minnich
- 110s Animal Reactions (3 cr; prereq 15 cr, cons instr) Lect and dem IV MWF Minnich
- 113w Adv Gen Physiology (3 cr; prereq 15 cr, cons instr) Lect VI MF Steinbach; Lab VI-IX W
- 118w Animal Ecology (3 cr; prereq 15 cr zool or ent cons instr) Lect VI TTh; Lab VII-VIII TTh Hodson
- 120s General Ecology of Insects (3 cr; prereq 15 cr zool or ent) Lect VI TTh; Lab VII-VIII TTh Hodson
- 126w-127s See 125f (prereq 125)
- 129w See 128f (prereq 128)
- 140s Biological Microscopy (4 cr; prereq sr, 15 cr zool, ent, or bot, cons instr) Lect VI WF; Lab VII-IX WF 208Z Richards
- 145w Parasitic Protozoa (3 cr; prereq 15 cr, cons instr) Lect and lab VII-IX TTh Wallace
- 146s Helminthology (3 cr; prereq 15 cr, cons instr) Lect and lab VII-IX TTh Wallace
- 155w Biophysics (3 cr; prereq 28 cr dist between physics and biology, cons instr) Ar Schmitt
- 171w Genetics of Speciation (3 cr; prereq* 15 cr incl 83) VII MWF; IX MWF Reed, Merrell
- 175s Human Genetics (3 cr; prereq 83, cons instr) IX MWF Reed
- 182s Experimental Embryology (5 cr; prereq sr, 50, 59, cons instr) Ar Spratt
- 198w-199s See 197f (prereq 197)
- 101w-102s See 100f
- 202w-203s See 201f
- 212w-213s See 211f
- 218w-219s See 217f
- 222w-223s See 221f
- 230w-231s See 229f
- 234w-235s See 233f
- 238w-239s See 237f
- 242w-243s See 241f
- 252w-253s See 251f
- 262w-263s See 261f
- 292w-293s See 291f
- 297w-298s See 296f

COURSE FEES

The following courses require payment of course fees as indicated.

Aeronautical Engineering Laboratory fee, required of all sophomores, juniors, and seniors in aeronautical engineering	\$ 3.00 per quarter
20, Flying (payable at the University Airport)	4.50 per solo hour 7.50 per dual hour
46, Orientation Course in Link Flying	
No fee for Aero Engineers; other students	42.00 per quarter
Agricultural Education 82, 91, 199E	1.50 per credit
Agricultural Engineering 5, 7, 13, 14, 19, 20, 21, 23, 24, 25, 33, 35, 40, 72	1.00 per quarter
41, 43	6.00 per quarter
42	3.00 per quarter
Architecture, AD I-II-III, Arch. 40	3.00 per quarter
AD IV	10.00 per quarter
Art 1, 2, 3, 4, 5, 11, 12, 30, 31, 32	1.00 per quarter
20, 21, 40, 41, 42, 43, 44, 45, 50, 51, 52, 60, 60A, 61, 61A, 62, 62A, 70, 71, 72, 80, 81, 82, 87, 88, 89, 97, 98, 99, 103, 104, 105, 110, 111, 112, 133, 134, 135, 150, 151, 152, 153, 154, 155, 180, 181, 182, 193, 194, 195, 200, 201, 202	2.00 per quarter
10, 23, 24, 25, 53, 54, 55, 63, 64, 65, 73, 74, 75, 90, 91, 92, 93, 94, 95, 101, 102, 190, 191, 192	5.00 per quarter
140, 141, 142, 143, 144, 145	7.50 per quarter
83, 83A, 84, 84A, 85, 85A, 123, 124, 125	10.00 per quarter
Art Education 84, 86, 86A, 87, 87A, 88, 88A, 185	1.50 per credit
17, 18, 19	1.50 per quarter
56, 57, 58	3.00 per quarter
81A, 81B	2.00 per quarter
Astronomy 20	1.00 per quarter
Bacteriology 53, 102, 103, 104, 113, 114, 116, 123, 124	3.00 per quarter
Biological Station, Laboratory fee	5.00 per term
Biostatistics (see Public Health)	
Botany 1, 2, 3, 50, 51, 52, 53, 54, 112, 113, 114, 115, 118, 119, 121, 127, 130, 132, 134, 137, 165, 194, 195, 196, 197, 198, 199	1.50 per quarter
4, 5	2.25 per quarter
120, 123, 154, 173, 174, 175, 179, 180, 181	3.00 per quarter
Business Administration	
65, 66, 74, 150, 152	2.00 per quarter
170, 171	1.00 per quarter
Civil Engineering 51, 52, 53, 137, 146	2.00 per quarter
23	10.00 per quarter
Communications I	1.00 per quarter
Drawing 65 (Jour. 65)	1.00 per quarter
Economics 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43—(for one or more of these courses)	2.50 per quarter
Ed.C.I., Curriculum and Instruction. All courses	1.50 per credit
Education 51A-B-C, 55A-B, 71A-B-C	1.50 per credit

