Supplement to the
1991-93
General Catalog

University of Arizona
Curriculum Office
Administration 412
Tucson, AZ 85721
All college and departments establish certain academic requirements which must be met before a degree is granted. These requirements concern such things as curricula and courses, majors and minors, and campus residence. Advisors, directors, department heads, and deans are available to help students understand and arrange to meet these requirements, but the students are responsible for fulfilling them. At the end of the student's course of study, if requirements for graduation have not been satisfied, the degree will not be granted. For this reason it is important for each student to be acquainted and remain currently informed about all regulations, and to be responsible for completing requirements. Courses, programs, and requirements described in the catalog and supplement may be suspended, deleted, restricted, supplemented, or changed in any other manner at any time at the sole discretion of the University of Arizona and the Arizona Board of Regents. The catalog and supplement do not establish a contractual relationship, but summarize the requirements to be met by students graduating under the authority of this catalog and supplement.

The determination of acceptability of credit for course work completed at another institution of higher learning, whether the other institution is accredited or not, is made solely at the discretion of this institution as guided by its academic policy bodies. Students are advised to check with the Office of Admissions to determine the acceptability of credit from other institutions and its applicability toward a program of study at the University of Arizona.

The University of Arizona strives to create a campus environment which understands, fosters, and embraces the value of diversity among students, faculty and staff. Diversity encompasses differences in age, color, ethnicity, gender, national origin, disability or handicap, race, religion, sexual orientation, socioeconomic background, Vietnam Era veteran status, or unique individual style. This institution is committed to the belief that all persons are valued for their individual characteristics, talents and contributions.

Announcements in this supplement concerning regulations, fees, curricula, or other matters are subject to change without notice.

Inquiries regarding admission to the University of Arizona should be addressed to:

Director of Admissions
The University of Arizona
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I. Administrative changes, new programs, new academic units, name changes, and program deletions and transfers.

II. New courses, course deletions, course and catalog changes.

This supplement is the record of all curricular changes approved since the publication of the 1991-93 General Catalog. All information contained herein has previously appeared in the Curriculum Bulletin, Volume 14, Nos. 1-8. Changes for the same course with the same effective date have been combined into one entry. In some cases, where two or more changes have occurred in a given course, only the final version will appear in this supplement. If the sequence of one or more related changes is critical, as in the case of a deletion and subsequent course renumbering, each individual change will be listed. Please report any errors noted in this publication to the University Curriculum Office as soon as possible (621-3913), as the supplement will be a primary source for revising the next catalog. Course changes processed subsequent to the last curriculum bulletin (Volume 14, No. 8) are not included in this supplement, but will be included in the next curriculum bulletin.

+ The home department of a course with crosslisting(s).
- A crosslisted department (not the home department).

Statement of Mailing Privilege

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I. Administrative Changes, New Programs, New Academic Units, Name Changes, and Program Deletions and Transfers

Final Action by the Board of Regents, February 22, 1991

Approved the change of name for the major in business administration for the Doctor of Philosophy degree to management. Eff. I 91-92.

Approved the merger of the Division of Restorative Medicine and the Long-Term Gerontology Center, both within the College of Medicine, into the Center on Aging. Eff. February 22, 1991.

Approved the major in epidemiology for the Master of Science and Doctor of Philosophy degrees, to be administered by the Graduate Committee on Epidemiology. Eff. I 91-92.

Approved the major in media arts for the Master of Arts degree. Eff. I 91-92.

Final Action by the Board of Regents, April 1, 1991

Approved the change of name of the Division of Respiratory Sciences within the College of Medicine to Respiratory Sciences Center. Eff. April 1, 1991.

Final Action by the Board of Regents, May 3, 1991

Approved the deletion of the food science major for the Bachelor of Science in Agriculture degree Eff. May 1993.

Final Action by the Board of Regents, July 19, 1991

Approved the reorganization of the College of Education from divisions to departments, with a corresponding change in the designations of unit administrators from division coordinators to department heads; and the division of Educational Foundations and Administration into two departments: the Department of Educational Psychology and the Department of Educational Administration and Higher Education. Eff. I 91-92.

Approved the name change of the major in general home economics for the Bachelor of Science in Family and Consumer Resources to family and consumer resources. Eff. I 91-92.

Approved the transfer of the Water Resources Research Center from the College of Engineering and Mines to the School of Renewable Natural Resources in the College of Agriculture. Eff. July 19, 1991.

Approved request for planning authorization for the major in women’s studies (M.A.)

Final Action of the Board of Regents, September 13, 1991

Approved the discontinuation of the Plasma Laboratory.

Postponed the sunset review for the Drachman Institute until 1993-94.

Approved the continuation of the Arizona Water Information Center. (The next sunset review date is 1995-96.)

Approved the continuation of the Optical Data Storage Center. (The next sunset review date is 1995-96.)

Final Action of the Board of Regents, October 18, 1991

Approved the deletion of the major in energy engineering for the Bachelor of Science in Energy Engineering degree.

Final action of the Board of Regents, January 17, 1992

Approved requests for Planning Authorization for the following programs:
(1) Master of Public Health
(2) Major in environmental science for a Bachelor of Environmental Science degree

Approved the name change of the major in geological engineering for the M.S. and Ph.D. degrees to geological and geophysical engineering.

Final action of the Board of Regents, March 12-13, 1992

Approved the name change of the major in Rehabilitation for the B.S. in Education degree to a major in Special Education and Rehabilitation.
Approved the proposal to make the major in Biochemistry and Microbiology available for the B.S. in Agriculture degree.
II. New Courses, Course Deletions, Course and Catalog Changes

Accounting (ACCT)

Revisions to College Section in 1991-93 General Catalog, page 56 and 57, under "Major Fields Available:"

Under "Accounting" revise as follows:

"1. All accounting majors must complete: ACCT 400a-400b."

"2. An additional 9 units (three courses) must be selected from the following: ACCT 401, 420, 422, 431*, 472."

"*P, 305, 400b"

Under "Finance" revise as follows:

(second sentence) "Finance majors must take ACCT 420 and MIS 375 prior to beginning major courses,..."

"1. All students in this major will complete FIN 412, 421 and 431."

"2. Six additional units (two courses) will also be chosen from the following: ACCT 310, 400a, 400b, ECON 332, 422, 442, FIN 313, 361, 362, 414, MAP 426."

Under "Real Estate" revise as follows:

(second sentence) "Real estate majors must take ACCT 420 and FIN 261 before beginning major courses,..."

Revision to College Section of 1991-93 General Catalog, page 56, under "Major Fields Available."

Second paragraph in column two should be revised as follows:

"Students must earn at least 9 units of university credit in the major in the BPA College." Eff. I 92-93.

In column two under "Accounting" #2 should be revised as follows:

"An additional 9 units (three courses) must be selected from the following: ACCT 401, 410, 420, 422, 431*, 472." Eff. I 92-93.

300a-300b. Change course number from "300a-300b" to "400a-400b." Eff. I 92-93. [For new listing, see "400a-400b."]

320. Change course number from "320" to "420." Eff. I 92-93. [For new listing, see "420."]

400a-400b. Course number changed from "300a-300b" to "400a-400b." New listing should read: "Intermediate Accounting (3-3) Theory and methodology involved in contemporary accounting for assets, liabilities, stockholders' equity, net income and funds; analysis and interpretation of financial statements. Credit allowed for this course or 500a-500b, but not for both. P, 210. Both 400a and 400b are offered each semester." Eff. I 92-93.

420. Course number changed from "320" to "420." New listing should read: "Introduction to Federal Taxation (3) I Introduction to the federal taxation of income, with emphasis on how individuals are taxed; additional topics. Credit allowed for this course or 520, but not for both. P, 210." Eff. 192-93.


429. NEW COURSE: "International Corporate Taxation (3) I Concepts of U.S. taxation of international transactions, including rules for sourcing income and allocating deductions and such fundamental multistate concepts as nexus, unitary taxes and apportionment. Credit allowed for this course or 529, but not for both. P, 422 or permission of instructor." Eff. I 93-94.


471. Change prerequisites to read "P, 310, 400b, FIN 311, MAP 305, MKTG 361." Eff. I 92-93.

500a-500b. Course number changed from "553a-553b" to "500a-500b." New listing should read: "Financial Accounting (3-3) I II Theory and methodology of net income determination; accounting for assets, liabilities and owners' equity. Credit allowed for this course or 400a-400b, but not for both. P, 210." Eff. 192-93.


520. Course number changed from "556" to "520." New listing should read: "Tax Factors in Business Decisions (3) II Introduction to the federal taxation of income for all types of taxpayers and to the taxation of transfers of wealth, with emphasis on the effect of taxes on business decisions. Open only to students admitted to the BPA graduate degree programs. Not open to accounting majors. Credit allowed for this course or 420, but not both. P, 210." Eff. 192-93.


525. Add: "Issues in Accounting and Taxation (3) I For course topics, see 425. Graduate-level requirements include a special project. P, 520. May be convened with 425." Eff. I 93-94.

529. NEW COURSE: "International Corporate Taxation (3) I Concepts of U.S. taxation of international transactions, including rules for sourcing income and allocating deductions and such fundamental multistate concepts as nexus, unitary taxes and apportionment. P, 422 or permission of instructor. Eff. I 92-93.

531. Change prerequisites to read "P, 400b or 500b." Eff. I 92-93.

553a-553b. Change course number from "553a-553b" to "500a-500b." Eff. I 92-93. [For new listing, see "500a-500b."]

556. Change course number from "556" to "520." Eff. I 92-93. [For new listing, see "520."]

682. Change prerequisites to read "P, 400b or 500b." Eff. I 92-93.

797a. Change units from "(1)" to "(1-3)." Eff. I 92-93.

Aerospace & Mechanical Engineering (AME)
Revision to the headnotes section of the 1991-93 Graduate Catalog, page 60-61, under "Master of Science:"

In the first paragraph:
Revision: "All students are required to complete 32 units of graduate work, including 24 at the 500 level and 2 units of 696. A student may elect to present a Master’s thesis (up to six units) and a final oral examination is required. All students are required to complete 500a-500b." Eff. II 91-92.

Revision to the headnotes section of the 1991-93 Graduate Catalog, page 61, under "Doctor of Philosophy:"

In the first paragraph, the last sentence:
Delete: All students are expected to attend the weekly Aerospace and Mechanical Engineering Seminars." Eff. II 91-92.
Add: "Students will be required to enroll for 3 units of 696 and give a presentation in their last year of residence." Eff. II 91-92

401. Change the number of units to variable (1-3)." Eff. I 91-92.


452. Course expansion to from "452" to "452/552." Add "May be convened with 552." Eff. I 91-92. [Title: Computer Aided Analysis of Mechanical Systems]


517.- Delete listing. [Title: Clinical Engineering] Eff. I 91-93. [Note: The change appears in the 1991-93 General Catalog, however, it was not officially listed in a Curriculum Bulletin.]

524. Delete semester offering "II." Eff. I 92-93.


536a. Change prerequisite to read "CR, 500a." Eff. II 91-92


539. Change semester offering to "II." Change alternate year to "1993-94." Eff. II 93-94.
552. Change course number from "552" to "553" (title: Advanced Computer-Aided Analysis of Mechanical Systems). Eff. I 91-92. [For additional changes, see 553.]
(2) Course expansion from "452" to "452/552." Add: "Computer Aided Analysis of Mechanical Systems (3) I For a description of course topics, see 452. Graduate-level requirements include an additional project and extra questions on exams. May be convened with 452." Eff. I 91-92.

African American Studies (AAS)


Agriculture (AGRI)


Agricultural & Biosystems Engineering (ABE/ABT)

Agricultural & Biosystems Engineering (ABE)

121. DELETE: "Agri-Biosystems Engineering Practice (1)." Eff. I 92-93.
455.+ Change units from "(3)" to "(4)." Add "3R, 3L." Change from "2ES, 1ED" to "2ES, 2ED." Eff. I 92-93.
457. DELETE: "Irrigation Engineering Laboratory (3)." Eff. I 92-93.
548. DELETE: "Experimental Data Acquisition Laboratory (3)." Eff. I 92-93.
552. DELETE: "Irrigation Water Supply (3)." Eff. I 92-93.
555. + Change units from ")3" to ")4." Change prerequisites to "P, CE 321 or AME 331a." Eff. I 92-93.

557. DELETE: "Irrigation Engineering Laboratory (3)." Eff. I 92-93.


Agricultural & Biosystems Technology (ABT)


312. DELETE: "Agri-Biosystems Machinery (3)." Eff. I 92-93.


408. Course expansion from "408" to "408/508." Add "May be convened with 508." Eff. I 92-93.

408. Change semester offering from "I" to "II." Eff. II 92-93.

465. + DELETE: "Food Engineering (3)." Eff. I 92-93.


508. Add: "Environmental Simulation (3) I For a description of course topics, see 408. Graduate-level requirements include a special project on a current environmental topic. P, MATH 123 or 124a. May be convened with 408. Rasmussen." Eff. I 92-93.

508. Change semester offering from "I" to "II." Eff. II 92-93.


Agricultural Economics (A EC)

Revision to the headnotes section of the 1991-93 General Catalog, page 98, for Agricultural Economics under "The major" replace existing paragraph with the following paragraphs:

"The major: Undergraduate majors must complete the general education requirements as described in the College of Agriculture section of the catalog. Courses in four of the five required study areas must be selected from a departmentally approved list. Included in this list are MATH 119 AND 123, ECON 201a, 201b, 330 and AEC 242. Additional requirements include ACCT 200, either ECON 300 or 361, and ECON 332 and a minimum of 22 units in upper-division agricultural economics courses. Majors must choose additional coursework from options in either Agricultural Economics, Agribusiness Management, or Resource and Environmental Economics.
Agricultural Economics Option: This option is designed for the student interested in the application of economics to societal problems. AEC 339, 403, 404 and 464 are required. Forty-one units of elective credit are open to the student.

Agribusiness Management Option: Designed for the student interested in the management of agricultural production, marketing/sales and service businesses. In addition to the above general requirements, ACCT 210, 310 and MAP 330 are required. Students taking this option must also complete AEC 213, 215, 339, 403, 404, 450 and 464. Majors in this option are encouraged to enroll in additional relevant courses in the College of Business and Public Administration.

Resource and Environmental Economics Option: This option meets the needs of the student interested in the economic analysis of environmental and natural resource issues facing society. In addition to the general requirements, AEC 217, 339, 350, 403, 404, 464, 475 and 476 are required. Students are encouraged to use 44 elective units in courses relating to biology, political science and natural resource management.

Revision to the headnotes section of the 1991-93 General Catalog, page 98, for Agricultural Economics under "The minor" replace existing paragraph with the following:

"The minor: A minimum of 20 units of course work is required in agricultural economics. At least 19 units must be selected from ACCT 200, AEC 213, 215, 217 and ECON 300, 330 or 361. A minimum of 12 upper-division units must be selected from a list of concentration courses that can be obtained from a minor advisor. Students are expected to have prerequisites and/or supporting courses that may be required for the courses in the minor."


217. Change prerequisites to read "P, ECON 200 or 201a." Eff. I 92-93.


313. (1) Delete semester offering "II." Eff. I 92-93.

(2) Change prerequisite to read "P, ECON 201a." Eff. I 92-93.

Course number changed from "475" to "375." New listing reads: "Economics of Land and Water in the American West (3) II Economic analysis of natural resource issues, policies and management alternatives. Case studies will focus on water supplies, public and tribal lands, river basins and wildlife, resources in the western U.S. P, 217 or ECON 201a. (Identical with ECON 375 and RNR 375). Colby." Eff. II 92-93.

Change prerequisites to read "P, 339, ECON 300 or 361." Eff. I 92-93.

Change prerequisites to read "P, MATH 123, ECON 300 OR 361." Eff. I 92-93.

Delete listing. Eff. I 92-93 [Note: Home dept. is Near Eastern Studies]

Change prerequisites to read "P, 215, ECON 300 or 361 and 3 units of accounting." Eff. I 92-93.

Delete listing. Eff. I 92-93 [Note: Home dept. is Near Eastern Studies]

Change course number from "475" to "375." [For new listing, see "375"]). Eff. II 92-93.

Change prerequisites to read "P, MATH 123, ECON 300 or 361." Eff. I 92-93.

Add prerequisites "P, MATH 123, ECON 300 or 361." Eff. I 92-93.


Delete listing. Eff. I 92-93 [Note: Home dept. is Near Eastern Studies]

Delete listing. Eff. I 92-93 [Note: Home dept. is Anthropology]

Change prerequisites to read "P, ECON 300 or 361 and 3 units of accounting." Eff. I 92-93.

Delete listing. Eff. I 92-93 [Note: Home dept. is Near Eastern Studies]


Agricultural Education (AED)


497i. Correction to General Catalog, 1989-91: In CB1214, course number was changed to "597i" and title was changed to "Video Communications and Methods (1-2)". Therefore, the 497i listing should have been eliminated. Eff. 189-91.


American Indian Studies (AINS)

100. NEW COURSE: "Introduction to American Indian Studies (3) I Examines diversity of American Indian tribes, successive colonization waves, conflict between Native Americans and colonizing nations." Eff. 192-93.

307a-307b.- Correction to General Catalog, 1989-91: Title should read "Elementary O'Odam (Papago) Language". Eff. 189-91.

467.- Delete "May be convened with 567." Eff. 191-92.

Anatomy (ANAT)

467L.+ DELETE: "Endocrinology Laboratory (1)". Eff. 191-92.

415. Change units from "(2)" to "(3)." Eff. 192-93.

515. Correction to CB1317: Title should read "Reproductive Biology" only. This course is no longer convened with 415, which now has a different title and different number of units. Eff. 191-92.

515. (1) Add semester offering "I." Eff. 192-93.


583.- Change semester offering from "I" to "II." Eff. II 92-93.

596c.+ NEW COURSE: "Concepts in Cellular Differentiation (2) I Differentiation at the cellular level with an emphasis on mammalian tissue culture. Presentation and critical discussion of relevant primary literature. P, ANAT 577 or consult with department before enrolling. (Identical with MCB 596c)." Eff. I 92-93.

