566

Surgery

210C. Special Topics in Mediterranean Religious Cultures (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Comparative, interpretive study of the treatment of specific topics in Mediterranean religious cultures. May be repeated for credit when topics differ. Offered irregularly.

230A. Thematic Topics—Body and Praxis (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Comparative, interpretive study of the treatment of religion through specific topics and themes relating to body, rhetoric, and performance. May be repeated for credit when topics differ. Offered irregularly.

230B. Thematic Topics—Language, Rhetoric, and Performance (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Comparative, interpretive study of the treatment of religion through specific topics and themes relating to language, rhetoric, and performance. May be repeated for credit when topics differ. Offered irregularly.

230C. Thematic Topics—Modernity, Science, and Secularism (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Comparative, interpretive study of the treatment of religion through specific topics and themes relating to modernity, science, and secularism. May be repeated for credit when topics differ. Offered irregularly.

230D. Thematic Topics—Theory and Method (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Comparative, interpretive study of the treatment of religion through specific topics and themes relating to theory and method. May be repeated for credit when topics differ. Offered irregularly.

230E. Thematic Topics—Values, Ethics, and Human Rights (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Comparative, interpretive study of the treatment of religion through specific topics and themes relating to values, ethics, and human rights. May be repeated for credit when topics differ. Offered irregularly.

230F. Thematic Topics—Visual Culture, Media, and Technology (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing or consent of instructor. Comparative, interpretive study of the treatment of religion through specific topics and themes relating to visual culture, media, and technology. May be repeated for credit when topics differ. Offered irregularly.

231B. Theories of Language (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing. Restricted to graduate students. Focuses on historical theories of language that predate and accompany post-structuralist theory. Intended to introduce graduate students to the context of modern theory formation. May cover structuralism, poststructuralism, and postmodernism. Offered irregularly. F, W, S. (F, W, S.)

231E. History, Theory and Criticism of Human Rights (4)
Seminar—3 hours; term paper. Prerequisite: graduate standing. Restricted to graduate students. Focuses on the development of Human Rights and the theoretical and practical elaboration of the international Human Rights system. Seminar will engage with criticism of Human Rights and develop research and teaching within disciplinary and interdisciplinary frameworks. (Same as Human Rights 200A.) Offered in alternate years. W, F. (W, F.)

298. Group Study (1-5)
Prerequisite: graduate standing or consent of instructor. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

299. Research (1-12)
Prerequisite: graduate standing or consent of instructor. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

299D. Dissertation Writing (1-12)
Prerequisite: advanced to candidacy for the Ph.D. program; consent of instructor. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

Surgery

See Surgery (SUR), on page 453; and Surgical and Radiological Sciences (SRS), on page 584.

Surgical and Radiological Sciences

See Veterinary Medicine, School of, on page 381.

Sustainable Agriculture and Food Systems

[College of Agriculture and Environmental Sciences]
Sustainable Agriculture and Food Systems is an interdisciplinary major hosted by the Department of Human Ecology.

Richard Sexton, Ph.D. (Agricultural & Resource Economics)
Anita Oberbauer, Ph.D. (Animal Science)
Michael Parrella, Ph.D. (Entomology and Nematology)
Susan Handy, Ph.D. (Environmental Science & Policy)
Patsy Eubanks Owens, M.L.A. (Human Ecology)
David Campbell, Ph.D. (Human Ecology)
Randal Southard, Ph.D. (Land, Air & Water Resources)
David Rizzo, Ph.D. (Plant Pathology)
Chris van Kessel, Ph.D. (Plant Sciences)

The Major Program
The Sustainable Agriculture and Food Systems (SA&FS) major serves students interested in improving the sustainability of agriculture and food systems. This major prepares students to understand the interdisciplinary and systems-based aspects of sustainability and provides them with the knowledge, leadership skills and experiences required to excel in agricultural and food system professions.