Ed.Psy. 142, 143, 144, 150	1.50 per credit
217, 218	1.00 per quarter
216A, 217A, 218A	1.50 per quarter
Ed.T., Methods and Student Teaching. All courses	1.50 per credit
Electrical Engineering 12, 14, 112, 114, 116, 118, 120, 127, 128, 129	1.00 per quarter
16, 122, 124, 126, 164, 165, 166	2.00 per quarter
English 4 (Engineering English)	1.00 per quarter
Entomology 5, 21, 51, 52, 56, 63, 64, 114, 117, 118, 119, 120, 121, 125, 126, 127, 141, 142, 144, 145, 146, 150, 164, 165, 166, 170, 175, 176, 179	1.50 per quarter
55, 128, 129, 140, 168, 169, 177	5.00 per quarter
Family Life 14	3.00 per quarter
General College 10A	1.00 per quarter
22A-B-C, 22X, 23AX-BX-CX-DX, 24A-B-C, 24AX- BX-CX, 25A-B-C-D, 25X, 28, 32A-B-C-D, 32AX-BX- CX, 33A-B-C, 33AX-BX-CX	1.50 per quarter
23A-B-C-D	2.00 per quarter
47A	2.50 per quarter
26A, 26B	5.00 per quarter
Geology A, B, 23, 24	1.00 per quarter
175	5.00 per quarter
100, 115, 150	10.00 per quarter
Home Economics Education 91, 93, 94, 197, 199E	1.50 per credit
Humanities 1, 11, 21, 51, 61, 71	1.00 per quarter
Industrial Education 1, 2, 3, 5, 6, 7, 10, 11, 12, 15, 16, 20, 21, 25, 26, 50A-B-C, 70, 75	1.50 per credit
Journalism, general fee	1.00 per quarter
The general fee of \$1 is charged students registered for courses in Journalism with the exception of Journalism 5. The fee is \$1 per quarter regardless of the number of courses taken.	
The following courses have fees in addition to the \$1 general fee:	
51, 58, 59, 67, 68 (in addition to general fee)	2.00 per quarter
41, 52, 55 (in addition to general fee)	3.00 per quarter
10, 66 (in addition to general fee)	5.00 per quarter
Library Tuition (for all Library courses except Lib. 1) Students taking 12 credits or more of library courses will pay full tuition rate for Library—\$42 (resident), \$75 (nonresident) and may take other courses with no college tuition charge. Students taking less than 12 credits of library courses will pay the library rate for library courses and the college rate for other courses except that no student will be charged more than \$42 (resident), \$75 (nonresident) regardless of courses pursued.	
Mathematics and Mechanics 87, 141, 143	1.00 per quarter
Mechanical Engineering 1-8, 12-18, 33, 34, 35, 61, 110-114, 118, 149, 159, 169, 189, 198	2.00 per quarter

COURSE FEES

Methods and Directed Teaching. All courses	1.50 per credit
Modern Language Institute (Summer Session)	40.00 per term
Mortuary Science Course Fees	
Anatomy	1.00 per quarter
Bacteriology	3.00 per quarter
Embalming	1.00 per quarter
Restorative Art	1.00 per quarter
Music 11-27, one individual lesson per week, 2 credits	30.00 per quarter
Two individual lessons per week, 4 credits	60.00 per quarter
Class lessons in courses 11C, 12C, 2 credits	15.00 per quarter
A, B, C, D, E, F, one individual lesson per week, no credit	30.00 per quarter
10, 31-36, 50-58	1.50 per quarter
Music Education 4, 5, 6, 50A, 50B, 53, 59, 60, 61, 62, 63, 64, 65	1.50 per credit
225E, one lesson per week, 2 credits	30.00 per quarter
225E, two lessons per week, 4 credits	60.00 per quarter
Natural Science 1, 2, 3, 4, 5, 6	1.00 per quarter
7, 8, 9	1.50 per quarter
Physical Education (men) 1A-B-C, 2A-B-C	1.00 per credit
4A-B-C, 5A-B-C, 6A-B-C, 7A-B-C, 8, 9A-B, 55, 60A- B, 73, 74, 75	1.50 per credit
Towel and locker fee required of all students using physical education facilities for activity, payable at the department	2.50 per quarter
Uniforms for class work or recreational activity, pay- able at the department	2.00 per quarter
Physical Education (women) All nonprofessional courses, 20A-B-C, 21A-B-C-D-E, 22A-B-C, 40A-B-C, 41A-B, 42 (\$5.00 per quarter maximum regardless of the number of courses)	2.50 per quarter
50, 51 (one or both)	2.00 per quarter
47, 48, 57A, 57B, 90A, 90B, 90C	1.50 per credit
Physical Therapy 75	3.00 per quarter
Physics 1a, 2a, 3a, 4-9, 52, 110, 112, 134, 136, 144, 145, 146, 154	2.00 per quarter
Psychology 4, 5, 135, 136, 137	1.00 per quarter
130, 290, 291	2.00 per quarter
Public Health 65, 66, 67, 119, 129, 138, 139, 173, 190	1.00 per credit
80, 140, 150	1.00 per quarter
121, 131	1.50 per quarter
111	2.00 per quarter
143, 144, 184, 185, 186, 187, 188	3.00 per quarter
169	100.00 per course
Rhetoric I (Communications) 12, 22, 28, 54, 59	1.00 per quarter
Social Work 210-217	3.50 per quarter
Soils 108	2.00 per quarter
Speech 1, 2, 3, 5, 6, 51, 55, 56, 57, 61, 65, 67, 81, 82, 83	1.00 per quarter
31, 32, 33, 34, 66, 71, 72, 73, 78, 79, 91, 92, 93, 111, 112, 113, 131, 132, 133	2.00 per quarter

Technical Aid 80A, 80B, 81, 81A, 81B, 82A, 82B, 83A, 84, 84A, 85A	2.00 per quarter
Zoology 22, Lab.	7.00 per quarter
1, 2, 3, 14, 15, 21, 50, 51, 52, 53, 55, 57, 58, 59, 75, 81, 100, 101, 102, 107, 108, 109, 110, 111, 112, 113, 115, 116, 117, 118, 119, 120, 121, 125, 126, 127, 132, 143, 144, 145, 146, 149, 150, 155, 156, 157, 160, 161, 162, 170, 180, 182, 183, 184, 185	1.50 per quarter
128, 129, 140	5.00 per quarter

