

Continuing Education

UNIVERSITY OF ARIZONA

FALL 1968

late afternoon

and evening courses

on campus



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#5 ucson

THE UNIVERSITY OF ARIZONA RECORD

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Statement of Mailing Privilege

THE UNIVERSITY OF ARIZONA RECORD is issued seven times a year. Published monthly during July, August and October and semi-monthly during April and June.

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ART

37 Introduction to Photography: The Negative (3)

Kew

The basic principles involved in the use of the camera and developing negatives of suitable merit for use as a means of artistic expression. 2R, 4S. P,3. Fee, \$20. (Student must furnish suitable quality camera to perform requirements of course). Class meets MW, 5:30-6:30 p.m., Fine Arts 205. Lab meets TTh, 5:30-7:30 p.m., Optical Sciences Annex, Cherry and 22nd Street.

HOME ECONOMICS

11 Family Meal Management (2)

Kline

This has been rescheduled as a morning class.

OFFICE ADMINISTRATION AND BUSINESS EDUCATION

*4a Secretarial Procedures (2)

Maynard

Grammar, usage, punctuation, and spelling for secretaries. Fee, \$32.
Class meets T, 7:00-9:00 p.m., BPA 203

Non-Credit courses in Government Contracts will be changed as follows:
Government Contract Administration Friday instead of Thursday
Government Contract Law Thursday instead of Friday

Thanksgiving Recess - November 23Th-December 5 Incl. change to November 23Th-December 1 Incl.

The University of Arizona
Tucson

ON CAMPUS • LATE AFTERNOON • EVENING COURSES

CONTINUING EDUCATION DIVISION

ACADEMIC CALENDAR

FIRST SEMESTER

1968 - 69

SEPTEMBER

Registration for Continuing Education Students Only.....	5 Th - 7 Sa
University Orientation Week Program.....	9 M - 14 Sa
Registration (for day students only)	
Returning Students.....	12 Th - 14 Sa Incl.
New Students.....	13 F, 14 Sa
Classes begin.....	16 M
"A" Day—Classes are held.....	21 Sa
Last day of registration for credit.....	23 M

OCTOBER

Parents' Day.....	19 Sa
Records close for midterm scholarship report.....	29 T

NOVEMBER

Homecoming— No classes.....	2 Sa
Veterans' Day— No classes.....	11 M
Last day for dropping courses.....	23 W
Thanksgiving recess.....	28 Th - Dec 5 Incl.

DECEMBER

Christmas recess.....	22 Su - Jan 5 Incl.
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JANUARY

Class and laboratory sessions end except in college of Medicine	16 Th
Semester examinations begin.....	18 Sa
Semester examinations end.....	27 M

DIVISIONS OF THE UNIVERSITY

COLLEGE OF AGRICULTURE

School of Home Economics; Departments of: Agricultural Biochemistry, Agricultural Chemistry and Soils, Agricultural Economics, Agricultural Education, Agricultural Engineering, Agronomy, Animal Pathology, Animal Science, Dairy Science, Entomology, Horticulture, Plant Breeding, Plant Pathology, Poultry Science, Watershed Management.

COLLEGE OF ARCHITECTURE

COLLEGE OF BUSINESS AND PUBLIC ADMINISTRATION

Departments of: Accounting, Economics, Finance, Insurance and Real Estate, Geography and Area Development, Management, Marketing, Office Administration and Business Education, Public Administration.

COLLEGE OF EDUCATION

Departments of: Counseling and Guidance, Education (Foundations of Education, Reading, Rehabilitation, School Library Science), Educational Administration, Educational Psychology, Elementary Education, Secondary Education, Special Education.

COLLEGE OF ENGINEERING

Departments of: Aerospace and Mechanical Engineering, Civil Engineering, Electrical Engineering, Nuclear Engineering, Systems Engineering.

COLLEGE OF FINE ARTS

School of Music; Departments of: Art, Drama, Speech.

COLLEGE OF LAW

COLLEGE OF LIBERAL ARTS

Departments of: Anthropology, Astronomy, Biological Sciences, Chemistry, Classics, English, German and Russian, Government, History, Journalism, Mathematics, Meteorology, Microbiology and Medical Technology, Philosophy, Physics, Psychology, Romance Languages, Sociology, Committee on Oriental Studies.

COLLEGE OF MEDICINE

COLLEGE OF MINES

School of Earth Sciences—Departments of: Geochronology, Geology; Institute of Arid Lands Research; Laboratory of Tree-Ring Research.

Departments of: Chemical Engineering, Metallurgical Engineering, Mining and Geological Engineering.

COLLEGE OF NURSING

COLLEGE OF PHARMACY

GRADUATE COLLEGE

Committees on: Agricultural Biochemistry and Nutrition, Genetics, Hydrology and Water Resources, Optical Sciences, Statistics, Urban Planning.

CONTINUING EDUCATION AND THE SUMMER SESSION

GENERAL DEPARTMENTS

Department of Health, Physical Education, and Recreation.

Department of Physical Education for Women.

School of Military Sciences and Aerospace Studies.

DIVISION OF RESEARCH AND SPECIAL PUBLIC SERVICE

Agricultural Experiment Station, Agricultural Extension Service, Arizona Bureau of Mines, Arizona Cooperative Fishery Unit, Arizona Cooperative Wildlife Research Unit, Arizona Poisoning Control Information Center, Arizona State Museum, Arizona Transportation and Traffic Institute, Bureau of Audiovisual Services, Bureau of Correspondence Instruction, Bureau of Educational Research and Service, Bureau of Ethnic Research, Computer Center, Division of Economic and Business Research, Engineering Experiment Station, Institute of Arid Lands Research, Institute of Atmospheric Physics (including Solar Energy Research Laboratory), Institute of Government Research, Laboratory of Tree-Ring Research, Lunar and Planetary Laboratory, Radio-Television Bureau, Steward Observatory (including Optical Sciences Laboratory), The University of Arizona—The University of Ceara Program, University Rehabilitation Center, Water Resources Research Center.

THE UNIVERSITY LIBRARIES

OFFICERS OF ADMINISTRATION

Richard Anderson Harvill, Ph.D., LL.D. (1934)	President of the University
Samuel C. McMillan, M.B.A. (1960)	Vice President for Planning and Development
Walter Harold Delaplane, Ph.D. (1962)	Vice President for Academic Affairs
Marvin D. Johnson, M.S. (1952)	Vice President for University Relations
Bowen C. Dees, Ph.D. (1966)	Provost for Academic Affairs
Kenneth R. Murphy, C.P.A. (1951)	Vice President for Business Affairs and Treasurer
David Lyall Patrick, Ph.D. (1934)	Coordinator of Research
Pendleton Gaines, Ph.D. (1959)	Dean of Continuing Education and the Summer Session
Francis Albert Roy, Ph.D. (1934)	Dean of the College of Liberal Arts
Karen Louise Carlson, Ph.D. (1945-49; 1951)	Dean of Women
Willis Ralph Brewer, Ph.D. (1949)	Dean of the College of Pharmacy; Chairman, Committee on Scholarship and Awards
Harold Edwin Myers, Ph.D. (1956)	Dean of Agriculture
James Donald Forrester, Ph.D. (1956)	Dean of the College of Mines; Director of the Arizona Bureau of Mines
Herbert Dawson Rhodes, Ph.D. (1943)	Dean of the Graduate College
Sidney Wahl Little, M.Arch. (1958)	Dean of the College of Architecture
C. William Voris, Ph.D. (1963)	Dean of the College of Business and Public Administration
Merlin D. DuVal, Jr., M.D. (1964)	Dean of the College of Medicine
David J. Hall, M.S. (1947)	Acting Dean of the College of Engineering
Robert Leslie Hull, Ph.D. (1964)	Dean of the College of Fine Arts
F. Robert Paulsen, Ed.D. (1964)	Dean of the College of Education
Robert Stanley Svob, M.A. (1942-44; 1946)	Dean of Men
Charles E. Ares, LL.B. (1966)	Dean of the College of Law
Gladys Elaine Sorensen, D.Ed. (1958)	Dean of the College of Nursing
David Lawrence Windsor, M.A. (1945)	Registrar and Director of Admission; Secretary of the Faculty
Robert K. Johnson, Ph.D. (1964)	Librarian

Continuing Education

ON-CAMPUS LATE AFTERNOON AND EVENING COURSES

The University of Arizona offers a wide variety of academic courses on its campus in the late afternoon and evening. All classes offered for credit through the University's Division of Continuing Education are fully accredited and they are designed for two principal groups: regular day students who wish to take additional or alternate courses in the late afternoon or night; and adults of the Tucson community.

Approximately four hundred courses are available in the late afternoon and evening to all qualified adults, including adults working toward undergraduate or graduate degrees, and to many citizens in the community who are seeking no specific degree but are simply interested in certain classes. Teachers, business men, industry employees, winter visitors and people from all walks of life enroll in evening classes.

The University of Arizona recognizes its special obligations to adults, particularly those of the Tucson community. Many late afternoon and evening courses on the campus are of particular interest to these adults. The classes may be taken for credit or non-credit.

Accounting, art, economics, education, English, finance, geography, German and Russian, government, home economics, management, mathematics, romance languages, speech and systems engineering are but a few of scores of subjects offered in Continuing Education.

Television courses of unusual interest are offered for regular academic credit on Channel 6, the University's own television station. Television courses for fall 1968 include chemistry, geology and home economics.

The University of Arizona conducts many other classes, not listed in this brochure, in the late afternoon or night. Such classes concern special fields of interest, are of varying duration, and usually do not furnish credit.

Persons interested in the formation of such classes listed above, those merely wishing more information about such courses, and those wishing additional information and literature about the classes described in this announcement, should phone or write the Dean, Continuing Education and the Summer Session, University of Arizona, Tucson, Arizona 85721.

REGISTRATION

Registration for those students taking evening classes only (4:40 p.m. or later) will be held in the STUDENT UNION ANNEX (east of the main Student Union building) at the times and dates indicated below:

Thursday, September 5	6:30 - 9:00 p.m.
Friday, September 6	6:30 - 9:00 p.m.
Saturday, September 7	9:00 a.m. - 12:00 noon

Those desiring counseling for evening courses prior to registration may visit the offices of the Division of Continuing Education Monday through Friday, 8-12 and 1-5 p.m. Counseling will also be available on Saturdays, 8-12 noon, and Wednesday evenings, 6:00-9:00 p.m.

A late registration fee will be charged for Continuing Education registration after 12:00 noon, Saturday, September 7.

Students who plan to enroll in any classes meeting prior to 4:40 p.m. must be admitted to the regular day session and must register for their entire program during the regular session registration which will be held on September 12, 13 and 14, according to an alphabetical time sequence published by the Office of the Registrar. Regular day registration packets must be used. See the Schedule of Hours for detailed registration instructions.

LATE REGISTRATION

Continuing Education students who fail to register by 12:00 noon, Saturday, September 7, will be unable to do so until the late registration period. Late registration will be conducted in the Office of Continuing Education at the dates and times indicated below. **Class Cards** must be obtained from departmental offices prior to completion of late registration.