The Program
This program is designed to develop students' competencies in integrating environmental, social, and economic challenges and opportunities associated with agricultural and food systems sustainability. The program emphasizes an experiential learning approach to sustainability education, allowing students to choose between three tracks within the major. Students in the Agriculture and Ecology track focus on crop and animal production systems, ecology, and practices that mitigate negative impacts while producing environmental and social benefits. Students in the Food and Society track focus on issues related to the social, cultural, political, and community development aspects of agriculture and food systems. Students in the Economics and Policy track focus on issues related to agricultural and resource economics, policy, and management.

The program provides students with practical experiences through courses with on-and off-campus fieldwork and through internship placements at sites related to students' interests and focus of study.

Internships and Career Alternatives
Sustainable Agriculture and Food Systems students are required to complete an internship in the field before graduation. Internships have been arranged with local, county, and state agricultural agencies, production farms and commercial processors and retailers, domestic and international non-governmental organizations, and rural and urban community development programs. Graduates are prepared to pursue a broad range of careers related to agricultural production and food system management, rural and urban community services, education and development, and agricultural and environmental sciences, as well as careers in agricultural, environmental, and economic policy and analysis. Positions may be in private industry, government and public service agencies and in the non-profit sector, nationally and internationally. The major also prepares students for graduate studies in a wide range of fields related to agriculture and food systems.

B.S. Major Requirements:

UNITS

English Composition Requirement............4-8
See College requirement, must include Communications 1.

Core Courses......................................24-26

- Plant Sciences 15.............................4
- Community and Regional Development 20.............................4
- Plant Sciences 150.............................4
- Agricultural and Resource Economics 121.............................4
- Plant Sciences 190.............................4
- Environmental Science and Policy 191A, 191B.............................6

Internship Requirement.........................12
Students must complete at least 12 units of internship, eight of which must be completed off campus.

Applied Production..............................6-9
Select 1 course from: Animal Science 49A, Animal Science 411.............................2-3
Select 1 course from: Agricultural and Food Systems Technology 49, 52, 101, 142.............................2-3

Track I: Agriculture and Ecology
Focuses on crop and animal production systems, ecology, and practices that mitigate negative impacts while producing environmental and social benefits.

Track 1 Adviser, W. Horvath, Ph.D.

Preparatory Subject Matter......................60-61

- Mathematics 16A, 16B.............................6
- Plant Sciences 120 or Statistics 1...........4
- Chemistry 2A.................................2-8
- Physics 1A.................................10
- Biological Sciences 2A, 2B.............................10
- Plant Sciences 2.............................4
- Animal Sciences 1 or 2.............................4
- Food Science 1.............................4
- Economics 1A.................................4
- Community and Regional Development 1, 4
- Select one course from: Philosophy 14, 15, 24.............................4
- Select one course from: Anthropology 2
- Political Science 4, Sociology 1, Sociology 3.............................4-5

Depth Subject Matter..........................34-38

- Agricultural and Resource Economics 120 or 147.............................3-4
- Environmental Science and Policy 161 or 169.............................3-4
- Soil Science 100 or Soil Science 109.............................4-5

Fall 2011 and on Revised General Education (GE): AH—Arts and Humanities; SE—Science and Engineering; SS—Social Sciences; AC—American Cultures; DD—Diverse Domestic; OL—Other Skills; DL—Quantitative; SL—Scientific; VL—Visual; WC—World Cultures; WE—Writing Experience

Pre-Fall 2011 General Education (GE): ArtHum—Arts and Humanities; SciEng—Science and Engineering; SocSci—Social Sciences; DomDiv—Diverse Domestic; Writ—Writing Experience

Quarter Offered: Fall, Winter, Spring, Summer; 2011-2012 offering in parentheses.
Select one course from: Animal Science 129, Environmental Horticulture 160 or, Environmental Science and Policy 100, Evolution and Ecology 101, Plant Sciences 105, 142, Wildlif, Fish, and Conservation Biology 154 ……………………………… 4
Additional upper-division restricted electives chosen in consultation with the track faculty adviser ... 20

Track II: Food and Society

Focuses on issues related to the social, cultural, political and community development aspects of agriculture and food systems.

Track II Adviser. R. Galt, Ph.D.