Courses Requiring Deposit Cards

Nonveterans should purchase Agricultural Biochemistry, Chemistry, Pharmacy, or Physiological Chemistry deposit cards as appropriate. Chemistry, Pharmacy, and Physiological Chemistry cards may be purchased from the bursar, Administration Building, Minneapolis Campus. Agricultural Biochemistry cards may be purchased from the cashier, Coffey Hall, St. Paul Campus. Chemistry deposit cards are \$10 each. Other deposit cards are \$5 each. Veterans will receive information from the instructor concerning cards and checking into laboratory. No student will be assigned a desk in the laboratory until he presents his card. The course fee, laboratory material, and breakage will be charged against his card. The unused balance will be credited to the student's matriculation deposit at the end of the course.

Agricultural Biochemistry 2	2.00 per quarter
103, 110, 117, 118, 129, 130, 131, 132, 133, 202, 203, 212	5.00 per quarter
Analytical Chemistry 1, 2, 7, 9, 96, 97, 98, 101, 102, 103, 104, 105, 106, 107, 108, 109, 122, 123, 127, 131, 132, 134, 138, 140	3.00 per quarter
Chemical Engineering 105, 106, 111, 112, 113, 151, 152, 153, 154, 155, 156, 160, 176, 177, 179	3.00 per quarter
Food Technology 51, 52	5.00 per quarter
Inorganic Chemistry 1, 2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 96, 97, 98, 102, 109, 110	3.00 per quarter
Organic Chemistry 61, 62, 64, 96, 97, 98, 102, 130	3.00 per quarter
110, 139	10.00 per quarter
Pharmacy Deposit (\$5) required of all sophomores, juniors, and seniors in Pharmacy.	
Pharmacognosy 55, 56	3.00 per quarter
162, 163	5.00 per quarter
Physical Chemistry 96, 97, 98, 104, 105, 106, 107, 108, 110, 111, 112, 113, 132, 133, 134, 211, 212, 213, 231	3.00 per quarter
Physiological Chemistry 100, 101, 102, 103	3.00 per quarter

Special Fees

Supplement to General Information Bulletin

Music Practice fees:

Piano and practice room 1 hour per week	1.00 per quarter
2 hours per week	2.00 per quarter
Each additional hour per week50 per quarter

Small organ and practice room20 per hour
Large organ and practice room40 per hour
Practice room for other instruments, 10 hours per week	2.00 per quarter
Speech and Hearing Clinic fees:	
Special Clinical Treatment (for students)	5.00 per quarter
Special Clinical Treatment (for nonstudents):	
Articulatory cases:	
1 lesson per week	15.00 per 10 weeks
2 lessons per week	25.00 per 10 weeks
3 lessons per week	30.00 per 10 weeks
4 lessons per week	35.00 per 10 weeks
5 lessons per week	40.00 per 10 weeks
Stutterers:	
Full-time remediation	100.00 per 7 weeks
Half-time remediation	50.00 per 7 weeks
One-quarter time remediation	30.00 per 7 weeks
Professional Engineering Thesis Examination Fee	15.00

DEPARTMENTAL ABBREVIATIONS

The following abbreviations, designed for IBM class cards, are used in designating prerequisite courses throughout the *Class Schedule*.

Aero, Aeronautical Engineering	Chin, Chinese
AgBi, Agricultural Biochemistry	Clas, Classics
AgEc, Agricultural Economics	Comm, Communication
AgEd, Agricultural Education	Comp, Composition
AgEn, Agricultural Engineering	CrBr, Crown and Bridge
AgJo, Agricultural Journalism	CW, Child Welfare
Agro, Agronomy and Plant Genetics	DHyg, Dental Hygiene
Air, Air Science and Tactics	Diag, Oral Diagnosis and Radiology
AmSt, American Studies	Draw, Drawing and Descriptive Geometry
Anat, Anatomy or Oral Anat	DyHu, Dairy Husbandry
AnCh, Analytical Chemistry	Econ, Economics
Anes, Anesthesia	Ed, General Education
AnHu, Animal Husbandry	EdAd, Educational Administration
Anth, Anthropology	EdCI, Educational Curriculum and Instruction
Arch, Architecture	EdT, Methods and Directed Teaching
ArEd, Art Education	EE, Electrical Engineering
Art, Art	Engl, English or Engineering English
Ast, Astronomy	Ent, Entomology and Economic Zoology
BA, Business Administration	EPsy, Educational Psychology
Biol, Cancer Biology	FL, Family Life
Bact, Bacteriology and Immunology	Food, Food Technology
Bot, Botany	For, Forestry
BPhy, Biophysics	
CE, Civil Engineering	
ChEn, Chemical Engineering	

