TO: The Academic Senate
FROM: Committee on Instruction and Curriculum (CIC)
SUBJECT: 16-17 CIC 55: Revision request for B.A. Environmental Studies
PURPOSE: Information to the Academic Senate
ACTION REQUESTED: That the Senate accept the information that the revision request for bachelors of arts in Environmental Studies has been approved by CIC.

BACKGROUND INFORMATION:
The Senate process for approving transformed degree programs for the semester calendar is defined by 14-15 CIC 36. The Committee discussed the B.A. in Environmental Studies at its January 23, 2017 meeting, which was attended by a representative of the Department of Anthropology, Geography, and Environmental Studies: Michael Lee. It was approved by CIC unanimously with the acknowledgement that some non-substantive changes may occur in the Catalog copy. The Committee recommended a change to the curriculum map.

The proposal may be viewed within Curriculog; the summary is attached as a PDF document per ExCom’s request.
Environmental Studies Bachelor of Arts

2. Semester Conversion Request for Approval of Revision of the Undergraduate Degree Program/Major

***READ BEFORE YOU BEGIN***

Use this form to request a revision to your Undergraduate Degree Program/Major and its concentration(s).

To **change the title of your degree** program, a narrative will need to be submitted to APGS for review by CIC and the state chancellor's office. [Click here](#) to submit your narrative.

To **move an existing degree to online**, complete form #7. *Semester Conversion Request for Online/Hybrid Program Modification*. 

To **elevate an option to a degree or change the degree type**, a narrative will need to be submitted to APGS for review by CIC and the state chancellor's office, [Click here](#) to submit your narrative.

**Turn on Help Text** by clicking the Show Help Text icon above this section of the form.

**Effective Term: Fall 2018**

**Catalog: 2018-2019**

Select **Shared Core** unless otherwise instructed by APGS

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**Notes:** If you want to move an existing degree program to online (i.e. 50% or more of the program can be completed online (a hybrid course counts as .50 online), elevate an option to a degree, or change the degree type, please e-mail [Donna Wiley](mailto:), Interim Associate Vice President, Academic Programs and Graduate Studies; and copy [Sarah Aubert](mailto:), Catalog and
Curriculum Specialist, Academic Programs and Graduate Studies, for additional instructions as soon as possible.

Department:*

Department of Anthropology, Geography and Environmental Studies

Full and exact title of Major including degree earned:*

Environmental Studies Bachelor of Arts

Has your program received transformation funding?*

Yes ☐ No ☐

Transformation Changes

Overview

The transformation of the Environmental Studies curriculum has centered on addressing four primary issues: (1) Increased focus on sustainability and environmental justice. (2) Increased career opportunities in the areas of energy and climate. (3) The need to more clearly distinguish the Environmental Studies Major from the Environmental Science Major. (4) Unnecessary complexity of the major. (5) Increased emphasis on high-impact learning. At the same time, the transformation process has provided the opportunity to better coordinate the delivery of essential concepts and skills across the curriculum, facilitating student mastery thereof.

ISSUE 1. Increased focus on sustainability and social justice

Sustainability and social justice have always been an integral part of our environmental studies curriculum. These issues were not only built into the coursework, we have maintained a Sustainable Resource Management Certificate for many years. However, the sustainability and social justice focus was not adequately evident from program and course descriptions. Nor were they adequately coordinated throughout the curriculum, ensuring that all students received a sufficient depth of exposure for mastering of the subjects. At the same time, increased societal focus on these issues has created new career opportunities, leveraging their importance.

For example, sustainability has become an internationally recognized and certified profession (see for example, The International Society for Sustainability Professionals) and job positions are rapidly emerging. This trend clearly evident even within the CSU: The Chancellor’s Office brought on a system-wide Sustainability Program Manager just this year (Erin...
Brewster). Cal State East Bay hired its first Sustainability Director (Jillian Buckholz) two years ago. Many other CSU campuses now have sustainability managers, as do many California municipalities.