Preparatory Subject Matter……………………57-64
Philosophy 5 or 31……………………………. 4
Select one course from: Philosophy 14, 15, 24…………………………………….. 4
Sociology 46B or Statistics 13 …………………. 4
Select at least one course from: Community and Regional Development 151, Applied Biological Systems Technology 180, Landscape Architecture 150, Statistics 103, Sociology 105, Sociology 106 3-6
Chemistry 2A ……………………………………... 5
Biological Sciences 2A or 10 …………………… 5
Plant Sciences 2 ……………………………….. 4
Select one course from: Evolution and Ecology 2 or Biological Sciences 2B or Environmental Science and Policy 1 or 30 or Wildlif, Fish, and Conservation Biology 10 or 11 or 12 or 13 or 14 ………………………………….. 3-5
Food Science 1 …………………………………… 3
Soil Science 10 ……………………………………. 3
Economics 1A …………………………………… 4
Politics 1 …………………………………………. 4
Select one course from: Anthropology 2, Sociology 1, Sociology 3 …………………… 4-5
Community and Regional Development 1, 2 …………………………………… 8

Depth Subject Matter ……………………………43-44
Agricultural and Resource Economics 112 or 150 ……………………………………… 4
Select one course from: Agricultural and Resource Economics 112, 147, 176, Environmental Science and Policy 160, 161, 169, 172, 179……………………………… 3-4
Choose 12 units from: Anthropology 101, 102, Community and Regional Development 142, 152, Sociology 139, 144, 145A, 145B ………………… 12
Select one course from: American Studies 101C, 155, 172 or Philosophy 109 …………………………………… 3-4
Additional upper-division restricted electives chosen in consultation with the track faculty adviser ... 20

Track III: Economics and Policy

Focuses on issues related to agricultural and resource economics, policy and management.

Track III Adviser. T. Tomich, Ph.D.

Preparatory Subject Matter…………………60-64
Mathematics 16A, 16B ……………………….. 6
Sociology 46B or Statistics 13 ………………... 4
Select one course from: Agricultural and Resource Economics 106, Sociology 103, Sociology 106 …………………………………… 4
Chemistry 2A …………………………………… 5
Biological Sciences 2A or 10 …………………… 5
Plant Sciences 2 ……………………………….. 4
Select one course from: Evolution and Ecology 2, Biological Sciences 2B, Environmental Science and Policy 1, 30, Wildlif, Fish, and Conservation Biology 10, 11 …………………………………… 3-5
Food Science 1 …………………………………… 3
Soil Science 10 ……………………………………. 3
Economics 1A, 1B ………………………………. 8
Political Science 4 ……………………………… 4
Select one course from: Anthropology 2, Sociology 1, Sociology 3 …………………… 4-5
Community and Regional Development 1 …………………………………… 4

Select 1 course from: Philosophy 14, 15, 24…………………………………….. 4

Depth Subject Matter ……………………………43-44
Select one course from: Agricultural and Resource Economics 112, 150, 157 …………………………………………………………… 4
Select 11-12 units from: Agricultural and Resource Economics 120, 130, 147, 176, Environmental Science and Policy 160, 161, 169, 172, 179……………………………… 11-12
Select 8 units from: Anthropology 101, 102, Community and Regional Development 142, 152, Sociology 139, 144, 145A, 145B 8 Additional restricted electives chosen in consultation with an adviser ... 20

Total units for the major……………………..140-163


Advising Center for the major is located in 1303 Hart Hall, Department of Human Ecology 300-752-2244.

Courses in Sustainable Agriculture and Food Systems (SAF)

Lower Division

90X. SAFS Portfolio (1-4)

Workshop—3-12 hours. Prerequisite: consent of instructor. Restricted to Sustainable Agriculture and Food Systems majors or with consent of instructor. SA&FS Portfolios are designed to complement interdisciplinary, academic coursework by supporting student development of each of the SAFS Standards: Systems Thinking, Experimentation & Inquiry, Understanding Values, Interpersonal Communication, Strategic Management, Civic Engagement and Personal Development. May be repeated for credit. Offered irregularly. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