FoSt, Foreign Study
 Fren, French
 GC, General College
 GE, General Engineering
 Geog, Geography
 Geol, Geology
 Germ, German
 Gphy, Geophysics
 Grk, Greek
 HE, Home Economics
 HED, History and Philosophy
 of Education
 HEEd, Home Economics Education
 Hist, History
 Hort, Horticulture
 HSci, History of Science
 Hum, Humanities
 IE, Industrial Engineering
 InCh, Inorganic Chemistry
 Ind, Industrial Education
 Ital, Italian
 Jap, Japanese
 Jour, Journalism
 Juri, Dental Jurisprudence
 Lat, Latin
 Law, Law
 Lib, Library Science
 Ling, Linguistics and Comparative
 Philology
 Math, Mathematics
 ME, Mechanical Engineering
 Med, Medicine
 MedT, Medical Technology
 Met, Metallurgy or Metallography
 Mil, Military Science and Tactics
 Min, Mining Engineering
 MM, Mathematics and Mechanics
 MuEd, Music Education
 Mus, Music
 Nav, Naval Science
 NPsy, Psychiatry and Neurology
 NSci, Natural Science
 NuEd, Nursing Education
 Nurs, Nursing
 Obst, Obstetrics and Gynecology
 OMed, Oral Medicine
 Oper, Operative Dentistry
 Opth, Ophthalmology
 OrCh, Organic Chemistry
 Orie, Orientation
 Orth, Orthodontia
 OSur, Oral Surgery
 Otol, Otolaryngology
 Path, Pathology or Oral Histology
 and Pathology
 PCh, Physical Chemistry
 PE, Physical Education for Men
 or Physical Education for Women
 Ped, Pediatrics
 Peds, Pedodontics
 Peri, Oral Hygiene and Periodontia
 PetE, Petroleum Engineering
 PH, Public Health
 Phcg, Pharmacognosy
 PhCh, Physiological Chemistry
 Phcl, Pharmacology
 Phcy, Pharmacy
 Phil, Philosophy
 PhmC, Pharmaceutical Chemistry
 Phsl, Physiology
 Phys, Physics
 PiPa, Plant Pathology
 PMed, Physical Medicine
 PNur, Practical Nursing
 PO, Personal Orientation
 PoHu, Poultry Husbandry
 Pol, Political Science
 Port, Portuguese
 PrM, Practice Management
 Pros, Denture Prosthesis
 Psy, Psychology
 Rad, Radiology
 Rest, Restorative Dentistry
 Rhet, Rhetoric
 Russ, Russian
 Scan, Scandinavian
 Sem, Seminar
 Soc, Sociology
 Soil, Soils
 Span, Spanish
 Spch, Speech
 SSci, Social Science
 Surg, Surgery
 SW, Social Work
 TA, Technical Aid
 Vet, Veterinary Medicine
 Zool, Zoology

DIRECTORY OF DEPARTMENTAL OFFICES

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Agricultural Biochemistry	Linguistics and Philology	118F
Agricultural Economics	Mathematics	119F
Agricultural Education	Mathematics and Mechanics	208E
Agricultural Engineering	Mechanical Engineering	125ME
Agricultural Journalism	Medical Technology	605 West Hosp
Agronomy and Plant Genetics	Medicine	221 East Hosp
Air Science and Tactics	Methods and Directed	
American Studies	Teaching	204Bu
Anatomy	Military Science and Tactics	106A
Animal Husbandry	Mines and Metallurgy	306AH
Anthropology	Music	107ScH
Architecture	Music Education	107ScH
Art	Naval Science	203A
Art Education	Nursery School	100CWI
Astronomy	Nursing	125MeS
Bacteriology	Nursing Education	125MeS
Botany	Obstetrics and	
Business Administration	Gynecology	435 Main Hosp
Chemistry	Ophthalmology and	
Child Welfare	Otolaryngology	523 East Hosp
Civil Engineering	Pathology	110IA
Classics	Pediatrics	205 West Hosp
Curriculum and Instruction	Pharmacology	105MH
Dairy Husbandry	Pharmacy	101WuH
Dentistry	Philosophy	323F
Drawing and Descriptive	Physical Education for Men	220CH
Geometry	Physical Education for	
Economics	Women	101NGW
Educational Administration	Physics	148Ph
Educational Psychology	Physiological Chemistry	17MeS
Electrical Engineering	Physiology	318MH
English	Plant Pathology and	
Entomology and Economic	Agricultural Botany	304PP
Zoology	Political Science	210NH
Forestry	Poultry Husbandry	120TSH
General College	Psychiatry and Neurology	126MH
General Studies	Psychology	112Psy
Geography	Public Health	121MH
Geology and Mineralogy	Rhetoric	309En
German	Radiology and Physical	
History	Medicine	530 Main Hosp
History of Education	Romance Languages	200F
Home Economics	Scandinavian	13F
Home Economics Education	Social Work	110NH

Sociology	110NH	Student Counseling Bureau.....	101EdH
Soils	100aSo	Veterinary Medicine	203TEH
Speech	309F	Zoology	108Z

BUILDING ABBREVIATIONS

A, Armory	NH, Nicholson Hall
Adm, Administration	NMA, Northrop Memorial Auditorium
AE, Aeronautical Engineering	OSL, Oak Street Laboratories
Ag (StP), Agronomy	P, Pillsbury Hall
AgrBot (StP), Agricultural Botany	PetH (StP), Peters Hall
AH, Appleby Hall	Ph, Physics
Bo, Botany	PoH, Louise M. Powell Hall for Nurses
Bu, Burton Hall	PP (StP), Plant Pathology
C, Chemistry	Psy, Psychology
CH, Cooke Hall	Pt, Pattee Hall
ChE, Chemical Engineering	Sch, Scott Hall
CofH (StP), Coffey Hall	ShH, Shevlin Hall
E, Main Engineering	SnH (StP), Snyder Hall
EdH, Eddy Hall	So (StP), Soils
EE, Electrical Engineering	TCH, Temporary, Court of Hospital
En (StP), Agricultural Engineering	TEH (StP), Temporary, East of Haecker
Ex, Experimental Engineering	TNCE, Temporary, North Court of Engineering
F, Folwell Hall	TNHS, Temporary, North of Health Service
ForH, Ford Hall	TNM, Temporary, North of Mines (Appleby Hall)
FraH, Frazer Hall	TNUH, Temporary, North of University High School
GH (StP), Green Hall	TSA (StP), Temporary, South of Administration (Coffey Hall)
Gy (StP), Gymnasium	TSCE, Temporary, South Court of Engineering
HE (StP), Home Economics	TSE, Temporary, South of Engineering
HoB (StP), Home Building	TSF, Temporary, South of Folwell
Hosp, University Hospitals	TSH (StP), Temporary, South of Haecker Hall
Hr (StP), Horticulture	TSMa, First Temporary, South of Mines (Appleby Hall)
IA, Institute of Anatomy	TSMb, Second Temporary, South of Mines (Appleby Hall)
J, Jones Hall	
JohH, Johnston Hall	
Lib, Library	
LsPav (StP), Livestock Pavilion	
MB (StP), Music Building	
ME, Mechanical Engineering	
MeH (StP), Meredith Hall	
MeS, Medical Sciences	
MEx, Mines Experiment Station	
MH, Millard Hall	
MNH, Museum of Natural History	
MSh (StP), Meat Shop	
MurH, Murphy Hall	
NGW, Norris Gymnasium for Women	