Since President Clinton’s 1994 Executive Order 12898 on environmental justice (EJ), EJ has increasingly been incorporated into the nation’s legal framework, catalyzing activity among agencies and advocates. In California, the California Environmental Protection Agency’s has developed an Intra-Agency Environmental Justice Strategy to improve environmental justice in the State, including the development of EJ screening tools to identify EJ hotspots, EJ legal tools and compliance and enforcement mechanisms to improve environmental protection in vulnerable communities. At the same time advocacy groups like the California Environmental Justice Alliance and Communities for a Better Environment maintain the pressure for progress.

Our transformed program addresses these issues both by adding a new course, by certain relevant old courses, and coordinating their delivery throughout the curriculum.

Program description modification: First, our program description has been modified to clearly state the program’s focus on sustainability and social justice, its first sentence now being: “The Environmental Studies Undergraduate Major is characterized by its focus on equitable, just, and sustainable environmental solutions.”

ENVT 330 (Sustainability and Social Justice) is a new required course that has been added to the required upper division core that is focused specifically on the intersection between sustainability and social justice.

ENVT 320 (Environmental Resource Analysis) introduced and develops students skills with quantitative methods to assess sustainability and social justice issues.

ENVT 465 (Sustainable Communities and Development) which was formerly an option area course, is now a required course in the upper division core. Poverty, equity, and environment are the central focuses of that course.

ENVT 447 (Energy, Climate, and Society) also addresses EJ and sustainability issues as they relate to energy technologies and their impacts.

ENVT/PHYS 307 (Social Impact through Sustainable Solar Design) is a new course in the upper division core, that also addresses issues of energy poverty and justice.

GEOG 455 (Sustainable Food Systems) a recommended elective in the major also addresses issues at the intersection of sustainability and social justice.

ISSUE 2. Increased career opportunities in the areas of energy and climate.
The past two decades of global concern over anthropogenic climate disruption has resulted in a very significant increase in the number of environmental jobs in climate and energy in recent years, especially in California with its highly ambitious climate protection legislation. Particularly meaningful to our students, AB-32 calls on local governments to reduce greenhouse gas emissions and SB-375 requires regional planning to reduce GHG emissions through land-use and transportation planning (see [link](https://www.350.org/climate_backup/)). This has created major job potential for our students, as is evident from the number of California cities currently active in that area. At the same time, Cal State East Bay committed itself to making climate neutrality part of the education of all students both in its Senate Resolution (06-07 BEC 9) and in the President’s signing of the American College and University Presidents Climate Commitment (ACUPCC, aka the Carbon Commitment) in January 26, 2015. To address these issues our program has increased its focus on energy and climate in the following ways:

ENVT 447 (Energy, Climate, and Society) is now a required class with more units, allowing a deeper immersion into the subject. Starting with the science of climate change, that class then examines society’s energy alternatives in the context of climate change and their social impacts.
ENVT/PHYS 307 (Social Impact through Sustainable Solar Design) was added to the upper division core. The hands-on learning class just won the California Higher Education Sustainability Conference Academics Award for STEM.
ENVT 320 (Environmental Resource Analysis), a required course develops quantitative skills in energy and climate analysis.
ENVT 499 (Environmental Projects) will continue to offer the opportunity for our students to engage in greenhouse gas assessment and climate action planning for the campus, as the senior seminar currently does.
In addition, Environmental Studies and Physics have just won a CSU-systemwide Campus as a Living Lab grant to develop a new collaborative Energy Analysis course that will focus on carbon emissions reductions through energy efficiency improvements.

**ISSUE 3. Programmatic overlap with the Environmental Science Major**

There has been much confusion between the two programs on campus. What we see as the major distinctions are: Environmental Science focuses primarily on the physical science of environmental problems. Not only does Environmental Studies examine environmental issues from a broader interdisciplinary perspective—including environmental aspects of policy, law, economics, social sciences and humanities—environmental studies also has a greater focus on solving environmental problems, rather than just understanding them. All of the changes made to address ISSUES
1 and 2, create a greater distinction with Environmental Science because of their broadly interdisciplinary, environmental problem-solving focus.