Monday thru Wednesday, September 16-18	8:00 a.m. - 4:00 p.m. 6:30 p.m. - 9:00 p.m.
Thursday and Friday, September 19-20	8:00 a.m. - 4:00 p.m.
Saturday, September 21	8:00 a.m. - 12:00 noon
Monday, September 23	8:00 a.m. - 4:00 p.m. 6:30 p.m. - 9:00 p.m.

The last day of registration for credit will be Monday, September 23. A student must have completed his registration for credit including payment of fees by 9:00 p.m. on that date.

THE LATE REGISTRATION FEE IS \$5.00 FOR REGISTRATIONS OF LESS THAN SEVEN UNITS AND \$10.00 FOR REGISTRATIONS OF SEVEN OR MORE UNITS.

CHANGES IN SCHEDULE

The University reserves the right to make any necessary changes in class schedules or cancel any classes.

Any changes in registration made for the convenience of the student after fees are paid must be made on a Change of Study form. These forms are available in the Offices of Continuing Education. Fee, \$2.00, payable to Business Office.

Each **IBM Course Card** a student turns in with his Registration packet to the cashier constitutes his **official enrollment** in the course(s). Failure to attend any of the courses makes it necessary to award a grade of "5" (failure) unless official withdrawal from the class is secured.

CLASS MEETINGS

All classes will begin on or after September 16 and will be held at the time and place indicated in the class description and Schedule of Hours. No further notice concerning these classes will be forwarded to students. Although these classes are given at night, the final examinations may be scheduled during the day.

FEES

Students registering for less than seven units in Continuing Education will pay a registration fee of \$16.00 per unit. If registering for seven or more units in Continuing Education, the registration fees will be \$144.50 plus nonresident tuition if applicable. Students who wish to combine Continuing Education courses with the regular day program must do so by registering during the day registration hours. Fees for combined registrations will be on the basis of total number of units for which registered, plus laboratory and course fees if applicable. Students registering for Audit and Non-Credit courses will pay the per unit cost of such courses in addition to other fees.

Courses listed with an asterisk (*) are primarily for Continuing Education students. The fees for these courses are equivalent to fees charged for other courses; however, these special courses are not open to general university students registering in the day program except upon payment of an additional \$16.00 per unit.

SCHEDULE OF CAMPUS REGISTRATION FEES FOR CONTINUING EDUCATION AND OR DAY CLASSES

UNITS	RESIDENT	NONRESIDENT
1	16.00	16.00
2	32.00	32.00
3	48.00	48.00
4	64.00	64.00
5	80.00	80.00
6	96.00	96.00
7	144.50	382.50
8	144.50	416.50
9	144.50	450.50
10	144.50	484.50
11	144.50	518.50
12 or over	144.50	552.00

All fees are due and payable on the day of registration.

WITHDRAWALS

All Continuing Education withdrawals should be processed on a Change of Study list. These forms are available in the Office of Continuing Education or in the Office of the Registrar. Unless an official withdrawal is secured from the course, a grade of "5" (failure) is awarded.

Students registered for Continuing Education courses only and who withdraw from class will have a percent of tuition and fees refunded according to the following schedule of effective dates:

September 16 through September 21	**100%
September 23 through September 28	80%
September 30 through October 5	60%
October 7 through October 12	40%
October 14 through October 19	20%
October 21 and thereafter	No Refund

**Less \$10.00 withdrawal fee, 7 or more units
 Less than 7 units, \$5.00 withdrawal fee (first week of classes.)
 There will be no refund of the late registration fee.

To claim refund, application must be made at the Office of Continuing Education immediately following withdrawal from class. Continuing Education students must secure the grade and signature of the instructor on the drop list.

GRADUATE CREDIT

Admission to the Graduate College: To obtain graduate credit, one must apply to and be admitted to the Graduate College. To apply for admission, (a) submit the completed application form in duplicate (one blue and one white copy), and (b) request the registrar of each institution attended to mail a transcript of credits directly to the Office of the Graduate College of The University of Arizona. This admission must be accomplished promptly by every person who expects to qualify for any graduate credit at The University of Arizona. Students who have been admitted to the Graduate College, but were not enrolled during the previous regular semester, should ascertain well in advance of registration whether or not it will be necessary for them to reapply for admission.

In order to receive graduate credit for any appropriate course it is absolutely necessary to be admitted to the Graduate College by the means outlined above. No exceptions will be made.

All graduate courses (200-399) listed in this catalogue, including those with numbers in the 5200, 5300, 7200, 7300, 8200, 8300, 9200, and 9300 series may be applied toward the master's and other appropriate degrees. Limitations upon their applicability are described in the Graduate Catalogue. **It is the student's responsibility to ascertain these limitations.**

KEY TO LIST OF COURSES

Courses 001-099 are primarily lower-division courses for freshmen and sophomores. Courses numbered 100-199 inclusive are upper-division courses primarily for juniors and seniors. Courses numbered 200-299 inclusive are upper-division courses primarily for juniors and seniors, but courses in this group may be carried for graduate credit; they are not open to lower-division students. Courses numbered 300-399 inclusive are graduate, but exceptionally well-qualified seniors may be admitted to certain courses in this group with the approval of the instructor and the Dean of the Graduate College.

CONTINUING EDUCATION FIRST SEMESTER — 1968 - 69

NOTE: It is expected that all courses will be offered as indicated, but the University necessarily reserves the right to make such last-minute changes as needed.

ACCOUNTING

- 1 Principles of Accounting (3)**
Fundamental concepts involved in accounting for assets, liabilities and owners' equity; financial statements. P, Sophomore standing.
Lec. 14 4:40-5:55, TTh, BPA 309
Lec. 15 7:00-8:15 p.m., TTh, BPA 305
- 3 Principles of Accounting (3)**
Continuation of 1. Not open to students majoring in accounting. P, 1.
Lec. 4 7:00-8:15 p.m., TTh, BPA 309
- 101 Intermediate Accounting (3)** **Windborne**
Theory and special problems involved in accounting for assets, liabilities, stockholders' equity; net income determination; analysis and interpretation of financial statements. P, 5 Econ, 2b or CR and Jr. standing.
Lec. 3. 7:00-8:15 p.m., MW, BPA 307
- 221 Income Tax Procedure (3)** **Dixon**
Interpretation of income tax laws, rules, and regulations of the United States with particular emphasis on fundamentals of the tax laws and procedures applicable to individual returns. P, 3 or 5.
Lec. 3 4:40-5:55, TTh, BPA 305
- 270 Data Processing (3)**
(Identical with Management 270.)
Lec. 1 4:40, TTh, Econ 106
Lab. 3 7:00-8:00 p.m., T, Hum 204
8:00-10:00 p.m., T, Engr 158
Lab. 4 7:00-8:00 p.m., F, Hum 204
8:00-10:00 p.m., F, Engr 158

AEROSPACE AND MECHANICAL ENGINEERING

- 61 Primary Ground School (2)** **Parks**
Elementary theory of flight, FAA regulations, navigation, meteorology, airplane nomenclature. Mainly a preparation for the FAA written examination for a private pilot's rating.
4:40, TTh, Aero 309.

AGRICULTURAL BIOCHEMISTRY

- 370 Special Topics in Genetics (2)**
(Identical with Genetics 370)
7:00-9:00 p.m., Th, H Ec 114

AGRICULTURAL CHEMISTRY AND SOILS

- 299 Special Problems (1-5)**
4:40-6:00 p.m., T, Agric 134

AGRICULTURAL EDUCATION

- 252 Philosophy and Principles of Extension Education (2)** **Olsen**
Social and economic significance of extension education in agriculture and home economics. P, 12 credits in agriculture or home economics.
4:40-6:30, M, Agric 230
- 293 College Teaching of Agriculture (2)** **McCormick**
Objectives, selection and organization of content, the teaching-learning process, and evaluation of instruction; emphasis on agriculture in junior and four-year colleges. P, Psych. 1a or CR and 12 units of agriculture.
4:40-6:30, W, Agric 230
- 315 Investigation and Studies in Agriculture Education (2)** **Hamilton**
Study and analysis of research literature, methods, techniques, and procedures for conducting investigations; selecting a problem and developing plans for a study. P, 9 units in agriculture education or education.
7:00-9:00 p.m., M, Agric 230
- 399 Seminar (1-2)**
Study of selected topics and current developments in agricultural education. P, 189.
4:40, T, Agric 230

ANTROPOLOGY

- 1a Introduction to Anthropology (3)** **Culbert**
Survey of physical anthropology and archaeology.
Lec. 2 7:00-9:00 p.m., T, Chem 111
Disc. 21 7:00-8:00 p.m., Th, Anthro 215
Disc. 22 7:00-8:00 p.m., Th, Anthro 216
Disc. 23 7:00-8:00 p.m., Th, Anthro 221
Disc. 24 8:00-9:00 p.m., Th, Anthro 215
- 289 Anthropology and Education (3)** **Chilcott**
(Identical with Foundations of Education 289)
4:40-5:55, TTh, Anthro 219

ARCHITECTURE

- 390 Projects in Planning (2-7)**
(Identical with Urban Planning 390.)
6:30-8:30 p.m., M, Arch 202
7:00-9:00 p.m., Th, Arch 202

ART

Studio 8 — Basic Design (3) Barker

Elements of visual perception and organization. 2 R, 4 S. Fee, \$2.

7:00-10:00 p.m., MW, Art 101

Studio 9

7:00-10:00 p.m., TTh, Art 101

Studio 10 — Basic Drawing (3)

Elementary course in representational drawing and composition. 2 R, 4 S. Fee, \$2.

7:00-10:00 p.m., MW, Art 301

Studio 11

7:00-10:00 p.m., TTh, Art 301

Ceramics (3)

Grossman

Introduction to ceramic materials: design, glazing and firing. 1 R, 6 S. P, 30, 31. Fee, \$10.

Lec. 2 4:40, M, Art 8

Studio 7

4:40-6:30 p.m., W, Art 8

Studio 8

4:40-6:30 p.m., F, Art 8

Studio 3 — Intermediate Figure Drawing (3)

McGrew

6 S. P, 45. Fee, \$10 each semester. May be repeated for total of 6 units

7:00-10:00 p.m., TTh, Art 314

Issues and Recent Research in Art Education (3)

Anderson

The identification of problems in art education at various curricular levels; examination of related research with possible implications for practice.

P, Sec. Ed. 139 (in Art) or teaching experience.

7:00-9:30 p.m., M, Art 209

BIOLOGICAL SCIENCES

Physiological Ecology (2)

Low

Analysis and synthesis of recent investigations pertaining to the physiological ecology of animals and plant populations. P, Bot. 166, or Zoo. 238. May be repeated for credit.