TSMc, Third Temporary, South of
Mines (Appleby Hall)
TSP, Temporary, South of Powell
Hall
TWH, Temporary, West of Hospitals
UHS, University High School

VetA, Veterinary Anatomy
VetC, Veterinary Clinic
VH, Vincent Hall
WeH, Wesbrook Hall
WuH, Wulling Hall
Z, Zoology

FINAL EXAMINATIONS

Final Examination Schedule—The time of examination is based on the hours and days the class is regularly scheduled during the quarter. For purposes of determining the proper examination time:

- Use the lecture hour rather than the laboratory or recitation periods.
- Use the MWF sequence if scheduled four or more days per week.
- Use the first class hour if scheduled two or more hours a day.

This schedule does not apply to courses offered primarily to students registered in Pharmacy, Law, Medicine, and Dentistry; to classes meeting after 6:00 o'clock p.m.; and to courses numbered 200 and over which have no regularly scheduled classroom.

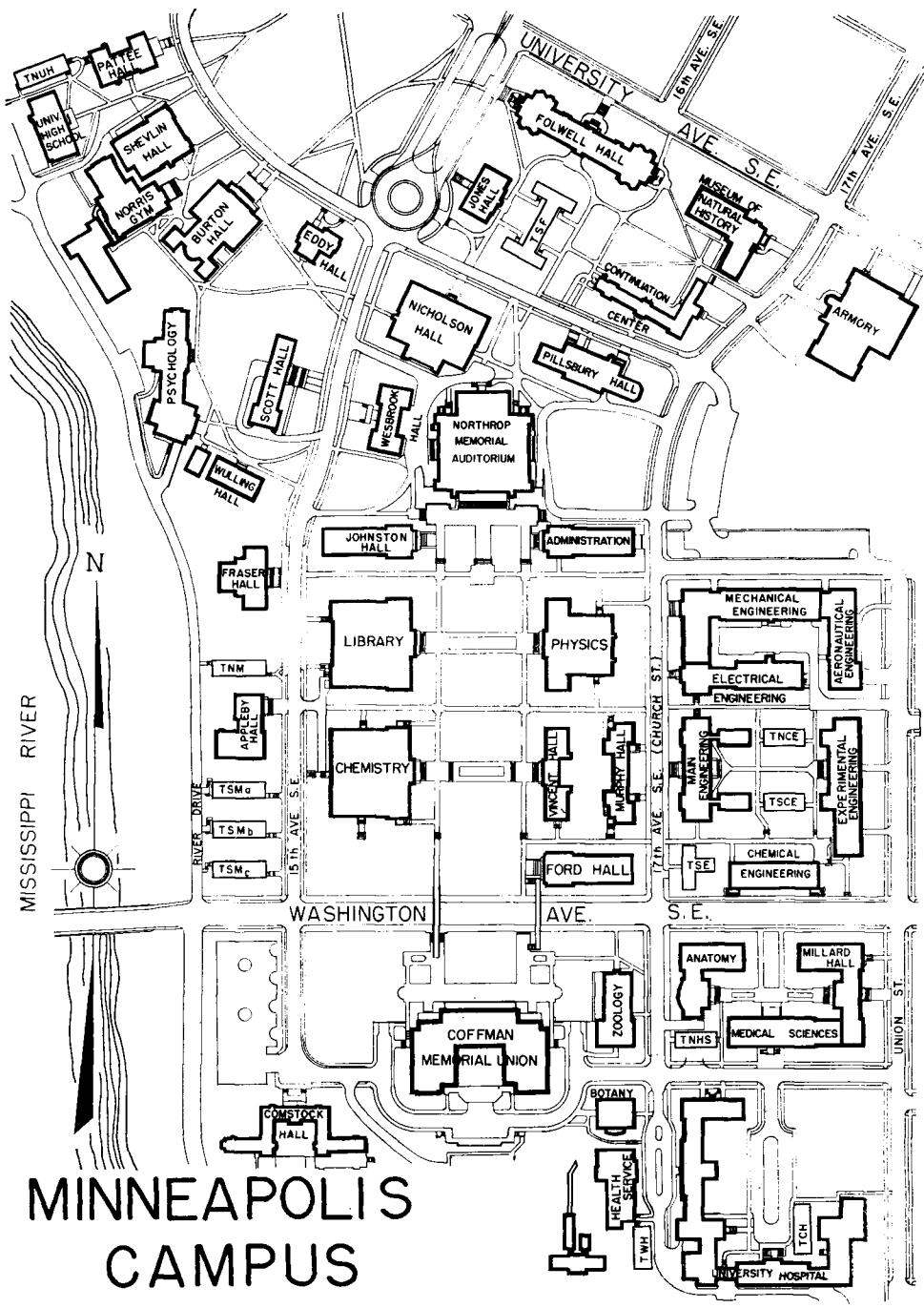
I	MWF	8:00-10:00	T	Dec 19	VII	MWF	1:30-3:30	Th	Dec 21
I	TThS	10:30-12:30	T	Dec 19	VII	TTh	4:00-6:00	Th	Dec 21
II	MWF	8:00-10:00	W	Dec 20	VIII	MWF	1:30-3:30	S	Dec 16
II	TThS	10:30-12:30	W	Dec 20	VIII	TTh	4:00-6:00	S	Dec 16
III	MWF	8:00-10:00	Th	Dec 21	IX	MWF	1:30-3:30	F	Dec 15
III	TThS	10:30-12:30	Th	Dec 21	IX	TTh	4:00-6:00	F	Dec 15
IV	MWF	8:00-10:00	S	Dec 16	X	MWF	1:30-3:30	M	Dec 18
IV	TThS	10:30-12:30	S	Dec 16	X	TTh	4:00-6:00	M	Dec 18
V	MWF	1:30- 3:30	T	Dec 19	Classes meeting on Saturdays only:				
V	TThS	4:00- 6:00	T	Dec 19	I, II	S	10:30-12:30	S	Dec 16
VI	MWF	1:30- 3:30	W	Dec 20	III, IV	S	1:30- 3:30	S	Dec 16
VI	TTh	4:00- 6:00	W	Dec 20					

