



Fullerton College

Self-study for Environmental Sciences Program

2025

Section 1: Introduction

1. Briefly describe your program, make sure to include how your program helps the College achieve its mission.

Environmental Sciences is a small program that has been chronically understaffed and under resourced. We offer an A.S. in Environmental Sciences. Our ENVS 105F: Environmental Biology and ENVS 105LF: Environmental Biology Lab courses meet the life sciences general education requirements for transfer to both UC and CSU. We offer several weekend field courses which provide students with hands-on experiential education in nature based settings. These courses are required for our majors and have been shown to help students clarify their educational and career goals, to build a supportive and inclusive environment, and to create a sense of connection and belonging for students. Once our students have taken one of our field courses, they often enroll in all our subsequent field courses increasing success and retention.

Section 2: Students

2.1 Student Demographics and Enrollment Trends

1. Using the data provided by the OIE, describe the student population your department serves. Which demographic groups have the most enrollments in your program? Which student groups are underrepresented in your program? Has the demographic profile of your program changed over the last four years?

Latinx (61.4%), White (16%), and Asian (12.6%) students make up the largest percent of students in ENVS (90%). ENVS serves more Latinx students than the college as a whole (4.4%), but fewer Black students (1.4%) and students of Two or More ethnicities (1.2%). The percentage of ENVS students identifying as Latinx seems to have declined by about 3% over the last 5 years, but trends in other groups are not apparent.

ENVS student genders averaged over the last 5 years were 51.4% Female, 42.6% Male, and 6.2% unknown. There is no significant difference between the gender composition of ENVS, relative to the college as a whole, over this time period. However, the annual data for this period indicates the gender gap between male and female students in ENVS has been closing over the last 5 years while the number of students listed as gender unknown has increased slightly.

2. Briefly describe course-level enrollment trends in your program over the past five years. Have the enrollment trends in your program changed over the last five years? To what do you attribute any changes or lack of changes?

Headcounts in ENVS have been quite variable over the last 5 years ranging from 371 to 728 (OIE 2025). The lower headcounts observed in 2024–25 are primarily attributable to a reduction in full-time faculty availability rather than a decline in student demand. During that year, the department operated with only one full-time faculty member, down from the historical norm of three, which significantly limited the number of sections offered. Regardless of the number of sections we offer, our fill rates are high (>95% since we established a mix of in person and online sections post covid, 2023-2025) and significantly exceed the campus wide average over the same time period (84.9%, 2023-2025) (KPI O225). These sustained high fill rates indicate continued demand and suggest that the program has significant capacity for growth. Our online offerings for Winter/Spring 2026 filled within 2 weeks of the start of registration. The department has repeatedly requested the restoration of a third full-time faculty position over the past five years to meet student demand and maintain program stability, but these requests have not yet been approved.

3. How do you monitor and modify course offerings, including time and modality, to ensure that students' needs are being met?

We monitor course offerings, including time and modality, through examination of OIE and KPI data, written course evaluations, and in person student queries. While the data help us identify

trends and needs, current student demand exceeds our capacity to respond fully. Students consistently express interest in additional online sections, more diverse course offerings, and classes scheduled at non-traditional times. However, our ability to meet these needs is constrained by limited full-time faculty staffing. For field-based courses, scheduling and modality are also influenced by the nature of the subject matter and by logistical factors such as site availability and the schedules of our community and agency partners. These external factors, combined with limited faculty resources, impact our flexibility in adapting course offerings to student needs.

2.2 Student Achievement

1. Using data provided by the OIE, describe overall student achievement counts, rates, and trends in your program over the past five years, these include: course success rates, degrees/certificates completion counts, transfer counts, licensing, job placement, wage improvements (not all of these measures apply to every program).

ENVS annual student success rates averaged across all courses (86%; range 84-89%) and course success rates averaged across the last 5 years (90.6%; range 82-96%) exceed institutional set standards and institutional stretched standards. Student success rates for ENVS 105F and ENVS 105LF show a bump up from 2023 on.