ISSUE 4. Unnecessary complexity of the major

The current major, with its three different concentrations, is unnecessarily complex, making it confusing to students and unmanageable to advise. The transformed program streamlines the curriculum by eliminating all options and concentrating on the Department's strengths as they relate to the current field of environmental studies. At the same time, we are deepening and strengthening the curriculum by coordinating the delivery of concepts through a clearly articulated series courses and prerequisites. The new major curriculum builds on what had previously been our Sustainable Resource Management option—the option that the vast majority of our students currently are taking. While streamlined, the major leaves room for free electives that students can take inside or outside of the department to further explore particular interest areas or deepen useful career skills (e.g. advance GIS).

ISSUE 5. Increased emphasis on high impact learning

While the Program has always engaged in project-based learning, we are deepening our emphasis on project-based learning, while containing costs through collaboration at the campus, community, and system-wide scale. These collaborations include

- collaborations with better endowed departments and colleges (for example Physics is providing laboratory space for ENVT 307 and with the College of Education for access to local schools and cost sharing)
- collaborations with University Advancement to fund-raise for project-based learning
- collaborations with the Sustainability Office for student support
- collaborations with local communities to support community-based projects (through The Sustainable City Year Program)
- Campus-as-a-Living-Lab grants from the CSU for the development of the Energy Analysis course, which included collaboration with facilities management on campus

The curriculum guarantees that every student will engage in project-based learning at least once, and probably several times.

The Upper Division Core includes the following courses, which are entirely project based:

- ENVT 499 (Environmental Projects) -required
- ENVT 307 (Social Impact through Sustainable Solar Design) -an option with a single alternative, ENVT 380, which is at
least partially project based

The Core also includes the following courses, which are typically at least partially project based:

- ENV T 225 (Fundamentals of GIS)
- ENV T 380 (Applied Field Studies)
- ENV T 445 (Water and Watershed Resources)
- ENV T 465 (Sustainable Communities and Development)

These courses also offer opportunities for community-based, project-based research.

Recommended courses include:

- GEOG 425 (Advanced GIS), which is entirely project based
- ENV T 301 (EcoLab), which is likely to be project based
Majors are typically involved in campus and community sustainability projects such as greenhouse gas assessment, water resource and sustainability assessment, climate action and sustainability planning, and urban restoration projects. The program engages actively in collaborations across the campus, locally, and internationally. The Major benefits by close association with the Geography Program, providing students access to training in the spatial analytical tools that can greatly leverage their expertise for careers as sustainability directors and environmental resource managers. The program also benefits from aggressive regional and state programs to promote environmental sustainability and social justice that make the San Francisco Bay Area a national hotspot for environmental careers.

Features

- Environmental Studies Bachelor of Arts
- Environmental Studies Minor
- Sustainability Certificate
- Sustainable Energy Systems Certificate

Career Opportunities

Career opportunities are highly diverse and new opportunities are rapidly emerging. Our graduates work in all sectors: governmental, non-profit, private, and education. Our students pursue graduate degrees in many fields including: environmental policy and management, urban planning, environmental law, recreation management, landscape architecture, green business, public administration, and education.

Many become environment and resource managers working on issues of water, energy, climate, parks, transportation, and urban environments

Job titles include, but are not limited to:

- Sustainability Officer/Director
- Environmental Advocate / Analyst / Educator / Program Manager / Planner
- Energy Analyst / Manager
- Water Resources Analyst / Manager / Planner
- Environmental Justice Analyst, Compliance Specialist
- Environmental Permitting, Planning, and Compliance
- Environmental Business Entrepreneur

Program Learning Outcomes

Graduates with a degree in Environmental Studies should be able to:

- Articulate key threats to the global environment, the scientific basis of the understanding of those threats, their underlying causes and implications for society;
- Articulate and apply key concepts to critical environmental problems including ecological limits, threshold effects,
tragedy of the commons, and the interconnectedness of natural and human systems;
Identify and apply a range of prominent tools and strategies
to maintain and restore environmental quality and achieve sustainability;
Describe and evaluate social justice and equity issues in the
context of sustainable development;
Identify, describe and assess the environmental and
associated equity and justice implications of human actions
including one's own;
Apply quantitative and qualitative approaches to identify,
analyze, and assess environmental problems.

Stop
Click here to see instructions before completing the following Major Requirements field.