7:30-9:30 p.m., Th, Bio. Sci. 307

Special Topics in Genetics (2)

Heed

(Identical with Genetics 370)

7:00-9:00 p.m., Th, Agric Sci 242W

CHEMISTRY

Seminar (1-3)

Lec. 1 4:40, M, Chem 126

Lec. 2 4:40, T, Chem 126

Lec. 3 4:40, W, Chem 126

Lec. 4 7:00-8:00 p.m., W, Chem 126

CIVIL ENGINEERING

- 254 Photogrammetry (3)** **Newlin**
Reading, interpretations and geometric characteristics of aerial photographs. Stereoscopic principles and their applications in the production of planimetric & topographic maps. 2 R, 3 L including field trips. P, 51, Math. 49a. Fee, \$5.
4:40, TTh, Civ. Engr. 310
- 299a Radiation Shield Shelters (3)**
4:40, MWF, Civ Engr 106

COUNSELING AND GUIDANCE (See Education)

ECONOMICS

- 1 Development of the American Economy (3)**
Origin and development of the economic institutions of the United States. Not open to students with credit in Econ. 204 or with 12 or more units in economics.
Lec. 2 7:00-8:15 p.m., TTh, Econ 102
- 2a Principles of Economics (3)**
Nature of economics, introduction to price theory, national income and employment, money and banking, economic growth and stabilization. P, Soph. standing. P, 2a and 2b are offered each semester.
Lec. 17 7:00-8:15 p.m., MW, Econ 102
Lec. 18 7:00-8:15 p.m., TTh, Econ 301
- 2b Principles of Economics (3)**
Price theory for the product market models, factor prices, international economics. P, 2a and 2b are offered each semester.
Lec. 7 7:00-8:15 p.m., MW, Econ 103
- 148 Money and Banking (3)**
Nature of money and credit; commercial banking; Federal Reserve System; monetary theories; domestic and international monetary policies. P, 2b or 101.
Lec. 6 7:00-8:15 p.m., MW, Econ 104
- 191 Economics of American Enterprise (3)**
Economic analysis of business problems. P, 2b or 101, Mgt. 155b or Math 91. Not open to students with credit in Econ 192.
Lec. 8 7:00-8:15 p.m., TTh, Econ 105

EDUCATION

Counseling and Guidance

- 240 The Guidance Function in Education (3)**
Types and purposes of pupil and student personnel services in school and college, staff function and relationships. Not applicable to counselor education majors.
4:40-5:55, MW, Educ 314

- 242 Appraisal of the Individual (2)**
 Methods of appraising and reporting individual behavior, with emphasis on non-psychometric data.
 Lec. 2 7:00-8:50 p.m., M, Mod Lang 203
- 245 The Counseling Process (3)**
 Introduction to theories of counseling; collation and interpretation of counseling data; the counseling process; study or cases. P, 241, 242 or CR.
 Lec. 2 4:40-5:55, MW, Educ 214
- 246 Group Techniques in Guidance (2)**
 Group techniques, their application in guidance, and the interrelationship of group and individual approaches in the guidance program. P, 241 and 245.
 7:00-8:15 p.m., W, Educ 214
- 343 Organization and Administration of Guidance Programs (2)**
 Organization and management of guidance programs in the public schools.
 P, 9 units in guidance, including 241.
 7:00-8:50 p.m., M, Educ 214
- 347 The College Student (3)**
 Characteristics of the college student; interactions with campus environmental influences; developmental and normative trends.
 4:40-5:55, TTh, Educ 316
- 397 Workshop (1-3)**
 Lec. 1 4:40-6:20, W, Psych 205
 Lec. 2 4:40-6:20, M, Psych 204
- 399b Student Personnel Services**
 7:00-9:30 p.m., M, Mod Lang 302

Educational Administration

- 301 Current Problems in Education (3) Anderson**
 The problems found in current educational literature, research studies and school reports.
 7:00-9:30 p.m., M, Psych 107
- 315 Public Relations for Teachers and Administrators (3) St. John**
 Purposes, necessary organization, agencies, and criteria of good public relations; designed to develop the knowledge and techniques necessary for an effective program of public relations.
 7:00-9:30 p.m., W, Educ 316
- 316 General School Administration (3) St. John**
 Analysis of the provisions through which the societal demands for education are met. Examination of the government structure for education and of the patterns of administrative practice in schools.
 P, 9 graduate units in education.
 8:40-11:30, S, Educ 314

- 365 American Higher Education (3) Paulsen**
The scope of higher education in the United States; its developmental characteristics, aims and prospects.
7:00-9:30 p.m., M, Psych 209
- 370 Personnel Administration in Education (3) St. John**
Composition of school staffs and the functions of various personnel. Patterns and practices in school personnel management. Issues, trends, and prospects in personnel management. P, 9 graduate units in education or CR.
7:00-9:30 p.m., Th, Educ 310
- 371 School Finance (3) Stokes**
Sources and distribution of school funds; accounting and reports. P, 9 graduate units in Education or CR.
7:00-9:30 p.m., T, Educ 402
- 375 The Law and American Education (3) McCann**
The analysis of educational questions as influenced by legal principles and the case law. Effect of legal provisions upon administrative and other educational decisions and upon social policy. P, 9 graduate units in education.
7:00-9:30 p.m., W, Mod Lang 202
- 390 Techniques in Educational Research (3)**
Educational problems, research techniques in education, the interpretation of data and the reporting of results. Required for any graduate degree in Education.
Lec. 2 7:00-9:30 p.m., M, Psych 112
Lec. 3 7:00-9:30 p.m., W, Mod Lang 205
Lec. 4 7:00-9:30 p.m., F, Educ 310
- 392 Research Design in Education (3)**
Problems in the design of experimental studies in education; statistical adaptations to specific educational problems; applications of computer technology. Use of statistical and other models. P, 18 graduate units including 390.
7:00-9:30 p.m., T, Psych 308
- 399 Seminar (1-3) Butler**
7:00-9:30 p.m., Th, Educ 316

Educational Psychology

- 254 Statistical Methods in Education (3)**
Elementary methods of dealing quantitatively with school data and data resulting from experimental investigations. P, 9 units in education or psychology.
Lec. 3 7:00-8:15 p.m., TTh, Psych 204

- 352 Psychological Theory in Educational Practice (3)**
 Educational applications of major psychological systems; comparison and implications of these systems for applied problems in motivation, learning, and instructional practice. P, 9 hours in educational psychology.
 4:40-5:55, TTh, Educ 320
- 353 Advanced Educational Psychology: Creativity (3)**
 The concept of creativity from a variety of approaches; criteria for recognizing the process of creativity; teaching to stimulate creativity. P, 9 hours in educational psychology.
 7:00-9:30 p.m., T, Psych 205
- 354 Advanced Statistical Methods in Education (3)**
 Further methods of dealing quantitatively with educational data. P, 254. Required of all doctoral students in education.
 4:40-5:55, TTh, Educ 308
- 357 Test Construction and Theory (3)**
 Major topics include the functions of measurements in education, construction of achievement tests, and theory of measurement. P, 151, 254, 257.
 4:40-5:55 p.m., MW, Educ 318
- 358b Individual Diagnostic Techniques in Education (3)**
 Practices in diagnostic testing applied to the improvement of teaching and to the correction of learning difficulties of children. P, 151, 257, Coun. Guid. 240. Fee, \$7 per semester.
 4:40-5:55, MW, Educ 316
- 399 Seminar (1-3)**
- a. Educational Psychology 7:00-9:30 p.m., T, Psych 408
 - b. Measurement and Research 7:00-9:30 p.m., W, Psych 408
 - c. School Psychology 7:00-9:30 p.m., M, Psych 408

Elementary Education

- 279 Kindergarten Education (3) Frobisher**
 Growth and learning of 4-6 year old children and study of programs for children of these ages in creative arts, music, science, mathematics, social studies, and language arts. Evaluation of and reporting pupil growth to parents. P, Ed. Psych. 151.
 4:40-5:55, MW, Educ 310
- 320 Science Curriculum in the Elementary School (3) Blecha**
 Trends in the science curriculum of the elementary school; emphasis on selection of content, grade placement of concepts and activities, methods of teaching, needed equipment, and community resources. Primarily for in-service public-school personnel.
 7:00-9:30 p.m., W, Educ 308

- 321 New Concepts of Teaching (2) Brown**
 Concepts drawn from studies of human interaction, creativity, and cognitive structures.
 7:00-9:30 p.m., M, Educ 308
- 323 Constructing the Elementary School Curriculum (3) Leavitt**
 The elementary school curriculum and its relationships; basic theories and techniques of curriculum construction discussed, evaluated and applied.
 7:00-9:30 p.m., W, Educ 310
- 324 Mathematics Curriculum in the Elementary School (3) Hirschi**
 Trend in the mathematics curriculum of the elementary school; emphasis on selection of criteria to determine grade placement of concepts, content, teaching procedures, and needed equipment. Primarily for in-service public-school personnel. P, 126.
 7:00-9:30 p.m., T, Educ 308
- 327 Elementary School Administration and Supervision (3) Ranniger**
 The administrative and supervisory problems of the principal of an elementary school; special emphasis upon teacher participation in planning and administering the educational program.
 7:00-9:30 p.m., Th, Educ 308
- 399 Seminar (1-3) Ranniger**
 7:00-9:30 p.m., T, Educ 310

Foundations of Education

- 206 International Education (3) Kelley**
 Analysis of education as a force in international relations focusing on philosophy, organization, and pattern of educational control throughout the world, and influence of international agencies on educational policies.
 4:40-5:55, MW, Educ 308
- 211 European and African Study Materials for Teachers (3) Kelley**
 Presentation and use of teaching materials related to western Europe and African countries, particularly adapted to the needs of those teaching at the upper elementary level.
 7:00-9:30 p.m., T, Psych 112
- 289 Anthropology and Education (3) Chilcott**
 The application of anthropological theory and methodology to education. (Identical with Anthro 289)
 7:00-9:30 p.m., W, Anthro 129
- 305 Education in Latin America (3) Chilcott**
 Intensive study of Latin-American national systems of education; special attention given to cultural influences affecting the historical development, underlying philosophy, and current practices of these systems. P, 306.
 7:00-9:30 p.m., M, Mod Lang 204

- 306 Comparative Education (3) Kelley**
National systems of education and the development of underlying philosophies and practices; contemporary movements in the educational systems of western European countries; emphasis on similar movements in the United States and Latin America.
7:00-9:30 p.m., Th, Psych 112
- 307 Pragmatic Philosophies of Education (3) Saunders**
Intensive analysis of modern philosophies and their relationship to American educational thought; the emergence of the "pragmatic" curriculum. P, 310.
4:40-5:55, MW, Psych 409
- 310 Philosophy of Education (3) Saunders**
Analysis of values and conflicts in American culture as these direct educational policies; critical examination of contending philosophies in the light of democratic ideals.
7:00-9:30 p.m., Th, Mod Lang 203
- 311 History of Western Education (3) Ivie**
The historical development of western educational thought from its origin to the present.
7:00-9:30 p.m., T, Mod Lang 203
- 391 Education and the Culturally Disadvantaged (3) Brindley**
Current studies relating to the culturally and socially disadvantaged; alleviation of this condition through school-community cooperation.
7:00-9:30 p.m., M, Geol 206