Delete prerequisites. Add "Permission required to enroll; consult instructor before registering." Eff. I 92-93.

Delete prerequisites. Add "Permission required to enroll; consult instructor before registering." Eff. I 92-93.


Correction to CB1316: Course number changed to "805a-805b." Correct crosslist to read "(Identical with NEUR 805a-805b, PHCL 805a-805b, and PSIO 805a-805b)

Animal Sciences (ANS)

134.
Change semester offering from "II" to "I." Eff. I 92-93.

344.
Change course number to "344a-344b." Change units to "(3-3)." Eff. II 91-92.

344a-344b.
Course number changed from "344" to "344a-344b." Units changed to "(3-3)." Eff. II 91-92.

612. -

665. +
Change title to "Analysis and Purification of Proteins." Change description to read "Principles and procedures for analyzing, purifying, and characterizing proteins and amino acids from cells or from cDNA expression systems." Delete instructor's name "Goll." Eff. II 91-92. [Note: Retain prerequisites and crosslistings with Biochemistry and Nutrition & Food Science.] Eff. II 91-92.

Anthropology (ANTH)

195a.
NEW COURSE: Colloquium: "Anthropology (1) II." Eff. II 92-93.

250H.
NEW COURSE: "Ethnographic Foundations (3) I An honors course that focuses upon the work of a single anthropologist whose writings substantially shaped the history of the field." Eff. I 93-94.

316.
NEW COURSE: "Political Economy of Language in the Southwest (3) I Interethnic and interclass contests over language and meanings in development of Southwest as a "region," in relation to access to material resources and civil rights. P, junior standing." Eff. I 92-93.

401. +
Correction to CB1317: Entry should have read: "Change crosslisting to read: (Identical with HIST 401 and NES 401)." Eff. I 91-92.

407. +
Change course number to "412" and expand to "412/512". Eff. II 91-92. [For new listing, see listings for 412 and 512.]
412. + Course number changed from "407" and expanded to "412/512". New listing for "412" reads: "Peasant Communities (3) II Comparative analysis of traditional and contemporary peasant communities. Ongoing cross-cultural research project. (Identical with SOC 412) May be convened with 512. Writing-Emphasis Course**. Eff. II 91-92.

418a-418b. Title change to "Scientific Illustration." Eff. II 91-92.


461. (1) Change course number of "Archaic Greek Sanctuaries" to "481". Eff. II 91-92.


468. Change units from "(3)" to "(4)". Eff. I 92-93.

501. + Correction to CB 1317: Entry should have read: "Change crosslisting to read: (Identical with HIST 501 and NES 501)." Eff. I 91-92.

512. + Course number change and expansion from "407" to "412/512". Listing for 512 reads: "Peasant Communities (3) II For a description of course topics, see 412. Graduate-level requirements include an additional research paper. (Identical with SOC 512) May be convened with 412." Eff. II 91-92.

518a-518b. Title change to "Scientific Illustration." Eff. II 91-92.


568. Change units from "(3)" to "(4)". Eff. I 92-93.

574. Delete listing.

575. Delete listing.

Architecture (ARCH)


432. NEW COURSE: "Video and Media in Design Communication (3) [Rpt./1] II Video and media in architectural design communication with emphasis on photographic reproduction, graphic design, desktop publishing, slide presentations, and video production. P, 302. May be convened with 532." Eff. II 91-92.

434. Change semester offering to "II." Add "(Identical with ARH 434)." Eff. II 92-93.


532. Add: "Video and Media in Design Communication (3) [Rpt./1] II For a description of course topics, see 432. Graduate-level requirements include an in-depth research paper or project." Eff. II 91-92.

534. Change semester offering to "II." Add "(Identical with ARH 534)." Eff. II 92-93.

562. Add: "Design Communication (3) [Rpt./1] II For a description of course topics, see 462. Graduate-level requirements include an in-depth research paper or project. May be convened with 462." Eff. II 91-92.

564. Course number changed from "596c". Add description: "For a description of course topics, see 464. Graduate-level requirements include an in-depth research paper. (Identical with ARH 564 and WS 564) May be convened with 464." Eff. II 91-92.


596c. Change course number to "564". [For other changes, see "564".] Eff. II 91-92.
Combining Media Emphasis: 24 units of upper-division courses including 15 units of primary medium and 9 units of secondary medium. Combinations from the following media: painting/drawing, printmaking, new genre, graphics/illustration, sculpture/ceramics/fibers/metal. This emphasis curriculum must be approved by the primary area coordinator in writing. Eff. I 1991-92.

Revision to the headnotes section of the 1991-93 General Catalog, page 113, under "The major in studio art:

In the second column, in the first paragraph
Delete: "This course can be part of the major, general education, or elective course work selected with the approval of the major advisor."

In the second column, in the first paragraph
Revision: "In addition, the student must complete 80 units in art, at least 18 of which must be taken in residence at the University of Arizona. These 80 units in art are subdivided as follows: ...."

In the second column (immediately preceding the section on "The major in art education")
Revision: "...Art electives - 11 units from other courses in art, 6 of which must be upper division." Eff. I 1991-92.

Art (ART)

312.

349.
NEW COURSE: "Intermediate Artists' Video (3) I Students will produce individual projects using video as a creative, self-expressive tool. The class will take an exploratory approach to experimental, fictional and documentary genres. 2R, 2S, P, portfolio review and M AR 200 and 214. (Identical with M AR 349)". Eff. II 1991-92.

445.

447.
NEW COURSE: "Advanced Artists' Video (3) [Rpt./1] II Students will produce individual video projects with an experimental, self-expressive orientation. There is also an option to combine video with performance or to incorporate it within an installation context. P, portfolio review and Art 349 or M AR 314. (Identical with M AR 449) May be convened with 549." Eff. II 91-92.


Delete semester offering "I." Eff. I 92-93.

Add: "Advanced Artists' Video (3) [Rpt./1] II For a description of course topics, see 449. Graduate-level requirements include projects that demonstrate conceptual and technical accomplishment. May be convened with 449." Eff. II 91-92. [No crosslisting desired on 500 level.]

Change prerequisites to read "P, 12 units of upper division studio art courses." Eff. II 91-92.


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Art History (ARH)


Add: "History of the American House (3) II (Identical with ARCH 434) May be convened with 534." Eff. II 92-93.

Add: "Etruscan Art and Archaeology (3) (Identical with CLAS 452) May be convened with 552." Eff. II 91-92.


Delete "Open to majors only." Add "P, permission of instructor." Eff. II 92-93.

Add: "History of the American House (3) II (Identical with ARCH 534) May be convened with 434." Eff. II 92-93.

Add: "Etruscan Art and Archaeology (3) (Identical with CLAS 552) May be convened with 452." Eff. II 91-92.


NEW COURSE: Seminar: "Issues in Contemporary Theory and Criticism (3) [Rpt./6 units] I Open to fine arts majors only." Eff. I 91-92.

Correction to 1991-93 General Catalog: Course erroneously listed under Art Education. It should be under the Art History section. [Title: Issues in Mexican American Art] Eff. I 91-92.

Art Education (ARE)


NEW COURSE: "Art Therapy Techniques I (3) I Explores the use of art related projective assessments and art therapy treatment issues and techniques used with adolescents." Eff. I 91-92.

NEW COURSE: "Art Therapy Techniques II (3) I Application of art therapy techniques used with adult populations, such as families and geriatric groups in a variety of treatment settings." Eff. I 91-92.


Correction to 1991-93 General Catalog: Course erroneously listed under Art Education. It should be under the Art History section. Eff. I 91-93.

Astronomy (ASTR)


Course expansion from "518" to "418/518." Transfer course description to "418." Add "For a description of course topics, see 418. Graduate-level requirements include an in-depth research paper. May be convened with 418." Eff. I 91-92. [Note: retain crosslisting with PTYS 518]

Atmospheric Sciences (ATMO)

DELETE: "A Survey of the Atmospheric Sciences (4-4)." Eff. I 92-93.
Course expansion to "300a-300b". Course revised. New listing reads: "General Meteorology (3-3) Survey of physical (300a) and dynamic (300b) meteorology, recommended for students wanting a more quantitative approach to meteorology than provided in 171 or 236a-236b. 300a: P, CR, MATH 125b. 300b: CR, MATH 223; recommended ATMO 171 or 236a-236b." Eff. II 91-92.

NEW COURSE: "Computer Methods in the Atmospheric Sciences (3) II Introduction to using the computer to solve physical and statistical problems related to the atmospheric sciences. P, 300, ENGR 101 (Fortran)." Eff. II 91-92.

Change units from "(4)" to "(3)." Change description to read "Principles of meteorological analysis; fundamental concepts of dynamical meteorology. Structure and dynamics of midlatitude cyclones and fronts. Use of computer driven graphical displays." Change class structure to "1R, 6L." Change prerequisites to read "P, knowledge of Fortran or a similar programming language; CR, 441a, or 300." Eff. I 92-93.


Change units from "(4)" to "(3)." Change class structure to "1R, 6L." Change prerequisites to read "P, knowledge of Fortran or a similar programming language; CR, 441a, or 300." Eff. I 92-93.

Add: "Weather Analysis and Forecasting (3) II For a description of course topics, see 472. Graduate-level requirements include a survey paper of some aspect of weather prediction. P, ATMO 471/571. May be convened with 472." Eff. II 91-92.

Biochemistry (BIOC)

Add: Colloquium: "Great Experiments in Microbiology (1) I II (Identical with MICR 195a)" Eff. I 92-93.

NEW COURSE: Colloquium: "Opportunities in Biological Sciences (1) [Rpt./4 units]" Eff. I 92-93.

Add: "Molecular Biology (3) II (Identical with MCB 411) May be convened with 511." Eff. II 91-92.

Add: "Developmental Mechanisms (3) I (Identical with MCB 455)". Eff. I 92-93

Add: "(Identical with MCB 462a)". Eff. I 91-92. (Note: 462b is already crosslisted.)

Course expansion from "473" to "473/573." Add "May be convened with 573." Eff. II 91-92.

COURSE DELETION: "Medical Biochemistry (5)." Eff. I 92-93.
Add: "Molecular Biology (3) II (Identical with MCB 511) May be convened with 411." Eff. II 91-92.

Course number changed from "517" to "516." Course revised to read: "Computer Analysis of Sequences (3) II (Identical with MCB 516)." Eff. II 91-92.

Change course number from "517" to "516." Course revised. [Note: for new listing see, 516.] Eff. II 91-92.

NEW COURSE: "Topics in Gene Regulation (2) 1992-93 Behavior of gene regulatory systems in prokaryotes and eukaryotes. Knowledge of mechanisms is assumed and discussed when needed, but emphasis is on regulatory circuitry. Most lectures will be student presentations. (Identical with MCB 569) P, 568 or permission of instructor." Eff. I 92-93.

Course expansion from "473" to "473/573." Add: "Recombinant DNA Methods and Applications (4) II (Identical with MCB 573) May be convened with 473. Eff. II 91-92.


Add repeatability "Rpt./9 units]." Eff. I 86-87.


Add course description "Comprehensive treatment of general biochemistry oriented toward human biology with emphasis on basic concepts and clinical correlations. Protein and nucleotide chemistry and metabolism, enzymology, metabolism of lipids and carbohydrates, metabolic regulation, biochemical nutrition, biochemical endocrinology and closely related topics are covered. Open only to medical students." Eff. I 92-93.
Business & Public Administration
Revision in college section of 1991-93 General Catalog, page 56, top of column 2, under heading "Major Fields Available."

Second paragraph should be revised as follows: "Students must earn at least 9 units of university credit in the major in the BPA College." Eff. II 91-92.

Cancer Biology (CBIO)
551. + Course revised. New listing should read: "Molecular Mechanisms of Carcinogenesis (3) I 1992-93 Physical and chemical carcinogenesis. Special emphasis will be upon molecular aspects of the interaction of the carcinogenic agents with mammalian cells and the subsequent mutagenic and metabolic consequences of such interactions. The topics of oncogene activation and tumor suppressor gene inactivation induced by carcinogens during multi-stage carcinogenesis will be emphasized. The molecular biology techniques used in the study of carcinogenesis will also be covered. P, consult committee before enrolling (Identical with MICR 551 and RONC 551) Bowden." Eff. II 91-92.

Chemical Engineering (CH E)
204. Change course number from "204" to "303." Eff. I 92-93.
206. Change course number from "206" to "316." Eff. I 92-93.
303. Course number changed from "204" to "303." Title: "Chemical Engineering Mass Transfer." Eff. I 92-93.
316. Course number changed from "206" to "316." Title: "General Thermodynamics." Eff. I 92-93.
453. NEW COURSE: "Space Manufacturing (3) I Basics of producing high value added materials in microgravity, as well as commodities for use in space from extraterrestrial resources. May be convened with 553." Eff. II 91-92.
NEW COURSE: "Law for Engineers/Scientists (3) II Topics covered in this course include patents, trade secrets, trademarks, copyrights, product liability contracts, business entities, employment relations and other legal matters important to engineers and scientists. (Identical with ENGR 454) May be convened with 554." Eff. II 91-92.

Add: Space Manufacturing (3) I For a description of course topics, see 453. Graduate-level requirements include an additional paper. May be convened with 453." Eff. II 91-92.

NEW COURSE: "Law for Engineers/Scientists (3) II For a description of course topics, see 454. Graduate-level requirements include an in-depth research paper on a current topic. (Identical with ENGR 554) May be convened with 454." Eff. II 91-92.

Chemistry (CHEM)

105a-105b.* Course revised. New listing reads: "Honors Fundamentals of Chemistry (5) Fundamental concepts of chemistry, with emphasis on theoretical and physical principles; atomic and molecular structure and theory, properties of gases, liquids and solids, thermodynamics and equilibria, kinetics, descriptive inorganic chemistry. Open to students who have had high school chemistry and physics and received acceptable scores on the ACT tests. 105a: P, CR, MATH 124.

*Credit is allowed for only one of the following lecture-lab combinations: (1) 101a, 102a, (2) 103a-103b, 104a-104b, or (3) 105a-105b, 106a-106b. Eff. I 92-93.


106a-106b.* NEW COURSE: "Honors Fundamentals Techniques of Chemistry (1 to 2 - 1 to 2) Techniques in college methods, techniques of measurement, separation, purification and analysis of organic and inorganic substances. Lab stresses individual studies and library research. Extra unit credit available for students pursuing optional original lab research problem. P, CR, the corresponding 105 lecture class.

*Credit is allowed for only one of the following lecture-lab combinations: (1) 101a, 102a, (2) 103a-103b, 104a-104b, or (3) 105a-105b, 106a-106b. Eff. I 92-93.

Add: "Biological Structure (4) II (Identical with BIOC 585)". Eff. II 91-92.
Civil Engineering (CE)


420. NEW COURSE: "Computer Applications in Hydraulics (3) I Techniques applied in several widely used hydraulic engineering computer programs are studied and the models are then applied in sensitivity analysis and for hydraulic system design. P, C E 321. May be convened with 420." Eff. I 91-92.


455.- Change units from "(3)" to "(4)." Add "3R, 3L." Change from "2ES, 1ED" to "2ES, 2ED." Eff. I 92-93.


497w.- Add: Workshop: "Advanced Cadastral Survey (1-4) II (Identical with RNR 497w, which is home) May be convened with 597w." Eff. II 91-92.

520. Add: "Computer Applications in Hydraulics (3) I For a description of course topics, see 420. Graduate-level requirements include an extensive sensitivity analysis for each program. May be convened with 420." Eff. I 91-92.

528. Add: "Introduction to Coastal Engineering (3) I For a description of course topics, see 428. Graduate-level requirements include a term paper. May be convened with 428." Eff. I 91-92.

555.- Change units from "(3)" to "(4)." Change prerequisites to "P, CE 321 or AME 331a." Eff. I 92-93.

558.- Change to alternate year "II 91-92." Eff. II 91-92.

573. Change number of variable units from "(1-2)" to "(2-3)." Eff. II 91-92.


597w.- Add: Workshop: "Advanced Cadastral Survey (1-4) II (Identical with RNR 597w, which is home) May be convened with 497w." Eff. II 91-92.

Classics (CLAS/GRK/LAT)

Classics (CLAS)


452. + NEW COURSE: "Etruscan Art and Archaeology (3) Surveys the art and archaeology of the Etruscans between the 7th and 1st centuries B.C. P, 340b or consent of instructor. (Identical with ARH 452) May be convened with 552." Eff. II 91-92.

461. + (1) Change course number of "Archaic Greek Sanctuaries" to "481". Keep crosslisting with Anthropology. Eff. II 91-92.
(2) Course number of "Greek Pottery 1200-400 BC" changed from "481". Keep crosslisting with Anthropology. Add crosslisting: "(Identical with ARH 461)". Eff. II 91-92.

463. Change units from "(3)" to ",(6)." Eff. II 91-92.

481. + (1) Change course number of "Greek Pottery 1200-400 BC" to "461". Keep crosslisting with Anthropology. Add crosslisting: "(Identical with ARH 461)". Eff. II 91-92.
(2) Course number of "Archaic Greek Sanctuaries" changed from "461". Eff. II 91-92.

552. + Add: "Etruscan Art and Archaeology (3) For a description of course topics, see 452. Graduate-level requirements include extensive reading and an in-depth paper. P, 340b or consent of instructor. (Identical with ARH 552) May be convened with 452." Eff. II 91-92.

561. + (1) Change course number of "Archaic Greek Sanctuaries" to "581". Eff. II 91-92.
(2) Course number of "Greek Pottery 1200-400 BC" changed from "581". Add crosslisting: "(Identical with ARH 561)". Eff. II 91-92.

563. Change units from "(3)" to "(6)." Eff. II 91-92.

(2) Course number of "Archaic Greek Sanctuaries" changed from "561". Eff. II 91-92.

Greek (GRK)

497b.- Correction to 1991-93 General Catalog: Erroneous listing. [Home dept., German, deleted course in CB1314.]
Latin (LAT)

400. NEW COURSE: "Prose of the Roman Republic (3) I Extended readings from Sallust, Cicero and Caesar with some grammatical review; development of skills in rapid readings and sight reading. P, 202." Eff. I 92-93.

