SUSTAINABLE AGRICULTURE & FOOD SYSTEMS, BACHELOR OF SCIENCE

College of Agricultural & Environmental Sciences
Sustainable Agriculture & Food Systems is an interdisciplinary major hosted by the Department of Land, Air, & Water Resources (http://lawr.ucdavis.edu).

William Horwath, Ph.D., Master Advisor

Program Office
1150 PES; 530-752-1603; Sustainable Agriculture & Food Systems (https://www.lawr.ucdavis.edu/students/undergrad-programs/sustainable-agriculture-and-food-systems/)

The Major Program
The Sustainable Agriculture & Food Systems (SA&FS) major serves students interested in improving the sustainability of agriculture and food systems. This major prepares graduates 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 systems professions.

The Program
This program is designed to develop students' competencies for addressing the 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 & 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 & Society track focus on issues related to the social, cultural, political and community development aspects of agriculture and food systems. Students in the Economics & 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.

Lead Faculty Advisor
Lead Faculty Advisor & Track I Advisor. W. Horwath (Land, Air & Water Resources); Track II Advisor. R. Galt (Human Ecology); Track III Advisor. T. Tomich (Environmental Science & Policy).

Advising Center for the major is located in 1150 PES; 530-752-1603.

Internships & Career Alternatives
Sustainable Agriculture & Food Systems students are required to complete an internship in the field before graduation. Internships have been arranged with local, county, & state agricultural agencies, production farms and commercial processors & retailers, domestic & international non-governmental organizations, and rural & urban community development programs. Graduates are prepared to pursue a broad range of careers related to agricultural production & food system management, rural & urban community services, education & development, and agricultural & environmental sciences, as well as careers in agricultural, environmental, and economic policy & 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.

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Sustainable Agriculture & Food Systems, Bachelor of Science

ANS 049I  Animal Management Practices: Sheep
Choose one:
ABT 049  Field Equipment Operation
ABT 052  Field Equipment Welding
ABT 101  Engine Technology
ABT/IAD 142  Equipment & Technology for Small Farms
FST 050  Introduction to Food Preservation
Applied Production Subtotal 6-8

Tracks
Choose one track:
94-110
Track I: Agriculture & Ecology (p. 2)
Track II: Food & Society (p. 2)
Track III: Economics & Policy (p. 3)
Tracks Subtotal 94-110

Total Units 135-158

1 Must include CMN 001.

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

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Depth Subject Matter
Agricultural & Resource Economics
Choose one: 3-4

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Environmental Science & Policy
Choose one: 3-4

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<td>Agroforestry: Global &amp; Local Perspectives</td>
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Total Units 94-100

Track II: Food & Society
Focuses on issues related to the social, cultural, political and community development aspects of agriculture and food systems.
### Preparatory Subject Matter

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Choose at least one:

- **CRD 151** Community Field Research: Theory & Analysis
- **LDA/ABT 150** Introduction to Geographic Information Systems
- **STA 103** Applied Statistics for Business & Economics
- **SOC 106** Intermediate Social Statistics

#### Chemistry

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Choose one:

- **BIS 002B** Introduction to Biology: Principles of Ecology & Evolution
- **ESP 001** Environmental Analysis
- **WFC 010** Wildlife Ecology & Conservation

### Food Science & Technology

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Choose one:

- **ANT 002** Cultural Anthropology
- **SOC 001** Introduction to Sociology
- **SOC 003** Social Problems

### Depth Subject Matter

#### Agricultural & Resource Economics

Choose one:

- **ARE 112** Fundamentals of Organization Management
- **ARE 145** Farm & Rural Resources Appraisal
- **ARE 147** Resource & Environment Policy Analysis
- **ARE 150** Agricultural Labor

Choose one:

- **ARE 176** Environmental Economics
- **ESP 160** The Policy Process
- **ESP 161** Environmental Law
- **ESP 169** Water Policy & Politics
- **ESP 172** Public Lands Management
- **ESP 179** Environmental Impact Assessment

Choose 12 units:

- **ANT/ESP 101** Ecology, Nature, & Society
- **CRD 118** Technology & Society
- **CRD 142** Rural Change in the Industrialized World
- **CRD 149** Community Development Perspectives on Environmental Justice
- **CRD 152** Community Development
- **SOC 130** Race Relations
- **SOC 160** Sociology of the Environment

Choose one:

- **AMS 101G** Special Topics: New Directions in American Culture Studies
- **AMS 156** Race, Culture & Society in the United States
- **HIS 108** Global Environmental History
- **HIS 172** American Environmental History
- **NAS 123** Native Foods & Farming of the Americas
- **NAS 162** California Indian Environmental Policy II
- **PHI 109** Philosophy of the Social Sciences
- **WMS 104** Feminist Research
- **WMS 136** Critical Food Studies

Additional upper division restricted electives chosen in consultation with the track faculty advisor.

Depth Subject Matter Subtotal 43-45

### Total Units

101-108

### Track III: Economics & Policy

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

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Choose one:

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<td>Botany &amp; Physiology of Cultivated Plants</td>
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<td>ESP 001</td>
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**Depth Subject Matter**

**Agricultural & Resource Economics**

Choose one: 3-4

- ARE 112 Fundamentals of Organization Management
- ARE 145 Farm & Rural Resources Appraisal
- ARE 150 Agricultural Labor
- ARE 157 Analysis for Operations & Production Management

Choose 11-12 units: 11-12

- ARE 120 Agricultural Policy
- ARE 130 Agricultural Markets