

credit on their transcripts for a Ph.D. with "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, Women's Studies 200A and Women's Studies 200B, and two additional courses focusing on women and gender, one in the student's home department and one outside their home department. A member of the DE affiliated faculty must be a member of the student's qualifying examination. Analysis of gender is expected to be a central component of both the student's qualifying examination and doctoral research.

Students should consult with the chair of the Designated Emphasis in Feminist Theory & 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. Consult the Women and Gender Studies office (530) 752-4686.

Fiber and Polymer Science

(College of Agricultural and Environmental Sciences)

Faculty. See under *Textiles and Clothing*, on page 492.

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, organic 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 the 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:

	UNITS
English Composition Requirement	7-12
See College requirement	0-8
Communication 1	4
University Writing Program 104A, 104B, 104C, 104D, 104E, or 104F	4
Preparatory Subject Matter	52-55
Chemistry 2A-2B-2C	15
Computer Science Engineering 15 or 30	4
Mathematics 16A-16B-16C or 21A-21B-21C	9-12
Physics 7A-7B-7C or 9A-9B-9C	12
Statistics 13 or Plant Sciences 120	4
Textiles and Clothing 6 and 8 or Engineering 45	8

Breadth/General Education 6-24

Satisfaction of General Education requirement; see Advising office for breadth requirement.

Depth Subject Matter 37

Textiles and Clothing 163, 163L 4
Fiber and Polymer Science 100, 150, 161, 161L, 180A, 180B 14
Chemistry 128A, 128B, 128C, 129A, 129B, 110A and 110C or 107A and 107B 19

Restricted Electives 30

Select courses from the following:
Computer Science and Mathematics: Plant Sciences 21; Engineering 5; Applied Science Engineering 115, 116; Mathematics 22A, 22B
Chemistry: Chemistry 108, 115, 120, 121, 124A, 124B, 124C, 131, 140
Marketing/Management: Agricultural and Resource Economics 100A, 100B, 113, 136, 157, Economics 1A, 1B, Statistics 103
Material and Advanced Fiber/Polymer Science: Aeronautical Science Engineering 137, Engineering 104, 104L, Textiles and Clothing 250A-F, 290, 293
Textiles: Textiles and Clothing 162, 162L, 164, 165, 173, 174

Unrestricted Electives 23-40

Total Units for the Degree 180

Major Adviser.

Y. L. Hsieh (*Textiles and Clothing*)

Advising Center

for the major is located in 129B Everson Hall (530) 752-4417.

Minor Program Requirements:

UNITS

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

Minor Adviser.

Y. L. Hsieh

Courses in Fiber and Polymer Science (FPS)

Upper Division Courses

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 147.)—II. (II.) 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.

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 and thermodynamics for major types of organic high polymers.—III. (III.) Hsieh

161. Structure and Properties of Fibers (3)

Lecture—3 hours. Prerequisite: Textiles and Clothing 6 and Chemistry 8B. The structure, properties and reactions of natural- and man-made fibers; the rela-

tions between molecular structure of fibers and their physical properties; interactions of fibers and detergents.—I. (I.) Hsieh

161L. Textile Chemical Analysis Laboratory (1)

Laboratory—3 hours. Prerequisite: course 161 (may be taken concurrently). Laboratory methods and procedures employed in qualitative and quantitative analysis of textile fibers and auxiliaries.—I. (I.) Hsieh

180A-180B. Introduction to Research in Fiber and Polymer Science (2)

Laboratory/discussion—6 hours. Prerequisite: senior standing in major related to Fiber and Polymer Science, and consent of instructor. Senior thesis on independent problems. Research begun in course 180A will be continued and completed in course 180B. (Deferred grading only, pending completion of sequence.)—I, II, III. (I, II, III.)

192. Internship in Fiber and Polymer Science (1-12)

Internship—3-36 hours. Prerequisite: consent of instructor. Work experience off campus in a fiber and polymer science related area. Supervision by a member of the Textiles and Clothing faculty. (P/NP grading only.)