497b.- Correction to 1991-93 General Catalog: Erroneous listing. [Home dept., German, deleted course in CB1314.]

Communication (COMM)

421. Change semester offerings to "I II". Eff. II 91-92.

521. Change semester offerings to "I II". Eff. II 91-92.


696f.- Transfer course from COMM to LING (as home department). Retain COMM as a cross-listed department. Listing under COMM should read "Linguistic Investigations and Applications (3) I II (Identical with LING 696f)." Eff. I 92-93.

Comparative Literature & Literary Theory (CPLT)


Computer Science (C SC)

331.- Correction to CB1318: Entry should have read: Delete listing. Eff. II 91-92.

450. Change semester offering to "II." Eff. II 91-92.


560. Course expansion to "460/560". New listing for "560" reads: "Database Systems (3) I For a description of course topics, see 460. Graduate-level requirements include more extensive problem sets and different examinations P, 327, 373, 430. May be convened with 460." Eff. I 91-92.

620. Change units from "(1-3)" to "(3)." Eff. II 91-92.

630. Change units from "(1-3)" to "(3)." Eff. II 91-92.

645. Change units from "(1-3)" to "(3)." Eff. II 91-92.
652. Change units from "(1-3)" to "(3)." Eff. II 91-92.

Critical Languages (CRL)
301. NEW COURSE: "Advanced Language Study (3) [Rpt.*] I II
Continuing study of the language with an emphasis on developing
reading and writing skills, continuing practice with spoken aspects
utilizing tape-intensive preparations with biweekly reviews. 2R, 4L.
Fee. P, proficiency at 202 level." *Course may be repeated if
language is different each time. Eff. I 91-92.
302. NEW COURSE: "Advanced Language Study (3) [Rpt.*] I II
Continuing study of the language with an emphasis on developing
reading and writing skills, continuing practice with spoken aspects
utilizing tape-intensive preparations with biweekly reviews. 2R, 4L.
Fee. P, proficiency at 202 level." *Course may be repeated if
language is different each time. Eff. I 91-92.

Dance (DNC)
176a. NEW COURSE: "Beginning Tap Dance (1) [Rpt./3 units] I II S*.
201. Correction to CB1311: "201" should have read "201a". Eff. II 90-91.
346. Change semester offering to "II." Eff. I 92-93.
370. Change semester offering to "I." Delete alternate year "1992-93."
Delete instructor's name "Wilson." Eff. II 90-91.
540a-540b. Change units from "(2-2)" to "(2-3)." Add "[Rpt./12 units]." Eff. I 92-93.
551a-551b. Add semester offering "II." Eff. II 91-92.

East Asian Studies (EAS/CHN/JPN)

East Asian Studies (EAS)
545. Correction to General Catalog, 1991-93: Delete erroneous
crosslisting with RELI 545, which appears under the EAS course
listing only.

Chinese (CHN)


522. Course expansion from "522 to "422/522." Transfer course description to "422." Add: "For description of course topics, see 422. Graduate-level requirements include additional assignments relating to translation skill and research methodology. P, 416/516." Eff. 191-92.

523. Course expansion from "523 to "423/523." Transfer course description to "422." Add: "For description of course topics, see 423. Graduate-level requirements include additional assignments relating to translation skill and research methodology. P, 422/522." Eff. 191-92.


550. Course expansion from "550" to "450/550." Transfer course description to "450." Delete semester offering "S." Add: "For description of course topics, see 450. Graduate-level requirements include an additional class presentation and a translation project of an essay of over 1500 words. May be convened with 450." Eff. 192-93.

Japanese (JPN)

144. NEW COURSE: "Japanese Humanities (3) II An introductory exploration of religion, literature, art and language in Japan through primary texts in translation. Enrollment limited to freshmen and sophomores. (Identical with RELI 144)." Eff. II 1992-93.

446. Course expansion from "446" to "446/546." Course revised to read: "Pre-modern Japanese Literature (3) I Survey of pre-modern Japanese literature in English translation. 7th century through the 17th century. May be convened with 546." Eff. I 92-93.

27
Course expansion from "447" to "447/547." Course revised to read:
"Modern Japanese Literature (3) II Survey of modern Japanese literature with readings in English translation. Selected topics; content varies. May be convened with 547." Eff. II 92-93.

Add: "Pre-modern Japanese Literature (3) I For a description of course topics, see 446. Graduate-level requirements include additional works to be discussed during an extra weekly seminar-style meeting. Additional reading will consist of complete English translations of major works and theoretical works in English and Japanese. The main writing requirement for graduate students will be a 15-20 page paper due at the end of the semester. May be convened with 446." Eff. I 92-93.

"Modern Japanese Literature (3) II For a description of course topics, see 447. Graduate-level requirements include one extra seminar-style meeting a week, theoretical works to be discussed during the extra weekly meeting, and a 15-20 page paper due at the end of the semester. May be convened with 447." Eff. II 92-93.

Ecology & Evolutionary Biology (ECOL)


Title change to "Scientific Illustration." Change description to read "Graphic arts techniques to meet the career demands of students." Eff. II 91-92.

Change units from "(2)" to "(3)." Add class structure to "2R, 4L." Eff. II 91-92.

Add crosslisting "(Identical with WFSC 483)." Eff. II 91-92.


Add: "Conservation Biology (3) II 1992-93 For course topics, see 406. Graduate-level requirements include a research paper. P, 182, 302. (Identical with RNR 506 and GEOS 506) May be convened with 406." Eff. II 92-93.

Course number changed from "517" to "516." Course revised to read: "Computer Analysis of Sequences (3) II (Identical with MCB 516)." Eff. II 91-92.

Change course number from "517" to "516." Course revised. [Note: for new listing see, 516.] Eff. II 91-92.
518a-518b. + Title change to "Scientific Illustration." Change graduate level requirements to read "Graduate-level requirements include the production of maps, graphs and drawings for the thesis, seminars and scientific papers." Eff. II 91-92.


566. + Change units from "(2)" to "(3)." Add class structure "2R, 4L." Eff. II 91-92.

596j. Course expansion from "596j" to "496j/596j." Add "May be convened with 496j." Eff. II 91-92.

596m. + Add crosslisting "(Identical with RNR 596m)." Eff. II 91-92.

Economics (ECON)

195a. NEW COURSE: Colloquium: "Economics (1) II Open to freshmen only." Eff. II 91-92

375.- Course number changed from "475" to "375." Change crosslisting to read "Identical with AEC 375." Eff. II 92-93.

475.- Change course number from "475" to "375." Eff. II 92-93.

489. + NEW COURSE: "Public Choice (3) [Rpt./6 units] II The study of voting theory, government expenditures, government structures, behavior of voters and bureaucracy. (Identical with POL 489). May be convened with 589." Eff. II 92-93.

508. NEW COURSE: "Applied Economic Analysis (3) II Uses economic history to show how research methods in economics are used to analyze data collected through empirical observation. P, 501a, 520." Eff. II 91-92.

575.- Course revised. New listing reads "Economics of Natural Resource Policies in the Western U.S. (3) II (Identical with AEC 575)." Eff. II 92-93.

589. + Add: "Public Choice (3) [Rpt./6 units] II For a description of course topics, see 489. (Identical with POL 589) May be convened with 489." Eff. II 92-93.

Education (EDUC/EDA/EDP/HED/LRC/SER/TTE)

Education (EDUC)


Educational Administration (EDA)

Educational Psychology (EDP)

403. + Course expansion from "503" to "403/503". Listing for 403 reads: "Advanced Adolescent Development (3) II Major developmental issues within the adolescent years, emphasis on the importance and design of adolescent research. (Identical with FS 403) May be convened with 503." Eff. I 191-92.

503. + Course expansion to "403/503". New listing for 503 reads: "Advanced Adolescent Development (3) II For a description of course topics, see 403. Graduate-level requirements include an in-depth research paper or other research project. (Identical with FS 503) May be convened with 403." Eff. I 191-92.

541. Change units from "(3)" to "(4)." Add "3R 1L." Eff. I 92-93.

695. Correction to 1991-93 General Catalog: Under 695, insert subscript "b" for the course "Issues in Educational Psychology."

695b. Correction to 1991-93 General Catalog: Course listing "Issues in Educational Psychology," under 695, should have the subscript "b."

696. Correction to 1991-93 General Catalog: Under 696, insert subscript "b" for the course "Issues in Educational Psychology."

696b. Correction to 1991-93 General Catalog: Course listing "Issues in Educational Psychology," under 696, should have the subscript "b."

Language, Reading & Culture (LRC)


408. Course expansion from "508" to "408/508." Add: "Bilingual Reading and Writing (3) I Analysis of reading and writing situations encountered by bilingual students; phonological, semantic and syntactic aspects of instructions; methods and materials. May be convened with 508." Eff. Summer 1992.

425. + Course expansion from "525" to "425/525." Add: "Foundations of Bilingual Education (3) I II Socio-cultural factors, language practices and education; analysis of theories and practices affecting bilingual learners; historical, social, and cultural influences; relationship of theory to the characteristics and needs of the bilingual learner. May be convened with 525. (Identical with MAS 425)." Eff. Summer 1992.

508. Course expansion from "508" to "408.508." Transfer course description to "408." Add: "For description of course topics, see 408. Graduate-level requirements include an in-depth research paper or other project. May be convened with 408." Delete prerequisite. Eff. Summer 1992.
Course expansion from "525" to "425/525." Change course title to "Foundations of Bilingual Education." Transfer course description to "425." Add: "For description of course topics, see 425. Graduate-level requirements include an in-depth research paper or other project. May be convened with 425." Eff. Summer 1992. [No crosslisting desired on 500 level.]

Add "[Rpt./12 units]." Change units from "(3)" to "(1-3)." Eff. I 91-92.

Correction to CB1317: Repeatability changed to "[Rpt./9 units]." Eff. II 90-91.


Special Education & Rehabilitation (SER)

411a. Change course number to "411". Course revised. New listing reads: "Service Delivery Trends in Rehabilitation and Special Education (3) I II Critical examination of current trends, issues and initiatives affecting service systems for persons with disabilities." Eff. II 91-92. (Note: "411b" was deleted in CB1401.)


432. Change course number to "444/544". Eff. Summer 1991. [For other changes, see "444" and "544".]

433. Course expansion to "433a-433b-433c-433d". Course revised. New listing reads: "Special Topics in Deaf Studies (3-3-3-3) I II 433a: Introduction to the structure of ASL; 433b: Languages and cultures of deaf communities; 433c: History of the deaf community; 433d: ASL literature. Classes will be offered on a rotating basis in a-b-c-d sequence; however, courses need not be taken in sequence. P, 431b or permission of department. May be convened with 533a-533b-533c-533d." Eff. II 91-92.

439. Course expansion from "439" to "439a-439b-439c." Change title, units and description to read "Special Topics in Sign Language Studies (3-3-3) I II Classes will be offered on a rotating basis in the following sequence--439a: ASL Acquisition and Bilingualism; 439b: Language Policy, Planning, and Intervention; 439c: Methods and Materials of ASL Instruction. Courses need not be taken in sequence. P, 431b or permission of division. May be convened with 539a-539b-539c." Eff. II 91-92.


533. + Course expansion to "533a-533b-533c-533d." Course revised. New listing reads: "Special Topics in Deaf Studies (3-3-3-3) I II For a description of course topics, see 433a-433b-433c-433d. Graduate-level requirements include an in-depth research paper on a course-related topic and a class presentation. Classes will be offered on a rotating basis in a-b-c-d sequence; however, courses need not be taken in sequence. P, 531b or permission of department. May be convened with 433a-433b-433c-433d." Eff. II 1991-92.

539. Course expansion from "539" to "539a-539b-539c." Change title, units and description to read "Special Topics in Sign Language Studies (3-3-3) I II For a description of course topics, see 439. Graduate-level requirements include an in-depth research paper on a course-related topic and a class presentation. P, 531b or permission of division. May be convened with 439a-439b-439c." Eff. II 1991-92.

544. Course number changed from "432" to "444/544". Listing for "544" reads: "Introduction to Interpreting (6) I II For a description of course topics, see 444. Graduate-level requirements include an in-depth paper on aspects of current issues in the field. May be convened with 544." Eff. Summer 1991.

544. Course expansion from "544" to "544a-544b-544c." Course revised. For new listing, see 544a-544b-544c. Eff. Summer 1992.

544a-544b-544c. Course expansion from "544" to "544a-544b-544c." Course revised. New listing should read: "ASL Discourse Processes (6-6-6) S For a description of course topics, see 444a-444b-444c. Graduate-level requirements include an in-depth paper on aspects of current issues in the field. P, 531b or permission of division. May be convened with 444a-444b-444c." Eff. Summer 1992.
Course expansion from "575" to "475/575." Listing for 575 reads "Observation and Participation in Special Education Programs (1-3) [Rpt./6 units] II For course topics, see 475. P, 400/500." Eff. I 92-93.

Change title to: "Professional Problems and Ethical Concerns in Rehabilitation Psychology". Change description to "Introduction to the field of rehabilitation psychology including an examination of ethical and legal considerations in the practice of rehabilitative psychology, foundational material in professional psychology, and an overview of the rules and functions of rehabilitation psychology." Delete prerequisite. Eff. II 91-92.


Teaching & Teacher Education (TTE)

Correction to 1991-93 General Catalog: Erroneous listing. Course was deleted in CB 1314. Eff. I 91-92.

NEW COURSE: Practicum: "Secondary Methods (1) II. Open to majors only. P, 300, ED P 310, EDUC 350; CR, 338H or 338U or 338Y or 414 or one only 410, 411, or 412." Eff. I 92-93.

Electrical & Computer Engineering (ECE)

Course number changed from "557b" to "457/557." New listing should read "Integrated Laboratory (3) II Experiments in diffusion, oxidation, processing, etc. Fabrication of an integrated circuit. P, 458 or equivalent. (Identical with MSE 457) May be convened with 557." Eff. II 91-92.

Delete crosslisting "(Identical with NEE 466)." [Title: Power Plant Electrical Design] Eff. I 91-93. [Note: the change appears in the 1991-93 General Catalog, however, it was not officially listed in a C.B.]


Course number changed from "557b" to "457/557." New listing should read "Integrated Circuit Laboratory (3) II For a description of course topics, see 457. Graduate-level requirements include additional homework and a term project. P, 458 or equivalent. (Identical with MSE 557) May be convened with 457." Eff. II 91-92.
557a. Change course number from "557a" to "540." Course revised. Delete crosslisting "(Identical with MSE 557a)." Eff. II 91-92.


563. (1) Correction to CB 1318: Course numbered "565" should have been numbered "563." Eff. I 91-92.

(2) Course revised. New listing reads: "Engineering Applications of Graph Theory (3) II Topics will emphasize engineering applications of graph theory. Terminology, algorithms, and complexity analysis will be included. Application areas will include, but are not limited to, communication networks, VLSI routing and layout, analog circuits, and mapping of sequential and parallel algorithms onto computer architectures." Eff. I 91-92.

565. Correction to CB 1318: Course should have been numbered "563" to avoid conflict with "465/565". Eff. I 91-92. [For revised listing, see "563"].


Engineering & Mines (ENGR)

Revision to College Section in 1991-93 General Catalog, Page 71, under the requirements for the Bachelor of Science in Optical Engineering:

Under, "Required Curriculum", "Junior Year" (in the right-hand column of the grid): Replace "PHYS 460 (3 units)" with "HUM/SOC Sci. Elective (4 units)." Revise the total units of this column from "15 units" to "16 units." Eff. I 92-93.

Under, "Required Curriculum", "Senior Year" (in the left-hand column of the grid): Delete "Hum/SOC Sci. Elective (4 units)" (Note: this is now included under "Junior Year" requirements above). Add "ECE 451 (3 units)." Revise total units of this column from "16 units" to "15 units." Eff. I 92-93.

Revision to 1991-93 General Catalog under College of Engineering and Mines section, under Bachelor of Science in Optical Engineering, page 71, delete paragraph beginning:

"Continuation in this program beyond the freshman year ...." (Paragraph begins at the bottom of column 1 and continues at the top of column 2). Eff. I 91-92.
NEW COURSE: "Fundamentals of Engineering (3-3) I II S
Introduction to the design process, basic engineering principles, professionalism, problem solving techniques, software tools and a structured programming language. Techniques learned will be applied to the solution of engineering design problems. 100a: 1ES, 1ED. CR, MATH 124, 125a or 126. 100b: 1ES, 1ED. P, 100a." Eff. I 92-93.


Change title of this Honors Proseminar to "Planning Engineering Design". Change semester offering to "I". Eff. II 91-92.

Add: "Microcomputing Applications (3) I II (Identical with ABT 220)." Eff. I 92-93.

Add: "Law for Engineers/Scientists (3) II (Identical with CH E 454) May be convened with 554." Eff. II 91-92.

Add: "Law for Engineers/Scientists (3) II (Identical with CH E 554) May be convened with 454." Eff. II 91-92.


(1) Add crosslisting "(Identical with RELI 486)." Eff. II 91-92.


Add: "Theory and Practice of Writing (3) II 1993-94 (Identical with FREN 548)." Eff. II 92-93.

Add: "Contemporary Feminist Theories (3) II (Identical with W S 554)." Eff. II 91-92.


Add: "Agriculture and the Environment (3) I (Identical with A ED 402). May be convened with 502.

Add: "Agriculture and the Environment (3) I (Identical with A ED 502). May be convened with 402.


Family & Consumer Resources (COUN/FCR/MCS/ID/HEE/FS)

Counseling & Guidance (COUN)

Family & Consumer Resources (FCR)

Family Studies (FS)
403.- Course expansion from "503" to "403/503". Add listing for 403:
"Advanced Adolescent Development (3) II (Identical with ED P 403)
May be convened with 503." Eff. I 91-92.

503.- Course expansion to "403/503". New listing for 503 reads:
"Advanced Adolescent Development (3) II (Identical with ED P 503)
May be convened with 403." Eff. I 91-92.

