231. Principles of Biological Data Analysis (3)
Lecture—2 hours; laboratory—3 hours. Introduction to the principles of data analysis, experimental design, statistical modeling, and hypothesis tests. Statistical methods of particular importance in biological applications will be emphasized. Examples will be presented from the fields of ecology and evolutionary genetics. Offered irregularly. (S/U grading only)—Rannala

240. Paleobotany and Angiosperm Evolution (4)
Lecture—3 hours; laboratory—3 hours. Prerequisite: Plant Biology 108, 116, or course 140. Critical analysis of the plant fossil record as a source of evidence on origin, evolution, and phylogeny of the angio-sperms, Cretaceous and Tertiary climates, geographic history of modern taxa, and origin of modern vegetation types. Offered irregularly.—Doyle

290C. Research Conference (1)
Discussion—1 hour. Prerequisite: graduate standing and consent of instructor. Presentation and discussion of faculty and graduate student research in biology. May be repeated for credit. (S/U grading only)—I, II, III. (I, II, III)

298. Group Study (1-5)
(S/U grading only)

299. Research (1-12)
(S/U grading only)

Professional

390. Methods of Teaching (2)
Lecture—1 hour; discussion—1 hour. Prerequisite: graduate standing and consent of instructor. Practical experience in the methods and problems of teaching. Includes analyses of texts and supporting material, discussion of teaching techniques and preparing and conducting of laboratory and discussion sections. May be repeated for credit for a maximum of 8 units. (S/U grading only)—I, II, III. (I, II, III)

Graduate Adviser. Contact Maxine Craig in 1101 Hart Hall 530-522-6429; mcbraig@ucdavis.edu

Fiber and Polymer Science

(College of Agricultural and Environmental Sciences) Faculty. See under Textiles and Clothing, on page 325.

The Major Program

The Fiber and Polymer Science major is concerned with the physical, chemical, and structural properties of fibers and polymers and how these relate to fiber and polymer performance and end-use.

The Program. All students in this major take a common core of course work in chemistry, physics, and mathematics, and depth subject matter in fiber and polymer science and physical chemistry, and technical writing. In the restricted electives, students select courses from areas such as computer science and mathematics, chemistry, marketing and management, material and advanced fiber and polymer science, and textiles.

Career Alternatives. The major prepares the student for a career in a wide range of industries in the areas of research and development, technical marketing and management, production, quality control, and science teaching (on completion of an additional year in the teaching credential program). The companies employing Fiber and Polymer Science graduates are in fiber, polymer, industrial product, textile and/or chemical business. Graduates are prepared to enter the graduate program in textiles or agricultural and environmental chemistry with a specialization in fiber and polymer chemistry, and fiber and polymer science programs at other universities.

B.S. Major Requirements:

Preparatory Subject Matter.................52-55
Chemistry 2A-2B-2C ........................5
Computer Science Engineering 13 or 30A ..4
Mathematics 16A-16B-16C or 21A-21B ...21C
Physics 7A-7B-7C or 9A-9B-9C ..........9.12
Statistics 13 or Plant Sciences 120 ........4
Textiles and Clothing 4 and 8 or Engineering 45 .................................8

Depth Subject Matter .....................37-39
Textiles and Clothing 163, 163L ...............4
Fiber and Polymer Science 100, 150, 161, 161L, 180A, 180B ..............................14

Total Units for the Degree..............119-124

Major Adviser. Y. L. Hsieh (Textiles and Clothing)

Exercise Biology

See Neurobiology, Physiology, and Behavior, on page 443.

Community Medicine

See Medicine, School of, on page 396.

Feminist Theory and Research

Maxine Craig Ph.D., Advisor
Program Office. 2222 Hart Hall 530-522-6429; http://vms.ucdavis.edu/wgsite/

Graduate Study. The Gender, Sexuality and Women’s Studies Program at UC Davis offers a Designated Emphasis in Feminist Theory & Research. Currently graduate students in the following fourteen designated emphases may seek admission to the Designated Emphasis in Feminist Theory and Research and enroll in Designated Emphasis in Feminist Theory and Research courses. Those students in affiliated Ph.D. programs who complete the requirements of the Designated Emphasis will have this noted on their transcripts and their Ph.D. diploma will note the “Special Emphasis in Feminist Theory & Research.” Students must complete all the requirements for the Ph.D. in their home department. The requirements for the Designated Emphasis in Feminist Theory and Research are the successful completion of the two core courses in feminist theory and one in women’s Studies 200A, and both the student’s qualifying examination and doctoral research. Students should consult with the Chair of the Designated Emphasis in Feminist Theory and Research before enrolling in a graduate course for which they wish to receive credit to ensure that it will count toward fulfilling the requirements of the Designated Emphasis. If possible, please bring a copy of the syllabus or an expanded course description to your meeting.

Graduate Adviser. Contact Maxine Craig in 1101 Hart Hall 530-522-6429; mcbraig@ucdavis.edu

B.S. Major Requirements:

Preparatory Subject Matter.................52-55
Chemistry 2A-2B-2C ........................5
Computer Science Engineering 13 or 30A ..4
Mathematics 16A-16B-16C or 21A-21B ...21C
Physics 7A-7B-7C or 9A-9B-9C ..........9.12
Statistics 13 or Plant Sciences 120 ........4
Textiles and Clothing 4 and 8 or Engineering 45 .................................8

Depth Subject Matter .....................37-39
Textiles and Clothing 163, 163L ...............4
Fiber and Polymer Science 100, 150, 161, 161L, 180A, 180B ..............................14

Total Units for the Degree..............119-124

Major Adviser. Y. L. Hsieh (Textiles and Clothing)

Advising Center for the major is located in 129B Everson Hall 530-754-8368.

Minor Program Requirements:

Fiber and Polymer Science ...............18
Textiles and Clothing 6 or Engineering 45 ....................................................4

Courses selected from the following: Fiber and Polymer Science 100, 150, 161, 161L, 180A and 180B; and Textiles and Clothing 163 and 163L .............................................14

Minor Adviser. Y. L. Hsieh

Courses in Fiber and Polymer Science (FPS)

Upper Division

100. Principles of Polymer Materials Science (3)
Lecture—3 hours. Prerequisite: Chemistry 2A-2B, Chemistry 8A-8B or Engineering 45; introductory physics. The basic principles of polymer science are presented including polymer structure and synthesis; polymerization mechanisms, polymer classes, properties, and reactions; polymer morphology, rheology, and characterization; polymer processing. (Same course as Materials Science Engineering 147J GE credit: SciEng | OL, SE—II | III) Pan 110. Plastics in Society and the Environment (4)
Lecture—3 hours; discussion—1 hour. Prerequisite: Chemistry 10 or introductory course in physical sciences. Basic concepts and methodologies in the study of plastics. Formation, classification, structure, properties, processing, and formulation. Their application to societal needs, and their impact on society and the environment. GE credit: SciEng or SocSci, Wrt | SE, SL, SS, WE.

150. Polymer Syntheses and Reactions (3)
Lecture—3 hours. Prerequisite: Chemistry 128B or 8B, and Chemistry 107A. Organic and physical chemistry aspects of polymer syntheses and reactions including polymerization mechanisms, kinetics