197T. Tutoring in Fiber and Polymer Science (1-5)

Tutorial—3-15 hours. Prerequisite: upper division fiber and polymer science related major and consent of instructor. Tutoring of students in Fiber and Polymer Science courses. Assistance with discussion groups and laboratory sections under supervision of instructor. May be repeated for credit if tutoring in another Fiber and Polymer Science course. (P/NP grading only.)

198. Directed Group Study (1-5)

Prerequisite: consent of instructor. (P/NP grading only.)

199. Special Study for Advanced Undergraduates (1-5)

Prerequisite: upper division standing and consent of instructor. (P/NP grading only.)

Graduate Courses

250A-F. Special Topics in Polymer and Fiber Science (3)

Lecture—3 hours. Prerequisite: Fiber and Polymer Science 100 or consent of instructor. Selected topics of current interest in polymer and fiber science. Topics will vary each time the course is offered. (Same course as Materials Science and Engineering 250A-F.)—I, III. (I, III.) Hsieh, Pan, Sun

299. Research (1-12)

Independent study—3-36 hours. (S/U grading only.)

Professional Course

396. Teaching Assistant Training Practicum (1-4)

Prerequisite: graduate standing. May be repeated for credit. (S/U grading only.)—I, II, III. (I, II, III.)

Film Studies

(College of Letters and Science)

Elizabeth Constable, Ph.D., Program Director

Program Office. 524 Sproul Hall (530) 752-4999; <http://filmstudies.ucdavis.edu>

Committee in Charge

Moradewun Adejunmobi, Ph.D.

(*African and African-American Studies*)

Emily Albu, Ph.D. (*Classics*)

Elizabeth Constable, Ph.D. (*French*)

Jesse Drew, Ph.D. (*Technocultural Studies*)

Jaimey Fisher, Ph.D. (*German and Russian*)

Margherita Heyer-Caput, Ph.D. (*Italian*)

Michael Lazzara, Ph.D. (*Spanish*)

Pablo Ortiz, Ph.D. (*Music*)

Scott Simmon, Ph.D. (*English*)

Eric Smoodin, Ph.D. (*American Studies*)

Quarter Offered: I=Fall, II=Winter, III=Spring, IV=Summer; 2009-2010 offering in parentheses

General Education (GE) credit: ArtHum=Arts and Humanities; SciEng=Science and Engineering; SocSci=Social Sciences; Div=Social-Cultural Diversity; Wrt=Writing Experience

Olga Stuchebukhov, Ph.D. (*German and Russian*)
Julie Wyman, Ph.D. (*Technocultural Studies*)

The Major Program

This interdisciplinary major takes one of the most influential art forms of the twentieth century and today—film—as its object of study. The field of Film Studies addresses the history, theory, and culture of this art form and asks questions about film texts themselves: modes of production (including everything from filmmakers’ aesthetic choices to the role of the global economy); historical, national, and cultural contexts; and spectators and audiences. Questions of gender, race, sexuality, and nationality, in all of these areas, have been central to Film Studies almost since its inception and continue to shape much of the work in the field. While the program emphasizes film history, criticism, and theory, students also have opportunities to explore film/video production.

The Program. Students majoring in Film Studies take upper-division courses in film history and film theory, as well as in at least three of five general areas of study. Students also develop a thematic emphasis, in consultation with an advisor, that draws on courses from at least two different departments/programs and that allows them to pursue their particular interests within the field of Film Studies. Students have the option of completing a senior thesis (either a written paper or an original film/video) within this emphasis.

Career Alternatives. The A.B. degree in Film Studies prepares students for a variety of careers in media industries: for example, local and national film and television production companies, local television newsrooms, community television stations, computer graphic companies, advertising and marketing companies, public relations departments, and film distribution companies. Students wishing to pursue graduate work will be prepared to go on in film studies, as well as a variety of other fields that draw on interdisciplinary study: for example, American studies, English, literatures and languages, drama, communication, computer science, cultural studies, women and gender studies, and ethnic studies programs. Many film students also choose to go on to law school, and the analytical skills, writing abilities, and familiarity with theoretical thought developed through the film major prepare them well for the study and practice of law.