Home Economics Education (HEE)
411.- Course revised. New listing reads "Consumer Issues in Nutrition (3)

489.- Change units from "(1-8)" to "(1-12)". Eff. II 91-92.

Merchandising and Consumer Studies (MCS)
114. Correction to CB 1318: Title should have been listed as
"Introduction to Merchandising." [Note: the title changed in
CB1306.]

411.- Course revised. New listing reads "Consumer Issues in Nutrition (3)

Fine Arts (FA)
Revision to 1991-93 General Catalog, college section, page 50, column 1. Under "C.
Oral Communications," last sentence should be revised as follows:
Theatre production and musical theatre majors may substitute
ENGL 207, T AR 367 or T AR 468 for this requirement." Eff. I 92-93.

Revision to 1991-93 General Catalog, college section, page 50, column 2. Under "C.
Oral Communications," the following sentence should be added:
"Theatre arts education majors may substitute T AR 367 or T AR 468
for this requirement." Eff. I 92-93.
Revision to page 171 of the General Catalog. In the headnote paragraph following the Fine Arts heading, DELETE the last two sentences which read: "They are crosslisted in Fine Arts departments when appropriate. These courses are taught by faculty in the Faculty of Fine Arts." Eff. II 91-92.

Revision to the 1991-93 General Catalog, under College of Arts and Sciences section, under Bachelor of Fine Arts, (major in general fine arts studies), page 51, column 2, delete paragraph beginning: "III. Introductory Fine Arts Courses ...." Eff. I 92-93.

Revision to the 1991-93 General Catalog, under College of Arts and Sciences section, under Bachelor of Fine Arts, (major in General fine arts studies), page 51, column 2, delete paragraph beginning: "IV. Fine Arts Emphasis Course Work ...." and replace with the following: "III. Fine Arts Emphasis Course Work (72 units) The candidate for this degree also must complete a minimum of 72 units of course work in three departments (A, B, and C) selected from the Faculty of Fine Arts: Art, Dance, Media Arts*, Music and Theatre Arts (with advisor approval, creative writing may be used for a maximum of 12 units in Dept. C). At least 36 units must be upper-division courses. A minimum of 24 units must be taken in residence. *Students must meet Media Arts advanced standing requirements." Eff. I 92-93.


French & Italian (FREN/ITAL)

French (FREN)

396H. + Delete crosslisting "(Identical with W S 396H)." Eff. II 91-92.


548. + NEW COURSE: "Theory and Practice of Writing (3) II 1993-94 An experiment in writing, concerning the means, the raw material at our disposal and the different literary devices that allow us to achieve it. (Identical with ENGL 548)." Eff. II 92-93.
Italian (ITAL)
Revision to the 1991-93 General Catalog:

Page 173, in the first column, last paragraph:
"The major: 32 units (in addition to 101 and 102), including 305a-305b and 400a-400b, and 12 additional units of literature courses in the 400 series. No fewer than 24 units must be upper-division course work." Eff. 192-93.

Page 173, in the second column, first paragraph:
"The minor: 20 units (in addition to 101 and 102), including 305a-305b and 400a-400b." Eff. 192-93.

282. Change semester offering to "I II." Change second sentence in course description to read: "Does not count toward fulfillment of language requirement nor for the major or the minor in Italian." Eff. I 92-93.

283. Change semester offering to "I II." Change second sentence in course description to read: "Does not count toward fulfillment of language requirement nor for the major or the minor in Italian." Eff. I 92-93.

284. NEW COURSE: "Italian Theater in Translation (3) I II 1993-94
Detailed study of Italian theater from its origins in the Middle Ages to the contemporary stage. Does not count toward fulfillment of the major or the minor in Italian. Taught in English." Eff. I 92-93.


502a-502b. Add: "Il Trecento (3-3) II 1992-93 For a description of course topics, see 402a-402b. Graduate-level requirements include more demanding readings and other assignments. P, 202. May be convened with 402a-402b." Eff. I 92-93.


504a-504b. Add: "The Renaissance (3-3) II 1993-94 For a description of course topics, see 404a-404b. Graduate-level requirements include more demanding readings and other assignments. May be convened with 404a-404b." Eff. I 93-94.

505a-505b-505c-505d-505e-505f. Add: "Literary and Cultural Studies (3-3-3-3-3-3) II 1993-94 For course topics, see 405a-405b-405c-405d-405e-405f. Graduate-level requirements include more demanding readings and other assignments. May be convened with 405a-405b-405c-405d-405e-405f." Eff. I 93-94.


Genetics (GENE)
473.- Course expansion from "473" to "473/573." Add "May be convened with 573." Eff. II 91-92.


516.- Course number changed from "517" to "516." Course revised to read: "Computer Analysis of Sequences (3) II (Identical with MCB 516)." Eff. II 91-92.

517.- Change course number from "517" to "516." Course revised. [Note: for new listing see, 516.] Eff. II 91-92.


573.- Course expansion from "473" to "473/573." Add: "Recombinant DNA Methods and Applications (4) II (Identical with MCB 573) May be convened with 473." Eff. II 91-92.

596f.- Correction to 1991-93 General Catalog: Erroneous listing. [Note: Home dept., Cancer Biology, changed course number from "596f" to "589" in CB1302.]

Geography & Regional Development (GEOG)
359.+ Change course number to "459/559". Course revised. Eff. II 91-92. [For new listings, see "459" and "559".]


444.- Correction to CB1317: Delete listing. [Home dept., Architecture, deleted crosslisting with GEOG in CB1317.]

459. + Course number changed from "359" to "459/559". Course revised. New listing for "459" reads: "Land Use and Growth Controls (3) II Current planning and legal techniques to regulate the rate of growth, the sequence of growth, and the eventual total size of towns, regions, and states; concentration on case studies. (Identical with PLNG 459) May be convened with 559." Eff. II 91-92.


496a. NEW COURSE: Seminar: "Research (3) II GRD Open to majors and honors students. Honors section available. P, junior or senior standing in Geography plus 357, or honors standing. Writing-emphasis course." Eff. II 91-92.

496a. Delete "GRD." Eff. 192-93.

504. - Course number changed from "609" to "504." New listing reads "Public and Policy Economics (3) II (Identical with PA 504)" Eff. I 92-93.

509. + Course expansion from "409" to "409/509". Add: "Soviet Union (3) I For a description of course topics, see 409. Graduate-level requirements include two research projects. May be convened with 409. Mitchneck*" Eff. 191-92.

544.- Correction to CB1317: Delete listing. [Home dept., Architecture, deleted crosslisting with GEOG in CB1317.]

559. + Course number changed from "359" to "459/559". Course revised. New listing for "559" reads: "Land Use and Growth Controls (3) II For a description of course topics, see 459. Graduate-level requirements include the completion of a series of research projects. (Identical with PLNG 559) May be convened with 459." Eff. II 91-92.

576. + Course expansion from "476" to "476/576". Add: "The Land Development Process (3) [Rpt./1] II S For a description of course topics, see 476. Graduate-level requirements include a research project. (Identical with PLNG 576) May be convened with 476." Eff. II 91-92.
Change course number from "609" to "504." See 504 for new listing. Eff. II 92-93.

DELETE: "Growth Controls (3)". Eff. II 91-92.


Geosciences (GEOS)


102. Change title to "Introduction to Historical Geology." Eff. II 91-92.


104. Change title to: "Introduction to Historical Geology Laboratory." Eff. II 91-92.


409a. Add semester offering "II." Eff. II 92-93.

429. Change number of units to "(2)". Change class structure to "2R, 3L." Eff. II 91-92.

458. NEW COURSE: "Geochronology (3) I Introduction to geochronologic methods used in the geological sciences including K-Ar/39Ar, Rb-Sr, Sm-Nd, U-Th-Pb, and fission track techniques. Application of isotopic dating techniques to the study of crustal dynamics. P, PHYS 110, 116, MATH 124 or 125a, 125b, CHEM 103a, 103b, 104a, 104b or consult department before enrolling. Open to majors only. May be convened with 558." Eff. I 92-93.


509a. Change semester offering "II." Eff. II 92-93.

529. Change number of units to "(2)". Change class structure to "2R, 3L." Eff. II 91-92.

558. Add: "Geochronology (3) I For a description of course topics, see 458. Graduate students will be required to present projects at the end of the semester. May be convened with 458." Eff. I 92-93.


German (GER)

500. Change number of units to "(4)". Add restriction: "Credit for nonmajors only. Credit is not available for German majors." Eff. Summer Session II 1991.

Gerontology (GERO)

457.- Change crosslisting to "(Identical with PA 457)." Eff. I 92-93.
557.- Change crosslisting to "(Identical with PA 557)." Eff. I 92-93.

Health-Related Professions (HLTH/OSH/EXSS/MEDT)

Exercise & Sport Sciences (EXSS)

165. NEW COURSE: "Social Dance (1) [Rpt./2 units] I II 2S." Eff. II 91-92.
228. NEW COURSE: "Strength and Conditioning Training (1) I II 2S.
Open to majors only." Eff. II 91-92.
262. NEW COURSE: "Lifeguard Training Instructor (2) II 1991-92
477. NEW COURSE: "Advanced Sport Injury Management (3) II 1991-92
Advanced techniques in recognition, evaluation, treatment, rehabilitation and prevention of athletic injuries. 2R, 3L. P, 377 and a minimum of 300 clinical hours in athletic training or physical therapy." Eff. II 91-92.
495a. NEW COURSE: Colloquium: "Research in Exercise Sciences (1-2) [Rpt./3 units] I II. Open to majors only. P, upper-division standing. May be convened with 595a." Eff. I 92-93.
550. DELETE: "Advanced Exercise Physiology Laboratory (3)." Eff. I 92-93.
595a. NEW COURSE: Colloquium: "Research in Exercise Sciences (1) [Rpt./1] I II. Open to majors only. May be convened with 495a." Eff. I 92-93.
Medical Technology (MEDT)


475b. Change semester offerings to "I II". Eff. II 91-92.


575b. Change semester offerings to "I II". Eff. II 91-92.


History (HIST)

201. + DELETE: "Religion in America (3)". Eff 191-92.

361. + Add crosslisting: "(Identical with LA S 361)". Eff. II 91-92. [Retain crosslisting with MAS]


481.- Add: "Work, Motherhood and Female Identity in America: 1945 to the Present (3) I (Identical with WS 481) May be convened with 581." Eff. 192-93

492. + Add crosslisting: "(Identical with RELI 492)". Eff. 191-92. [Retain crosslisting with NES]

581.- Add: "Work, Motherhood and Female Identity in America: 1945 to the Present (3) I (Identical with WS 581) May be convened with 481." Eff. 192-93

Honors (HONR)

Correction to 1991-93 General Catalog, page 194, under the heading, Department Course Offerings:

Under subheading, Art:

--Change subheading from "Art" to "Art History." [Course number 118 changed to an Art History course in CB1314.]

--Art 396H. Delete listing. [in CB1315]

Under subheading, Civil Engineering:

--196H. Delete listing. [In Fall 1988, course was revised and transferred to ENGR as 196a and 196b.]

Under subheading, Economics:

--ECON 332. Change title to "Intermediate Macroeconomics." [in CB1316]

--ECON 361. Change title to "Intermediate Microeconomics." [in CB1316]

--ECON 441. Change course number to "443." [in CB1316]

Under subheading, Engineering and Mines:

--Add: "196a. Survey of Engineering Professions (1) I."

--Add: "196b. Engineering Design Proposal (1) II."

[Note: ENGR 196a and 196b were previously CE 196H.]
Under subheading, Humanities:

-HUM 250a-250b-250c. Change units to "(3-3-3)." [Eff. Fall 1987]

Humanities (HUM)


NEW COURSE: "10Q4 Creativity: A Class in Self-Expression (3) I II S GRD Creative projects in literary studies (writing, interpretation); and in visual and tactile media; survey of creativity theory; also, student-led discussions and explorations." Eff. II 91-92.

NEW COURSE: "Spirituality in the Arts (3) I Both traditional and non-traditional concepts of spirituality are examined in Hopi, African-American, European, and American literature, philosophy, visual art and film. P, 6 units Freshman Composition (Identical with RELI 307)." Eff. I 92-93.

NEW COURSE: "From Orality to Literature: Storytelling in Contemporary Literature (3) I The importance of oral storytelling tradition in gendered, multi-ethnic literature and art, why this theme arises in ethnic works, and its importance for concepts of gender and ethnic identity. Students will attend 4 cultural events. P, 3 units of HUM 250a-250b-250c or 260; or 3 units of ENGL 251a-251b-251c; or 3 units of CPLT 200." Eff. I 92-93.

Hydrology and Water Resources (HWR)

Course number changed from "414a-414b" to "414a." New listing reads as follows "Field Hydrology (Surface Water) (1) S Field methods of collection, compilation, and interpretation of data in surface water. Stream gaging, hydrography and limnology exercises; evaporation studies; slope-area method of indirect discharge measurement; flood plain mapping; preparation of hydrologic reports. Daily field work. Fees. P, 250 or 423 or 440. May be convened with 514a." Eff. Summer 1993.

Change course number from "414a-414b" to "414a." Eff. Summer 1993.
514a.
Course number changed from "514a-514b" to "514a." New listing reads: "Field Hydrology (Surface Water) (1) S For a description of course topics, see 414a. Graduate-level requirements include an in-depth report on one aspect of the field work or participation and assistance in the preparation and conduction of a field project. Daily field work. Fees. P, 518, 519. May be convened with 414a." Eff. Summer 1993.

514a-514b.
Change course number from "514a-514b" to "514a." Eff. Summer 1993.

696m. +

Journalism (JOUR)

471.
Course expansion from "471" to "471/571." Add "May be convened with 571." Eff. II 91-92.

505.

571.
Add: "International Communications (3) I II For a description of course topics, see 471. Graduate students will be required to complete one extra research paper. May be convened with 471." Eff. II 91-92.

596a.

Judaic Studies (JUS)

321. +
NEW COURSE: "Women in Judaism (3) Images of Jewish women in Jewish and other texts. Text include religious, historical and literary genres from biblical, medieval, and modern sources. The course will deal with Jewish women as mothers, leaders, stereotypes, and current feminist viewpoints. (Identical with W S 321)." Eff. II 91-92

377. +
NEW COURSE: "Modern Israel (3) Evolution of the State of Israel from the beginnings of the Zionist Movement during the second quarter of the 19th century through the establishment of the Yeshuv (Jewish Settlement) to the present. Survey of Israel's social organization, economy, political system and parties, Jewish-Arab and USA-Israel relations. (Identical with HIST 377, NES 377 and POL 377)." Eff. I 91-92.

401.-
Correction to CB1317: Entry should have read "Delete listing." Eff. I 91-92.

501.-
Correction to CB1317: Entry should have read "Delete listing." Eff. I 91-92.

Latin American Studies (LA S)

322.-


Add: "Spanish-American Novel of the Twentieth Century (3-3-3) (Identical with SPAN 575a-575b)". Eff I 91-92. [Note: 575c is already crosslisted.]


Law (LAW)

Change units from "(1)" to "(2)." Eff. II 91-92.

NEW COURSE: "Environmental Law (3) GRD Reviews the principles, statutes and policies of environmental law, including principles, statutes, and policies relating to air, water and hazardous waste issues." Eff. II 91-92.


NEW COURSE: "Law and the Elderly (2) GRD Examines the law concerning the elderly involving bio-legal issues such as the right to die and the right to refuse treatment, planning for disability, and ethical issues." Eff. II 91-92.

NEW COURSE: "Natural Resources Law (3) GRD Focus on current legal and institutional arrangements in the U.S. government for the management of natural resources and the production and consumption of resources. Allocation, preservation and conservation of water resources, oil, gas and uranium and coal." Eff. II 91-92.


Library Science (LI S)

Course expansion from "503" to "403/503." Listing for 403 reads:
"Library Collection Development (3) For description of course topics, see 503. 403 taught through correspondence only." Eff. I 92-93.

Course expansion from "504" to "404/504." Listing for 404 reads:
"Foundations of Library and Information Services (3) For description of course topics, see 504. 404 taught through correspondence only." Eff. I 92-93.

Course expansion from "505" to "405/505." Listing for 405 reads:
"Basic Reference (3) For description of course topics, see 505. 405 taught through correspondence only." Eff. I 92-93.

Course expansion from "508" to "408/508." Listing for 408 reads:
"Trends in Library Management (3) For description of course topics, see 508. 408 taught through correspondence only." Eff. I 92-93.

Course expansion from "511" to "411/511." Listing for 411 reads:
"Information Storage and Retrieval (3) For description of course topics, see 511. 411 taught through correspondence only." Eff. I 92-93.

Course expansion from "530" to "430/530." Listing for 430 reads:
"Public Librarianship (3) For description of course topics, see 530. 430 taught through correspondence only." Eff. I 92-93.

Course expansion from "540" to "440/540." Listing for 440 reads:
"Academic Librarianship (3) For description of course topics, see 540. 440 taught through correspondence only." Eff. I 92-93.

Course expansion from "550" to "450/550." Listing for 450 reads:
"Special Librarianship (3) For description of course topics, see 550. 450 taught through correspondence only." Eff. I 92-93.

Course expansion from "580a-580b" to "480a-480b/580a-580b." Listing for 480a-480b reads: "Literature for Children's Librarians (3-3) For description of course topics, see 580a-580b. 480a-480b taught through correspondence only." Eff. I 92-93.
Course expansion from "581" to "481/581." Listing for 481 reads: "School Library Administration and Organization (3) For description of course topics, see 581. 481 taught through correspondence only." Eff. I 92-93.

Course expansion from "585" to "485/585." Listing for 585 reads "Literature for Adolescents (3) For description of course topics, see 585. 485 taught through correspondence only." Eff. I 92-93.

Course expansion from "503" to "403/503." Eff. I 92-93.

Course expansion from "504" to "404/504." Eff. I 92-93.

Course expansion from "505" to "405/505." Eff. I 92-93.

Course expansion from "508" to "408/508." Eff. I 92-93.

Course expansion from "511" to "411/511." Eff. I 92-93.