Reading

- 219 The Improvement of Reading (3) Melnik**
A basic course in reading, including the nature of the reading process; sequential development of reading from kindergarten to college; the whole-school reading program; methods of teaching reading in every subject, in special groups, and individual cases.
Lec. 1 4:40-5:55 p.m., MW, Educ 432
Lec. 2 7:00-9:30 p.m., M, Psych 308
- 235 Reading Development in Secondary School (3) Frazier**
Antley
Theory, program, teaching techniques, and materials to improve reading in every subject with students of different background and abilities in grades 6-12.
7:00-9:30 p.m., Th, Educ 432
- 322 Supervised Case Studies and Group Work in the Improvement of Reading (1-6)**
Supervised practice in case work and group work with elementary and secondary students having varied reading problems. P, 219, 235, 335. Recommended: Ed. Psych. 257 and 358. Fee, \$1 per unit; \$3 maximum.
4:40-5:55, F, Educ 310

335 **Diagnosis of Reading Development and Difficulties (3)** **Antley**
Theory, demonstration, and practice in group and individual procedures of administration, interpretation, and use of techniques of diagnosis of reading development and difficulties. P, 219, 235. Fee, \$5.
Lec. 1 7:00-9:30 p.m., M, Educ 432

399 **Seminar (1-3)** **Stemmler**
7:00-9:30 p.m., T, Educ 432

School Library Science

201 **Literature for Children (3)** **Renthal**
History and development of children's literature; emphasis on standards of evaluation and reading interest. Reading and analysis of books, particularly modern publications, for student interest, ability, and need, up through the junior high school level.
Lec. 6 7:00-8:15 p.m., MW, Educ 320

280 **Reference Service in the School Library (3)** **Van DeVoerde**
Survey of periodical indexes, bibliographies, encyclopedias, and other reference aid most used in elementary- and secondary-school libraries.
4:40-5:55, MW, Educ 320

282 **Organization, Cataloguing, and Classification of Materials (3)** **Saltus**
Purpose and principles of cataloguing and classification; the card catalogue, shelf list, filing, vertical files; organization and maintenance of materials of use.
7:00-8:30 p.m., MW, Educ 314.

283 **Book Selection (3)** **Van DeVoerde**
Principles of selection, selection aids and bibliographies, acquisitions work, practice in reviewing and annotating books; selection problems.
7:00-8:15 p.m., TTh, Educ 314

287 **Fundamentals of Library Science (3)** **Renthal**
History and development of libraries from earliest times to the present, emphasizing their major role in communication and their responsibilities to modern society; the different types of libraries.
4:40-5:55, TTh, Psych 204

Secondary Education

197d **The Teaching of Vocational Office and Distributive Education (3)**
Teaching procedures and instructional aids for Vocational Office and Distributive Education programs.
7:00-9:30 p.m., Th, Econ 405

222 **Principles of Vocational Office and Distributive Education (3)** **Langen**
Current principles, concepts, and philosophy of vocational office and distributive education in the total education program.
7:00-9:30 p.m., M, Econ 405

- 231 Teaching of Literature (3) Cook**
 (Identical with English 211)
 Lec. 2 4:40-5:55, TTh, Mod Lang 401
- 238 Teaching English Composition (3) Davis**
 (Identical with English 210)
 Lec. 2 4:40-5:55 p.m., MW, Mod Lang 401
- 334 Analysis of Secondary School Teaching (3) Reece**
 Analysis of the teaching process; preparation of behavioral objectives;
 Study of recent methods, trends, analysis of current classroom evaluation techniques.
 7:00-9:30 p.m., M, Educ 402
- 337 Secondary School Administration and Supervision (3) Krebs**
 The internal administration of secondary schools; supervision and the improvement of instruction; emphasis on responsibilities of all staff members in secondary schools.
 7:00-9:30 p.m., M, Educ 310
- 338 Constructing the Secondary School Curriculum (3) Reece**
 The curriculum and its relationships; basic theories and techniques of curriculum construction discussed, evaluated and applied.
 7:00-9:30 p.m., Th, Educ 402
- 339 Investigations in Secondary Education (3) Letson**
 Critical study and evaluation of the investigations and experimental evidence underlying the aims and instructional practices of the various subject-matter fields of the secondary school. P, 9 units in education.
 7:00-9:30 p.m., T, Engr 202
- 359 The Junior College (3) Anderson**
 The scope, objectives, and education functions of the junior college; patterns of junior college programs. P, 3 graduate units in education or CR.
 7:00-9:30 p.m., T, Engr 301
- 399 Seminar (1-3) Krebs**
 7:00-9:30 p.m., W, Educ 402

Special Education

- 203a Study of Exceptional Children (3) Holmberg**
 Incidence, characteristics and medical aspects of exceptional children.
 Lec. 2 7:00-9:30 p.m., Th, Educ 318
- 204a Teaching Mentally Retarded Children and Youth (3) Hamilton**
 Techniques, organization of materials, and construction of experience units at the elementary level.
 4:40-5:55, TTh, Educ 310

- 204b Teaching Mentally Retarded Children and Youth (3) Hamilton**
Techniques, organization of classes, and utilization of community resources for effective apprenticeship and vocational education programming at the secondary level.
7:00-9:30 p.m., W, Educ 318
- 213 Education of the Visually Handicapped (3) Starkovich**
Education of the blind in current and historical perspective; causes and prevention of blindness; psychological and sociological aspects of blindness; laboratory experience.
4:40-5:55, MW, Educ 402
- 215 Braille Reading and Writing (3) Starkovich**
Introductory course in the fundamentals of reading and writing by means of the Braille System. Historical development of education of the blind.
4:40-5:55, TTh, Educ 402
- 256 The Education of Gifted Children (3) Olson**
The relationship of the problem presented by the gifted child to the total program of the classroom and of the school; discussion, evaluation, and application of basic theories and techniques of teaching the gifted child.
7:00-9:30 p.m., T, Educ 318
- 270 Mental Retardation (3)**
History and philosophy of educational programs for the mentally retarded; etiology, classification, and characteristics of the retarded with consideration to their educational, social, and interpersonal problems. P, 203a or CR.
7:00-9:30 p.m., W, Psych 107
- 278 Construction Activities for Exceptional Children (3) Starkovich**
Utilization of arts and crafts media to reinforce educational concepts; construction of projects designed in the laboratory for use with various types of exceptional children; development of teaching aids for classroom instruction. P, 6 units in special education.
7:00-9:30 p.m., M, Educ 316
- 285 Teacher-Parent Relationships in Special Education (3) Starkovich**
Through lectures, demonstrations, and discussion, the techniques used in parent interviews, conferences, and referrals are presented as they relate to the various handicapping conditions.
7:00-9:30 p.m., T, Psych 107
- 350 Organization & Administration of Special Education Programs (3) Morgan**
Practical aspects of organization and development of special education programs, problems of public relations, personnel, case finding, evaluation, placement, and records.
7:00-9:30 p.m., Th, Educ 320

- 397 Workshop (1-3)**
 Lec. 1 7:00-9:30 p.m., M, Educ 318 **Thorne**
 Lec. 2 7:00-9:30 p.m., T, Psych 309 **Kass**
- 399 Seminar (1-3)**
 Lec. 1 7:00-9:30 p.m., T, Educ 316 **Kirk**
 Lec. 2 7:00-8:15 p.m., MW, Psych 309 **Morgan**

ENGINEERING

- 14 Engineering Mechanics (4)**
 Vector algebra and calculus. Equivalent force systems. Equilibrium, First and Second moments of solids, kinematics. Momentum and Energy methods. P, Phys. 10, Math 49b.
 Lec. 2 4:40, MWThF, Aero 207
- 17 Mechanics of Materials (3)**
 Material behavior; relationship between external forces acting on elastic and inelastic bodies and the resulting behavior; relationship between external forces acting on elastic and inelastic bodies and the resulting stress and strain; combines stresses. P, 14.
 Lec. 2 4:40, MWF, Aero 306.

ENGLISH

Satisfaction of the Freshman Composition requirement is prerequisite to all other courses in English.

- X Subcollegiate English (0)**
 Lec. 13 4:40, MWF, Mod Lang 405
 Lec. 14 4:40, MWF, Mod Lang 406 **Greenup**
 Lec. 15 7:00-8:15 p.m., MW, Mod Lang 402 **Drury**
 Lec. 16 7:00-8:15 p.m., MW, Mod Lang 401 **Greenup**
 Lec. 17 7:00-8:15 p.m., MW, Mod Lang 403 **Buus**
 Lec. 18 7:00-8:15 p.m., MW, Mod Lang 406 **Cooper**
 Lec. 19 7:00-8:15 p.m., TTh, Mod Lang 406 **Inkster**
 Lec. 20 7:00-8:15 p.m., TTh, Mod Lang 401 **Still**
 Lec. 21 7:00-8:15 p.m., TTh, Mod Lang 506
- I Freshman Composition (3)**
 The study and practice of good writing, with emphasis upon exposition; review of English fundamentals; regular theme writing; collateral reading.
 Lec. 61 4:40, MWF, Mod Lang 506 **J. Davis**
 Lec. 62 4:40, MWF, Mod Lang 204 **Malanga**
 Lec. 63 4:40, MWF, Mod Lang 214 **Creamer**
 Lec. 64 4:40, MWF, Psych 107
 Lec. 65 4:40, MWF, Psych 110

Lec. 66	4:40, MWF, Psych 408	
Lec. 67	4:40, MWF, Psych 308	
Lec. 68	7:00-8:15, MW, Mod Lang 301	
Lec. 69	7:00-8:15, MW, Mod Lang 404	
Lec. 70	7:00-8:15, MW, Mod Lang 405	
Lec. 71	7:00-8:15, MW, Mod Lang 502	
Lec. 72	7:00-8:15, MW, Mod Lang 501	Malanga
Lec. 73	7:00-8:15, MW, Mod Lang 506	
Lec. 74	7:00-8:15, MW, Mod Lang 212	
Lec. 75	7:00-8:15, TTh, Mod Lang 301	
Lec. 76	7:00-8:15, TTh, Mod Lang 306	Cohen
Lec. 77	7:00-8:15, TTh, Mod Lang 403	R. Young
Lec. 78	7:00-8:15, TTh, Mod Lang 404	
Lec. 79	7:00-8:15, TTh, Mod Lang 405	Keippel
Lec. 80	7:00-8:15, TTh, Mod Lang 212	

2 Freshman Composition (3)

The equivalent of English 1 for students whose proficiency in English grammar and usage permits advanced placement; theme writing; library paper; collateral reading. Students who make a grade of 2 or better will be permitted to take Eng. 4.

Lec. 17	4:40; MWF, Mod Lang 201	Roecker
Lec. 18	7:00-8:15 p.m., MW, Mod Lang 312	Boebel
Lec. 19	7:00-8:15 p.m., TTh, Mod Lang 202	J. Carter

3 Freshman Composition (3)

Continued practice in composition with emphasis upon objective writing; library paper; readings in fiction and non-fiction. P, 1 or 2 or advanced standing.

