

**Names of all programs and degree types assessed:**

Environmental Studies major, Environmental Studies minor

**Names and contact information of the faculty coordinating the assessment of each program and report:**

David Silver, lead contact <dmsilver@usfca.edu>, Adrienne Johnson <ajohnson21@usfca.edu>, and Steve Zavestoski <smzavestoski@usfca.edu>

**Your Mission Statement; note any changes since last report:**

Although the Environmental Studies Program has not formally adopted a mission statement, we operate the major and minor in accordance with the following statement:

The Environmental Studies Program is interdisciplinary in nature, reflects the current state of the field, recognizes the relationship between human behavior and nature in ecological issues, and responds to the Jesuit call to promote environmental justice and ethical stewardship of the natural world.

**Your PLOs; note any changes since last report:**

PLOs for the Major:

1. Demonstrate an understanding of the roles of humans and institutions in creating and responding to environmental issues;
2. Integrate perspectives of multiple disciplines to understand the complexities of human-environment interactions;
3. Apply scientific principles to environmental problems;
4. Critically analyze socio-culturally appropriate strategies to address environmental problems; and
5. Connect environmental problems to issues of social justice through study and community engagement.

PLOs for the Minor:

1. Demonstrate an understanding of the roles of humans and institutions in creating and responding to environmental issues;
2. Apply scientific principles to environmental problems; and
3. Connect environmental problems to issues of social justice.

**Your current Curricular Map; note any changes since last report:**

| ENVA Curricular Map                                       |   |  |  |   |   |
|---|---|--|--|---|---|
| <b>REQUIRED COURSES (30 units)</b>                        | Integrate perspectives of multiple disciplines to understand the complexities of human-environment interactions | Demonstrate an understanding of the range of environmental issues and the roles of humans and institutions in responding to them | Analyze critically and develop socio-culturally appropriate strategies to resolve environmental problems | Connect environmental problems to issues of social justice through study and community engagement | Apply scientific principles to develop solutions for environmental problems |
| ENVA 109 Environment and Society                          | I   | M  | I  | I   |   |
| ENVS 110 Introduction to Environmental Science w/Lab      | I   | I  | I  |   | M   |
| ENVS 210 Ecology and Human Impacts w/Lab                  | M   |  |  |   | M   |
| ENVA 285 Nature Immersion + Campus and Community Projects |   |  |  | M   |   |
| ENVA 310 The Commons: Land, Air and Water                 | A   | A  | M  | M   |   |
| ENVA 355 Methods and Approaches in Environmental Studies  | M   |  | M  |   | M   |
| ENVA 367 Environmental Justice                            | A   | A  | M  | M   |   |
| ENVA 450 Capstone Practicum in Environmental Studies      |   | A  | A  | A   |   |

Your assessment schedule between APRs: a year by year list of PLOs assessed since your last APR and those to be assessed before your next APR:

2021-22 - APR

2022-23 - PLO 3: "Apply scientific principles to environmental problems"

2023-24 - PLO 4: "Critically analyze socio-culturally appropriate strategies to address environmental problems"

2024-25 - PLO 5: "Connect environmental problems to issues of social justice through study and community engagement"

2025-26 - PLO 1: "Demonstrate an understanding of the roles of humans and institutions in creating and responding to environmental issues"

2026-27 – PLO 2: "Integrate perspectives of multiple disciplines to understand the complexities of human-environment interactions"

### Description of the assessment methodology:

This year, we found ourselves in a bit of a pickle with respect to assessing PLO 5, "Apply scientific principles to environmental problems." Although we do teach scientific principles in some of our classes, including Methods, our students primarily receive and work with this knowledge through two required ENVS classes: Introduction to Environmental Science (ENVS 110) and Ecology (ENVS 210). In other words, for better or worse, we have "out-sourced" our teaching of the scientific method to our excellent ENVS colleagues. Our assessment committee was not comfortable asking

ENVS colleagues to collect and assess student work of our ENVA students. Therefore, we decided to take a larger approach to assessing PLO 5 by doing two things:

First, the assessment committee arranged a “town hall” lunch-time meet up with ENVA students to survey them about their experiences in their ENVS requirements, about their preparation for those classes, and about their understanding and ability to apply scientific principles to develop solutions to environmental problems.