**Lower Division (18 Units)**

Students must take all of the following courses (15 units):

CHEM 100 Introduction to College Chemistry (3)
STAT 100 Elements of Statistics of Probability (3)
ENVT 101 Environmental Challenges of the 21st Century (3)
ENVT 225 Fundamentals of GIS (3)
ENSC 240 Environmental Biology (3)

Students must take one (1) of the following courses (3 units):

GEOG 125 World Regions and Development (3)
ECON 205 Principles of Macroeconomics (3)

**Upper Division (35 units)**
Students must take all of the following courses (29 units):

ENVT 310 Literature and Research Methods (4)  
ENVT 320 Environmental Resource Analysis (4)  
ENVT 330 Environment, Sustainability, and Social Justice (3)  
ENVT 410 Environmental Impact Analysis (3)  
ENVT 445 Water and Watershed Resources (4)  
ENVT 447 Energy, Climate, and Society (4)  
ENVT 465 Sustainable Communities and Development (4)  
ENVT 499 Environmental Projects (3)

Students must take one of the following courses (3 units):
POS 444 Environmental Law (3)  
POS 411 Public Policy and the Environment (3)

Students must take one of the following courses (3 units):
ENVT 307 Social Impact Through Sustainable Solar Design (3)  
ENVT 380 Applied Field Studies (3)

Total Units Required in the Major Program

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B.A. Programs: Major requirements are a minimum of 24 units with at least 12 upper division units.

B.S. Programs: Major requirements are a minimum of 36 units with at least 18 upper division units.

Total Degree Units should not exceed **120 Semester Units** unless previously approved by Chancellor's Office for exemption.

See [Unit Calculator](https://csueastbay.curriculog.com/proposal:3838/print) for assistance.
If the program has a similar transfer model curriculum (TMC), please e-mail Kyle Burch, Articulation Officer, Academic Programs and Graduate Studies, to verify that the revised program meets the TMC requirements prior to submitting the program revision request form.

Is the major approved as a "similar" degree under the STAR Act (SB 1440)?

☐ Yes ☐ No ☐ I’m not sure (Articulation Office will contact you)

If yes, explain how this modification will affect the "similar" degree agreement

Were any concentrations (options) discontinued?

☐ Yes ☐ No

If yes, please explain below. If no, please enter "N/A" or "not applicable."

Yes. All concentrations were eliminated for the following reasons:

- To create the room in the major for all students to receive what is now essential curriculum in the field (specifically related to sustainability, social justice, climate and water) and receive the skills to be competitive for today's environmental careers
- To leverage faculty expertise
- To streamline the major
- To make the curriculum easier for students to understand

Is this major approved as an online degree program?

☐ Yes ☐ No

If no, is there any pathway in the revised degree that is more than 50% online?

☐ Yes ☐ No
Resource implications of the proposed revision, if any:

None

Relationship of Revised Program to requirements for teaching credentials, accreditation, and/or licensing, if any:

Consultation with other affected departments and programs:

The following department(s) has (have) been consulted and raised no objections:*

- Department of Chemistry and Biochemistry
- Department of Earth and Environmental Sciences
- Department of Economics
- Department of History
- Department of Mathematics
- Department of Political Science
- Department of Sociology and Social Services

No objections raised from consulted departments.

The following department(s) has (have) been consulted and raised concerns:
**Attachments**

Please scroll to the top of this form and select the Files icon to attach the following documents to your proposal:

- Bachelor's Degree Roadmap
- Curriculum Map 1 - PLOs to Courses
- Curriculum Map 2 - PLOs to ILOs
- Five Year Assessment Plan

Did you attach your Curriculum Maps, Five Year Assessment Plan or other supporting documents to this proposal?