ENVS awarded 13 degrees during this study's 5-year period. Only 4% of the Fall 2018-Fall 2020 combined cohort earned their degree and transferred while, 24% transferred without their degree, and 69% have not earned a degree or transferred. Our Strategic Action Plans include measures to reduce the time to complete our degree and to reduce the number of our students who transfer without completing their A.S. in ENVS, such as hiring an additional fulltime faculty member.

2. Are there student groups whose success rates are below the institution-set standard or whose success rates are below other student groups? What factors can explain this?

ENVS student success rates averaged over the period 2020-2025 meet or exceed institutional set standards and stretch goals for all ethnic groups (range 80% - 100%), except American Indian/Alaska Native (50%). However, looking at the data in finer detail, we see that American Indian/Alaska Native (25%, n=4) and Black/African American (67%, n=12) success rates were lowest in 2020/2021, the first year of Covid fully online instruction, and were likely associated with a transition to the asynchronous online modality. The 4 most recent years in the data set show both these groups meeting or exceeding institutional stretched goals. There were no clear gender associated trends in student success.

3. In terms of your degree and certificate completers, are there any groups who are underrepresented in your completion data compared to the overall enrollment in your program?

Only 3 ethnic groups received degrees during this period (Asian, n=1; Latinx, n=6; White, n=6) (OIE 2025). These 3 groups combined make up 89.3% of our majors with students identifying as Two Or More making up an additional 9.5% (KPI 2022-2025). There is no apparent reason why students identifying as belonging to two or more ethnic groups would have lower success at completing our degree. Considering the ethnic make up of our majors relative to the campus as a whole, it seems there are opportunities for recruitment to diversify the ethnic composition of students pursuing an ENVS degree. Our SAP's include measures to improve recruitment such as developing a common sustainability web portal for ENVS, ESC, and GEOG, and diversifying our course offerings by adding an additional faculty member. Our SAP's also include measures to reduce barriers to access and improve retention, such as covering students field trip associated costs.

4. Are your students completing your degree and certificate program requirements in the expected time frame? Are there certain groups whose rates are below other student groups? Discuss any efforts to improve time to completion.

The average time to completion of an ENVS degree was 5.38 years with 53.8% (n=7) taking 6 or more years. This compares with campus wide averages of 4.65 years and 24.8% requiring 6 or more years. All ENVS students who completed their degree took greater than 3 years to do so (OIE 2025). The number of degrees and transfers from our department was too small to draw any meaningful conclusions based on gender or ethnicity, but it is clear that time to graduation for our majors is too long and that most of our majors who transfer will do so without earning their A.S.

Actions we are taking/want to take to reduce time to completion are:

- We revised our major to include only courses taught on regular rotation. These degree requirements went into effect in Fall 2022. Unfortunately, subsequent retirements in ESC have resulted in field courses required by our students not being taught.
- We seek to build a stronger student community within our program to increase engagement and persistence, particularly among BIPOC students. Research consistently links belonging and peer connection to higher retention and completion rates.
- We seek to expand degree offerings to appeal to a broader range of environmental interests, thereby encouraging students to remain in the program through graduation.
- We seek to improve communication between faculty and students within our program, including clearer degree maps and proactive outreach to students close to completion.

Our SAP's include measures to accomplish these goals including (1) Hiring a new faculty member to increase the diversity and regularity of course offerings and expand the number of degrees we offer

(2) Develop a sustainability based web portal to increase recruitment and communication with potential, current, and former students (3) Reduce barrier to access/retention by assisting with field course expenses (4) Increase retention and develop a sense of belonging by offering a diversity of career relevant field courses supported by reliable modern field instrumentation and research equipment.

2.3 Student Learning Outcomes

1. Describe your program's processes and practices for defining, assessing, and analyzing student learning outcomes at the course (CSLO) and program (PSLO) level. Include a discussion of how your program uses the results of CSLO/PSLO data to inform course and program improvement efforts.

The department reconsiders course level and program level SLO's every 6 years as part of six-year curriculum review. We review SLO's to make sure they reflect current department curriculum, course content, and changing discipline standards. The process sometimes results in removal and replacement of SLO's or rewording of existing SLO's. This process is a collaborative/consensus process following discussions amongst department faculty.