A.B. Major Requirements:

	UNITS
Preparatory Subject Matter.....	20-40
Film Studies 1	4
A four-course sequence in a single language or equivalent	0-20
One course from African American and African Studies 15, 50; American Studies 1A, 21, 30; Art History 5; Art Studio 30; Chicana/o Studies 50, 60; Design 1; French 50; Humanities 60; Italian 50; Japanese 25; Native American Studies 32; Textiles and Clothing 7; Women’s Studies 20, 25	4
One course from African American and African Studies 10, 15, 50; Asian American Studies 1, 2; Chicana/o Studies 10, 50, 60; Native American Studies 1, 10, 32, 33; Women’s Studies 20, 25, 50, 70, 80.....	4
Two courses from Art History 1A, 1B, 1C, 1D; Asian American Studies 2; Chinese 10, 11; Classics 10; Comparative Literature 3, 4, 5, 6, 7; Dramatic Art 1, 20; English 43, 44; German 48; History 4C, 10C, 17B, 72B; Humanities 5, 6; Japanese 10; Music 10, 28; Native American Studies 33; Russian 41, 42	8
Note: One of these two courses may be from Design 15, 16 or Dramatic Art 10, 21A, 21B, 24.	
Depth Subject Matter	36-40
One course from English 161A, 161 B or Film Studies 124.....	4

One course from English 162; Film Studies 127; Philosophy 127; Women and Gender Studies 162

4

One course each from three of the following topic areas: Cinematic Traditions and Movements, Visual and Popular Culture, Gender/Sexuality/Class, Race/Ethnicity/Class, Production and Performance

12

A current list of approved classes is available from the Program office and from the faculty adviser.

16-20 units in one of the two breadth areas not used to satisfy the breadth requirement, or development of a thematic area in consultation with a faculty adviser.....

16-20

Qualified students who complete 20 units and have an overall GPA of 3.500 may choose the senior thesis option (194H-196H) for 8 of those 20 units.

No course may be counted for more than one requirement for the major.

Total Units for the Major

Major Advisers. E. Constable (*French*)

Minor Program Requirements:

	UNITS
Film Studies	24

Film Studies 1

4

Upper division courses selected from the following list, with no more than two courses from any one category

20

(a) *Problems and Themes in Cinema:* Anthropology 136, Classics 102, Dramatic Art 115, English 160, 161A, 161B, 162, Film Studies 124, 125, Women’s Studies 162

(b) *Cinema, Nation and Nationality:* German 119, 142, Film Studies 176A, 176B, Italian 150, Japanese 106, Russian 129, Spanish 148

(c) *Film and Social Identities:* African American and African Studies 170, 171, Film Studies 120, Jewish Studies 120, Women’s Studies 160, 164

(d) *Film/Video Production:* Art Studio 116, 117, 150

(e) *Popular and Visual Culture:* American Studies 130, 132, 133, 139, Art Studio 150, Communication 140, Political Science 165, Textiles and Clothing 107, Women’s Studies 139

Restrictions: No more than two courses from a single department or program may be offered in satisfaction of the minor requirements.

Note: With a minor advisor’s prior approval, up to four units of internship (e.g., American Studies 192, Communication 192, or Women’s Studies 192) in television/video/film production may be offered toward satisfying the requirements of the minor. Such courses will be considered part of the “Film/Video Production” category.

Courses in Film Studies (FMS)

Lower Division Courses

1. Introduction to Film Studies (4)

Lecture—2 hours; discussion—1 hour; film viewing—3 hours. Analysis of film form and narrative, including cinematography, editing, and sound. Issues in film studies, including authorship, stardom, race, gender, class, and cultural identity. Includes introduction to selected cinematic movements and national film traditions. Not open for credit to students who have completed Humanities 10. GE credit: ArtHum, Wrt.—I, II, III. (I, II, III.) Constable, Fisher, Lu, Smoodin, Wyman

90X. Lower Division Seminar (4)

Seminar—4 hours. Prerequisite: lower division standing and consent of instructor. Study of a special topic in film studies in a small class setting. May be repeated for credit if topic differs. (P/NP grading only.)—I, II, III. (I, II, III.)