Common Examinations—For courses having common examinations, all sections are examined together at one time irrespective of the regularly scheduled hours and days. A list of courses for which common examinations are given will be published in the Official Daily Bulletin.

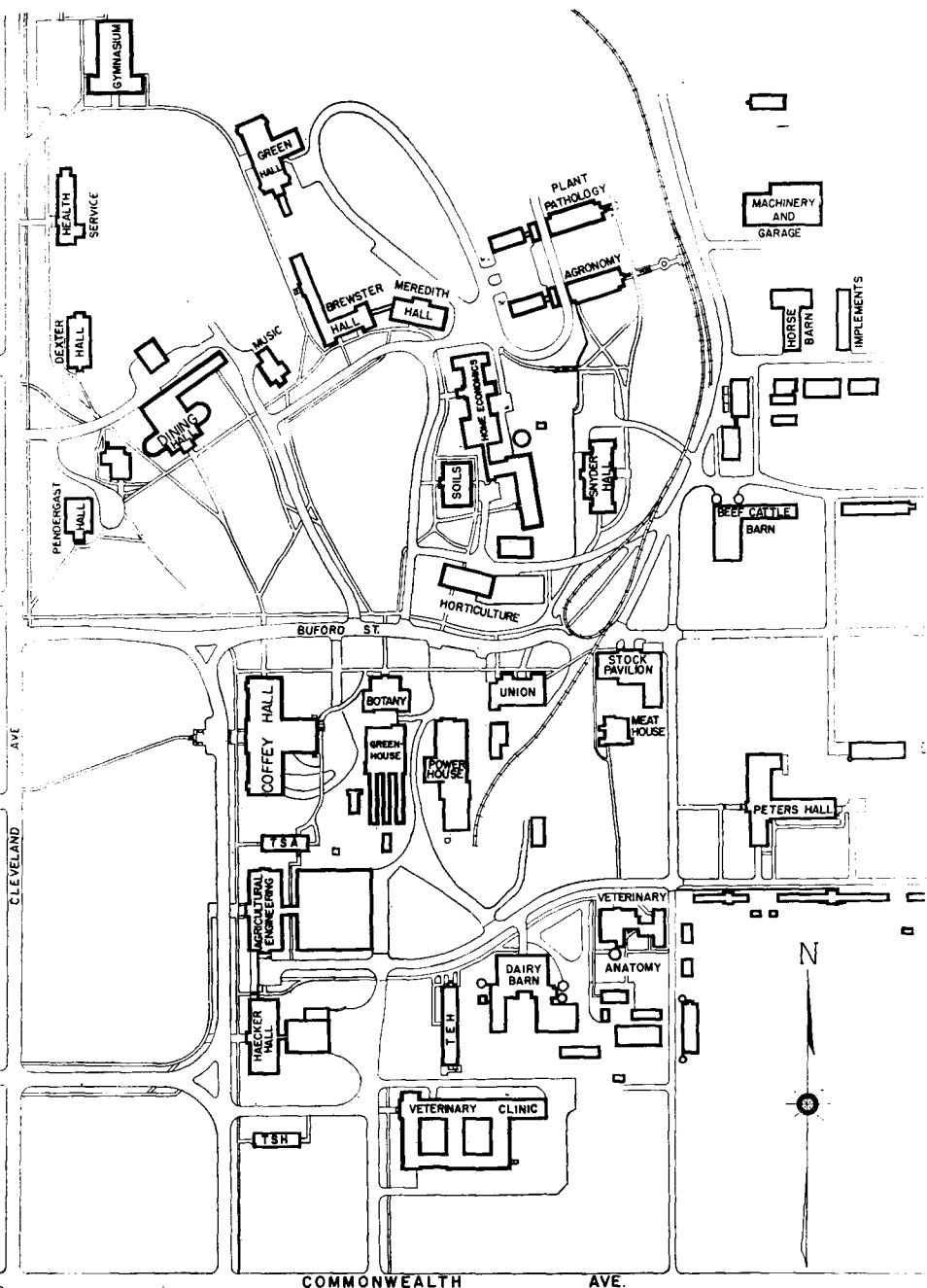
Length of Examinations—Examinations for classes scheduled four or more days a week may continue into the examination period established for TThS classes provided the instructor notifies the Room Scheduling Office of his intention to do this.