Course expansion from "530" to "430/530." Eff. I 92-93.

Course expansion from "540" to "449/540." Eff. I 92-93.

Course expansion from "550" to "450/550." Eff. I 92-93.


Course expansion from "580a-580b" to "480a-480b/580a-580b." Eff. I 92-93.

Course expansion from "581" to "481/581." Eff. I 92-93.

Course expansion from "585" to "485/585." Eff. I 92-93.

NEW COURSE: "Evaluation of Libraries (3) II Examines the process of evaluation and analytical decision making in assessing library services and procedures." Eff. II 91-92.

Linguistics (LING)

NEW COURSE: "Introduction to Linguistics (3) II CDT Fundamentals of linguistics: phonetics, phonology, morphology, syntax, semantics and language acquisition; provides basis for further study in the field." Eff. II 92-93.

NEW COURSE: "Symbolic Processing (3) CDT I Fundamentals of processing of natural language text, especially parsing and grammar development; includes programming in Prolog or other symbolic programming languages. P, C SC 115 or equivalent programming background; LING 101 or 201." Eff. I 92-93.

Correction to CB1402: The following listing should have been included under "425": "Course number changed from "430" to "425." Add crosslisting (Identical with ANTH 425)." Change prerequisites to read "P, one course in linguistics, preferably LING 101 or ANTH 276." Eff. I 91-92. [Title: Language Variation]


465.-  Transfer course from LING to PHIL (as home department). Retain LING as a cross-listed department. The revised listing under LING should read "Pragmatics (3) II (Identical with PHIL 465). May be convened with 565." Eff. I 92-93.

474.-  Add: "Linguistic Perspectives on Mexican-American Spanish and Bilingualism (3) I II (Identical with SPAN 474) May be convened with 574." Eff. II 91-92.

525. +  Course number changed from "530" to "525." Add crosslisting "(Identical with ANTH 525)." Eff. I 91-92. [Title: Language Variation].


564. +  Cross transferred from PHIL to LING (as home department). Retain PHIL as a cross-listed department. The revised listing under Linguistics should read: "Formal Semantics (3) I Introduction to model-theoretic investigations of natural language interpretation, including coordination, qualification, referential relations, tense, aspect and modality. (Identical with PHIL 564)." Eff. I 92-93

565.-  Transfer course from LING to PHIL (as home department). Retain LING as a cross-listed department. The revised listing under LING should read "Pragmatics (3) II (Identical with PHIL 565). May be convened with 465." Eff. I 92-93.

574.-  Add: "Linguistic Perspectives on Mexican-American Spanish and Bilingualism (3) I II (Identical with SPAN 574) May be convened with 474." Eff. II 91-92.

696f. +  Transfer course from COMM to LING (as home department). Retain COMM as a cross-listed department. Add crosslisting with PSYC. The revised listing under LING should read "Linguistic Investigations and Applications (3) I II (Identical with COMM 696f and PSYC 696f)." Eff. I 92-93.

Management and Policy (MAP)

204.  Change course prefix from "MAP" to "PA." (Title: "Introduction to the Analysis of Data for Decision Making). Eff. I 92-93.


331.  Change course prefix from "MAP" to "PA." Change course number from "331" to "343." (Title: "The Crime Problem). Eff. I 92-93.

332. Change course prefix from "MAP" to "PA." Change course number from "332" to "344." (Title: "Legal Aspects of the Criminal Justice Process). Eff. I 92-93.

337. Change course prefix from "MAP" to "PA." Change course number from "337" to "241." Delete "*" after course number. (Title: "Criminal Justice Administration). Eff. I 92-93.


354. Change course prefix from "MAP" to "PA." Change course number from "354" to "321." For additional changes, see PA 321. Eff. I 92-93.

410a-410b. Change course prefix from "MAP" to "PA." Change course number from "410a-410b" to "410." For additional changes, see PA 410. Eff. I 92-93.

431. Change course prefix from "MAP" to "PA." Change course number from "431" to "441." (Title: "The Criminal Justice System). Eff. I 92-93.


540.+ Change course prefix from "MAP" to "PA." (Title: "Theories of Crime and Public Policy"). Eff. I 92-93.

541.- Add: "Deviance and Social Control (3) (Identical with SOC 541)". Eff. I 91-92.

550.- Add: "Social Stratification (3) I II (Identical with MAP 550)". Eff. I 91-92. [Note: No 400-level listing.]
Change course prefix from "MAP" to "PA." (Title: "Law of the Elderly"). Eff. 192-93.


Change course prefix from "MAP" to "PA." Change course number from "601" to "501." (Title: "Public Management"). For additional changes, see PA 501. Eff. 192-93.

Change course prefix from "MAP" to "PA." Change course number from "602" to "514." (Title: "Analytic Methods in Planning and Management"). For additional changes, see PA 514. Eff. 192-93.

Change course prefix from "MAP" to "PA." Change course number from "609" to "504." For additional changes, see PA 504." Eff. 192-93.

Change course prefix from "MAP" to "PA." Change course number from "621" to "513." For additional changes, see PA 513. Eff. 192-93.

Add: "Issues in Rural Health Care (3) II (Identical with NURS 635)." Eff. II 92-93.

Change course prefix from "MAP" to "PA." Change course number from "650" to "522." (Title: "Analysis of Health Systems"). For additional changes, see PA 522. Eff. 192-93.

Change course prefix from "MAP" to "PA." Change course number from "651" to "523." (Title: "Health and Public Policy"). For additional changes, see PA 523. Eff. I 92-93.

Change course prefix from "MAP" to "PA." (Title: "Management of Long Term Care Facilities and Programs." For additional changes, see PA 652. Eff. I 92-93.

Change course prefix from "MAP" to "PA." Change course number from "653" to "525." (Title: "Cooperative Management in Health Administration." For additional changes, see PA 525. Eff. I 92-93.

Change course prefix from "MAP" to "PA." Change course number from "662" to "527." (Title: "Aging and Public Policy"). Eff. I 92-93.

Change course prefix from "MAP" to "PA." Change course number from "693b" to "593b." (Title: Internship: "Criminal Justice."). Eff. I 92-93.

Change course prefix from "MAP" to "PA." Change course number from "693c" to "593c." (Title: Internship: "Public Management." Eff. I 92-93.

Change course prefix from "MAP" to "PA." Change course number from "693d" to "593d." (Title: Internship: "Health Services Administration." Eff. I 92-93.

Change course prefix from "MAP" to "PA." Change course number from "693f" to "593f." (Title: Internship: "Long Term Care Administration." Eff. I 92-93.
Change course prefix from "MAP" to "PA." Change course number from "693g" to "593g." (Title: Internship: "Policy and Planning." Eff. I 92-93.

Management Information Systems (MIS)


473a-473b. Course expansion from "473a-473b" to "473a-473b/573a-573b." Add "May be convened with 573a-573b." Eff. II 91-92.

474. Course expansion from "474" to "474/574." Add "May be convened with 574." Eff. II 91-92.

475. Course expansion from "475" to "475/575." Add "May be convened with 575." Eff. I 92-93.


477. Course expansion from "477" to "477/577." Add "May be convened with 577." Eff. I 92-93.

478. Course expansion from "478" to "478/578." Add "May be convened with 578." Eff. I 92-93.


573a-573b. Course expansion from "473a-473b" to "473a-473b/573a-573b." Add: "Production and Operations Management (3-3) For a description of course topics, see 473a-473b. Graduate-level requirements include an additional term paper or program. May be convened with 473a-473b." Eff. II 91-92.

574. Course expansion from "474" to "474/574." Add: "Current Topics in Operations Management (3) II For a description of course topics, see 474. Graduate-level requirements include an additional term paper or program. May be convened with 474." Eff. II 91-92.


(2) Course expansion from "475" to "475/575." Add: "Productivity Improvement (3) I For a description of course topics, see 475. Graduate-level requirements include an additional term paper or program. May be convened with 475." Eff. I 92-93.

576. Course expansion from "476" to "476/576." Add: Management of Service Operations (3) I For a description of course topics, see 476. Graduate-level requirements include an additional term paper or program. May be convened with 476." Eff. I 92-93.
(1) Change course number from "577" to "584." [Title: Discrete Mathematical Programming] Eff. II 91-92.
(2) Course expansion from "477" to "477/577." Add: Materials and Logistics Management (3) I For a description of course topics, see 477. Graduate-level requirements include an additional term paper or program. May be convened with 477." Eff. I 92-93.

(2) Course expansion from "478" to "478/578." Add: "Project Management (3) I For a description of course topics, see 478. Graduate-level requirements include an additional term paper or program. May be convened with 478." Eff. I 92-93.

(2) Course expansion from "479" to "479/579." Add: "Computer Models for Operations Management (3) I For a description of course topics, see 479. Graduate-level requirements include an additional term paper or program. May be convened with 479." Eff. II 91-92.

Course number changed from "575" to "583." [Title: Stochastic Models in Management Science] Eff. II 91-92.
Course number changed from "577" to "584." [Title: Discrete Mathematical Programming] Eff. II 91-92.

Materials Science and Engineering (MSE)


Course expansion from "412" to "412/512." Add "May be convened with 512." Eff. I 92-93.

Course revision and course expansion from "442a-442b" to "442a-442b/542a-542b." Revised listing should read "Materials Engineering Design (2-2) Application of engineering design principles to materials application and processes. 442a: Product and Process Design. 442b: Cost and Economic Analysis. 442a: 2ED. 442b: 2 ED. P, 360. May be convened with 542a-542b." Eff. I 92-93.

Course expansion from "444" to "444/544." Add "May be convened with 544." Eff. II 92-93.
457.- Course number changed from "557b" to "457/557." Change title to "Integrated Circuit Laboratory." Add semester offering "I II." Change crosslisting to read "(Identical with ECE 457)." Add: "May be convened with 557." Eff. II 91-92.

512. Add: "Physical Chemistry of Materials (3) I For a description of course topics, see 412. Graduate-level requirements include surface chemistry, electrochemistry and chemical kinetics. P, 240, MATH 223. May be convened with 412." Eff. I 92-93.

542a-542b. Add: "Materials Engineering Design (2-2) For a description of course topics, see 442a-442b. Graduate-level requirements include defense of the design project before the student's research committee. May be convened with 442a-442b." Eff. I 92-93.

544. Add: "Design Competition (3) II Students utilize their research experience in formulating and developing a materials design project which they present and defend before a review panel. Team design and research is emphasized. Graduate-level requirements include defense of the design project before the student's research committee. May be convened with 444." Eff. II 92-93

557.- Course number changed from "557b" to "457/557." Change title to read "Integrated Circuit Laboratory." Add semester offering "I II." Change crosslisting to read "(Identical with ECE 557)." Add "May be convened with 457." Eff. II 91-92.


557b. Change course number from "557b" to "457/557." For new listing, see "457/557." Eff. II 91-92.

Mathematics (MATH)
Revision to 1991-93 General Catalog, under Mathematics (headnotes section), page 214, second column, the paragraph under "The mathematics education option," it should read:
"397, 405, either 315 or 415, either 362 or 464, and either 330 or 430. Prospective secondary mathematics teachers must have at least a 2.5 GPA in the four lower-division courses: 124 or 125a, 125b, 223, and 215. Students who have not met this standard may not enroll in the mathematics education option courses without special permission." Eff. I 91-92.

126a-126b. NEW COURSE: "Calculus and Analytic Geometry (5) I II S Differentiation and integration of elementary functions; applications to graphing, maximization, areas and volumes, physical problems. P, 120 117R/S and 118, or acceptable score on math readiness test. Credit is allowed for this course or 124 or 125a-125b." Eff. II 92-93.
NEW COURSE: "Calculus with a Computer (2) II Designed to supplement regular calculus courses. The use of computers to solve calculus problems emphasizing numerical and geometrical understanding of calculus. P or CR, 125b." Eff. II 91-92.

Correction to 1991-93 General Catalog: Course number changed from "473" to "373." Title changed to "Automata, Grammars and Languages." Semester offering changed to "II." Eff. II 89-90. [Note: Listing under home dept., Computer Science, is correct.]

Change semester offering to "I II." Eff. II 91-92.

Correction to 1991-93 General Catalog: Course number changed to "373." Eff. II 89-90. [For additional changes, see 373.]

Delete semester offering "II." Eff. II 91-92.

Delete semester offering "I II." Eff. I 92-93.

Delete semester offering "I II." Eff. I 92-93.

Change semester offering to "I II." Eff. II 91-92.

Correction to 1991-93 General Catalog: Delete "May be convened with 473." Eff. II 89-90.

Change units from "(1-3)" to "(1)." Eff. I 92-93.

Delete semester offering "II." Eff. I 91-92.

Change units to from "(6)" to "(3)." Add "[Rpt./1]." Eff. I 91-92. [Students will no longer receive a "K" grade, but will receive a regular grade for the semester.]

Media Arts (M AR)

Add class structure "2R, 2S." Eff. I 92-93.


NEW COURSE: "History of Japanese Film (3) I II Development of Japanese cinema from its origins as an importer of Western technology at the turn of the century through its recognition as a major international art film producer during the 1950s and 1960s. 2R, 2S." Eff. II 91-92.


449. Add: "Advanced Artists’ Video (3) [Rpt./1] II (Identical with Art 449)"
Eff. II 91-92.

497a. Change units from "(1-5)" to "(3)." Add "[Rpt./6 units]." Eff. II 91-92.

497c. Add "[Rpt./1]." Eff. II 91-92.

497e. Change units from "(4)" to "(3)." Change prerequisite to read "P, 214." Eff. II 91-92.

500. NEW COURSE: "Graduate Study in Media Arts (3) I Fundamental concepts and areas of study in media arts; forms and standards for graduate student research and writing." Eff. II 91-92.

521. NEW COURSE: "Cultural Theory and Criticism of Media (3) I Critical and cultural theories and their application to media arts, including mass culture, empiricism, technoculture, political economy." Eff. II 91-92.

526. NEW COURSE: "Sexuality in Media Narratives (3) I For a description of course topics, see 426. Graduate-level requirements include additional reading and writing assignments and different examinations. May be convened with 426." Eff. I 91-92.


696.* NEW COURSES: Seminars:
b. "Media Arts History (3) [Rpt./6 units] I II". Eff. II 91-92.
c. "Readings in Media Arts (3) [Rpt./9 units] I II"
"Students may earn a maximum of 9 units in M AR 696, of which a maximum of 6 units may be earned in 696a or 696b." Eff. II 91-92.

Medicine (MED/ANES/FCM/IMED/NEUR/OBG/OPH/PATH/PED/PSYI/RONC/RADI/SURG)

Interdepartmental (MED)

596f. DELETE: "Clinical Epidemiology (2)." Eff. II 91-92.


896n. Add "**" after course subscript "n," to identify that this course is listed under both 496 and 896. Eff. I 92-93.

Change units from "(1-18)" to "(4-6)." Eff. I 92-93.

Course number changed from "891b" to "815a." Eff. I 92-93.

Course number changed from "891d" to "815b." Eff. I 92-93.

DELETE: "General Anesthesiology (4-6)." Eff. I 92-93.

Course number changed from "891b" to "815a." Eff. I 92-93.

Course number changed from "891d" to "815b." Eff. I 92-93.


Change units from "(3-6)" to "(4-6)." Eff. I 92-93.

DELETE: "Family Medicine (4-6)." Eff. I 92-93.


Correction to CB1316: Course number changed from "805" to "805a-805b." [For additional changes, see 805a-805b.]

Correction to CB1316: Course number changed from "805" to "805a-805b." Units changed to "(3-3)." Crosslisting changed to read "(Identical with ANAT 805a-805b)." Eff. I 91-92. [Note: These changes were only listed under the home dept., Anatomy, in CB1316.]

Change title to "Neurology Consult Service." Change units from "(3-6)" to "(4)." Eff. I 92-93.


**Obstetrics and Gynecology (OBG)**

Course number changed from "891b" to "815d." Title: "Gynecology-Endocrinology." Eff. I 92-93.


Course number changed from "891c" to "815h." Title: Reproductive Endocrinology & Fertility." Eff. I 92-93.

Change course number from "891b" to "815d." Eff. I 92-93.

Change course number from "891c" to "815h." Eff. I 92-93.

DELETE: "Gynecologic Oncology (3-6)." Eff. I 92-93.

**Pathology (PATH)**


Course number changed from "891b" to "810d." Eff. I 92-93.

Change course number from "891b" to "810d." Eff. I 92-93.

**Pediatrics (PED)**

Course number changed from "891c" to "815n." Eff. I 92-93.

DELETE: Subspecialty: "Child with Complex Chronic Illness (4-8)." Eff. I 92-93.

Change course number from "891c" to "815n." Eff. I 92-93.


**Psychiatry (PSYC)**


**Radiation Oncology (RONC)**

**Surgery (SURG)**


672.- Add: "Principles of Perfusion Techniques II (2) I (Identical with PHCL 672)". Eff. II 91-92.

800d. Course number changed from "891g" to "800d." New listing should read "Research Techniques in Orthopedic Surgery (4-8) P, 803." Eff. I 92-93.

810b. Course number changed from "891j" to "810b." New listing should read "Burn Care (4-8) P, fourth year medical students or completion of 803." Eff. I 92-93.

815l. Change title to "Orthopedic Biomechanics/Biomaterials." Change units from "(3-6)" to "(6)." Eff. I 92-93.


891g. Change course number from "891g" to "800d." Eff. I 92-93.

891j. Change course number from "891j" to "810b." Eff. I 92-93.

891e. DELETE: Preceptorship: "Care of the Trauma Victim (4-8)." Eff. II 91-92.


891l.- Add: Preceptorship: "Perfusion Science (3) [Rpt./9 units] I II S (Identical with PHCL 891l, which is home)". Eff. Summer 1991.

**Mexican American Studies (MAS)**


474.- Add: "Linguistic Perspectives on Mexican-American Spanish and Bilingualism (3) I II (Identical with SPAN 474) May be convened with 574." Eff. II 91-92.

573.- Correction to CB 1317: "Title change should have listed for "573" also (only 400-level was listed). Change title to "Spanish for the Native Speaker of Spanish Classroom Teacher." Eff. I 91-92.

