



University of Arizona Record

REVISIONS IN BIENNIAL CATALOGUE FOR THE ACADEMIC YEARS

1955-1956, 1956-1957



STATEMENT OF MAILING PRIVILEGE

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University Calendar

Homecoming—
no classroom exercises (page 4) October 27, Sat.

University Week Events—
classes are held (page 5) May 10, 11; Fri., Sat.

General Regulations

Add on page 66 immediately after Admission of Veterans the following:

Admission of Foreign Students:

The University of Arizona requires that all foreign students, as a condition of admission to the University in January, 1957, and thereafter, purchase accident and sickness insurance through the Insurance Division of the Institute of International Education. The cost of a policy effective for six months following entry into the United States is \$15.50 and the cost of a one year policy is \$27.20. The insurance application forms are issued by the office of the University Registrar and Director of Admissions.

Students Disqualified (page 81).

Change paragraph three to read as follows: Students disqualified because of failure in scholarship may be granted a card of honorable dismissal in which a statement regarding deficiencies in scholarship shall be expressly included. Such students are not permitted to enroll in extension classes but with the permission of the dean of the college concerned may enroll for correspondence study courses. They may not, however, transfer to the University any credit completed elsewhere during the period of disqualification.

Add to page 86 as a third paragraph the following:

Foreign students as a condition of admission in January, 1957 and thereafter are required to purchase through the Insurance Division of the Institute of International Education accident and sickness insurance. The cost of a six month policy is \$15.50 and that of a one year policy \$27.20.

Tuition for Non Resident Students (page 86).

Change paragraph one to read as follows: Every non-resident student carrying twelve or more units, except those registered as auditors or graduate fellows, shall be required to pay a non-resident fee of \$200 each semester. Those carrying less than twelve units will pay a non-resident fee of \$17 per unit.

Registration Fee (page 87).

Change the statement to read as follows: A registration fee of \$25 each semester is paid on the day of registration by each student. Graduate students registered for thesis or dissertation only pay a registration fee of \$5. A fee of \$2 per unit with a minimum of \$6 is payable each semester by graduate students carrying work in absentia other than thesis or dissertation. The non-resident tuition fee is payable in each case if applicable.

Dormitory Fees (page 91).

Change rates as follow:

Dormitory

	SEMESTER RATE Per Student (Double Room)
Coconino, Graham, Greenlee.....	\$116.00
Gila, Yuma.....	100.00
Maricopa, Yavapai.....	92.00
Arizona, Cochise, E. Stadium, Hopi, Navajo, Papago, Pima, Pinal.....	88.00

Polo Village

	MONTHLY RATE
Unfurnished Apartment.....	\$ 28.00
Furnished Apartment (1 bedroom).....	30.00
Furnished Apartment (2 bedrooms).....	35.00

The Graduate College (page 210).

Residence and Credit Requirements (p. 221). Change research on line 6 to dissertation.

Physical Sciences: Insert asterisk for Electrical Engineering.

Doctor of Education (page 223)

Residence and Credit Requirements

Substitute the following: The equivalent of three academic years of essentially full-time graduate study, including work toward a master's degree, is required. This must include at least one regular semester, beyond the master's degree, in residence. During this semester in residence the student must register for at least nine semester hours of credit. The equivalent of one academic year of full-time work must be completed at this university. Graduate credit earned at approved institutions may be counted toward requirements for this degree, if accepted by the major department and the Committee on Graduate Study. The dissertation is

understood to require at least one academic year of full-time work. Students must elect Ed. 420 (Dissertation) for a total of eighteen units while working on the dissertation. No more than nine of these units may be elected in any one term. Arrangements for writing the dissertation **in absentia** must be made through petition to the Committee on Graduate Study with the favorable recommendation of the department supervising the work. Requirements for the Ed. D. degree must be completed within a period of six calendar years after the qualifying examination.

COURSES OF INSTRUCTION

General

In all departments offering 199 change to:

299 Special Problems (1-5) I, II.

Exceptions: the following departments list for 299 the units available as follows: Bacteriology (2-4); Philosophy (2-3); Psychology (2-3); Romance Languages, French (1-4), Spanish (1-4); Zoology (2-4); Journalism (do not drop 199 or add 299).

