ENVS 149: AGROECOLOGY

In Workflow

1. ENVS Committee Chair (wayne.linklater@csus.edu)
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Approval Path

1. Mon, 03 Feb 2025 18:29:36 GMT
   Wayne Linklater (wayne.linklater): Approved for ENVS Committee Chair
2. Mon, 03 Feb 2025 18:30:54 GMT
   Wayne Linklater (wayne.linklater): Approved for ENVS Chair
3. Tue, 11 Mar 2025 18:43:29 GMT
   Heidy Sarabia (heidy.sarabia): Approved for SSIS College Committee Chair
4. Wed, 12 Mar 2025 18:34:46 GMT
   Emily Wickelgren (wickelgr): Approved for SSIS Dean

Date Submitted: Fri, 31 Jan 2025 00:41:26 GMT

Viewing: ENVS 149 : Agroecology

Last edit: Tue, 11 Mar 2025 18:43:15 GMT

Changes proposed by: Si Gao (223019017)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
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Catalog Title:
Agroecology

Class Schedule Title:
Agroecology

Academic Group: (College)
SSIS - Social Sciences & Interdisciplinary Studies

Academic Organization: (Department)
Environmental Studies

Will this course be offered through the College of Continuing Education (CCE)?
No

Catalog Year Effective:
Spring 2026 (2026/2027 Catalog)

Subject Area: (prefix)
ENVS - Environmental Studies

Catalog Number: (course number)
149

Course ID: (For administrative use only.)
201377

Units:

3

Is the ONLY purpose of this change to update the term typically offered or the enforcement of existing requisites at registration?

No

In what term(s) will this course typically be offered?

Fall, Spring, Summer

Does this course require a room for its final exam?

No, final exam does not require a room

This course complies with the credit hour policy:

Yes

Justification for course proposal:

Although Agroecology has been listed in the Environmental Studies (ENVS) course catalog for years, it had not been taught until my arrival at Sacramento State (I began offering it in Spring 2023). Since then, I have developed the course to align with contemporary agroecological principles, integrating hands-on activities, systems thinking, and interdisciplinary approaches to sustainable agriculture. This course revision formally establishes Agroecology as a key upper-division elective offering within our department, ensuring its long-term inclusion in the ENVS curriculum.

The revision of this course reflects the increasing demand for courses that address sustainable food systems, climate resilience, and ecological land management. Agroecology provides students with a comprehensive framework for understanding the relationships between agriculture, biodiversity, and environmental sustainability. By embedding this course within the ENVS major/minor, we offer students essential training in field-based research, agricultural land management, and community-centered sustainable practices - critical competencies for careers in environmental science, sustainable agriculture, and food policy.

Additionally, this revision recognizes and formalizes the expertise I bring as a tenure-track faculty member specializing in soil health, agroecology, and climate-smart agriculture. Since its relaunch, student engagement and interest in the course have demonstrated a strong need for its continued inclusion. This course also enhances opportunities for community-based learning, as students will have the opportunities to collaborate with local farms, conduct urban agriculture projects, and engage with environmental organizations to apply agroecological principles in real-world contexts.

In summary, this course revision ensures the long-term viability of Agroecology as a critical component of our ENVS curriculum. By having it as a regularly taught upper division ENVS elective course, we not only address a long-standing gap in the program but also equip students with the knowledge and practical experience needed to contribute meaningfully to sustainable agriculture and food system resilience.

Summary of updates:
• Course Offering Schedule Update: Previously offered in Fall & Spring; now updated to Fall, Spring & Summer.
• Final Exam Room Request Removed.
• Field Trip Requirement Removed.
• Updated Course Description: Revised to better reflect course content and objectives.
• Updated ELOs and Assessments: Expected Learning Objectives and their assessment strategies are now explicitly listed, as they were previously absent in the course inventory.

Course Description: (Not to exceed 90 words and language should conform to catalog copy.)

Agroecology explores the ecological principles that shape sustainable agricultural systems and food production. This interdisciplinary course also examines how natural resource management, biodiversity, and climate resilience intersect with socioeconomic factors in agriculture. Students will analyze the structure and function of agricultural ecosystems, investigate soil and nutrient cycles, and explore sustainable farming practices and their ecological significance. With a science-driven and solution-based approach, this course highlights the role of sustainable agriculture in addressing global environmental challenges.

Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

No

Is this course designated as Curricular Community Engaged Learning?
No

Does this course require safety training?
No

Does this course require personal protective equipment (PPE)?
No

Does this course have prerequisites?
No

Does this course have corequisites?
No

Graded:
Letter

Approval required for enrollment?
No Approval Required

Course Component(s) and Classification(s):
Lecture

Lecture Classification
CS#02 - Lecture/Discussion (K-factor=1WTU per unit)
Lecture Units
3

Is this a paired course?
No

Is this course crosslisted?
No

Can this course be repeated for credit?
No

Can the course be taken for credit more than once during the same term?
No

Description of the Expected Learning Outcomes and Assessment Strategies:

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

	Expected Learning Outcome	Assessment Strategies
1	Apply ecological principles to analyze the structure and function of agricultural ecosystems and their interactions with natural resources.	Class discussion; homework assignments; midterm exam
2	Examine the biological, physical, and chemical processes that regulate soil health, nutrient cycling, and resource flows in agroecosystems.	Class discussion; homework assignments; midterm exam; literature review paper and presentation
3	Evaluate the role of socioeconomic and cultural factors in shaping sustainable agricultural practices, food systems, and related career opportunities.	Class discussion; agricultural interview project; homework assignments; literature review paper and presentation
4	Assess the impacts of climate change on agricultural systems and identify strategies to enhance resilience and sustainability.	Class discussion; homework assignments; agricultural interview project; literature review paper and presentation
5	Synthesize research and stakeholder perspectives to develop solutions for improving sustainability and resilience in agricultural systems.	Class discussion; agricultural interview project; literature review paper and presentation

Attach a list of the required/recommended course readings and activities:

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Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Undergraduate Learning Goals:

Competence in the disciplines
Knowledge of human cultures and the physical and natural world
Intellectual and practical skills
Personal and social responsibility
Integrative learning

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Please attach any additional files not requested above:

ENVS 149.pdf

Key: 2080