574.- Add: "Linguistic Perspectives on Mexican-American Spanish and Bilingualism (3) I II (Identical with SPAN 574) May be convened with 474." Eff. II 91-92.
NEW COURSE: Colloquium: "Great Experiments in Microbiology (1)" Eff. I 92-93.

Add: "Molecular Parasitology (3) II GRD (Identical with V SC 404) May be convened with 504." Eff. II 91-92.

Change semester offering to "II". Eff. II 91-92.

Add: "Molecular Biology (3) II (Identical with MCB 411) May be convened with 511." Eff. II 91-92.


Course number changed from "436" to "426." New listing for 426 reads: "Environmental Microbiology Laboratory (2) I (Identical with S W 426) May be convened with 526." Eff. I 92-93.


Add: "Environmental Microbiology Laboratory (2) I (Identical with S W 436) May be convened with 536." Eff. I 92-93.

Change course number from "436" to "426." For new listing see 426. Eff. I 92-93.

Course expansion from "473" to "473/573." Add "May be convened with 573." Eff. II 91-92.

Add: "Molecular Parasitology (3) II GRD (Identical with V SC 504) May be convened with 404." Eff. II 91-92.

Add: "Molecular Biology (3) II (Identical with MCB 511) May be convened with 411." Eff. II 91-92.

Add crosslisting: "(Identical with S W 525)". Eff. I 92-93.

Course number changed from "536" to "526." New listing for 526 reads: "Environmental Microbiology Laboratory (2) I (Identical with S W 526) May be convened with 426." Eff. I 92-93.


Add: "Environmental Microbiology Laboratory (2) I (Identical with S W 536) May be convened with 436." Eff. I 92-93.

Change course number from "536" to "526." For new listing see 526. Eff. I 92-93.

Add: "Environmental Biotechnology Laboratory (2) II 1992-93 (Identical with S W 546)". Eff. II 92-93.


Course expansion from "473" to "473/573." Add: "Recombinant DNA Methods and Applications (4) II (Identical with MCB 573) May be convened with 473." Eff. II 91-92.


Military Aerospace Studies (MLA)

100a-100b. Course number changed from "101a-101b" to "100a-100b." Change title to "Air Force Today." Eff. I 92-93.

101a-101b. Change course number from "101a-101b" to "100a-100b." See 100a-100b for new listing. Eff. I 92-93.

200a-200b. Course number changed from "201a-201b" to "200a-200b." Change title to "History of Aviation." Eff. I 92-93.

201a-201b. Change course number from "201a-201b" to "200a-200b." See 200a-200b for new listing. Eff. I 92-93.

Military Science (MLS)

300. Course number changed from "300a" to "300." New listing reads "Small Unit Leadership I (3) Topographical map interpretation; fundamentals of small-unit operations; communication media, motivation and behavior in the military environment; military planning and execution; practicum. 3R, 1L. Consult department before enrolling." Eff. I 93-94.

300a. Change course number from "300a" to "300." Eff. I 93-94.

300b. Change course number from "300b" to "301." Eff. I 93-94.

301. (1) Change course number from "301" to "310." [Title: Army ROTC Advanced Camp""] Eff. I 93-94.

(2) Course number changed from "300b" to "301." New listing reads "Small Unit Leadership II (3) Topographical map interpretation; fundamentals of small-unit operations; communication media, motivation and behavior in the military environment; military planning and execution; practicum. 3R, 1L. Consult department before enrolling." Eff. I 93-94.

310. Course number changed from "301" to "310." [Title: "Army ROTC Advanced Camp"] Eff. I 93-94.

400. Course number changed from "400a" to "400." New listing reads "Officership I (3) Development of skills required to function as a manager; motivation and behavior in a military environment; highlights personal integrity, honor and professional ethics; military legal system; unit management; practicum. 3R, 1L. Consult department before enrolling." Eff. I 93-94.

400a. Change course number from "400a" to "400." Eff. I 93-94.

400b. Change course number from "400b" to "401." Eff. I 93-94.

401. Course number changed from "400b" to "401." New listing reads "Officership II (3) Development of skills required to function as a manager; motivation and behavior in a military environment; highlights personal integrity, honor and professional ethics; military legal system; unit management; practicum. 3R, 1L. Consult department before enrolling." Eff. I 93-94.
Geological Engineering (GEN)
427.- Change units from "(4)" to variable units "(3-4)." Eff. I 91-92.
521. Correction to 1991-93 General Catalog: Erroneous listing. [G EN 421/521 were deleted in CB1316.]
527.- Change units from "(4)" to variable units "(3-4)." Eff. I 91-92.

Mining Engineering (MNE)
427. + Change units from "(4)" to variable units "(3-4)." Eff. I 91-92.
527. + Change units from "(4)" to variable units "(3-4)." Eff. I 91-92.

Molecular & Cellular Biology (MCB)
195a.- Add: Colloquium: "Great Experiments in Microbiology (1) I II (Identical with MICR 195a)" Eff. I 92-93.
413. Change units from "(2)" to "(3)." Eff. I 92-93.
455. + NEW COURSE: "Developmental Mechanisms (3) I Molecular and cellular mechanisms of development, with emphasis on model systems. P, 181 and an advanced course in genetics, molecular or cell biology. (Identical with BIOC 455)". Eff. I 92-93.
462a- Add:"Biochemistry (4) (Identical with BIOC 462a)". Eff. I 91-92. (Note 462b is already crosslisted.)
466.- Change units from "(2)" to "(3)." Eff. II 91-92.
473. + Course expansion from "473" to "473/573." Add "May be convened with 573." Eff. II 91-92.

511. + Add: "Molecular Biology (3) II For a description of course topics, see 411. Graduate-level requirements include attending an additional lecture hour per week to discuss independent research, and to perform at a level 10% above undergraduate students. MCB majors should not take this course for graduate credit. P, 462a and consult department before enrolling. (Identical with BIOC 511 and MICR 511) May be convened with 411." Eff. II 91-92.

513. Change units from "(2)" to "(3)." Eff. I 92-93.

516. + Course number changed from "517" to "516." Course revised to read: "Computer Analysis of Sequences (3) II Analysis of protein and DNA sequence information using computer methods. Consult instructor before enrolling. (Identical with BIOC 516, ECOL 516 and GENE 516)." Eff. II 91-92.

517. + Change course number from "517" to "516." Course revised. [Note: For new listing, see 516.] Eff. II 91-92.

566.- Change units from "(2)" to "(3)." Eff. II 91-92.


573. + Course expansion from "473" to "473/573." Add "Recombinant DNA Methods and Applications (4) II For a description of course topics, see 473. Graduate-level requirements include reading papers for the current literature, coupled with oral presentations. 2R, 6L. Consult department before enrolling. P, 410, BIOC 462a. Not available to MCB graduate students. (Identical with BIOC 573, GENE 573 and MICR 573) May be convened with 473. Eff. II 91-92.

583. + Change semester offering from "I" to "II." Eff. II 92-93.


612. + NEW COURSE: "Biological Electron Microscopy (4) I Provides theoretical background and practical experience in transmission and scanning electron microscopy that are necessary for the efficient and effective application of ultrastructural and cytochemical techniques as research tools. 2R, 6L. P, one college level course in each of physics, chemistry and biology. (Identical with ANAT 612, AN S 612, BIOC 612, ENTO 612, MICR 612, PATH 612, PSIO 612, PL P 612, V SC 612)." Eff. I 92-93.
Music (MUS)

Correction to 1991-93 General Catalog, on page 234, under section on Areas of Specialization, under Guitar, in the first column, the last line of first paragraph should read: "434" should be "424." Eff. I 91-92.

103. Change units from *"(1)" to "(2)." Eff. I 92-93.
200e. + Change title to "Wind Symphony". Eff. II 91-92.

361. Change units from *"(2)" to "(3)." Eff. II 91-92.
400e. + Change title to "Wind Symphony". Eff. II 91-92.
4970. NEW COURSE: "Level I Orff Schulwerk (2) S Pedagogical foundation of the Orff approach. Includes study of Orff techniques; use of the pentatonic, simple bordun, ostinato, elemental forms; basic body movements and application; vocal and rhythmic training; soprano recorder; improvisation. May be convened with 5970." Eff. Summer 1992.
500e. + Change title to "Wind Symphony". Eff. II 91-92.
534. DELETE: "Music in World Cultures (3)." Eff. II 91-92.
551. Change title to "Behavioral Research in the Arts." Change course description to: *Research methodologies as they apply to artistic behavior; emphasis on applying the results of existing studies to practice and on conducting original research." Eff. II 92-93.
5970. Add: "Level I Orff Schulwerk (2) S For course topics, see 4970. Graduate students will be required to teach a prepared lesson to the rest of the class and submit extra written assignments on various subjects. May be convened with 4970." Eff. Summer 1992.

Near Eastern Studies (NES)

401.- Correction to CB1317: Entry should have read: "Add: Ancient Mesopotamia (3) I (Identical with ANTH 401) May be convened with 501." Eff. I 91-92.
468a-468b. Correction to the 1991-93 General Catalog: Course number erroneously listed as "468a-468b"; it should be "468a-468b.
497b. Correction to 1991-93 General Catalog: Erroneous listing. [Note: Home dept., German, deleted course in CB1314. It had a crosslisting with EAS not NES]
501.- Correction to CB1317: Entry should have read: "Add: Ancient Mesopotamia (3) I (Identical with ANTH 501) May be convened with 401." Eff. I 91-92.
568a-586b. Correction to the 1991-93 General Catalog: Course number erroneously listed as "568a-586b"; it should be "568a-568b.
596q. Change "Rpt." to "Rpt./6." Eff. I 89-90. [Note: Prior to Fall of 1990, course was listed as OR S 596q]

Neuroscience (NRSC)

195H. NEW COURSE: "Honors Colloquium (1) I Introduction to the multidisciplinary field of neuroscience and to scientific ways of knowing and the methods and standards for discovering new knowledge. Limited to honors freshmen." Eff. I 92-93.
495a. NEW COURSE: Colloquium: "Antennal Lobe (1) [Rpt./6 units] I II S." Eff. I 92-93.
495b. NEW COURSE: Colloquium: "Developmental Neurobiology (1) [Rpt./6 units] I II S." Eff. I 92-93.
495c. NEW COURSE: Colloquium: "Neurophysiology (1) [Rpt./6 units] I II S." Eff. I 92-93.
495d. NEW COURSE: Colloquium: "Brain, Behavior and Computation (1) [Rpt./6 units] I II S." Eff. I 92-93.
495e. NEW COURSE: Colloquium: "Neurobiology (1) [Rpt./6 units] I II S." Eff. I 92-93.
537.- Add: "Gerontology: A Multidisciplinary Perspective (3) I II (Identical with PSYC 537)" Eff. I 91-92. (Graduate-level crosslisting only--no 437 crosslisting.)
565.- Add: "Neural Encoding, Memory and Computation in the Mammalian Brain (3) I II (Identical with PSYC 565)" Eff. I 92-93. (Graduate-level crosslisting only--no 465 crosslisting.)
583.- Change semester offering from "I" to "II." Eff. II 92-93.
595a. NEW COURSE: Colloquium: "Antennal Lobe (1) [Rpt./6 units] I II S." Eff. I 92-93.
NEW COURSE: Colloquium: "Developmental Neurobiology (1) [Rpt./6 units] II S." Eff. 192-93.

NEW COURSE: Colloquium: "Neurophysiology (1) [Rpt./6 units] II S." Eff. 192-93.

NEW COURSE: Colloquium: "Brain, Behavior and Computation (1) [Rpt./6 units] II S." Eff. 192-93.

NEW COURSE: Colloquium: "Neurobiology (1) [Rpt./6 units] II S." Eff. 192-93.

Change "Consult department before enrolling." to "Consult neuroscience program office before enrolling." Eff. 191-92.

Change number of units to "(2)". Change semester offering to "II" only. Change "consult department before enrolling" to "consult neuroscience program office before enrolling". Eff. II 91-92.

Nuclear & Energy Engineering (NEE)

Revision to College Section of 1991-93 General Catalog, page 71, under the requirements for the Bachelor of Science in Nuclear Engineering:

Under "Required Curriculum" "Sophomore Year" in the left-hand column of the grid: Replace "Hum./Soc. Sci. Elective (3 units) with "NEE 201 (2 units)." Revise the total units of this column from "17 units" to "16 units." Eff. II 91-92.

Under "Required Curriculum" "Sophomore Year" in the right-hand column of the grid: Replace "ECE 207 (3 units)" with "Hum./Soc. Sci. Elective (3 units)." Eff. II 91-92.

Under "Required Curriculum" "Junior Year" in the left-hand column of the grid: Replace "AME 300 (3 units)" with "ECE 207 (3 units)." Eff. II 91-92.

Under "Required Curriculum" "Senior Year" in the left-hand column of the grid: Replace "NEE 406 (3 units)" with "NEE 406 (4 units)." Add: "Hum./Soc. Sci. Elective (3 units)." Revise the total units of this column from "15 units" to "19 units." Eff. II 91-92.

Under "Required Curriculum" "Senior Year" in the left-hand column of the grid: Replace "Hum./Soc. Sci. Elective (4 units) with "Hum./Soc.Sci. Elective (3 units)." Revise the total units of this column from "16 units" to "15 units." Eff. II 91-92.
NEW COURSE: "Instrumentation and Measurements Laboratory (2)
I Techniques of instrument use for measurements of pressure,
temperature, mass flow, and radiation intensity. Data analysis,
error, analysis, lab notebook, technical reporting. 1L, 3L. P, MATH
125b; CR, PHYS 116." Eff. I 92-93.

Change number of units to "4". Add class structure: "3R, 3L." Eff. I
91-92.

Change number of units to "4". Add class structure: "3R, 3L." Eff. I
91-92.

NEW COURSE: Seminar: "Advanced Nuclear Power Activities (1)

Nursing (NURS)

NEW COURSE: "Nursing Issues and Research (4) S Overview of
nursing as a profession within the health care delivery system.
Introduction to research process, role of nurse as consumer and
user of research. Open to accelerated-pathway nursing majors

NEW COURSE: "Professional Nursing Skills (5) S The first course in
clinical nursing focuses on basic skills, nursing process, and health
assessment. Theoretical concepts of health wellness,
communication, functional health patterns, culture, physical
assessment and basic nursing skills will be taught by lecture,
demonstration, seminar, and clinical practice. Open to accelerated-

NEW COURSE: "Mental Health Nursing Clinical Therapeutic
Process (3) II Focus on concepts of personality development using
psychodynamic and cognitive/behavior theories oriented to the
practice of mental health nursing; employing individual, family and
group nursing therapeutic techniques for the amelioration of

NEW COURSE: "Mental Health Nursing Advanced Clinical Practice
(3) I Focus on the application of cognitive and behavioral theory in
the mental health clinical setting, emphasizing individual and group
modalities. Open to majors only." Eff. I 91-92.

NEW COURSE: "Issues in Rural Health Care (3) II Topics include:
community assessment, planning and evaluation; interdisciplinary
practice; health care issues for southwestern ethnic minority
populations (Identical with MAP 635, PHPR 635 and PSYC 635)."
Eff. II 92-93.
Nutrition & Food Science (N FS)


220.- Add: "Microcomputing Applications (3) I II (Identical with ABT 220)." Eff: I 92-93.


440. Change title to "Nutritional Assessment and Management." Change units from "(3)" to "(4)." Eff. 92-93.

565.- Delete listing. Eff. 92-93.


Optical Sciences (OPTI)

505L. Change course number from "505L" to "509L." [For new listing, see 509L.] Eff. II 91-92.

509L. Course number changed from "505L" to "509L." Change title to read "Fundamentals of Physical Optics Laboratory." Change description and prerequisites to read "Laboratory in support of 509. P, 501 or 509." Eff. II 91-92.

511. + Correction to CB1318: Change effective date for new course, "Lasers and Solid-State Devices" to "II 91-92".

513. Change prerequisites to "P, 505 or 509, 506 or 510." Eff. I 92-93.


637. NEW COURSE: "Principles of Image Sciences (3) II Mathematical description of imaging systems and noise; introduction to inverse problems; introduction to statistical decision theory; prior information; image reconstruction and radon transform; image quality; applications in medical imaging; other imaging systems. P, 504, 508." Eff. II 92-93.

638. DELETE: "Advanced Radiological Imaging (3)." Eff. II 92-93.
670. NEW COURSE: "Principles of Optical Data Storage (3) II 1991-92
Optics of polarized light in systems of high numerical aperture;
automatic focusing and tracking schemes; interaction of light with
magnetic media; readout enhancement through multilayering;
physical mechanisms of optical recording in ablative, phase-
change, thermomagnetic and dye-polymer media; sources of noise
in optical recording; data encoding schemes. P, consent of
instructor." Eff. II 91-92.

681. NEW COURSE: "Software Tools for Scientists and Engineers (3) II
Introduction to basic software techniques useful in carrying out and
documenting scientific research. 3R, 3L. P, C SC 227 or SIE 270.
Eff. II 91-92.

Pharmacology (PHCL) (College of Medicine)

501. + Change prerequisites to "P, PSIO 601 and graduate course
equivalent to BIOC 801." Eff. I 92-93.

670. + NEW COURSE: "Principles of Perfusion Techniques I (3) I An
introduction to basic extracorporeal techniques through discussion
of blood propelling devices, heat transfer, gas transfer, bio-
materials and perfusion pharmacology. P, CR, 671, acceptance as
degree graduate student. (Identical with SURG 670)." Eff. I 91-92.

671. + NEW COURSE: "Perfusion Technology Laboratory (1) I An
introduction to basic extracorporeal systems. P, acceptance as
degree graduate student. (Identical with SURG 671)." Eff. I 91-92.

672. + NEW COURSE: "Principles of Perfusion Techniques II (2) I
Introduction to basic extracorporeal techniques through discussion
of blood propelling devices, heat transfer, gas transfer, bio-
materials and perfusion pharmacology. P, acceptance as a degree
track graduate. (Identical with SURG 672)." Eff. II 91-92.