Agricultural Chemistry (page 243).

Add

420. Dissertation. (1-9) I, II.

Agricultural Engineering (page 245).

Change 105 to 205.

Agronomy and Range Management (page 247).

205. Change 2R, 3L to 3R, 2L.

Add

420. Dissertation (1-9) I, II.

Anthropology (page 252).

Add:

200. a, b. Introduction to Far Eastern Civilizations. (3-3) yr.

Hucker
Cultural and institutional evolution of the great civilizations, principally China and Japan, and their transformations in modern times.

204 a, b. Studies in Chinese Culture. (3-3) Yr. Hucker
A survey of Chinese thought, literature, and Confucian state institutions, with representative readings and translation.

206 a, b. The Contemporary Far East. (2-2) Yr. Hucker
A survey of present-day conditions and problems in China and Japan, with some reference to other Far Eastern areas.

208. Introduction to Contemporary Islam. (3) I. Hackenberg
The origin, growth, and present traditions of Islam as a way of life in the Near East. The Islamaic ideology and socio-economic structure of Muslim countries will be studied.

209. Contemporary Islam. (3) II. Hackenberg
Background of Twentieth Century political, social, and economic developments in the Near East together with an analysis of the structure of urban and rural social life. P, 12 units in social science.

210. Introduction to Southeast Asia. (3) I. Hackenberg
Discussion of the sequence of cultures of the region, formation of native kingdoms, and the colonial period. Analysis of revolutionary movements and contemporary socio-economic problems of the new nations of the region.
211. Contemporary Southeast Asia. (3) II. Hackenberg
The background of Twentieth Century socio-economic and political life in Southeast Asia. Cultural features of urban and rural life today will be discussed and compared throughout the area. P. 12 units in social science.
242. Add \$3. laboratory fee.
420. Dissertation. (1-9) I, II. Staff
- Biochemistry (page 261).
Add.
420. Dissertation. (1-9) I, II. Staff
- Botany (page 264).
Add.
420. Dissertation. (1-9) I, II. Staff
- Chemistry (page 272).
Add
420. Dissertation. (1-9) I, II. Staff
- Education (page 289).
323. Change from I to II.
344. Change to alternate year course, 1956-57.
- Add:
1971* The Teaching of Mathematics in the
Secondary Schools. (3) II. 1956-57. Steinbrenner
The course includes a study of current problems in the teaching of mathematics, teaching techniques, enrichment material, and nature of the curriculum. P, 134, Math 25.
420. Dissertation. (1-9) I, II. Staff
- School Library Science (page 292)
Add.
289. Library Techniques for Research. (1) I, II. Library Staff
Use of library catalogues, trade bibliographies, indexes, abstract journals and special bibliographies in locating material for advanced research problems. Practice in compiling bibliographies. For students intending to do advanced work.
- Electrical Engineering (page 295).
Change 332 as follows:
332. Magnetic Amplifiers. (3) I, II. Dunn
A study of the theory of magnetic amplifiers with emphasis placed on the analysis of basic types. This is followed by a study of the various practical circuits and their application in servo systems as computer elements, control devices, etc.
- Delete 325
- Add:
244. Environmental Engineering. (2) I. Tulus
Effects of natural and physical phenomena on the electrical and mechanical properties of electronic devices; instrumentation.
245. Automatic Test Methods. (2) II. Walther
Comparison between automatic and normally operated philosophy; computer techniques, programming, quality decisions, digital data systems, feed back techniques and controls; particular emphasis on missile test applications.

318. **Transmission of Electric Power. (3) II. Matsch**
Structure of power and distribution systems. Characteristics and steady state performance of power transmission lines. Regulation of voltage and frequency in the power system.

333. **Systems Engineering. (3) II. Staff**
Definition and development of systems, block diagram representations; equations of physical systems; transfer functions and analogs; considerations of cost, maintenance, reliability, accuracy, and stability, system measurements.