92. Internship (1-12)

Internship—3-36 hours. Supervised internship off and on campus in areas of Film Studies. May be repeated for credit. (P/NP grading only.)

98. Directed Group Study (1-5)

(P/NP grading only.)

99. Special Study for Undergraduates (1-5)

(P/NP grading only.)

Upper Division Courses

120. Italian-American Cinema (4)

Lecture/discussion—3 hours; film viewing—3 hours. Prerequisite: course 1. Exploration of representations of Italian-American identity in American (U.S.) cinema. Analysis of both Hollywood and independently produced films, especially as they represent ethnicity, gender, and social class of Italian Americans. Not open for credit to students who have completed Humanities 120. GE credit: ArtHum, Div, Wrt.—III. (III.) Heyer-Caput

124. Topics in U.S. Film History (4)

Lecture—3 hours; film viewing—3 hours. Prerequisite: course 1. Study of an aspect of American film history (such as the silent era; the studio system; U.S. avant-garde cinema), including the influences of technological, economic, regulatory, cultural, and artistic forces. Not open for credit to students who have completed Humanities 124 unless topic differs. May be repeated twice for credit if topic differs. GE credit: ArtHum, Wrt.—III. (III.) Clover, Constable, Fisher, Simmon

125. Topics in Film Genres (4)

Lecture—3 hours; film viewing—3 hours. Prerequisite: course 1. A study of one or more of the film genres (such as the documentary, the musical, film noir, screwball comedy, or the western), including genre theory and the relationship of the genre(s) to culture, history, and film industry practices. Not open for credit to students who have completed Humanities 125 unless topic differs. May be repeated twice for credit if topic differs. GE credit: ArtHum, Wrt.—II. (II.) McConnell, Simmon

127. Film Theory (4)

Lecture/discussion—3 hours; film viewing—3 hours. Prerequisite: course 1 or consent of instructor. Survey of the conceptual frameworks used to study film (including semiotics, psychoanalysis, spectatorship, auteur, genre and narrative theories). Historical survey of major film theorists. GE credit: ArtHum, Wrt.—III. (III.) Constable

142. New German Cinema (4)

Lecture/discussion—3 hours; extensive writing. German filmmakers of the 1960s-1980s such as Fassbinder, Herzog, Syberberg, Brückner, Schlöndorff, Kluge, Wenders. Knowledge of German not required. May be repeated for credit with consent of instructor. (Same course as German 142) GE credit: ArtHum, Wrt.—I. (I.) Fisher

176A. Classic Weimar Cinema (4)

Lecture/discussion—3 hours; film viewing—3 hours. Prerequisite: Humanities 1. German Weimar (1919-1933) cinema. Fritz Lang, F.W. Murnau, and G.W. Pabst among others. Influence on world-wide (esp. Hollywood) film genres such as film noir, horror, science fiction, and melodrama. Not open for credit to students who have completed Humanities 176. Offered in alternate years. (Same Course as German 176A.) GE credit: ArtHum, Wrt.—I. Fisher

176B. Postwar German Cinema (4)

Lecture/discussion—3 hours; film viewing—3 hours. Prerequisite: course 1. Exploration of German cinema from 1945 to 1980, when the Nazi past was a central theme. Includes study of postwar “rubble films,” escapist “homeland films,” and New German Cinema of the 1970s (including films by Fassbinder, Kluge, Syberberg, and Herzog). Not open for credit to students who have completed Humanities 177. Offered in alternate years. GE credit: ArtHum, Wrt.—II. Menges

189. Special Topics in Film Studies (4)

Lecture/discussion—3 hours; film viewing—3 hours. Prerequisite: course 1, upper division standing, or consent of instructor. Group study of a special topic

in film, focusing on a national tradition, a major filmmaker, or a specific era. May be repeated three times for credit. GE credit: Wrt.—I, III. (I, III.) Clover, Constable, Fisher, Heyer-Caput, Lu, Simmon, Smoodin

190X. Upper Division Seminar (4)

Seminar—4 hours. Prerequisite: upper division standing or consent of instructor. Study of a special topic in film studies in a small class setting. May be repeated for credit if topic differs. (P/NP grading only.)—I, II, III. (I, II, III.)