Conflicts—Students shall consult their college office regarding procedure to follow in case of examination conflicts.

Rooms—Examinations are given in the regularly scheduled classroom unless the instructor arranges for and announces a different examination room.



MINNEAPOLIS CAMPUS



ST. PAUL CAMPUS

Student's Copy of Fall Quarter Classes

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
I						
II						
III						
IV						
V						

INTERCAMPUS CAR SCHEDULE

For the school year 1950-51, October 2 to June 15, inclusive, except during the Christmas and spring vacations.

Leaving Minneapolis Campus					Leaving St. Paul Campus				
7:05	8:40	10:10	11:40	1:10	7:20	8:55	10:25	11:55	1:25
7:20	8:55	10:25	11:55	1:25	7:35	9:10	10:40	12:10	1:40
7:40	9:10	10:40	12:10	1:40	7:55	9:25	10:55	12:25	1:55
7:55	9:25	10:55	12:25	etc.	8:10	9:40	11:10	12:40	etc.
8:10	9:40	11:10	12:40	Last	8:25	9:55	11:25	12:55	Last
8:25	9:55	11:25	12:55	car 6:40	8:40	10:10	11:40	1:10	car 6:55

Half hour schedule Saturday afternoons, beginning Minneapolis Campus at 1:10; last car at 6:40. Beginning St. Paul Campus at 1:25; last car at 6:55. No cars on Sundays. Holiday schedule will be announced.

Passes for those who have classes on both campuses are issued at the University Post Office on the Minneapolis Campus and the Admissions and Records Office on the St. Paul Campus.

Tickets for the Intercampus car may be purchased at the Cashier's Office on either campus, twenty rides for one dollar.

Student's Copy of Fall Quarter Classes

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
VI						HAVE YOU CHECKED ALL SECTION NUMBERS
VII						
VIII						
IX						Course—Section Room—Building
X						<i>ME 141, Sec. 1</i> <i>110 ME</i>

SEPTEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

CALENDAR

FALL QUARTER

September

- 29 Fall registration (see page 3). Orientation program for new students
- 4 Holiday (Labor Day)
- 21 Fall quarter fees due for students registered through September 15
- 25-29 New Students' Week
- 29 Last day for registration and payment of fees in undergraduate colleges

October

- 2 Fall quarter classes begin
- 5 Opening convocation at 11:00 a.m. IV hour classes excused
- 6 Last day for registration and payment of fees for the Graduate School, and for teachers in residence
- 12 Holiday (Columbus Day)

November

- 4 Homecoming Day
- 9 Senate meeting, 3:00 p.m.
- 11 Holiday (Armistice Day)
- 18 Dads' football game
- 23 Holiday (Thanksgiving)
- 24-25 Classes excused

December

- 15-21 Final examination period
- 21 Commencement, 8:00 p.m.
- 23 Fall quarter closes

WINTER QUARTER

- 25 Holiday (Christmas)
 - 28 Winter quarter fees due for students in residence fall quarter in undergraduate colleges
- #### January
- 1 Holiday (New Years)
 - 4, 5 Orientation program; registration and payment of fees for new students in all undergraduate colleges
 - 8 Winter quarter classes begin

- 12 Last day for registration and payment of fees for the graduate school and for teachers in service

February

- 11-17 University of Minnesota Week
- 12 Holiday (Lincoln's Birthday)
- 15 Charter day convocation at 11:00 a.m. IV hour classes excused
- Senate meeting, 3:00 p.m.
- 22 Holiday (Washington's Birthday)

March

- 16-22 Final examination period
- 22 Spring quarter fees due for students in residence winter quarter in undergraduate colleges
- Commencement, 8:00 p.m.
- 23 Holiday (Good Friday)
- 24 Winter quarter closes

SPRING QUARTER

- 29, 30 Orientation program; registration and payment of fees for new students in all undergraduate colleges

April

- 2 Spring quarter classes begin
- 6 Last day for registration and payment of fees for the Graduate School and for teachers in service
- 12 Parents Day

May

- 24 Cap and Gown Day convocation at 11:00 a.m.; IV hour classes excused
- 30 Holiday (Memorial Day)
- 31 Senate meeting, 3:00 p.m.

June

- 9-15 Final examination period
- 10 Baccalaureate service 11:00 a.m.
- 16 Spring quarter closes
- Commencement 8:00 p.m.

REGISTRATION TALLY PROCEDURE

See Registration Instructions, page 3.

AGRICULTURE, FORESTRY, HOME ECONOMICS, AND VETERINARY MEDICINE

Tally at 203d CofH for all courses except the following (courses numbered 200 and over are not tallied).