691I. + NEW COURSE: Preceptorship: "Perfusion Science (3) [Rpt./9 units]
I II S P, admission into circulatory sciences option within

805.- Correction to CB1316: Course number changed from "805" to
"805a-805b." [For additional changes, see 805a-805b.]

805a-805b.- Correction to CB1316: Course number changed from "805" to
"805a-805b." Units changed to "(3-3)." Crosslisting changed to read
"(Identical with ANAT 805a-805b)." Eff. I 91-92. [Note: These
changes were only listed under the home dept., Anatomy, in
CB1316.]

891I. + NEW COURSE: Preceptorship: "Perfusion Science (3) [Rpt./9 units]
Pharmacology and Toxicology (PCOL/TOX)

Pharmacology (PCOL)


Toxicology (TOX)

466.- Change units from "(2)" to "(3)." Eff. II 91-92.

501.- Change prerequisites to "P, PSIO 601 and graduate course equivalent to BIOC 801." Eff. I 92-93.


565.- Course number changed from "565" to "509." Eff. I 92-93.

566.- Change units from "(2)" to "(3)." Eff. II 91-92.

Pharmacy Practice (PHPR)


300. + Change course number from "300" to "400." (Title: "Pharmaceutical Calculations") Change crosslisting to read "(Identical with PHSC 400)" Eff. I 92-93.

303. Change course number from "303" to "403." (Title: "Introduction to Pharmacy Practice") Eff. I 92-93.

304. Change course number from "304" to "404." (Title: "Interviewing and Counseling Skills") Eff. I 92-93.

305. Change course number from "305" to "405." (Title: "Patient Counseling and Medical Devices") Eff. I 92-93.

343. Change course number from "343" to "443." (Title: "Pharmacy Laws") Eff. I 92-93.


400. + Course number changed from "300" to "400." (Title: "Pharmaceutical Calculations") Change crosslisting to read "(Identical with PHSC 400)" Eff. I 92-93.

403. Course number changed from "303" to "403." (Title: "Introduction to Pharmacy Practice") Eff. I 92-93.

404. Course number changed from "304" to "404." (Title: "Interviewing and Counseling Skills") Eff. I 92-93.

405. Course number changed from "305" to "405." (Title: "Patient Counseling and Medical Devices") Eff. I 92-93.
443. Course number changed from "343" to "443." (Title: "Pharmacy Laws") Eff. I 92-93.

454. Course number changed from "354" to "454." (Title: "Drug Information and Drug Literature Evaluation") Change prerequisite to "P, 403." Eff. I 92-93.


635.- Add: "Issues in Rural Health Care (3) II (Identical with NURS 635)." Eff. II 92-93.

695a. Correction to General Catalog: Home dept., was never identified in this course listing. Revise crosslisting to read "(Identical with GERO 695a, which is home)."


Pharmaceutical Sciences (PHSC)

300.- Change course number from "300" to "400." (Title: "Pharmaceutical Calculations") Change crosslisting to read "(Identical with PHPR 400)" Eff. I 92-93.
400.- Course number changed from "300" to "400." (Title: "Pharmaceutical Calculations") Change crosslisting to read "(Identical with PHPR 400)" Eff. I 92-93.
606. NEW COURSE: "Industrial Manufacturing Pharmacy (3) II Pharmaceutics as applied to various aspects of industrial pharmacy. Field trips." Eff. II 91-92.

Philosophy (PHIL)

454. Change course number to "455". Eff. II 91-92. [For other change see "455".]
455. + Course number changed from "454". Add crosslisting: "(Identical with PSYC 455)." Eff. II 91-92.
Course transferred from LING to PHIL (as home department). Retain LING as cross-listed department. The revised listing under Philosophy should read: "Pragmatics (3) II Study of language use, its relationship to language structure and context; topics such as speech acts, presupposition, implication, performatives, conversations. (Identical with LING 465) May be convened with 565." Eff. I 92-93.

Change course number to "555". Eff. II 91-92. [For other changes, see "555".]

Course number changed from "554". Add crosslisting: "(Identical with PSYC 555)". Eff II 91-92.

Add crosslisting "(Identical with LING 563)." Eff. II 91-92.

Transfer course from PHIL to LING (as home department). Retain PHIL as cross-listed department. The revised listing under Philosophy should read: "Formal Semantics (3) I (Identical with LING 564)." Eff. I 92-93.

Course transferred from LING to PHIL (as home department). Retain LING as cross-listed department. The revised listing under Philosophy should read: "Pragmatics (3) II For a description of course topics, see 465. Graduate-level requirements include a greater number of assignments and a higher level of performance. (Identical with LING 565) May be convened with 465." Eff. I 92-93.

Physics (PHYS)

Change repeatability to "[Rpt./4 units]". Eff. II 85-86.

Change units to from "(6)" to "(3)." Add "[Rpt./1]." Eff. I 91-92. [students will no longer receive a "K" grade, but will receive a regular grade for the semester.]

Physiology (PSIO)

Change units from "(2)" to "(3)." Eff. II 91-92.

Change units from "(2)" to "(3)." Eff. II 91-92.

Delete prerequisites. Add "Permission required to enroll; consult instructor before registering." Eff. I 92-93.


Change course description to "Comprehensive approach to understanding the system of human physiology." Delete prerequisites. Eff. I 92-93.

Correction to CB1316: Course number changed from "805" to "805a-805b." [For additional changes, see 805a-805b.]
Correction to CB1316: Course number changed from "805" to "805a-805b." Units changed to "(3-3)." Crosslisting changed to read "(Identical with ANAT 805a-805b)." Eff. I 91-92. [Note: These changes were only listed under the home dept., Anatomy, in CB1316.]

DELETE: Subspecialty: "BNI Neurophysiology (4-8)." Eff. I 92-93.

Planetary Sciences (PTYS)


Course expansion from "518" to "418/518." May be convened with 418." Eff. I 91-92.


Planning (PLNG)

Change course number to "459/559". Course revised. Eff. II 91-92. [For new listings, see "459" and "559".]

Course number changed from "359" to "459/559". Course revised. New listing for "459" reads: "Land Use and Growth Controls (3) II (Identical with GEOG 459) May be convened with 559." Eff. II 91-92.


Course number changed from "609" to "504." New listing reads "Public and Policy Economics (3) (Identical with PA 504)." Eff. I 92-93.

Course number changed from "602" to "514." Change crosslisting to read "(Identical with PA 514)" Eff. I 92-93.

Course number changed from "651" to "523." Change crosslisting to read "(Identical with PA 523)" Eff. I 92-93.

Course number changed from "662" to "527." Change crosslisting to read "(Identical with PA 527)" Eff. I 92-93.

Course number changed from "359" to "459/559". Course revised. New listing for "559" reads: "Land Use and Growth Controls (3) II (Identical with GEOG 559) May be convened with 459." Eff. II 91-92.


Course number changed from "693g" to "593g." (Title: "Policy and Planning." Change crosslisting to read "(Identical with PA 593g)" Eff. I 92-93.
602.- Change course number from "602" to "514." Change crosslisting to read "(Identical with PA 514)" Eff. I 92-93.

609.- Change course number from "609" to "504." See 504 for new listing. Eff. I 92-93.

651.- Change course number from "651" to "523." Change crosslisting to read "(Identical with PA 523)" Eff. I 92-93.


662.- Change course number from "662" to "527." Change crosslisting to read "(Identical with PA 527)" Eff. I 92-93.

693g.- Change course number from "693g" to "593g." (Title: "Policy and Planning." Change crosslisting to read "(Identical with PA 593g)" Eff. I 92-93.


Plant Pathology (PL P)


Plant Sciences (PL S)

234.- Change course number from "234" to "335." For new listing, see 335. Eff. I 92-93.

335.- Course number changed from "234" to "335." New listing reads "Plant Materials (4) II (Identical with PA 335)" Eff. I 92-93.

526. Correction to CB1318: Course number erroneously listed as "528," it should have been to delete "526." Eff. I 91-92.

528. Correction to CB1318: Course number erroneously listed as "528," it should have been to delete "526." Eff. I 91-92.

551. Correction to CB1317: Change effective date for course revision to "Summer 1991".

Political Science (POL)


297a. Change units from "(1-3)" to "(3)." Eff. II 91-92.

335. + NEW COURSE: "Gender and Politics (3) I II Examination of politics through the lens of gender hierarchy. Emphasis on how constructions of masculinity and femininity shape and are shaped by interacting economic, political, and ideological practices. P, W S 100 (Identical with W S 335)." Eff. II 91-92.

373.- Add: "Political Geography (3) II (Identical with GEOG 373)." Eff. II 91-92.

Add crosslisting "(Identical with PA 406)" Eff. I 92-93. [Crosslisting at 400 level only]

Add crosslisting "(Identical with PA 480)" Eff. I 92-93.

Add crosslisting "(Identical with PA 481)" Eff. I 92-93. [Crosslisting at 400 level only]

Add: "Public Choice (3) [Rpt./6 units] II (Identical with ECON 489). May be convened with 589.

Add: "Public Choice (3) [Rpt./6 units] II (Identical with ECON 589). May be convened with 489.

Add crosslisting "(Identical with PA 595g)" Eff. I 92-93.

Add crosslisting "(Identical with PA 596i)" Retain crosslisting with RNR. Eff. I 92-93.

Psychology (PSYC)


Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Course expansion to "413/513". Add "May be convened with 513." Eff. I 91-92.

Add "Writing-emphasis course." Eff. II 91-92.

Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Add "Writing-Emphasis Course." Eff. II 91-92.


Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Add "Writing-Emphasis Course." Eff. II 91-92.

Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Add: "Philosophy and Artificial Intelligence (3) (Identical with PHIL 455) May be convened with 555." Eff. II 91-92.

Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.
Add to course description "Open only to psychology majors and IDS majors with a psychology subject area." Eff. II 91-92.

Course expansion from "413" to "413/513". Add: "Drugs, Brain and Behavior (3) I II For a description of course topics, see 413. Graduate-level requirements include an additional term paper pertinent to the course topic. May be convened with 413." Eff. I 91-92.

DELETE: "Neurobiology (3)." Eff. I 92-93.

DELETE: "Psychobiology (3)." Eff. I 92-93.

Add crosslisting: "(Identical with NRSC 537)". Eff. I 91-92. (Graduate-level crosslisting only--no 437 crosslisting.)

Add crosslisting "(Identical with GERO 537)" Eff. I 92-93.

Add: "Philosophy and Artificial Intelligence (3) (Identical with PHIL 555) May be convened with 455." Eff. II 91-92.

NEW COURSE: "Methods for Psychosocial Research (3) I Logic of inquiry and issues of philosophy of science as they apply to psychosocial research. Problems encountered by researchers in personality, family studies, social, and clinical psychology, and creative approaches to their data analysis and methodological design resolutions." Eff. II 91-92.

Add crosslisting: "(Identical with NRSC 565)" Eff. I 92-93. (Graduate-level crosslisting only--no 465 crosslisting.)

NEW COURSE: "Modes and Methods of Family Therapy (3) I II Theoretical bases underlying different methods of family therapy and their clinical applications. Includes system theory, the family as a system, therapeutic principles, and process and outcome research." Eff. II 91-92.

Add: "Issues in Rural Health Care (3) II (Identical with NURS 635)." Eff. II 92-93.


Public Administration and Policy (PA)

Course prefix changed from "MAP" to "PA." (Title: "Introduction to the Analysis of Data for Decision Making"). Eff. I 92-93.

Add: "Public Policy and Administration (3) II (Identical with POL 206)." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "348" to "221." Delete "*" after course number. (Title: "Social Welfare Policy"). Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "337" to "241." Delete "*" after course number. (Title: "Criminal Justice Administration"). Eff. I 92-93.
Course prefix changed from "MAP" to "PA." Course number changed from "354" to "321." Revised listing reads: "Health Care Policy and Institutions (3) I Examines public policy issues in health including recent developments in health policy and planning at the nation, state, and local levels and their impacts on administrative behavior." Eff. 192-93.

341.- Add: "Juvenile Delinquency (3) I II (Identical with SOC 341)." Eff. 1 92-93

343. Course prefix changed from "MAP" to "PA." Course number changed from "331" to "343." (Title: "The Crime Problem"). Eff. 1 92-93.

344. Course prefix changed from "MAP" to "PA." Course number changed from "332" to "344." (Title: "Legal Aspects of the Criminal Justice Process"). Eff. 1 92-93.


410. Course prefix changed from "MAP" to "PA." Course number changed from "410a-410b" to "410." New listing reads: "Introduction to Public and Nonprofit Financial Management (3) Issues and techniques of financial management and budgeting in the public and nonprofit sectors. P, ECON 300; ACCT 200 or 272." Eff. 1 92-93.

421. Course prefix changed from "MAP" to "PA." Course number changed from "454" to "421." New listing reads: "Health, Ethics, and Public Policy (3) II Course will consider the major policy issues confronting health care system including finance, access and ethics.". Eff. 1 92-93.

422. Course prefix changed from "MAP" to "PA." Course number changed from "456" to "422." New listing reads: "Introduction to Health Economics (3) II Applies microeconomic theory, industrial organization and public finance to efficiency and equity problems in the acute and chronic health-care sectors and explores solutions to these problems at an introductory level. P, 321." Eff. 1 92-93.

423. Course prefix changed from "MAP" to "PA." Course number changed from "466" to "423." Course title changed to "Introduction to Health Care Policy and the Elderly." Eff. 1 92-93.

441. Course prefix changed from "MAP" to "PA." Course number changed from "431" to "441." (Title: "The Criminal Justice System"). Eff. 1 92-93.

442. Course prefix changed from "MAP" to "PA." Course number changed from "436" to "442." (Title: "Crime and Public Policy"). Eff. 1 92-93.

457. Course prefix changed from "MAP" to "PA." (Title: "Law of the Elderly"). Eff. 1 92-93.
Course prefix changed from "MAP" to "PA." Course number changed from "472" to "470." New listing reads: "Administration of Public Organizations (3) II Exploration of public organization theory and behavior in the context of issues confronting upper echelon public administrators on local, state and federal levels. P, MAP 305, PA 410. Writing-Emphasis Course." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "435" to "474." New listing reads: "International Management (3) II S Analysis of public and private management opportunities and constraints internationally; strategies under inter- and international conditions. May be convened with 574." Eff. I 92-93.

Add: "Formation of Public Policy (3) I (Identical with POL 480)." Eff. I 92-93.

Add "Environmental Policy (3) I (Identical with POL 481)." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "601" to "501." (Title: "Public Management"). Add "Open only to students admitted to a BPA graduate program or consult department before enrolling." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "609" to "504." New listing reads: "Public and Policy Economics (3) II Applications of economics to the analysis of public policy and planning problems. (Identical with GEOG 504 and PLNG 504)" Eff. I 92-93.

NEW COURSE: "Public Organization Theory (3) I II Course focuses on understanding and analyzing interactions, effectiveness and complexities of organization structures." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "621" to "513." Change title to "Intergovernmental Relations." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "602" to "514." (Title: "Analytic Methods in Planning and Management"). Change crosslisting to read "(Identical with PLNG 514)." Change prerequisites to "P, MIS 552, GEOG 557 or permission of instructor." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "650" to "522." (Title: "Analysis of Health Systems") Change prerequisites to read "P, 501." Eff. I 92-93.

Course prefix changed from "MAP" to "PA." Course number changed from "651" to "523." (Title: "Health and Public Policy"). Change prerequisites to "P, 522." Eff. I 92-93.
Course prefix changed from "MAP" to "PA." Course number changed from "653" to "525." (Title: "Comparative Management in Health Administration"). Change prerequisites to "P, 522." Eff. 192-93.

Course prefix changed from "MAP" to "PA." Course number changed from "662" to "527." (Title: "Aging and Public Policy"). Change crosslisting to read "(Identical with PLNG 527)" Eff. 192-93.

Course prefix changed from "MAP" to "PA." (Title: "Theories of Crime and Public Policy"). Eff. 192-93.

Course prefix changed from "MAP" to "PA." (Title: "Law of the Elderly"). Eff. 192-93.

Course prefix changed from "MAP" to "PA." Course number changed from "535" to "574." (Title: "International Management"). Eff. 192-93.

Course prefix changed from "MAP" to "PA." Course number changed from "693b" to "593b." (Title: "Criminal Justice"). Eff. 192-93.

Course prefix changed from "MAP" to "PA." Course number changed from "693c" to "593c." (Title: "Public Management"). Eff. 192-93.

Course prefix changed from "MAP" to "PA." Course number changed from "693d" to "593d." (Title: "Health Services Administration"). Eff. 192-93.

Course prefix changed from "MAP" to "PA." Course number changed from "693f" to "593f." (Title: "Long Term Care Administration"). Eff. 192-93.

Course prefix changed from "MAP" to "PA." Course number changed from "693g" to "593g." (Title: "Policy and Planning"). Eff. 192-93.

Add: "Public Policy (3) (Identical with POL 595g)." Eff. 192-93.

Add: "Water and Equity in the Southwest (3) [Rpt.] I II (Identical with POL 596i)." Eff. 192-93.

Course prefix changed from "MAP" to "PA." (Title: "Management of Long Term Care Facilities and Programs"). Change prerequisites to "P, 522." Eff. 192-93.

Religious Studies (RELI)

Add: "Japanese Humanities (3) II (Identical with JPN 144)." Eff. 192-93.


Correction to the 1991-93 General Catalog: the crosslisting should read "(Identical with JUS 372a-372b)." [Note: The listings under the home dept. (Judaic Studies) and its other crosslisted departments (HIST and NES) are correct.]

(1) Add: "Themes in American Literature (3) II (Identical with ENGL 486)." Eff. II 91-92.

Add: "History of Sufism (3) II (Identical with HIST 492, which is home)." Eff. I 91-92.

Renewable Natural Resources (RNR/LAR/RAM/WSM/WFSC)

Renewable Natural Resources (RNR)


375.- Course number changed from "475" to "375." Change crosslisting to read "Identical with AEC 375." Eff. II 92-93.


475.- Change course number from "475" to "375." Eff. II 92-93.