- [ ] Yes
- [ ] No

**Catalog Item Types**

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### Steps for Environmental Studies Bachelor of Arts

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#### Dean's Office Review

**Participants**

- **David Larson**
  - Date Completed: 5/30/2016 2:25 PM
  - Changes: No
  - Comments: No

#### College Curriculum Committee Approval

**Participants**

- **Dennis Chester**
  - Date Completed: 10/31/2016 4:27 PM
  - Changes: No
  - Comments: Yes

#### Dean's Office Approval

**Participants**

- **Dennis Chester**
  - Date Completed: 12/12/2016 3:03 PM
  - Changes: No
  - Comments: No
### APGS (Technical Review)

**Status:** Approved  

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| Sarah Aubert | Required for Approval: 100% required  
Date Completed: 12/20/2016 11:17 AM |
| Stephanie Matsuda | Changes: Yes  
Comments: Yes  
Date Completed: 12/20/2016 11:18 AM |

**Participants:**  
- Sarah Aubert
- Stephanie Matsuda
- Stephanie Matsuda (System Administrator)

**Activity:**  
- Required for Approval: 100% required
- Date Completed: 12/20/2016 11:18 AM
- Changes: Yes
- Comments: Yes

### APGS (Dean, Undergraduate Studies Review/AVP Review)

**Status:** Approved  

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| Maureen Scharberg | Required for Approval: 50% required  
Date Completed: 1/4/2017 4:35 PM |
| Donna Wiley | Changes: No  
Comments: Yes |

**Participants:**  
- Maureen Scharberg
- Donna Wiley

**Activity:**  
- Required for Approval: 50% required
- Date Completed: 1/4/2017 4:35 PM
- Changes: No
- Comments: Yes

### Committee on Instruction and Curriculum

**Status:** Working  

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Time Spent: 19 days |
| Sophie Rollins | Changes: No  
Comments: No |

**Participants:**  
- Academic Senate
- Sophie Rollins

**Activity:**  
- Required for Approval: 100% required
- Time Spent: 19 days
- Changes: No
- Comments: No
- Agenda Administrator

### Executive Committee

**Status:** Incomplete  

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- Executive Committee

**Activity:**  
- Executive Committee

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https://csueastbay.curriculog.com/proposal:3838/print  15/20
Participants

**Academic Senate**
- Sophie Rollins *

**ExCom**
- Mark Karplus *
- Sophie Rollins *

Step Details

Required for Approval: 100% required
Work: comment
Agenda: Yes

* Agenda Administrator

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**Academic Senate**

Status: Incomplete

Participants

**Academic Senate**
- Sophie Rollins *

Step Details

Required for Approval: 100% required
Work: comment
Agenda: Yes

* Agenda Administrator

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**President's Office**

Status: Incomplete

Participants

**Academic Senate**
- Sophie Rollins *

Step Details

Required for Approval: 100% required
Work: comment
Agenda: Yes

* Agenda Administrator

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**APGS (Final Review & Export)**

Status: Incomplete

Participants

Sarah Aubert
Stephanie Matsuda

Step Details

Required for Approval: 100% required
Work: edit, comment
Attachments for Environmental Studies Bachelor of Arts

**ENVT curr-map-2 FINAL 2016-05-26.docx** (uploaded by Karina Garbesi, 5/26/2016 6:30 pm)

**ENVT curr-map-1 Final REV 2016-05-29.docx** (uploaded by Karina Garbesi, 5/29/2016 11:50 am)

**Five Year Assessment Plan 2016-05-29.docx** (uploaded by Karina Garbesi, 5/29/2016 11:52 am)

**Copy of ENVT bacc-degree-roadmap 2016-05-29.xlsx** (uploaded by Stephanie Matsuda, 12/19/2016 11:02 am)
Comments for Environmental Studies Bachelor of Arts

Donna Wiley
1/4/2017 4:35 pm
Very detailed justification of transformation. Well written!

Stephanie Matsuda
12/19/2016 11:08 am
Uploaded roadmap with edits.

Shubha Kashinath
11/14/2016 10:54 am
Corrected a spelling error under description of reasons for discontinuing major (streamline-streamline).

Dennis Chester
10/20/2016 2:38 pm
add unit value to courses in schema

Karina Garbesi
5/29/2016 8:54 pm
Updated as discussed. Good catch! K

David Larson
5/29/2016 6:40 pm
Karina: I’m sending this proposal back to you for the reason described in my recent email message. Also: Departments are not allowed to list part-time faculty in the university catalog.

Karina Garbesi
5/29/2016 12:17 pm
Dave...Could you add the full time lecturers to the Department Description?

Decision Summary for Environmental Studies Bachelor of Arts

Step Summary
This step requires 100% approval from all participants to move forward.
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