92. Internship (1-12)

Internship—3-36 hours. Prerequisite: consent of instructor. Restricted to Sustainable Agriculture and Food Systems majors or with consent of instructor. Lower-division internship for students enrolled in the Sustainable Agriculture and Food Systems program of study. Enrollment for non-majors may be permitted by upper division standing or with consent of instructor. May be repeated up to 12 units for credit with consent of instructor. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

98. Directed Group Study (1-5)

Prerequisite: consent of instructor. Restricted to Sustainable Agriculture and Food Systems majors or with consent of instructor. Group study on focused topics in Sustainable Agriculture and Food Systems. Varies according to student need and interest in conjunction with the expertise of the instructor. May be repeated for credit. Offered irregularly. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

198. Directed Group Study (1-5)

Independent study—3-15 hours. Prerequisite: upper division standing, consent of instructor. Under faculty supervision, advanced students pursue a special or individualized course of study related to Sustainable Agriculture and Food Systems. May be repeated for credit. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

Environmental Design

(Regents Program in Environmental Design)

ARD = Arts and Humanities; DD = Domestic Diversity; DL = Oral Skills; DLQ = Quantitative; SL = Scientific; V = Visual; WC = World Cultures; WE = Writing Experience

Pre-Fall 2011 General Education (GE): ArtHum=Arts and Humanities; SciEng=Science and Engineering; SocSci=Social Sciences; Div=D=Domestic Diversity; Wrt=Writing Experience

Quarter Offered: F=Fall, W=Winter, S=Spring, Su=Summer; 2017/2018 offering in parentheses

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197T. Tutoring in Sustainable Agriculture and Food Systems (1-S)

Tutorial—3-15 hours. Prerequisite: upper division standing, consent of instructor. Undergraduates assist the instructor by tutoring students in regularly scheduled courses that fulfill SA&FS major requirements. May be repeated for credit. Offered irregularly. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

197TC. SAFS Tutoring in the Community (1-5)

Tutorial—3-15 hours. Prerequisite: upper division standing, consent of instructor. Undergraduates assist the instructor by tutoring in the community in settings related to Sustainable Agriculture and Food Systems. May be repeated for credit. Offered irregularly. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

198. Directed Group Study (1-5)

Prerequisite: upper division standing, consent of instructor. Restricted to Sustainable Agriculture and Food Systems majors or with consent of instructor. Group study on focused topics in Sustainable Agriculture and Food Systems. Varies according to instructor. Group study plan is adapted to student need and interest in conjunction with the expertise of the instructor. May be repeated for credit. Offered irregularly. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

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

Independent study—3-15 hours. Prerequisites: upper division standing, consent of instructor. Under faculty supervision, advanced students pursue a special or individualized course of study related to Sustainable Agriculture and Food Systems. May be repeated for credit. (P/NP grading only)—F, W, S, Su. (F, W, S, Su.)

Sustainable Environmental Design

(Regents Program in Environmental Design)

Steven E. Greco, Ph.D., Chairperson, Landscape Architecture and Environmental Design Program

Program Office. 131 Hunt Hall,
530-752-3907, http://humanecology.ucdavis.edu/lass/academic_programs/sed

Faculty

Elizabeth Boulbs, MLA Continuing Lecturer
David de la Pena, Ph.D., Assistant Professor
Steven E. Greco, Ph.D., Professor
Eric Larsen, Ph.D., Associate Research Scientist
Jeff Loux, Ph.D., Associate Adjunct Professor
Brett Milligan, M.L.A., Assistant Professor
N. Claire Napawan, M.L.A., Assistant Professor
Lorence Oki, Ph.D., Associate Specialist in Cooperative Extension
Patsy Eubanks Owens, M.L.A., Professor
Michael Rios, Ph.D., Associate Professor
Sheryl-Ann Simpson, M.L.A., Assistant Professor
Stephen Wheeler, Ph.D., Professor

The Major Program

The Sustainable Environmental Design major is intended to build student understanding and skills related to creation of sustainable communities and landscapes. Coursework emphasizes urban and environmental design, sustainable development theory and practice, green building, local government planning and decision-making, community dynamics and organization, and written, graphic, and oral presentation of sustainability strategies.

The Program

The Sustainable Environmental Design major is particularly suited for students who are interested in the