AgEn 43, 52, 53, 63, 101, 111, 121, 122, 123, 131, 171 tallied at 136E
HE 1, 20, 30, 31, 40, 52, 56, 76, 85, 120 tallied at 107TSF for SLA students

BUSINESS ADMINISTRATION

Tally at 107VH for all courses except the following:

BA 97, 183, 198, 199, 258 not tallied
Econ 34, 40, 97, 200, 233, 243 not tallied
Econ 10 tallied at 101WuH
Econ 1, 3, 5, 6, 7, 8, 28 tallied at 136E for IT students
Other Econ courses tallied at 107TSF for all students except those registered in the School of Business Administration

EDUCATION

Tally at 204Bu for courses listed below unless otherwise indicated. Other courses are not tallied.
AgEd 1, 91, 101, 102, 103, 104, 141 tallied at 203d CofH

ArEd 17, 56, 84
Ed 55A, 71A
EdCI 58, 109
EPsy 125, 216a, 250, 281
HEd 180
HEEd 90, 91, 92, 93, 94, 95, 192, 194A, 197, 243, 293, 294, 295 tallied at 203d CofH
Ind 1, 5, 10, 11, 15
MuEd 50A, 60, 61, 62
PE (for Women) 25, 26, 58

GENERAL COLLEGE

Tally at 108WeH for all courses.

INSTITUTE OF TECHNOLOGY

Tally at 136E for all courses except the following (courses numbered 200 and over are not tallied).

AnCh 7 tallied at 107TSF for SLA students
Draw 44, 45 tallied at 107TSF
InCh 1, 4 tallied at 203d CofH for Agric students
InCh 6, 9 tallied at 101WuH for Pharmacy students
InCh 1, 4, 6, 9, 11 tallied at 107TSF for SLA students
OrCh 61 tallied at 101WuH for Pharmacy students
PCh 107 tallied at 107TSF for SLA students

MEDICAL SCIENCES

The courses listed below are tallied as indicated. Other courses are not tallied.

Bact 53 tallied at 203d CofH for Agric, 125MeS for Nurs, 121MH for PH Nurs, 605W Hosp for Med Tech, 209TWH for PT, and 107TSF for SLA students
PH 52a, 52b tallied at 203d CofH
PH 62, 100, 111 tallied at 107TSF

SCIENCE, LITERATURE, AND THE ARTS

Courses listed below are tallied at 107TSF unless otherwise indicated. Other courses are not tallied.

AmSt 200, 210
Art 1, 10, 20, 21, 23, 24, 25, 43, 41, 42, 59, 53, 56, 60, 61, 62, 63, 66, 70, 71, 72, 73, 80, 81, 82, 83, 87, 88, 90, 91, 92, 93, 97, 103, 106, 110, 116, 136, 140, 141, 142, 146, 150, 151, 152, 156
Art 60A, 61A, 62A tallied at 136E for IT students
Bot 1, 50, 113, 119, 121, 130, 131, 173
Bot 1 tallied at 101WuH for Pharmacy and 203d CofH for Agric students
Comm 1, 2, 3
Comp 4, 5, 6, 7, 27, 28, 29, 58, 101, 200
Comp 4 tallied at 106MeS for Dental Hygiene and 101WuH for Pharmacy students
Comp 58 tallied at 107VH for BA students
Engl A, B, C, 21, 55, 56, 57, 73, 97, 234, 256, 259, 265, 274, 277, 281
FL 1, 14, 15, 20, 25
Fren 1, 1A, 2, 3, 4
Geog 1, 41, 60
Geog 41 tallied at 107VH for BA students
Geol A, B, 1, 2, 8, 23, 106, 107, 110, 118
Geol 5, 23, 106 tallied at 136E for IT students
Germ 1, 1a, 1b, 2, 3, 4
Germ 24, 27, 41 tallied at 136E for IT students
Germ 24a tallied at 203d CofH for Agric students
Gphy See IT
Hist 1, 3, 4, 20, 53, 56, 59, 70
Hist 1, 3, 20 tallied at 136E for IT students
Hum 1, 2, 3, 4, 11, 21, 51, 61, 71, 131
Hum 1, 2, 3, 4, 11, 21, 51 tallied at 136E for IT students
Jour 10, 11, 13, 15, 51, 55, 59, 66, 67, 73, 76, 86, 140
Jour 10 tallied at 203d CofH for Agric students
Lib 1
Math 1, 6, 7, 8, 15, 30, 49, 50, 51, 60, 105, 106
Math 1, 6, 7 tallied at 203d CofH for Agric students
Math 8 tallied at 107VH for BA students
Mus 1, 1T, 3T, 4T, 6T, 11C, 12C, 34, 43, 46
Mus 43StP tallied at 203d CofH
NSci 1, 4, 7
Phil 1, 1A, 2, 3, 50
Phil 1, 2, 3, 50, tallied at 136E for IT students
Phys 110, 134, 144
Phys 7, 8 tallied at 136E

PO 1, 11	Spch 1, 2, 3, 5, 6, 32, 34, 55, 61, 65, 66, 67, 71, 78, 81, 83, 93, 101, 106, 111, 115, 171
Pol 1	Spch 1 tallied at 106MeS for Dental Hygiene stu- dents
Pol 1, 5, 25 tallied at 136E for IT students	SSci 1, 2, 3, 11, 81
Psy A, 1, 4, 56, 65, 101, 125, 128, 130, 144, 160	SSci 1, 2, 3, 81 tallied at 136E for IT students
Psy A tallied at 106MeS for Dental Hygiene students	SW 220, 222
Psy A, 1 tallied at 203d CofH for Agric students	Zool 1, 14, 21, 51, 112, 117, 121, 125, 144, 170
Psy 1, 4, 56, 128, 130 tallied at 136E for IT stu- dents	Zool 14, 51, 128 tallied at 203d CofH for Agric students
Soc 1, 2, 45	Zool 1 tallied at 106MeS for Dental Hygiene students
Soc 1A, 14A tallied at 203d CofH	Zool 14 tallied at 101WuH for Pharmacy students
Soc 1, 2 tallied at 136E for IT students	
Span 1, 1A, 2, 3, 4, 53, 70	

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