Lec. 23	4:40, MWF, Mod Lang 302	Rankin
Lec. 24	7:00-8:15, MW, Mod Lang 314	Loveday
Lec. 25	7:00-8:15, MW, Psych 409	Yots
Lec. 26	7:00-8:15, MW, Psych 204	Rankin
Lec. 27	7:00-8:15, TTh, Mod Lang 502	Boyd
Lec. 28	7:00-8:15, TTh, Mod Lang 312	
Lec. 29	7:00-8:15, TTh, Mod Lang 205	

119 Advanced Expository Writing (2)

Close analysis of and extensive practice in the techniques of expository writing. Intended primarily for juniors in the College of Business and Public Administration.

Lec. 9	4:40, TTh, Mod Lang 402	Scott
Lec. 10	7:00 p.m., TTh, Mod Lang 402	Grindell

- 210 Teaching of English Composition (3) Davis**
 Theoretical and practical preparation for teaching courses in writing in high school and college. For seniors and graduate students. (Identical with Sec. Ed. 231.)
 Lec. 2 4:40-5:55, MW, Mod Lang 404
- 211 Teaching Literature (3) Riggins**
 Principles and methods of teaching literature with intensive study of the genres and several of the works most commonly taught in high school. (Identical with Sec. Ed. 231.)
 Lec. 2 4:40-5:55, TTh, Mod Lang 302
- 212 Teaching of English as a Second Language (3) Cook**
 (Identical with Sec. Ed. 233.)
 4:40, MWF, Mod Lang 403
- 399 Seminar (3)**
 Topics will be chosen from the following periods and subjects, with concentration upon a particular author or group of authors, or upon a literary problem.
- a. Medieval Literature, 7:30-10:00 p.m., T, Mod Lang 435 **Clark**
 j. American Literature, 7:30-10:00 p.m., T, Mod Lang 461 **Kay**

FINANCE, INSURANCE AND REAL ESTATE

- 142 Securities Markets (3) Swango**
 Analysis of the markets for securities of both public and private issuers; brokers, dealers, investment bankers, organized and over-the-counter markets; the mechanics of trading, and the investment risks and merits of all classes of securities.
 7:00-9:30 p.m., T, Econ 111
- 241 Corporation Finance (3) Joehnk**
 Financial problems involved in the organization and conduct of business enterprise. P, Acct. 3, Econ 2b.
 Lec. 8 4:40, MWF, Econ 304
 Lec. 9 7:00-8:15 p.m., MW, Econ 303
- 243 Corporate Financial Problems (3) Bleck**
 Integration of financial operations with operations of the business unit; financial planning and control; capital budgeting; cost of capital. P, 241.
 4:40-5:55, MW, Econ 301
- 357 Survey of Finance (3) Fredman**
 Analysis of security instruments; the middleman; the issuers and problems of corporate financial management. P, 241.
 4:40-5:55, TTh, Econ 301

FRENCH

(See Romance Languages)

GENETICS

- 370 Special Topics in Genetics (2)**
Consideration of recent advances in the field of genetics. P, Bot. 172.
(Identical with Ag. Biochem. 370, Microb. 370 and Zoo. 370)
7:00-9:00 p.m., Th, H Ec 114
- 399 Seminar (1)**
7:00-8:00 p.m., W, Ag Sci 245.

GEOGRAPHY AND AREA DEVELOPMENT

- 51 Fundamentals of Geography for Teachers (3)** **Todd**
Limited to majors in elementary education. Not open to students with
6 or more units of credit in Geog. 2a-2b, 3a-3b.
Lec. 3 4:40, MW, Econ 110
Disc. 12, 4:40, F, BPA 409
- 253 The Localization of Manufacturing (3)** **Gibson**
The major world regions; locational history of leading industries; con-
temporary factors in the United States.
6:45-8:00 p.m., TTh, BPA 407
- 301 Advanced Physical Geography (3)** **Altschul**
Designed for M.A. candidates in geography, to be taken during their
first or second semester, to provide a comprehensive foundation.
Extensive reading in important journal articles and other original pub-
lications. P, 3a-3b or equivalent, plus 12 units in geography.
Field trips. Fee, \$3.
7:00-9:30 p.m., T, BPA 403
- 390 Projects in Planning (2-7)** **Saarinen**
(Identical with Urban Planning 390)
6:30-8:30 p.m., M, Arch 202
7:00-9:00 p.m., Th, Arch 202
- 391 History of Geographic Thought (3)** **Stanislawski**
Seminar in the history of geographic philosophy and methodology. P,
15 units in geography.
7:00-9:30 p.m., W, BPA 403

GEOLOGY

- 5001b** See page 38 of this catalogue for TV courses.
Lab. 2 7:00-10:00 p.m., T, Geol 226
Lab. 3 7:00-10:00 p.m., Th, Geol 226
- *3 Identification of Minerals (3)**
An introduction to the study of mineral classification and the procedure
for field identification. Fee \$48.
7:00-10:00 p.m., Th, Geol 12

GERMAN

1a Elementary German (4)

1a is offered each semester. Fee \$1. (First year of work in a foreign language shall not be counted toward a minor.)

Lec. 12 4:40, MTWTh, Mod Lang 301

Lec. 13 7:00-9:00 p.m., MW, Mod Lang 503

Lec. 14 7:00-9:00 p.m., TTh, Mod Lang 503

3a Intermediate German (4)

Offered each semester. P, 1b or two years of high school German.

Lec. 7 4:40, MTWTh, Mod Lang 503

Lec. 8 7:00-9:00 p.m., TTh, Mod Lang 501

RUSSIAN

1a Elementary Russian (4)

Offered each semester. Fee \$1. (Elementary course may not be used in minor for the bachelor's degree.)

Lec. 4 4:40, MTWTh, Mod Lang 306

270 Lermontov (2)

P, 208b

7:00-9:00 p.m., M, Mod Lang 505

275a Russian Stylistics (2)

Designed to improve the student's practical mastery and understanding of Russian at a higher and more sophisticated level. Required for all majors. P, 175b.

7:00-9:00 p.m., Th, Mod Lang 505

285a Old Church Slavic (2)

P, 175b

4:40-6:20, Th, Mod Lang 505.

GOVERNMENT

2 American National Government (3)

General survey of the constitutional bases, organization, and functioning of the American national government; recent and current trends.

Lec. 40 7:00-9:30 p.m., T, LA 114

Lec. 45 7:00-9:30 p.m., W, LA 312

Lec. 50 7:00-9:30 p.m., Th, LA 114

3 American State and Local Government (2)

General survey of state and local government; recent and current trends.

Lec. 4 7:00-8:40 p.m., M, LA 114

Lec. 5 7:00-8:40 p.m., Th, LA 206

- 100 National and State Constitutions (3)**
 Meets the state requirement for a teacher's certificate. For seniors intending to teach. Not open to students with credit in 2, 3, 101, or 214.
 Lec. 15 7:00-9:30 p.m., M, LA 206
 Lec. 20 7:00-9:30 p.m., T, LA 312
 Lec. 25 7:00-9:30 p.m., W, LA 114
- 214 Arizona Government and Administration (2)**
 History, structure, organization, powers and procedures of Arizona state and local government and administration. May be used for state teacher's certificate.
 7:00-8:40 p.m., Th, LA 312
- 267 Public Personnel Administration (3)**
 Development of public service and its role in the contemporary state; basic ideas, problems, and processes in public personnel administration; development of a career service. P, 2 and 3. (Identical with P.A. 267)
 7:00-9:30 p.m., Th, LA 222
- 299d Individual Studies Political Practice (1)**
 10:40 a.m., S, LA 332
- 337 Fiscal and Budgetary Administration of Public Agencies (2)**
 (Identical with Public Administration 337)
 7:00-8:40 p.m., T, BPA 107
- 390 Methods of Political Inquiry (3)**
 Systematic examination of problems of scope and methods of inquiry in the discipline of political science, intended to acquaint students with the discipline and to prepare them for scholarly research in the field.
 7:00-9:30 p.m., T, LA 332
- 399b Seminar: American Government (3)**
 7:00-9:30 p.m., Th, LA 332
- 399d Seminar: Research in International Relations (3)**
 7:00-9:30 p.m., W, LA 332

HEALTH, PHYSICAL EDUCATION AND RECREATION

- 267 International Health Problems (3)** **King**
 Recognized major health problems of the world; the role of the World Health Organization and its affiliate divisions; analysis of international health education programs.
 7:00-9:30 p.m., Th, Econ 308
- 320 Advanced Kinesiology (3)** **Simko**
 Scientific analysis of complex motor skills; the use of cinematography, electromyography, and anthropomechanics in the study of movement, P, Zoo. 40, HPER 87 and 12 units of upper-division instruction in physical education.
 4:40-5:55, TTh, PE Women 203
- 400 Research (2-6)** **Munroe-Roby**
 4:40, W, Mod Lang 102

- 337 Trends in Human Relations (2)** **Christopherson**
 Philosophy, content, and resources in teaching human relations courses. Primarily for administrative personnel, teachers, ministers and others who intend to work with youth groups or young adults.
 4:40-6:30 p.m., W, H Ec 301

HUMANITIES

- 50a Introduction to Humanities (4)**
 The cultural life of the Western World as it developed in literature, art and philosophy from the Greeks to the present. P, Freshman Composition. Fee \$1.
 Disc. 26 7:00-8:40 p.m., MW, Mod Lang 303

MANAGEMENT

- 155a Statistical Methods in Economics and Business (3)**
 Statistical analysis and statistical inference applied to data in economics and business. P, Math 20. 155a is prerequisite to 155b.
 Lec. 9 4:40-5:55, TTh, BPA 207 **Billings**
 Lec. 10 4:40-5:55, MW, BPA 207 **Billings**
 Lec. 11 7:00-8:15 p.m., MW, BPA 107 **Billings**
- 155b Statistical Methods in Economics and Business (3)**
 155a is a prerequisite to 155b.
 Lec. 2 7:00-8:15 p.m., TTh, Econ 104 **Kromko**
 Lec. 6 4:40-5:55, MW, Econ 308 **Chorba**
 Lec. 7 4:40-5:55, TTh, Econ 408 **Kromko**
 Lec. 8 7:00-8:15 p.m., MW, Econ 307 **Chorba**
- 220a Business Law (3)** **Tindall**
 Nature and sources of business law; the judicial system; contract, sales and agency law. Not open to students who have completed 6 or more units in the College of Law.
 Lec. 8 4:40-5:55, MW, Econ 103
- 220b Business Law (3)** **Tindall**
 Negotiable instruments, partnerships, corporations, and property rights. Not open to students who have completed 6 or more units in a college of law. P, 220a.
 Lec. 3 4:40-5:55, TTh, Econ 306
- 371 Business Policies (3)** **Logan**
 Case method approach to problems and policies facing top management. P, 205.
 Lec. 2 4:40-5:55, MW, Econ 209

