MINOR IN SUSTAINABILITY

In Workflow

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Approval Path

1. Tue, 27 Aug 2024 18:33:16 GMT
   Wayne Linklater (wayne.linklater): Rollback to Initiator
2. Tue, 27 Aug 2024 18:38:21 GMT
   Wayne Linklater (wayne.linklater): Approved for ENVS Committee Chair
3. Tue, 27 Aug 2024 18:39:22 GMT
   Wayne Linklater (wayne.linklater): Approved for ENVS Chair
4. Wed, 23 Oct 2024 15:33:40 GMT
   Emily Wickelgren (wickelgr): Approved for SSIS College Committee Chair
5. Sat, 26 Oct 2024 00:33:25 GMT
   Marya Endriga (mendriga): Approved for SSIS Dean

New Program Proposal

Date Submitted: Tue, 27 Aug 2024 18:37:52 GMT

Viewing: Minor in Sustainability

Last edit: Tue, 29 Oct 2024 20:51:26 GMT

Changes proposed by: Wayne Linklater (223005380)

Academic Group: (College)

Social Sciences & Interdisciplinary Studies

Academic Organization: (Department)

Environmental Studies

Catalog Year Effective:

2025-2026 Catalog

NOTE: This degree major program will be subject to program review evaluation within six years after implementation.

Individual(s) primarily responsible for drafting the proposed degree major program:

Name (First Last)	Email	Phone 999-999-9999
Wayne Linklater	wayne.linklater@csus.edu	916-278-6671

Type of Program Proposal:
Minor

Is this a pilot program?
No

Delivery Format:
Fully Face to Face

Title of the Program:
Minor in Sustainability

Designation: (degree terminology)
Minor

Abstract of the proposal:
There is, currently, no program enabling students to receive a qualification in sustainability, although student demand for learning on the topic is high. This is why sustainability is already taught across six colleges and 15 Departments but in ways idiosyncratic to individual disciplines. An opportunity exists, therefore, to unite those courses into a trans-disciplinary program on the topic. Outside students' learning, sustainability is also a topic central to Sac. States institutional mission, hence its Office of Sustainability. Periodically, Sac. State is evaluated for its sustainable practice, including the provision of learning and qualifications on sustainability. The Department of Environmental Studies in the College of Social Science and Inter-disciplinary Studies, with the collaboration of other departments across the university, is well-placed to lead a new Minor in Sustainability drawing on pan-university teaching on the subject to add value to multiple majors from, for example, business, engineering, and health. Consultation reveals wide-spread support for the idea across departments. Such a pan-university program lends itself to strongly supporting all five baccalaureate learning goals, but particularly integrative learning. The Minor in Sustainability integrates learning in multiple majors.

Briefly describe the program proposal (new or change) and provide a justification:
STUDENT LEARNING
Sustainability is a multi-disciplinary topic, requiring collaboration across diverse disciplines from Business, Engineering, Humanities, Human Health, and the Natural Sciences.

Over the last two decades, sustainability courses have been approved for 15 Department across 6 colleges at Sac. State. There is, however, not yet a program which draws that diversity of perspectives, curriculum and pedagogy together for inter-disciplinary student learning to serve their degree goals and career aspirations.

We propose a Minor in Sustainability that includes pan-university electives, supported by a small number of core Environmental Studies courses, allowing students to add sustainability as a qualification and complement to their majors. This new minor does not need to build new courses, only draw from the diversity of courses already supported by a diversity of academic departments for the benefit of students. Nonetheless, we suspect that having a minor may motivate other Departments also offer new sustainability aligned courses.

Minors at Sac. State are characteristically silo'ed into disciplines. The Department of Environmental Studies, for example, has a minor already, but it is a minor including only ENVS courses. The Minor in Sustainability will be an explicitly trans-disciplinary program, designed to complement multiple majors. In that way it will address one of the major themes of bachelorette learning goals: interdisciplinarity.