192. Internship (1-12)

Supervised internship off and on campus in areas of Film Studies. May be repeated for credit. (P/NP grading only.)

194H. Special Study for Honors Students (1-5)

Variable—1-5 hours; independent study—3-15 hours. Prerequisite: senior standing; GPA of at least 3.500; consent of instructor. Guided research on a topic in Film Studies in preparation for the writing of an honors thesis in course 195H or the creation of an honors project in course 196H. May be repeated twice for credit. (P/NP grading only.)—I, II, III. (I, II, III.)

195H. Honors Thesis (1-5)

Independent study—3-15 hours. Prerequisite: course 194H and consent of instructor; GPA of at least 3.500; senior standing. Writing of an honors thesis on a topic in Film Studies under the direction of a faculty member. May be repeated twice for credit. (P/NP grading only.)—I, II, III. (I, II, III.)

196H. Honors Project (1-5)

Project—3-15 hours. Prerequisite: course 194H and consent of instructor; GPA of at least 3.500; senior standing. Creation of an honors film, video, or mixed-media project under the direction of a faculty member. May be repeated twice for credit. (P/NP grading only.)—I, II, III. (I, II, III.)

197T. Tutoring in Film Studies (1-5)

Tutorial—3-15 hours. Prerequisite: consent of program director. Leading of small voluntary discussion groups affiliated with one of the Program's regular courses. May be repeated for credit. (P/NP grading only.)

198. Directed Group Study (1-5)

(P/NP grading only.)

199. Special Study for Advanced Undergraduates (1-5)

(P/NP grading only.)

Professional Course

396. Teaching Assistant Training Practicum (1-4)

Prerequisite: graduate standing. May be repeated for credit (S/U grading only.)

Fisheries

See [Animal Science](#), on page 141; [Biological and Agricultural Engineering](#), on page 166; and [Wildlife, Fish, and Conservation Biology](#), on page 516.

Food Science

College of Agricultural and Environmental Sciences)

The Major Program

Food science applies chemical, physical, biological, engineering, and social sciences to processing, preservation, development, packaging, storage, evaluation, identity and utilization of foods.

The Program. Students majoring in food science spend the first two years of study developing the sci-

entific and general background necessary for upper division study. The science courses include chemistry, biology, physics, and mathematics. General background is provided by courses in the social science/humanities area and by optional courses in introductory food science. At the upper division level, students take courses in nutrition, food microbiology, food chemistry, food analysis, food commodities, food processing, and food engineering, and may choose to specialize in one of seven career-oriented options. The major, including all seven options, is accredited by the Institute of Food Technologists. Students enrolled in the program are eligible for various scholarships, including scholarships from the Institute of Food Technologists.

Career Alternatives. Opportunities for employment include positions in the food and allied industries, local, state, and federal government agencies, and educational and research institutions. Graduate study for the food science student may lead to the M.S. or Ph.D. degree in food science, or in related fields such as agricultural chemistry, biochemistry, engineering, microbiology, and nutrition.

B.S. Major Requirements:

UNITS

English Composition Requirement 0-8

See College requirement.