MARKETING

- 161 Marketing Principles (3)**
Nature of marketing; analysis of customer behavior; development of marketing institutions, policies, and programs. P, Economics 2a, Accounting 1.
Lec. 10 4:40-5:55, TTh, Econ 316
Lec. 11 7:00-9:30 p.m., M, Econ 316
Nigh Nelson
- 165 Creative Advertising (3)**
Practical application of visual and aural techniques in the planning and preparation of advertisement and advertising campaigns.
Lec. 1 4:40-7:00, W, Hum 212
Lec. 2 7:10-9:30 p.m., W, Hum 212
Daniels
- 166 Public Relations (3)**
Nature and tools of public relations; some formulae for successful public relations practice.
Lec. 1 4:40-7:00, M, Hum 212
Lec. 2 7:10-9:30 p.m., M, Hum 212
Daniels

MATHEMATICS

- 20 College Algebra (3)**
P, 1½ entrance units in algebra or 11.
Lec. 15 7:00-8:15 p.m., TTh, PMM 376
Lec. 16 7:00-8:15 p.m., TTh, PMM 374
Lec. 17 7:00-8:15 p.m., TTh, LA 118
Lec. 18 7:00-8:15 p.m., TTh, PMM 272
Lec. 19 7:00-8:15 p.m., MW, PMM 376
Lec. 20 7:00-8:15 p.m., MW, PMM 374
Lec. 21 7:00-8:15 p.m., MW, PMM 494
- 24 Plane Trigonometry (2)**
Optional slide rule work permitted. P, 1 entrance unit in geometry, and either 1½ entrance units in algebra or 11.
Lec. 8 7:00-8:40 p.m., W, PMM 210
Lec. 9 7:00-8:40 p.m., W, PMM 212
- 44 Pre-Calculus Mathematics (5)**
P, 1 entrance unit in geometry and either 1½ entrance units in algebra, or 11.
Lec. 13 7:00-9:05 p.m., TTh, PMM 496
Lec. 14 7:00-9:05, MW, PMM 276
- 79a Analytic Geometry and Calculus (5)**
Both 79a and 79b are offered each semester. P, 44.
Lec. 10 7:00-9:05 p.m., TTh, PMM 378
- 79b Analytic Geometry and Calculus (5)**
Both 79a and 79b are offered each semester. P, 79a.
Lec. 4 7:00-9:05 p.m., TTh, PMM 210

- 80** **Calculus (2)**
 Concludes the standard calculus work. P. 79b.
 Lec. 4 7:00-8:40 p.m., W, PMM 272
- 181** **Intermediate Analysis and Differential Equations (3)**
 P, 49b or CR in 80.
 Lec. 11 7:00-8:15 p.m., TTh, PMM 276

METALLURGICAL ENGINEERING

- *201** **Elements of Physical Metallurgy (3)** **Walker**
 The purpose of this course is to provide non-engineering students with knowledge of the fundamental basis for the metallurgical arts and crafts. The student is assumed to possess a practical knowledge of metallurgical arts such as casting, welding, machining, forging, heat treating, etc. and the intent of this course is to provide an understanding of the scientific basis of these arts. Fee \$48.
 7:00-9:00 p.m., W, Mines 225

MICROBIOLOGY

- 370** **Special Topics in Genetics (2)**
 (Identical with Genetics 370)
 7:00-9:00 p.m., Th, H Ec 114

MUSIC

- 10b** **Band (1-2)** **Lee-Peters**
 Performance of all types of band music. The band plays for home and out-of-town football games and other campus functions, presents concerts, and makes a concert tour of Arizona high schools. Open to all qualified students.
 Lec. 1 4:40-6:00, MWF, Music 110
 Lec. 2 4:40-6:00, MWF, Music 130
- 25a** **Piano Class (1)** **Phelps**
 Beginning instruction; adult beginner text with supplementary materials; transposition, accompaniment patterns, original compositions, improvisation, sight reading, scale forms.
 Lec. 4 7:00-8:00 p.m., T, Music 102
- 25b** **Piano Class (1)**
 Lec. 2 8:00-9:00 p.m., T, Music 102
- 155a** **Opera Workshop Performance (1)** **Johnson**
 Training in basic acting techniques for the lyric theater and operatic stage. Performance of opera.
 4:40-6:00 p.m., TTh, Music 130
- 204** **Music of the Romantic Period (2)** **Iotti**
 The development of romanticism in music from late Beethoven through Bruckner. P, Jr. standing in Music.
 7:00-9:00 p.m., W, Music 204

- 310 Introduction to Musicology (3) Fain**
 The definition and history of academic study in music; survey of related fields (acoustics, physiology, psychology, and aesthetics); bibliography and research procedures.
 4:40, MWF, Music 136

OFFICE ADMINISTRATION & BUSINESS EDUCATION

- 170 Unit Record Equipment (3) LaSalle**
 (Identical with Systems Engineering 170.)
 4:40, MW, Econ 106
 Lab. 1 7:00-8:00 p.m., M, Hum 204
 8:00-10:00 p.m., M, Engr 158
 Lab. 2 7:00-8:00 p.m., Th, Hum 204
 8:00-10:00 p.m., Th, Engr 158

- 270 Data Processing (3) LaSalle**
 (Identical with Engineering 270)
 Lec. 1 4:40, TTh, Econ 106
 Lab. 3 7:00-8:00 p.m., T, Hum 204
 8:00-10:00 p.m., T, Engr 158
 Lab. 4 7:00-8:00 p.m., F, Hum 204
 8:00-10:00 p.m., F, Engr 158

ORIENTAL STUDIES

- 55a Introduction to Oriental Humanities (2) Putzar**
 Discussion of the languages, literatures, arts, music and ideas of Asia, especially of the Middle East, India, China, and Japan.
 7:00-9:00 p.m., T, Mod Lang 411

PHILOSOPHY

- 11 Introduction to Philosophy (3) Knipe**
 The basic philosophical areas and the problems pertaining to language and meaning; knowledge and truth; the world and God; free will; the good life; the ideal community.
 Lec. 2 4:40, TTh, Hum 103
 Disc. 19 4:40, M, LA 307
 Disc. 20 4:40, M, LA 308
 Disc. 21 4:40, F, LA 307
- 12 Introduction to Logic (3) Byerly**
 Principles of valid thinking; the nature and applications of inductive and deductive inference.
 Lec. 2 4:40, TTh, Econ 110
 Disc. 11 4:40, M, LA 312
 Disc. 12 4:40, F, LA 311

PSYCHOLOGY

1a Elementary Psychology (3)

Growth and change of the individual, learning and conditioning principles; description of aptitudes and abilities.

Lec. 3 7:00 p.m., TTh, Mod Lang 350

Disc. 83 6:00 p.m., T, Psych 209

Disc. 84 6:00 p.m., T, Psych 208

Disc. 85 6:00 p.m., T, Psych 110

Disc. 86 6:00 p.m., Th, Psych 110

Disc. 87 6:00 p.m., Th, Psych 208

Disc. 88 6:00 p.m., Th, Psych 209

Disc. 89 8:00 p.m., T, Psych 110

Disc. 90 8:00 p.m., T, Psych 208

Disc. 91 8:00 p.m., T, Psych 209

Disc. 92 8:00 p.m., Th, Psych 209

Disc. 93 8:00 p.m., Th, Psych 208

1b Elementary Psychology (3)

Introduction to perception, emotions, and personality organization. 1a and 1b are offered each semester. 1a is prerequisite to 1b.

Lec. 2 7:00 p.m., MW, Mod Lang 350

Disc. 20 6:00 p.m., M, Psych 110

Disc. 21 6:00 p.m., W, Psych 110

Disc. 22 8:00 p.m., M, Psych 110

Disc. 23 8:00 p.m., W, Psych 110

Disc. 24 8:00 p.m., M, Psych 208

Disc. 25 8:00 p.m., W, Psych 208

10 Introduction to Social Psychology (3)

Basic concepts and theories in social psychology; the individual as related to culture and group situations.

Lec. 3 7:00-8:15 p.m., TTh, Psych 306

205 Advanced Statistical Methods in Psychology (3)

Rationale and methods of statistical inference; sampling distributions, power function, analysis of variance, statistical models; introduction to multiple comparisons, non-parametric techniques, correlation and regression. P, 105.

Lec. 2 7:00-8:15 p.m., TTh, Psych 304

218 Abnormal Psychology (3)

The nature and etiology of the various forms of behavior disorder, mental deficiency, and other deviations. Critical evaluation of current theories. Field trip. Fee, \$3.

Lec. 3 7:00-8:15 p.m., TTh, Mod Lang 412

- 390 Psychology Colloquium (1)**
 Discussions of research problems by staff, graduate students and, on occasion, by visiting scholars. Required of students registered for 400, 410, and 420. P, 24 upper-division units. May be repeated for credit once.
 4:40-6:00, W, LA 222

PUBLIC ADMINISTRATION

- 1 Social Administration (3) Ralston**
 Over-all view of the principles of administration in the fields of public welfare, social welfare, corrections, health services, law enforcement, and public recreation.
 Lec. 4 7:00-8:15 p.m., MT, Econ 110
- 2 Social Welfare Problems (3) Ralston**
 Selected problems from the field of social welfare.
 7:00-9:30 p.m., Th, BPA 107
- 3 Ethics for Public Service (3) Rektor**
 Professional codes of ethics; examination of selected public services in the fields of corrections, social welfare, law enforcement, government, health and recreation.
 Lec. 3 7:00-9:30 p.m., Th, BPA 207
- 138 Fields of Social Work (3) Endriola**
 Backgrounds, philosophy, fields, and methods of social work. P, 1.
 Lec. 2 7:00-9:30 p.m., M, BPA 105
- 230 Social Casework (3) Fuller**
 Theory and principles of social casework.
 4:40-5:55, TTh, BPA 203
- 245a Correctional Counseling (2) Hoffman**
 Basic concepts and principles of counseling, interviewing, and case work as carried on in correctional settings.
 Lec. 2 7:00-8:40 p.m., W, BPA 105
- 337 Fiscal and Budgetary Administration of Public Agencies (2) Shirley**
 International fiscal operation and the budgetary cycle of public and non-profit agencies. (Identical with Govt. 337)
 7:00-8:40 p.m., T, BPA 207

ROMANCE LANGUAGES

(Those interested in taking language courses that do not grant academic credit should refer to offerings at the end of the listings for credit courses.)