UNIVERSITY STRATEGIC GOALS
The Office of Sustainability is a non-academic office that works with faculty and students in a diversity of different colleges to advance the university's sustainability agenda and goals. The Office of Sustainability participates in and reports to STARS: the Sustainability Tracking and Rating System - a higher education non-profit which sets the "gold-standard" for evaluating whether universities meet sustainability goals. Reporting occurs every three years.

One section of the evaluation process seeks information about what academic programs in sustainability are offered by Sac. State. We do not currently offer a sustainability program. By creating this new Minor in Sustainability - a complement to a diversity of majors - we hope to improve Sac States sustainability credentials among its peers in higher education.

Lastly, trans-disciplinary minor programs, like the one proposed, support enrollment resiliency across major programs. As enrollments across individual programs fluctuate from year to year, the majors of highly enrolled programs that are also registered for the minor, contribute to enrollments in other departments and colleges courses. For example, majors in Business, HHS and Engineering and Computer Science (currently heavily enrolled), who also register for the Minor in Sustainability will also be electing courses in other colleges, such as Arts & Letters and Social Science and Inter-disciplinary Studies.

INSTITUTIONAL SUPPORT

The following departments supported the creation of a Minor in Sustainability and the inclusion of some of their aligned classes in its curriculum (see attached consultation document): Civil Engineering, Economics, Electrical and Electronic Engineering, Family and Consumer Sciences, Geography, Geology, History, Public Health, RPTA, Strategy and Entrepreneurship.

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

Program Learning Outcomes

Program Learning Outcomes

Learning Outcome
1. Describe and explain the key principles and concepts of sustainability by writing and speaking about sustainability issues (Undergraduate Learning Goals [ULG] 1, 2, 3, 4).
2. Evaluate examples of the socio-cultural, economic, scientific, and technological implications of sustainability challenges (ULG 1, 2, 3, 4, 5).
3. Create and assess different solutions for local and global sustainability-related challenges (ULG 1, 2, 5).

Learning Outcomes Display

Course Code	PLO 1	PLO 2	PLO 3
ENVS 10			
ENVS 111			
ENVS 144			
ECON 162			
EEE 196I			
ENGR 106			
ENVS 140			
ME 132			
BIO 160			
ENVS 135			
ENVS 149			
GEOG 118			
GEOG 161			
GEOL 140			
NUFD 110			
BIO 118			
BIO 179			
ENVS 137			
ENVS 151			
ENVS 158			
ENVS 163			

RPTA 150			
RPTA 151			
ECON 153			
ENVS 130			
ENVS 138			
ENVS 170			
GEOG 143			
PUBH 114			
RPTA 124			
FASH 33			
CE 150			
CE 150L			
CE 151			
CE 152			
ECON 180			
ENGR 105			
ENVS 122			
ENVS 147			
ECON 120			
ECON 123			
ENVS 128			
ENVS 155			
ENVS 171			
HIST 139A			
HIST 165			
IBUS 180			
ENVS 195			
ENVS 199			

Will this program be 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

Please attach a Comprehensive Program Assessment Plan (required)

Program-Assessment-Plan-Template - Minor in Sustainability.docx

Please attach a Curriculum Map Matrix (required)

CurriculumMapMatrixTemplate - Minor in Sustainability.docx

Please attach a five-year budget projection (required)

5-year-budget-template-Minor in Sustainability.xls

Catalog Description:

Program Description

Units needed for Minor: 21

Sustainability - meeting our social, economic, and environmental needs in the present without compromising the ability of future generations to meet their needs too - is a multi-disciplinary topic. Knowledge, practice and collaboration across disciplines such as Business, Engineering, Humanities, Human Health, and the Natural Sciences is necessary. The Minor in Sustainability makes available 50 courses offered by 15 different Departments from six Colleges at California State University, Sacramento. It provides a single qualification to complement students learning in their own major with cross-disciplinary learning on sustainability from many other disciplines.

Admission Requirements: Course prerequisites and other criteria for admission of students to the degree major program, and for their continuation in it.

A minimum grade of "C-" is required in all courses required for the Sustainability Minor.

Program Requirements: (If new courses are being created as part of a new program, it will be useful to propose courses first.)