Preparatory Subject Matter 52-70

University Writing Program 102F, 104A, or 104E (if not already taken to satisfy college English requirement) 4
 Communication 1 (if not already taken to satisfy college English Requirement) 4
 Mathematics 16A-16B-16C 9
 Biological Sciences 1A, 1C or 2A, 2B, 2C 10-14
 Chemistry 2A-2B-2C 15
 Organic chemistry (see option for requirement)
 Physics 7A-7B-7C 12
 Food Science and Technology 1 and/or 10; both recommended, but not required 3-6
 Food Science and Technology 50 3
 Nutrition 10 (or approved substitute) 3

Breadth/General Education 24

Satisfaction of General Education requirement plus social science and humanities electives to total 24 units

Depth Subject Matter 50

Biological Sciences 102, 103 6
 Agricultural Management and Rangeland Resources 120 or Plant Sciences 120 4
 Food Science and Technology 100A, 100B, 101A, 101B, 103, 104, 104L, 160, 190 28
 Food Science and Technology 110A-110B, Applied Biological Systems Technology 110L 8
 Food Science and Technology 127 or 107 4

Select one of the following five options:

Food Technology Option

The Food Technology option provides a broad exposure to food chemistry, food microbiology, food engineering and food processing. Students find positions in quality assurance, product development, and food processing in the food industry.

Specific course requirements 11

Chemistry 8A-8B 6
 Food Science and Technology 108, 109 5

Selected additional courses 15

Select courses from a master list available from the department Advising Center.

Food Business and Management Option

The Food Business and Management option allows students to integrate study of the science and technology of food with that of business and economics in a unique program. Students prepare for positions of management in small food companies, and

research-and-development oriented marketing or technical sales opportunities in corporate food industries.

Specific course requirements 24

Chemistry 8A-8B 6
 Economics 1A 4
 Agricultural and Resource Economics 112, 113 8
 Management 100 3
 Food Science and Technology 109 3

Selected additional courses 10

Select courses from a master list available from the department Advising Center.

Consumer Food Science Option

The Consumer Food Science option prepares students for jobs in food product formulation, research-and-development oriented marketing and sensory analysis, quality assurance, extension service, creative writing, and community service. Students who fulfill the requirements for the teaching credential teach elementary or secondary school home economics.

Specific course requirements 19

Chemistry 8A-8B 6
 Food Science and Technology 47, 109, 159 6
 Additional Food Science and Technology 107 or 127 4
 Consumer Science 100 3

Selected additional courses 10

Select courses from a master list available from the department Advising Center.

Brewing Science Option

The Brewing Science option prepares students for careers in production or quality assurance within the brewing industry or other food fermentation industries (e.g., other alcoholic beverages, vinegar and cheese). The option also prepares students for graduate study in food science. The option exposes the students to a diversity of coursework, including chemistry, biochemistry, microbiology and engineering as they pertain to the malting and brewing processes. Issues of quality assurance, plant sanitation and packaging are also key. Of course, there is a thorough grounding in malting and brewing.

Specific course requirements 26-29

Chemistry 8A, 8B 6
 Food Science and Technology 3 (recommended but not required) 3
 Food Science and Technology 102A, 102B, 108, 109, 123, 131 20

Selected additional courses 9

Select courses from a master list available from the department Advising Center

Food Biology/Microbiology Option

The Food Biology/Microbiology option is for students interested in research and development careers with food companies or government laboratories, in teaching and research at academic institutions, or in professional (medical, veterinary, pharmacy, optometry or dental) school. This option prepares students for graduate study and research in several areas, including food science, biochemistry, biotechnology, microbiology, and post-harvest biology.

Specific course requirements 18-24

Biological Sciences 1B or 2B 5
 Chemistry 8A-8B or 118A-118B-118C 6-12
 Microbiology 102, 102L 7

Selected additional courses 10

Select courses from a master list available from the department Advising Center.

Food Biochemistry Option

The Food Biochemistry option prepares students for graduate study and research in food science, biochemistry, biotechnology, microbiology, pharmacology, post-harvest biology, and commodity emphasis. The program is designed for students interested in

Quarter Offered: I=Fall, II=Winter, III=Spring, IV=Summer; 2009-2010 offering in parentheses

General Education (GE) credit: ArtHum=Arts and Humanities; SciEng=Science and Engineering; SocSci=Social Sciences; Div=Social-Cultural Diversity; Wrt=Writing Experience