French

- 1a Elementary French (4)**
 Basic grammar. (The first year of work offered in a foreign language shall not be counted toward a minor.)
 Lec. 13 4:40, MTWTh, Mod Lang 202
 Lec. 14 4:40, MTWTh, Mines 213

- *1a-1 Elementary French (2)** **Bunge**
7:00-9:00 p.m., M, Mod Lang 306, Fee \$32.
- 1b Elementary French (4)**
Lec. 4 4:40, MTWTh, Mod Lang 205
- *1b-1 Elementary French (2)** **Bunge**
7:00-9:00 p.m., W, Mod Lang 306, Fee \$32.
- 1g Training in Reading French for Graduates (3 hrs. a week—no credit)**
A summary of basic grammar essential to a reading knowledge of the language, accompanied by readings of increasing difficulty both in general literature and the chosen field of specialization.
Lec. 2 4:40, MWF, Mod Lang 505
Lec. 3 7:00-8:30 p.m., TTh, Mod Lang 504
- 3a Intermediate French (4)**
P, 1b or 2 years of high school French. Fee, \$1
Lec. 10 4:40, MTWTh, Mod Lang 210
Lec. 11 4:40, MTWTh, Mod Lang 212
- 3b Intermediate French (4)**
Lec. 4 4:40, MTWTh, Mod Lang 501
- 399 Seminar (2)**
The topics will be chosen from the following:
a. Romance Philology, 4:40-6:30, W, Mod Lang 578
e. 17th Century, 4:40-6:30, T, Mod Lang 578
f. 18th Century, 4:40-6:30, Th, Mod Lang 578
g. 19th Century, 4:40-6:30, M, Mod Lang 578

Spanish

- 1a Elementary Spanish (4)**
Fee, \$1. (The first year of work offered in a foreign language shall not be counted toward a minor.)
Lec. 22 4:40, MTWTh, Mod Lang 303
Lec. 23 4:40, MTWTh, Geol 320
Lec. 24 4:40, MTWTh, Hum 208
- *1a-1 Elementary Spanish (2)**
7:00-8:40 p.m., W, Mod Lang 505, Fee \$32.
- *1a-2 Elementary Spanish (2)**
7:00-8:40 p.m., T, Mod Lang 505, Fee \$32.
- 1b Elementary Spanish (4)**
(The first year of work offered in a foreign language shall not be counted toward a minor) Fee, \$1.
Lec. 10 4:40, MTWTh, Mod Lang 304

- *1b-1 Elementary Spanish (2)**
7:00-8:40 p.m., T, Engr 203. Fee \$32.
- 3a Intermediate Spanish (4)**
P, 1b or 2 years of high school Spanish. Fee \$1.
Lec. 16 4:40, MTWTh, Mod Lang 312
Lec. 17 4:40, MTWTh, Hum 101
Lec. 18 4:40, MTWTh, Hum 200
Lec. 19 4:40, MTWTh, Hum 201
- *3a-1 Intermediate Spanish (2)**
P, 1b-2.
7:00-9:40 p.m., M, Mod Lang 214, Fee \$32.
- 3b Intermediate Spanish (4)**
P, 3a or 3 years of high school Spanish. Fee \$1.
Lec. 8 4:40, MTWTh, Mod Lang 314
Lec. 9 4:40, MTWTh, Hum 100
Lec. 10 4:40, MTWTh, Hum 204
- 75a Intermediate Composition and Conversation (3)**
Two hours conversation, 1 hour composition. P, 3b or 4 years of high school Spanish.
Lec. 8 4:40, MWF, Mod Lang 504
Lec. 9 7:00-8:15 p.m., MW, Mod Lang 504
- 301a Bibliography and Paleography (2)**
Bibliographical methods and principal bibliographies.
4:40-6:30, M, Mod Lang 502
- 374 The Novel of the Mexican Revolution (2)**
7:00-8:40 p.m., W, Mod Lang 535
- 399b Seminar (2)**
Old Spanish
4:40-6:30, W, Mod Lang 535
- 399e Seminar (2)**
Spanish Literature of the 17th Century
7:00-9:00 p.m., M, Mod Lang 535
- 399h Seminar (2)**
Spanish Literature of the 20th Century
4:40-6:30, Th, Mod Lang 535

RUSSIAN

(See German and Russian)

SOCIOLOGY

- 1a Introduction to Sociology (3)** Miller
(1a is prerequisite to 1b and all other courses in the department.)
Basic concepts and principles of human society.
Lec. 5 4:40-5:55, TTh, LA 224

- 1b Introduction to Sociology (3)** **Jacobson**
 Use of basic concepts and principles in the analysis of selected sociological materials. P, 1a. Non-majors may take 1a without 1b.
 Lec. 8 4:40-5:55, TTh, LA 411
- 85 American Social Problems (3)**
 Principles of social disorganization and deviant behavior as applied to American social problems. P, 1a.
 Lec. 3 4:40-5:55, MW, LA 224
 Lec. 4 7:00-8:15 p.m., TTh, LA 224
- 191 Medical Sociology (3)** **Tiedeman**
 Social and cultural factors in the course and treatment of illness, including etiology, patterns of response, structure of treatment settings, and analysis of selected health professions; social theory and social research relevant to the health professions. P, 6 units of sociology.
 4:40-5:55, TTh, LA 307
- 281 Principles of Sociology (3)**
 Discussion of major issues in theoretical sociology. P, 9 units of sociology and at least Senior standing.
 7:00-8:15 p.m., TTh, LA 411

SPEECH

- 2 Principles of Speech (3)**
 An introduction to the field of speech. Designed to develop confidence, poise, and clarity in the use of the body, voice, language, and thought through guided practice in speaking. Fee \$1.50.
 Lec. 32 4:40, MWF, LA Anx 311
 Lec. 33 7:00-9:30 p.m., M, LA Anx 311
 Lec. 34 7:00-9:30 p.m., W, LA Anx 211

SYSTEMS ENGINEERING

- 170 Unit Record Equipment (3)** **LaSalle**
 Basic principles of information handling and automatic computation; use of punched card equipment; business applications and implications, flow charts and block diagrams. 2R, 3L. Fee \$7.50. (Identical with Off. Ad. 170)
 4:40, MW, Econ 106
 Lab. 1 7:00-8:00 p.m., M, Hum 204
 8:00-10:00 p.m., M, Engr 158
 Lab. 2 7:00-8:00 p.m., Th, Hum 204
 8:00-10:00 p.m., Th, Engr 158
- 270 Data Processing (3)** **LaSalle**
 Potentialities of electronic digital computers for business data processing; principles and techniques of machine language programming, symbolic programming and compilers; applications to typical business

data processing problems. 2R, 3L. Fee \$7.50. (Identical with Mgt. 270, Acct. 270, and Off. Ad. 270)

Lec. 1 4:40, TTh, Econ 106

Lab. 3 7:00-8:00 p.m., T, Hum 204
8:00-10:00 p.m., T, Engr 158

Lab. 4 7:00-8:00 p.m., F, Hum 204
8:00-10:00 p.m., F, Engr 158

272 Computer Organization and Programming (3)

Machine instructions, their representation in machine language and symbolic form, use of index registers, indirect addressing, open and closed subroutines, interpretive routines. 2R, 3L. P, 172 or E. 171. Fee \$7.50.

Lec. 2 4:40, MW, Engr 301

Lab. 2 7:00-8:00 p.m., W, Hum 204
8:00-10:00 p.m., W, Engr 158

275 Information Retrieval and Correlation (3)

Perry

Analysis of library document selection methods. Automation techniques in document selection. Theoretical framework for designing and operating document selection systems. Practical exploration of diagrams to represent the subject contents of documents. P, 172.

7:00-8:30 p.m., MF, Ag Sci 242W

374 Non-numerical Applications of Digital Computers (3)

Perry

Deductive logic, algorithms, heuristic programming and theoretical definition of limits of computer application. Factor determining reliability of output results, benefits and costs. P, 274.

7:00-8:15 p.m., TTh, Engr 311

Urban Planning

390 Projects in Planning (2-7)

A series of problems relating to situations in urban planning. Conducted on a collaborative team basis using students with and without previous experience in drawing and presentation. May be repeated for credit. Maximum total credit permitted, 16 units. (Identical with Architecture 390). Enrollment in this course is limited to second year students in the MS in Urban Planning program, with occasional exceptions.

6:30-8:30 p.m., M, Arch 202

7:00-9:00 p.m., Th, Arch 202

COURSES BY TELEVISION KUAT — CHANNEL 6

Registration for television courses will be held at the same time and place as the registration for regular continuing education classes.

CHEMISTRY

- 5002a** **Fundamentals of Chemistry (4)** **Keller**
Instruction in lecture and laboratory providing preparation for further work in the Chemistry Department. 4R, 3L. Fee \$10. Deposit fee \$8. Recitation: one hour per week on the campus. Laboratory sessions are held three hours per week on the campus and an examination will be given once a month on the campus.
Sec. 1—MWF, 7:40-8:30 a.m., KUAT VR
Sec. 2—MWF, 10:40-11:30 a.m., KUAT VR
Viewing rooms: Mod Lang 201, 202, 203, 204, 205, 210, 212, 214 and Chem 111.

GEOLOGY

- 5001a** **Elementary Geology (4)** **McCullough**
Introduction to the principles of geology. 3R, 3L, including field trips. Fee \$4.
Lect. 1—MWF, 9:40-10:30 a.m., KUAT VR
Lect. 2—MWF, 11:40-12:30 a.m., KUAT VR
Lect. 3—MWF, 5:40-6:30 p.m., KUAT VR
Laboratory once a week on campus, and a test once a month (Friday) at 4:40 in the Main Auditorium. No lecture on exam day. Choose one of the above times. Viewing rooms for Sections 1 and 2 are in Mod Lang 201, 202, 203, 204, 205, 210, 212, 214 and Chem 111. Viewing rooms for Section 3 are in Mod Lang 202 and 210.
- 5001b** **Elementary Geology (4)**
Introduction to the principles of geology. 1a is prerequisite to 1b. 3R, 3L, including field trips. Fee \$4.
Lect. 1—MWF, 8:40-9:30 a.m., KUAT VR
Laboratory once a week on campus, and a test once a month in the Main Auditorium. No lecture on exam day.
Viewing rooms: Mod Lang 201, 202, 203, 204, 205, 210, 212, 214 and Chem 111.

HOME ECONOMICS

- *5216** **Management of Family Resources (3)** **Hall**
The resources available to families and the use of these resources to obtain family goals. P, Econ 2a. Fee \$48.
6:30-7:00 p.m., MWF, Mod Lang 210

Viewing rooms: Mod Lang 201, 202, 203, 204, 205, 210, 212, 214 and Chem 111.

Additional hours to be announced.

EVENING NON-CREDIT COURSES

Certain classes meet for the full fifteen weeks of the semester, but do not offer academic credit. These courses are listed below and consist mostly of foreign-language conversation which does not require formal examinations. Enrollment for these non-credit courses will be accomplished at regular registration or at the first class meeting in the classrooms shown below. Individuals enrolling in these courses will not be required to complete regular registration packets.

ROMANCE LANGUAGES

French

- 1X Elementary French Conversation I (0) Bunge**
Class meets M, 7:00-9:00 p.m., Mod Lang 202, beginning September 9 for 15 weeks. Enrollment fee \$30.
- 2X Elementary French Conversation II (0) Bunge**
A continuation of French 1X. Class meets W, 7:00-9:00 p.m., Mod Lang 204, beginning Sept. 11 for 15 weeks. Enrollment fee \$30.
- 3X Advanced French Conversation (0) Bunge**
A continuation of French 2X or one must have a good command of the French language. Class meets Thursday, 7:00-9:00 p.m., Mod Lang 201, beginning September 12 for 15 weeks. Enrollment fee \$30.