Each professor assesses all sections of their courses every three years, analyzes the results, and completes the reflection template. We discuss our results amongst department faculty and determine if changes to the course/program/assessment process are needed. Our most recent SLO assessment was done in August 2025 based on course sections taught in Spring 2025.

SLO results are considered in course and program improvement efforts, but provide very little data of relevance to the process because (1) Student success rates are high across all SLO's for all courses (2) Many ethnic groups have low head counts which provide data of little statistical relevance (3) SLO data is too course to suggest meaningful changes that can be enacted. Anonymous course surveys of each student in each class at the end of every semester and informal discussions with students and among faculty provide more granular data and more specific student driven suggestions for course improvements. These surveys have proven significantly more valuable for the purposes of improving course and program efforts..

-
2. (OPTIONAL/NOT REQUIRED) Using the data provided by OIE, describe the most salient results of CSLO or PSLO mastery rates. Did you find significant differences by race, ethnicity, gender, and other categories?
-

Section 3: Other Areas of Program Effectiveness

1. Document any substantial changes to your program curriculum since the last review and discuss what prompted these changes. Looking forward, what changes to the curriculum do you plan based on the emerging needs of your discipline, industry, student population, etc.

Our new A.S. in Environmental Sciences was implemented in Fall 2022. It was implemented (1) to make sure all courses required were being taught on a regular basis so students were not held up from getting their degrees because they could not get required courses (2) to clarify the departments commitment to experiential hands on learning in field based settings by requiring ENVIS majors to complete multiple weekend field courses (3) to use these same field courses to ensure students develop a solid foundation in natural history by the time they complete our program (4) to build community amongst our students and faculty with the goal of increased student success rates and degree completion rates. The new degree requirements were implemented in our 2- and 3-year program maps which are being reviewed and updated this semester.

We plan to expand our course offerings over the next several semesters. In keeping with our focus on hands on experiential education and goal of building a stronger ENVIS community, this expansion will include several new field courses. Topics may include Forest Ecology, Coastal Ecology of the Central California Coast, Agricultural Ecology, and a study abroad short course. We will also be developing some new lecture courses focused on the strengths of our new full-time faculty member. These courses will be designed to meet the transfer requirements for UC and CSU. They will allow us to capture students with a greater breadth of personal and career interests and offer our majors additional courses taught within our department where historically they may have had to turn to courses outside our department to meet their degree requirements.

-
2. Please briefly describe opportunities your students have to apply and deepen knowledge and skills through projects, apprenticeship, internships, co-ops, clinical placements, group projects outside of class, service learning, study abroad, and other experiential learning activities that you intentionally embed in coursework or elsewhere in your program.

Fully staffed, ENVIS should have 3 full-time faculty. We have fluctuated between one and two fulltime faculty since our last program review. Until we are fully staffed, we cannot provide these kinds of opportunities. Our faculty already teach overtime every semester just to meet the staffing needs of our current GE and Field courses. "Projects, apprenticeship, internships, co-ops, clinical placements, group projects outside of class, service learning, study abroad, and other experiential learning activities" all require investments of time, money, and personnel that the college has not been willing to make. The college cannot expect these kinds of intensive programs if it is not willing providing the necessary resources to support them.

We have included a "Hire A Fulltime Faculty" SAP to address this shortfall.

All field courses taught within ENVS are focused on hands on experiential outside of the classroom learning, and we are coordinating with ESC to offer a study abroad course to Central America in Winter/Spring 2028. ENVS regularly coordinates and co-teaches field courses and other programs with the Earth Sciences (ESC) program. This provides a synergy necessary to meet our student needs, but that department is now down to one faculty member and was not provided any program review funds for 2025/2026 to cover field course expenses for courses our majors need to complete their degrees.

We have included a "Secure Permanent Funding For Field Courses" SAP to make sure our field courses, which intentionally embed experiential learning in every aspect of the course, can continue to be taught.