334. **Transistor Electronics. (3) I, II. Martin**
Theory of operation of semiconductor devices; representation by equivalent circuits to include frequency effects; formulation of design criteria and techniques; application to basic transistor circuitry.

352. **Antenna Theory. (3) I. 1956-57. Hessemer, Stewart**
Study of the physical principles underlying antenna behavior, design, and experimentation. The basic principles will be applied to antennas of all frequencies. P. 350.

420. **Dissertation. (1-9) I, II. Staff**

Entomology (page 301).

Add

420. **Dissertation. (1-9) I, II. Staff**

Geochronology-Dendrochronology (page 302).

Add

305. **Introduction to Paleoclimatology (3) II. 1956-57. McDonald**
Survey of climatic variations during geologic time and historic time; astronomical, geological, and meteorological factors contributing to climatic instability; interrelations between paleoclimatology and other historical sciences.

Geology (page 303).

10. Following Fee \$5, add Deposit \$5.

121. Change I to I, II.

202. Change I to I, II.

208. Change I to II.

Add to 213s (page 304) on line two, following "daily field work," the following: And overnight trips to Canyon DeChelly, Grand Canyon and Buell Park.

Add to 213 and 212s on line three after Fee an asterisk, and at the bottom of page 304 add a footnote as follows:

*For students not regularly enrolled in the University of Arizona there is an additional summer session fee of \$7.50 per unit.

227. Change II to I.

301. Delete.

302. Delete.

303. Add Fee \$4. Change 3R to 2R, add Field trip.

308. Change II to I.

310. Change I to II.

311. Delete.

Add.

228. Ore Finding. (2) I. Lacy
Techniques and guides to locate and delimitation of ore bodies in operating mines and in exploration programs. Two field trips. P. 203, 210. Fee \$4.
229. Atomic Structures of Minerals. (2) I. Anthony
Physical and chemical properties of crystalline solids examined with regard to their atomic structures; special emphasis in minerals. P. 10, Chem. 22.
238. Prospect Valuation and Development. (2) II. Lacy
Application of the principles of geology to the examination, testing, appraisal and development of mineral prospects. 2L. P, 210.
325. Crystal Measurement and Introduction to X-Ray Crystallography. (3) II. Anthony
Theory and practice of crystal measurement, theory of point group and space group symmetries; identification of crystalline solids by powder X-ray methods. 2R, 3L. P, 10, Chem. 22. Fee \$5.
333. Precious and Rare Metal Deposits. (3) II. Lacy
A study of outstanding uranium, gold, silver, alloy metals and rare earth deposits. 2R, 3L. Field trip. P, 203. Fee \$5.
420. Dissertation. (1-9) I, II. Staff

Horticulture (page 318).

Add:

420. Dissertation. (1-9) I, II. Staff

Mathematics (page 322).

Delete from 202a, b 1955-1956.

Mechanical Engineering (page 323).

102. Change units to 3.

Add.

322. Fluid Machinery (3) II. Staff
Application of the principles of fluid mechanics. P, 321.

Mining and Metallurgical Engineering (page 329).

Metallurgical

310. Change units to read 1-3, and add: Classroom or laboratory work, or both, in the theory and techniques of spectrography as applied to metallurgy.

Music (page 340).

399. Change units to 1-4

Pharmacy (page 341).

Insert the following on page 341 before the description of the first course:

NOTE: A laboratory breakage deposit of \$2.50 is required for all courses for which a course fee is noted below.

Physical Education for Women (page 352)

35, 36, 37, 38, Change golf Fee to \$15.

77. Change II to I.

89. Change I to II.

116 a, b, c, d. Delete open to men and women.

Physics (page 355).

5. Delete Fee \$2. and change prerequisite to Math 11 or 20.

205. R. Delete Fee \$4.

205 L. Add Fee \$4.

• Plant Pathology (page 359).

Add.

420. Dissertation. (1-9) I, II.

Staff

Poultry Science (page 360).

102. Change 1955-56 to 1956-57.

Speech (page 371).

371. Change units from 3 to 2.