Second, the members of the assessment committee arranged a lunch with ENVS professors who teach Introduction to Environment Science and Ecology (Tom McDonald, April Randle, and Calla Schmidt) in order to ask them what they think of the current arrangement, whether our students are adequately prepared, what would help our students succeed, etc.

We – Adrienne, David, and Steve – then met to discuss both meetings, our findings, and ways to leverage this information to improve the ENVA Program and student learning.

#### **Rubrics (and other instruments, if applicable)**

NA.

#### **Description of your results, noting any significant findings from the data or assessment process:**

We learned a lot from the student town hall meeting, which was attended by a dozen ENVA majors and all members of the assessment committee. When asked to give their overall impressions of ENVS 110 and 210, students were very positive. They enjoyed the classes and were particularly complimentary of their professors. Related, when asked if they felt prepared to take these two classes, most students answered in the affirmative. At the same time, a few students felt underprepared or intimidated by science but felt that the professors did an outstanding job bringing them up to speed.

When asked if they would like to take more or fewer ENVS classes, a few students answered, “more!” One student was convinced that ENVS classes would help her and her colleagues find a job, leading other students to then chime in on the side of wanting more ENVS classes. When, however, it was noted that if we were to require more ENVS classes it would mean we would require fewer ENVA classes. A fear covered the room and consensus was reached that two ENVS classes is “just right.” When asked what a future ENVA curriculum should require, students were enthusiastic

about new and more classes in: Environmental Education; Environmental Law; Environmental Art; and a 4-unit Nature Immersion.

We also learned a lot from our meeting with our ENVS colleagues. (Unfortunately, only Calla from ENVS and Adrienne and Steve from ENVA were able to attend the lunch meeting, but all others were invited to share feedback with attendees.) For example, we learned that ENVA students are doing exceptionally well in ENVS classes, especially in ENVS 110. Calla mentioned that ENVA students are keen learners and demonstrate great capacity in bringing the natural sciences together with the social sciences. Calla mentioned that ENVA tends to gain students from ENVS when they switch to our major if they fail general Biology and other required ENVS classes. This is not necessarily a bad thing as students are able to continue studying Environmental topics but now from mainly social science and humanities perspectives. We also learned that ENVS is seeking more ways to integrate Environmental Justice principles and values into their classes as students and faculty are realizing that scientific inquiries are not immune to, and can benefit from, analyses of power and inequality. Lastly, Calla mentioned that down the road, it would be productive to design a ENVA/ENVS team-taught class, perhaps integrating ENVA 109 and ENVS 110 or our capstone courses. A first step, as suggested by Calla, may be to co-design a ENVA/ENVS Professional Development course which launches from an already-existing ENVS course on the same topic. Overall, this team-teaching suggestion echoes the desires of our ENVA students to have more connection between ENVA and ENVS content and learning.

**Description of how the results were shared with faculty and how your department/program responded to the results. This is where you should lay out any plans for future improvement or assessment of your program indicated by the results.**

This was a productive and helpful process for ENVA. We shared and discussed our findings and arrived at a few key improvements towards student learning:

1. We learned that there is significant student interest in developing a new class that is co-taught by one ENVA and one ENVS professor.
2. We learned that our ENVA Orientation to the Major can and should include more discussion about ENVA Electives and how they are geared towards students' interests. If, for example, an ENVA student is science-oriented, they should a) be encouraged to consider majoring in ENVS, double majoring in ENVA and ENVS, or minoring in ENVS and b) understand from the outset that they can take multiple ENVS classes, including established classes like Air and Water and special topics classes like Marine Environments w/Lab and Water & Wastewater Treatment, that can count towards their ENVA Electives.

3. In order to demonstrate to students various ENVA paths they can take, we are considering creating a document of 'model pathways' which show differently themed pathways such as 'Arts', 'Science and Policy', 'Community/Non-profit work' etc. and lay out suggested courses and electives that can be taken.
4. We will start researching possibilities to team teach a course with ENVS in the future. This will entail having more discussions with ENVS faculty and looking into resources (such as the CAS Team Teaching Collaborations Award) that will facilitate design and lessen other service duties.

**Discussion of any significant feedback from your previous year's report and how your program responded to that feedback:**

NA. In place of a formal assessment, we had our APR.