Spanish

- 1X Lect. 1—Spanish Conversation for Beginners I (0)**
A workshop course in Spanish covering conversation at the beginning level. Class meets M, 7:00-9:00 p.m., Mod Lang 205, beginning Sept. 9 for 15 weeks. Enrollment fee \$30.
Lect. 2—Class meets W, 7:00-9:00 p.m., Mod Lang 214, beginning Sept. 11 for 15 weeks. Enrollment fee \$30.
- 2X Spanish Conversation for Beginners II (0)**
A continuation of 1X. For those with previous practice in elementary conversation. Direct method. Class meets M, 7:00-9:00 p.m., Mod Lang 201, beginning Sept. 9 for 15 weeks. Enrollment fee \$30.
- 3X Intermediate Spanish Conversation I (0)**
A continuation of 1X and 2X. Class meets W, 7:00-9:00 p.m., Mod Lang 302, beginning Sept. 11 for 15 weeks. Enrollment fee \$30.
- 4X Intermediate Spanish Conversation II (0)**
A continuation of 3X. Class meets Th, 7:00-9:00 p.m., Mod Lang 210, beginning Sept. 5 for 15 weeks. Enrollment fee \$30.

ADULT EVENING SHORT COURSES

In addition to the credit courses listed in this catalogue, the Division of Continuing Education offers for the fall of 1968 a wide variety of short courses. These classes are designed for interested adults who wish the knowledge, but who are not seeking college credit. Registration for the short courses (no academic credit) may be accomplished by mail or in the offices of the Division of Continuing Education, M-F, 8:00 a.m. - 5:00 p.m., Sat. 8:00 a.m. to 12:00 noon, PRIOR to starting date of class or at the time of regular registration.

Art: A New Look At Art

Lawson

This course is an essay in looking and is designed for everyone who wishes to view art from a different and unusual angle. W, 7:00-9:00 p.m.; Tucson Art Center Studio, 325 W. Franklin Street; October 2 through November 20. Fee \$20.

Art: Basic Painting

TBA

Introduction to painting and its basic techniques using a critical appraisal of the student's painting with respect to form and composition as the major approach. W, 7:00-9:00 p.m., Art 326, October 2 through December 4. Fee \$25.

Education: Child Development for Church Teachers

Thornburg

Child development from birth through junior high; evaluation and enrichment techniques. Of specific interest is analyzing behavioral patterns with a church-school framework. Th, 7:00-9:00 p.m., Mod Lang 303, September 26-December 19. Fee \$25.

Government: Politics of the American Presidency

Thompson

Attention will be focused on the politics of the American Presidency in light of the 1968 Presidential Election, problems of general foreign policy, and the complexity of national security. W, 7:00-9:00 p.m., LA 307, September 18-November 6. Fee \$20.

Beginning Course in Handwriting Analysis

Talvy

Through this course, students can learn how to determine basic personality traits from the study of handwriting. T, 7:00-9:00 p.m., Engineering 214, September 17 through November 19. Fee \$25.

Interior Design: Beginning Interior Design and Decorating

Harvey

A study of the basic principles of color and interior design for the home. Sec. 1 meets M, 7:00-9:00 p.m., BPA 409, September 30-December 2. Sec. 2 meets Th, 7:00-9:00 p.m., BPA 409, October 3-December 12. Fee \$25; husband and wife, \$35.

Investments: Fundamentals of Investing

Baker

A basic course in securities to acquaint the investor with facts needed to make an investment decision. T, 7:00-9:00 p.m., BPA 409, October 1-December 3, Fee \$25; husband and wife, \$35.

Investments: Advanced Principles of Investing

Edminster

Enrollment limited to those who have taken Fundamentals of Investing or have prior market experience. Analysis of Securities, Industries, and Securities Markets. Th, 7:00-9:00 p.m., Econ 304, October 8-December 18. Fee \$25, husband and wife, \$35.

Landscape Architecture**Jones**

A course dealing with the fundamentals of landscape design, specifically including the history of landscape architecture, design qualities of plant materials and their use in the landscape, construction materials and techniques, principles and fundamentals of design. Several field trips and design problems will be included. T, 7:00-9:00 p.m., Agriculture Building 206B, September 26-December 10. Fee \$25.

Law: Human Anatomy for Lawyers**Joy**

A course designed especially for lawyers, to familiarize them with physiology, medical and anatomical terminology needed for the court room situation. Th, 7:00-9:00 p.m., Biological Sciences 313, September 26-December 19. Fee \$25.

Law: Law for the Layman**various lecturers**

An introduction to law, basic constitutional rights, torts, land use regulations, rights of creditors, labor law, wills and estates. W, 7:00-9:00 p.m., Anthro. 221, October 9-November 27. Fee \$20.

Ideas: Applied Creativity—Techniques for the Production of Ideas**Thornton**

A course designed to explore the basic nature of creativity and to develop the fundamental attributes and processes necessary to creative problem solving. W, 7:00-9:00 p.m., Econ 306, October 7-December 10. Fee \$25.

Mathematics: Multiple and Perfect Precision Programming in FORTRAN**Karst**

Discussion of proper techniques and writing of programs to extend precision accuracy in FORTRAN on the IBM 1130 computer, with emphasis on problems involving repeated multiplications and/or divisions. MW, 7:00-9:00 p.m., BPA 203, September 9-December 11. Fee \$50.

Music: The Guitar**Weil**

The playing of the guitar is approached in a sing-along way in which each new problem of chordal playing is introduced and expanded upon by its utilization with a song. No knowledge of music is necessary, and no reading of musical notes is employed except possibly in the advanced stages. A classical or acoustical guitar is necessary for individual use. Th, 6:00-8:00 p.m., Music 110, September 12-December 19. Fee \$30.

Music: The Guitar (Advanced)**Weil**

Open only to students who have completed the second semester guitar course recently completed. This is a continuation of the beginning course and will include chord study, mechanics of music, finger patterns and their use, and playing melodically by ear. Th, 8:00-10:00 p.m. September 12 through December 19. Fee \$30.

Para-Medical: Medical Terminology**Evans**

Course includes general prefixes and suffixes common to medical terminology. Diagnoses, operations, and related terms particular to each anatomical system; common medical abbreviations, pathology, laboratory and x-ray terminology will be discussed. T, 7:00-9:00 p.m., Geol. 304, September 24-December 10. Fee \$25.

Personal Development: Becoming Your Best**Massengale**

For the woman who wishes to improve personal appearance and social abilities. Will deal with basic information about clothing selection, grooming, social etiquette and posture. T, 7:00-9:00 p.m., H Ec 101, September 17-November 19. Fee \$20 plus \$1 for materials.

Hobby: The Art of Philately (Stamp Collecting)**Wallace**

A survey and introduction to the world's leading hobby—the course covers how to correctly begin, where to acquire stamps, the tools of philately, mounting and exhibiting a collection, among other aspects. M, 7:00-9:00 p.m., Anthro 219, October 7-December 9. Fee \$20.

Reading Improvement**Wright**

For the adult who desires to increase his reading ability and to sharpen his comprehension skills. S, 10:00-12:00 noon, Anthro 221, September 21-December 12. Fee \$30.

Speech: An Introduction to Public Speaking**La Ban**

An introduction to principles of speech; essentials of public speaking. T, 7:00-9:30 p.m., LA Annex 211, October 8-December 10. Fee \$20 or husband and wife, \$30.

Study: How to Study in College**Ingram**

Emphasis placed on proper techniques for doing effective work in college and university courses. S, 9:40-11:30 a.m., Old Psych 316, October 12-December 14. Fee \$20.

Special Programs: Distributive Education**Brickner**

Supervisory Development: For supervisory personnel of any business, who wish to improve their on-the-job performance, or for people who wish to become supervisors. Offered in two courses as follows: T, October 1, 8, 15, & 22; W, November 6, 13, 20 & 27. Tuition for each course (two sessions) is \$10. Classes will be held in Room 205, Econ. Building, 7:00-9:00 p.m.

Christmas Sales Training. This course is designed especially for those who are interested in becoming salespeople. Teaches techniques of selling, procedures in change-making, how to properly write saleschecks, and human relations. Class meets September 16, 17, 18, 19, 23, 24, 25, 26, 30 and October 1. Tuition will be \$6.00 for the twenty-five hour course. Classes will be held in Room V-307 of the Tucson High School Vocational Building from 7:00-9:00 p.m.

Government Contract Administration**Williamson**

Introductory course in government procurement policies; basic elements of contract law; special attention to Armed Services Procurement Regulations; study of types of contracts, invitations to bid, bid proposals, bonds, and methods of payment. Th, 7:00-9:30 p.m., Civ Engr 103, September 26-December 19. Fee \$50.

Government Contract Law**Williamson**

Procedure for changing terms of a government contract; procedures for stop-orders, correction of deficiencies, latent and patent defects, inspection methods, receiving; contract changes and terminations. P, Principles of Government Contract Administration or consent of lecturer. F, 7:00-9:30 p.m., Civ Engr 103, September 27-December 13. Fee \$50.

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Edgar E. Louttit, M.Ed. (1967)	Director of Adult Education
Benjamin H. Pochyla, B.S. (1966)	Director of Conferences and Institutes
William L. Raby, C.P.A., M.B.A. (1964)	Director, Tax Practitioners Institute
Lyman L. Darcy, M.A. (1964)	General Extension Specialist
Edward H. Wilkie, Jr., B.S. (1959)	Coordinator of Civil Defense Training
Duane C. Brickner, M.S., M.Ed. (1964)	Field Coordinator of Distributive Education
Walter A. Shaw (1964)	Instructor, Civil Defense Training
John Swenson, B.A. (1968)	Coordinator of Business Conferences
John Little, LL.B. (1967)	Coordinator of State Technical Services
Edward C. McCullough, B.S. (1965)	Director, University of Arizona Peace Corps Programs

FOR ADDITIONAL INFORMATION
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BUILDING DIRECTORY

Building Abbreviation	Building Name		
Admin	Administration	Hum	Humanities
Aero	Aeronautical	LA	Liberal Arts
Ag Sci	Agricultural Sciences	Mines	Mines and Metallurgy
Agric	Agriculture	Mod Lang	Modern Languages
Anthro	Anthropology	PE Women	Women's Physical Education
Arch	Architecture	Ph M	Pharmacy-Microbiology
Art	Art and Gallery	PMM	Physics, Math, and Metereology
Bio Sci	Biological Sciences	Psych	Psychology
BPA	Business and Public Administration	Stdo A	Fine Arts Annex (Studio A)
Chem	Chemistry	Stdo B	Art Studio Annex (Studio B)
Civil En	Civil Engineering	Stdo C	Studio C
Econ	Economics	Stdo D	Studio D
Educ	Education	VR	Viewing Room (TV Courses)
Engr	Engineering		
Geol	Geology		
H Ec	Home Economics		

KEY TO SYMBOLS

- () Indicates the unit value of the course for each semester by the number in parentheses following the course title. Each unit usually represents one hour of lectures or recitation or 3 hours of laboratory work per week for a semester.
- R, L, S indicates "recitation," "laboratory," or "studio." For those courses which include laboratory work, the number of hours of recitation and of laboratory work is listed on the basis of hours per week (i.e. 2R, 3L). For courses consisting of lecture and recitation periods only, the number of class hours per week is similar to laboratory work.
- P, Indicates "prerequisite."
- CR Indicates "concurrent registration."
- TBA Indicates "to be announced."