3. Describe any laws, regulations, trends, policies, procedures, or other influences that have an impact on your program. These can include things like Vision 2030, CALGETC, Common Course Numbering, etc.

Job opportunities for our students are affected by federal funding and the roll backs in environmental laws and regulations. It is too early in the tenure of the current federal administration to know the severity and range of impacts.

Section 4: Faculty and Staff

4.1 Population and Demographics

1. Using the data provided by OIE, describe your program's staff (full-time/part-time faculty, nonfaculty, classified). How reflective of your program's student population is your staff?

ENVS has had only 2 fulltime faculty in the last few years and only 1 for the 2024-2025 academic year. Both faculty were older white males. This does not reflect the diversity of our students (57% Latinx, 13.45 Asian, 15.6% White). Ethnic and gender diversity has increased with the retirement of one faculty member and the hiring of a replacement. Our department remains down one fulltime faculty and remains committed to our faculty reflecting our student population.

2. Describe your program's staffing changes since fall 2021. How have these changes impacted your program's ability to achieve its strategic action plans?

Since Fall 2021, we repeatedly requested an additional full-time faculty member to expand our course offerings. This was core to our strategic action plans as outlined in our last comprehensive program review and would have returned us to historical staffing levels. One responsibility of this faculty would have been to develop additional field courses. These courses provide hands-on experiential learning and real-world experiences relevant to employers. They also help to build community, which is important for student retention and success. Field courses were key to our equity and retention plans as outlined in the ENVS 2021 Comprehensive Program Review. The 3rd fulltime faculty member would have also been integral to a new capstone course which would help the department assess how well we are doing at achieving department goals among transferring majors. The college did not provide this faculty member and none of the action plans associated with this position were achieved.

In Spring 2024, a retirement left ENVS with only one faculty member. We hired a new faculty member and an adjunct in Fall 2025, but we remain understaffed. We cannot achieve the strategic action plans outlined in our 2021 Comprehensive Program Review and this current program review while we remain understaffed.

4.2 Staff Support and Professional Development

1. Describe the regular discussions your program faculty are having about equitable grading, attendance, late work, extra credit policies, and other strategies to support equitable student success.

These discussions occur regularly at the beginning and end of each semester and on an ongoing basis as need arises throughout the semester. We attend all required professional development trainings and seek outside counsel from other faculty members when necessary.

-
2. How have these conversations shaped practices or polices in your program? What action has arisen from these discussions? If no action has been taken, why not?

These conversations have resulted in policies that include more leeway in acceptance of late work without penalties, provisions for students to miss a certain number of class meetings without explanation or penalty, an increase in the number and types of evaluations, and a decrease in the percentage of the course grade associated with any single assignment/assessment.

-
3. What additional areas of professional development could help your faculty and staff engage in this work?

Additional areas of professional development cannot help us engage in this work if the college

does not provide the department resources and personnel necessary to engage in this work. Our SAP's are designed with equity in mind.

Section 5: Program Planning

5.1 Progress on Previous Strategic Action Plans

1. Please discuss the goals (Strategic Action Plans, SAPs) from your last self-study. Assess and explain your progress on each of the SAP.

Our goals in our last self-study were as follows:

Strategic Action Plan (SAP) # 1: Hire a New Fulltime Faculty Member

Strategic Action Plan (SAP) # 2: Develop New Field Courses

Strategic Action Plan (SAP) # 3: Develop a Gateway Course

None of these were achieved. All our goals were dependent on hiring a third full-time faculty for our department. The college did not provide the faculty to achieve our goals.

2. If additional funds were NOT allocated to you in the last review cycle, how did the LACK of funds have an impact on your program?

Lack of funds meant our program did not achieve any of its strategic action plans. In 2024/2025, we dropped to a single faculty and had to cut our course offering in half after already significantly reducing them over previous years. Reduction in course offerings was not a product of lack of student demand, but rather a lack of adequate resources from the college. Programs cannot achieve their goals without the faculty to implement them.