Program Requirements

Code	Title	Units
A maximum of 9 units of courses from a student's major may count towards minor requirements		
REQUIRED COURSES (9 Units)		
ENVS 10	Introduction to Environmental Science [1]	3
ENVS 111	Environmental Ethics [1]	3
ENVS 144	Sustainability Science & Policy	3
ELECTIVE COURSE DOMAINS (12 Units)		
Elective courses must be chosen from at least two of the seven domains for a total of 12 units.		12
1. Energy		
ECON 162	Energy Economics	
EEE 196I	Electric Vehicle Design: Electrical and Control Concepts	
ENGR 106	Energy and Modern Life	
ENVS 140	Energy, Society, and the Environment	
ME 132	Solar Energy, Geothermal Energy, and Bioenergy Systems	
2. Air, Water and Earth		
BIO 160	General Ecology	
ENVS 135	California Water and Society	
ENVS 149	Agroecology	
GEOG 118	Earth Transformed	
GEOG 161	California's Water Resources	
GEOL 140	Geology and the Environment [1]	
NUFD 110	Food Production and Sustainability	
3. Ecosystems and Biodiversity		
BIO 118	Natural Resource Conservation	
BIO 179	Conservation Biology & Wildlife Management	
ENVS 137	Conservation and Society	
ENVS 151	Restoration Ecology	
ENVS 158	Wetlands Ecology	
ENVS 163	Ethnoecology [1]	
RPTA 150	Ecology Of Resource Areas	
RPTA 151	Visitor Management in Recreation Areas	
4. Human Health and Well-being		
ECON 153	Health Economics	
ENVS 130	Environmental Toxicology	
ENVS/SOC 138	Introduction to Environmental Sociology	
ENVS 170	Environmental Justice	
GEOG 143	Environmental Hazards and Society	
PUBH 114	Human Ecology and Health [1]	
RPTA 124	The Science of Nature Engagement and Human Health & Wellbeing [1]	
5. Built and Urban Environments		
FASH 33	Fashion Sustainability, Global Impact, and Critical Thinking [1]	

CE 150	Principles of Environmental Engineering
CE 150L	Environmental Engineering Laboratory
CE 151	Environmental Engineering Practice
CE 152	Stormwater Management
ECON 180	Urban Economics
ENGR 105	Sustainable Design and Construction [1]
ENVS 122	Environmental Impact Analysis: CEQA and NEPA
ENVS 147	Urban Agriculture and Aquaponics
6. Law, Policy and Economy	
ECON 120	Economics and Environmental Degradation
ECON 123	Resource Economics
ENVS/POLS 128	Environment and the Law
ENVS 155	Environmental Management and Decision-Making
ENVS/POLS 171	Environmental Politics and Policy
HIST 139A	Global Environmental History in the Age of Imperialism, 1450-Present Day
HIST 165	American Environmental History [1]
IBUS 180	Sustainability Business in Global Economy
7. Professional Experience	
ENVS 195	Environmental Studies Internship
ENVS 199	Special Problems
Total Units	**21**

[1] Course also meets a General Education requirment

Attach the results of a formal survey in the geographical area to be served indicating demand for individuals who have earned the proposed degree and evidence of serious student interest in majoring in the proposed program:

CONSULTATION (other Cal States).docx

For graduate programs, the number of declared undergraduate major and the degree production over the preceding years of the corresponding baccalaureate program:

NA

Professional uses of the proposed degree major program:

The program proposed is not a major, but a minor. It is designed to complement a diversity of majors in ways relevant to career interests and demand.

The expected number of majors in:

1st Year Enrollment:

20

3rd Year Enrollment:

30

5th Year Enrollment:

50

1st Year Graduates:

0

3rd Year Graduates:

18

5th Year Graduates:

28

Please attach any additional files not requested above:

CONSULTATON (departments contributing electives)(4).docx

Reviewer Comments:

Wayne Linklater (wayne.linklater) (Tue, 27 Aug 2024 18:33:16 GMT): Rollback: .

Key: 575