518. Add: "Advanced Geographic Information Systems (3) II For description of course topics, see 418. Graduate-level requirements include a more extensive project and report. P, 417 or 517. May be convened with 418." Eff. II 92-93.

527. NEW COURSE: "Artificial Intelligence in Resource Management (3) I 1993-94 Use of artificial intelligence as it applies to natural resources, including knowledge representation, problem solving, expert systems, feature recognition, neural networks, and genetic algorithms. Examples will be derived from current applications using various techniques to address management problems. P, computer programming skills." Eff. I 93-94.

537. Add: "Modeling Natural Systems (3) I 1992-93 For a description of course topics, see 437. Graduate students will do an expanded project and report. P, MATH 123, 124 or 125a, RNR 316, computer programming skills. May be convened with 437." Eff. I 93-94.


596m. Add: "Conservation Biology (1) [Rpt./6 units] II (Identical with ECOL 596m)." Eff. II 91-92.

597w. Add: Workshop: "Advanced Cadastral Survey (1-4) II (Identical with C E 597w) May be convened with 497w." Eff. II 91-92.


Landscape Architecture (L AR)
Revisions to 1991-93 General Catalog, page 39, college section,
under General Requirements, Bachelor of Landscape Architecture:
Under BLA in the right-hand column of the grid, replace "47" with "55" and replace "8" with "15." Revise "Total required for graduation" from "130" to "155."
Revise -2 The Mathematics or statistics requirement may be fulfilled by STAT 160, 263, 275 or.......
Under Student Organizations, second paragraph, delete "the Society of American Foresters."

Revisions to 1991-93 General Catalog, page 272, headnotes section for Landscape Architecture:
-Revise first sentence as follows: The five-year curriculum leading to the Bachelor of Landscape Architecture is composed of two preprofessional and three professional years."
-Revise last sentence in second paragraph as follows: "Students are admitted to the professional phase in the fall semester only, after having completed the following courses: CHEM 101a, 102a; ECOL 130; ENGL 101, 102 or 103H, 104H; L AR 101, 103, 104, 201, 202; MATH 117R/S, 118; PL S 100; RNR 200, 271, 321; SW 200, 201."

-Revise last paragraph in headnotes as follows: "The following courses are required as part of the professional program in landscape architecture: ARH 118, 207 or ARCH 324, 334; COMM 100, 102; ECON 201a; ENGL 308; GEOG 103b; L AR 301, 302, 332, 335, 401, 402, 404, 436, 442, 443, 451, 452, 453, 460, 482; PSYC 101, 371; RNR 202, 384. Students will also take a 12-unit landscape architecture internship in their final year."

-Delete notation beginning "At the time of catalog production..."

103. NEW COURSE: "Basic Design I (3) I Understanding the design process, with emphasis on development of visual language and graphic skills; study of functional, contextual, spatial, socio-cultural, and environmental factors in influencing design in our physical environment. 2R, 4S." Eff. I 92-93.

104. NEW COURSE: "Basic Design II (3) II Exploring the creative design process through 2-D and 3-D exercises. Introduction of basic environmental, functional and aesthetic design criteria. 2R, 4S. P, 103." Eff. II 92-93.

201. Course number changed from "211" to "201." New listing should read "Intermediate Design I (3) I Introduction to programming, analysis and problem solving in landscape design. 1R, 5S. P, 104." Eff. I 92-93.

202. Course number changed from "212" to "202." New listing should read "Landscape Graphic Communication (3) II Introduction to materials and techniques of graphic communication and their application to landscape design. 1R, 5S. P, 211." Eff. I 92-93.


211. Change course number from "211" to "201." Eff. I 92-93.

212. Change course number from "212" to "202." Eff. I 92-93.

234. Change course number from "234" to "335." For new listing, see "335." Eff. I 92-93.

250. COURSE DELETION: "Landscape Analysis (3)." Eff. I 92-93.

NEW COURSE: "Introduction to Computer-Aided Design for Landscape Architecture (3) II CDT Introduction to computer-aided design (CAD) utilizing microcomputers. Course includes theory, ethics, management and applications for computer use in landscape architecture. Open only to landscape architecture majors in professional phase of program. P, RNR 271. 1R, 4S. Field trips." Eff. II 92-93.

Course number changed from "234" to "335." New listing reads "Plant Materials (4) II Plant materials used in landscape design. 3R, 3L. Field trips. P, PL S 100, RNR 202. (Identical with PL S 335)." Eff. I 92-93.

Change title to "Site Planning and Design." Eff. I 92-93.

NEW COURSE: "Professional Portfolio Design (1) II Design and preparation of a professional portfolio. Past projects will be reviewed, graphically revised, photographed, and integrated into a professional quality portfolio. Open to majors only. 2R/S. P, 401." Eff. II 92-93.

NEW COURSE: "Planting Design (3) II Application of plant materials in landscape design; principles of xeriscape and energy-conserving design. Open to majors only. 2R, 2S. P, 335 and 401. May be convened with 538." Eff. II 92-93.

Change course number from "441" to "442." (Title: "History and Theory of Landscape Architecture") Eff. I 92-93.

Course number changed from "441" to "442." (Title: "History and Theory of Landscape Architecture") Eff. I 92-93.


NEW COURSE: "Professional Practice Studio (5) II Synthesis studio in landscape architecture. Complex problems in regional, site and urban planning and design. Emphasis upon "real world" problems and professional practice. Open to majors only. 2R, 7S. P, 402. May be convened with 582." Eff. I 92-93.

Change title to "Site Planning and Design." Eff. I 92-93.

Course number changed from "522a-522b" to "503." New listing reads "Advanced Landscape Design (3) I Issues and problems in landscape design. Relationships with architects, engineers, planners and natural resource scientists are stressed. 1R, 6L. Field trips." Eff. I 92-93.
Course number changed from "523a-523b" to "504." New listing reads "Advanced Landscape Planning (3) II Advanced techniques in landscape planning and problem analysis including visual simulation, computer map overlap, video applications, research in perception and behavior. 1R, 6L." Eff. I 92-93.

Change course number from "522a-522b" to "503." For new listing, see "503."

Change course number from "523a-523b" to "504." For new listing, see "504."

Change units to from "(2)" to "(3)." Add "Two, 2-day field trips." Eff. I 92-93.


Add: "Planting Design (3) II For course topics, see 438. Graduate-level requirements include a topical research paper on a planting design subject. May be convened with 438." Eff. II 92-93.

Change course number from "541" to "542." (Title: "History and Theory of Landscape Architecture"). Eff. I 92-93.

Course number changed from "541" to "542." (Title: "History and Theory of Landscape Architecture"). Eff. I 92-93.

Add: "Contemporary Landscape Architecture (3) I For course topics, see 443. Graduate-level requirements include a topical research paper on a temporary issue in landscape architecture. May be convened with 443." Eff. II 93-94.


Add: "Professional Practice Studio (5) For course topics, see 482. Graduate-level requirements include a written evaluation of the impact of the student projects on the environmental, social, political and economic community for which the project is planned. 2R, 7S. P, 402." Eff. II 92-93.

NEW COURSE: Colloquium: "Professional Leadership (1) [Rpt./4 units] II." Eff. I 92-93.

Watershed Management (WS M)

NEW COURSE: "Wildland Water Quality (3) II Introduction to water quality and its influences in natural environments. Interactions with land management and relationships to the larger issues of environmental quality. Field trips. May be convened with 568." Eff. II 91-92.

Add: "Wildland Water Quality (3) II For a description of course topics, see 468. Graduate-level requirements include a class report and presentation on a negotiated topic of interest. Field trips. May be convened with 468." Eff. II 91-92.
### Wildlife and Fisheries Science (WFSC)


**Add:** "Herpetology (4) II (Identical with ECOL 483) May be convened with 583." Eff. II 91-92.

**Add:** "Aquaculture (3) II 1991-92 For a description of course topics, see 456. Graduate-level requirements include a topic report. (Identical with VSC 556) May be convened with 456." Eff. II 91-92.

**Add:** "Herpetology (4) II (Identical with ECOL 583) May be convened with 483." Eff. II 91-92.

### Russian & Soviet Studies (RSS)

**409.-** Change semester offering to "I". Eff. I 91-92.

### Russian and Slavic Languages (RUSS)

**120.** Change title to "Russia Today." Eff. I 92-93.

**510.** NEW COURSE: "Theory and Methods (3) I II Provides broad theoretical, critical and bibliographical introduction to the field of Russian/Slavistics." Eff. I 92-93.

### Sociology (SOC)


**341.+** Add crosslisting "(Identical with PA 341)". Eff. I 92-93.


**407.-** Change course number to "412" and expand to "412/512". Eff. II 91-92.

**412.-** Course number change from "407" to "412/512". To "412", add "May be convened with 512." Eff. II 91-92.


**467.+** Delete "May be convened with 567." Eff. I 91-92.

**512.-** Course number change and expansion from "407" to "412/512". Add: "Peasant Communities (3) II (Identical with ANTH 512) May be convened with 412." Eff. II 91-92.

**540.-** Change crosslisting to read "(Identical with PA 540)". Eff. I 92-93.

Add crosslisting: "(Identical with MAP 550)". Eff. I 91-92. [Note: Graduate crosslisting only—no 450.]


NEW COURSE: "Basic Quantitative Methods (3) I An introduction to basic quantitative methods for professional sociologists, including computer, mathematical, and statistical concepts." Eff. I 90-91.

Add Colloquium: "Criminal Justice (3) [Rpt./12 units] I (Identical with MAP 595f, which is home)". Eff. I 91-92.


Soil & Water Science (SW)


Add: "Environmental Microbiology (3) I (Identical with MICR 425) May be convened with 525." Eff. I 92-93.


DELETE: "Soil Microbiology (3)". Eff. II 91-92.

Change course number from "436" to "426." For new listing, see 426. Eff. I 92-93.

NEW COURSE: "Environmental Microbiology Laboratory (2) I Basic techniques for isolation and characterization of environmental soil and water microflora including methods for enumeration and measurement of physiological activity. P, 425. (Identical with MICR 436) May be convened with 536." Eff. I 92-93.


Add: "Environmental Microbiology (3) I (Identical with MICR 525) May be convened with 425." Eff. I 92-93.

Course number changed from "536" to "526." New listing under 526 reads: "Environmental Microbiology Laboratory (2) I For a description of course topics, see 426. Graduate-level requirements include additional assignments. P, 525. (Identical with MICR 526) May be convened with 426." Eff. I 92-93.


Change course number from "536" to "526." For new listing see 526. Eff. I 92-93.

Add: "Environmental Microbiology Laboratory (2) I For a description of course topics, see 436. Graduate-level requirements include additional assignments. P, 525. (Identical with MICR 536) May be convened with 436." Eff. I 92-93.

Add: "Biodegradation of Pollutants in Soil and Groundwater (3) II 1991-92 For a description of course topics, see 440. Graduate-level requirements include a short oral presentation about a recent journal article and a paper pertaining to recent advances in biodegradation studies. P, MICR 525. May be convened with 440." Eff. II 91-92.


Add: "Soil and Groundwater Restoration (3) II 1991-92 For a description of course topics, see 466. Graduate-level requirements include a research paper. May be convened with 566. Brusseau." Eff. II 91-92.

Spanish & Portuguese (SPAN/PORT)

Spanish (SPAN)
Revision to the headnotes section of the 1991-93 General Catalog, page 281:

In the second column, immediately preceding the paragraph beginning "For further information ...." Add: "For purposes of appropriate placement, enrollment in all language courses is subject to the consent of the instructor."

NEW COURSE: "Linguistic Perspectives on Mexican-American Spanish and Bilingualism (3) I II Focuses principally on descriptive linguistic analyses of Chicano language phenomena examined in sociolinguistic and psycholinguistic contexts. Analyses will include phonological and phonetic levels, although the primary emphasis will be on morphosyntactic and lexical realizations. Macro-sociolinguistic topics of languages in contact/conflict, language shift, language choice/preference, and language attitudes as well as specific linguistic behaviors associated with Chicano bilingualism will also be treated in depth. P, 310. (Identical with LING 474 and MAS 474) May be convened with 574." Eff. II 91-92.


Correction to CB 1317: Title change should have listed for "573" also (only 400-level was listed). Change title to "Spanish for the Native Speaker of Spanish Classroom Teacher." Eff. I 91-92.

Add: "Linguistic Perspectives on Mexican-American Spanish and Bilingualism (3) I II For a description of course topics, see 474. Graduate-level requirements include two examination and a tape/analysis. P, 310. (Identical with LING 574 and MAS 574) May be convened with 474." Eff. II 91-92.

Add crosslisting: "(Identical with LA S 575a-575b)". Eff I 91-92. [Note: 575c is already crosslisted.]


Add "[Rpt./6 units]". Eff. I 91-92.

Delete last sentence in description, "Units cannot be used to satisfy departmental graduate-degree requirements." Eff. I 91-92.

Portuguese (PORT)

Course expansion from "463" to "463/563." Add "May be convened with 563." Eff. II 91-92.

Course expansion from "463" to "463/563." Add "Studies in Brazilian Literature (3) I 1991-92 For a description of course topics, see 463. Graduate-level requirements include additional research and papers. P, 301a-301b. (Identical with LAS 563) May be convened with 463." Eff. II 91-92.

Statistics (STAT)

Course number changed from "461" to "451." Change title to "Introduction to Statistical Methods." Change prerequisites to read "P, MATH 123 or 125b and knowledge of elementary probability theory." Eff. Summer 1992.


564. Change semester offering to "I II." Eff. II 91-92.


Systems & Industrial Engineering (SIE)

431. Course expansion to "431/531". Add "May be convened with 531." Eff. I 91-92.

531. Course expansion from "431" to "431/531". Listing for "531" reads: "Digital Systems Simulation (3) I II For a description of course topics, see 431. Graduate-level requirements include a library research report. May be convened with 431." Eff. I 91-92.

545. Course number changed from "644" to "545." Course revised. New listing should read "Nonlinear Programming (3) I II Unconstrained and constrained optimization problems from a numerical standpoint. Topics include variable metric methods, optimality conditions, quadratic programming, penalty and barrier function methods, interior point methods, successive quadratic programming methods. P, 340." Eff. II 91-92.

644. Change course number from "644" to "545." [For new listing, see, "545."] Eff. II 91-92.

Theatre Arts (TAR)

Revision to the headnotes section of the 1991-93 General Catalog, page 289, at the bottom of the second column, under "Major in Theatre Arts Education":

Delete the second sentence: "This major is designed for students preparing for a teaching position in the junior and senior high schools."
Replace the second sentence with the following: "This major is designed for students planning to teach in the elementary, middle or high schools. Graduates qualify for the K-12 Theatre Arts Specialist Endorsement on a Secondary Certificate from the State of Arizona. This program approximates certification requirements in most states. The prerequisites for entry into this program include the following: completion of the theatre arts core curriculum, an interview, acceptance both by the Department of Theatre Arts and the College of Education, and passing scores on the Pre-Professional Skills Test (PPST)."

Revise the third sentence as follows: "The student must complete the following theatre arts courses: TAR 410, 440, 455 and 456; and at least 6 units selected from 203, 204, 237, 238, 239, 250, 251, 267, 336 or 468, and the following education courses: ED P 310, TTE 300, 338t, 396, 493b, EDUC 350, LRC 435, 493; SER 310b." Eff. I 92-93.

397a. + Delete all crosslistings: "(Identical with ARE 397a, DNC 397a, FA 397a, MAR 397a, MUS 397a)". Eff. II 91-92. Eff. II 91-92.
410. Change course title to "Methods of Teaching Creative Drama." Eff. I 92-93.
410. Course expansion to "410/510". Add "May be convened with 510." Eff. I 91-92
510. Course expansion from "410" to "410/510". Listing for 510 reads: "Creative Drama (3) I For a description of course topics, see 410. Graduate-level requirements include an additional creative and/or research paper. May be convened with 410." Eff. I 91-92
510. Change course title to "Methods of Teaching Creative Drama." Eff. I 92-93.

Veterinary Science (V SC)
NEW COURSE: "Molecular Parasitology (3) II GRD The molecular details of parasites, cell biology and biochemistry of host and host cell interactions. P, 403R, BIOC 460/462a. (Identical with MICR 404) May be convened with 504." Eff. II 91-92


NEW COURSE: "Shrimp Pathology (2) [Rpt./1] S Comprehensive lectures and practical laboratory training on the current methods used to diagnose, prevent and treat the principal diseases of cultured penaeid shrimp. Field trip. Fee. P, B.S., M.S. and/or D.V.M. in biological and/or medically oriented fields." Eff. Summer 1991.


Add: "Gender and Politics (3) I II (Identical with POL 335)." Eff. II 91-92.

NEW COURSE: "Honors Proseminar (3) [Rpt./9 units] II Course is primarily for honors students. Repeatable if topic is different." Eff. II 91-92.

Course number changed from "496c". Eff. II 91-92.

NEW COURSE: "Work, Motherhood and Female Identity in America: 1945 to the Present (3) I History of women in the U.S. since 1945. Will explore a variety of topics including employment, sexuality, motherhood, abortion, reproductive technologies and feminism, and explore how changes in these areas have affected diverse groups of women. Prior course work in women's studies or history helpful. P, two women's studies courses or one women's history course. (Identical with HIST 481). May be convened with 581." Eff. I 92-93.
Change course number to "464". Eff. II 91-92.

NEW COURSE: "Contemporary Feminist Theories (3) II Introduction to contemporary feminist theories, posing and analyzing the questions that propel theorizing about women's relationships to processes of gender differentiation. By examining the assumptions about gender relations that ground theoretical positions from various disciplines, analytic traditions, and subject areas, students will be enabled to read, synthesize and critique across the spectrum of feminist theorizing. P, consult the committee before enrolling. (Identical with ENGL 554)" Eff. II 91-92.


NEW COURSE: "Work, Motherhood and Female Identity in America: 1945 to the Present (3) I For a description of course topics, see 481. Graduate-level requirements include a longer more comprehensive research paper. (Identical with HIST 581). May be convened with 481." Eff. I 92-93.