SAPs

Secure Permanent Funding For Field Courses

Short Description:

ENVS field courses support the colleges mission and values in all the ways described below, and yet ENVS does not have a permanent budget to support these courses. Each year we request funds

through program review which may or may not be provided. This is untenable. ESC, our sister department, which also teaches numerous field courses, did not receive any program review funds to support its field courses in 2025/2026. If we do not receive these funds, courses cannot be taught, students cannot complete their degrees, and the benefits to students and the college cannot be achieved. 1) The colleges vision is to transform lives and inspire positive change in the world. Our field courses expand students worlds by offering them immersive experiences outside the urban environment. It may be their first time on a boat, their first time being in the water with a harbor seal, or the first time they've held a hermit crab as it emerges from its shell. Through these experiences students begin to see themselves as part of something larger, as member of linked species and processes that expand around the globe and across 3.5 billion years of evolution. By building connections to all living things, they begin to desire something more for themselves and all living things. In these courses, students build confidence in themselves as they learn to kayak, camp, and interpret the natural world around them. 28% of the world's species are at risk of extinction; climate change will result in 2 billion climate refugees by 2100; coral reefs will disappear within our lifetimes impacting marginalized communities throughout the world. As their own lives are transformed, our students learn how they can transform the lives of others by helping to protect the natural world around them. 2) One of the colleges core values includes diversity, equity, inclusivity, and antiracism and eliminating barriers to students' educational and career goals. The majority of ENVS students are Low Income, Latinx, and Female. On our field trips, students of different ethnicities, socioeconomic backgrounds, gender identities, and neural divergences, live, eat, and learn together developing an understanding, respect for, and appreciation of diversity. These field trips require students to be housed, fed, and guided in remote locations and, therefore, have costs associated with them that can be barriers to access and inhibit students' educational and career goals. 3) Another of the colleges core values includes belonging, responsibility, respect, and compassion. "We attend to our students as whole people, identifying their changing needs personally, academically, and professionally." In our weekend field courses, students and faculty interact in structured and informal settings that allow faculty to get to know students as individuals and allow students to get comfortable around faculty. Students build a sense of belonging and faculty develop respect and compassion for their students. To attend to the whole person, faculty have to know the whole person. 4) The colleges core values also include growth, intellectual curiosity, and excellence. "We encourage each other to ask questions that drive further inquiry, research, and experimentation." Field settings provide an endless array of new experiences which foster student inquiry. The informal nature of most field setting puts students at ease so they are more willing to ask difficult questions and allows for lengthier more in depth discussions. It is worth institutionalizing our department's funding to ensure students maintain access to these experiences. The quotes below from anonymous post-field trip course evaluations reflect the importance of these experiences for students.

MeasurableOutcomes:

Expected outcomes are (1) improved success and retention rates (2) higher degree completion rates (3) shorter times to degree completion (4) higher transfer rates (5) greater equity (6) enriched

student lives. We don't need to wait to know how student's lives will be affected by greater access to field experiences because students are telling us in anonymous course feedback surveys that our field courses transform their lives. Field courses clarify student educational and career goals: "It solidified my passion for the outdoors and conservation of the world around us. " "I think it's confirmed for me that I'm following a path I would enjoy better. I felt a sense of grief when I got home to have lost the connection to nature. " "The class helped confirm my aspiration to become a Marine Biologist. It just showed that I truly do love learning about marine life. " "It influenced me by reminding me that I like discovering things." Our field courses build community: "I was really happy to be doing all the activities and I enjoyed being surrounded by likeminded people." "I was also able to make some incredible connections with my classmates. I've found it difficult to socialize in college, but for the first time in a long time, I felt like I belonged, and everyone shared such great energy and respect for one another. My classmates inspire me to be more social, better myself academically, and become more involved on campus." "I have made new friends and connections that I will cherish for a long time. " "I don't usually keep the friends I've made doing stuff like this before- that seems to be different with this group, and that's a big change for me." Our courses build connections between students and faculty and build student confidence: "I liked the quality of the instructors, specifically when the instructors were giving information during the hands-on activities or having Q and A type discussions." "To not be afraid to ask and get involved. I didn't realize I had a hesitation to ask questions until I suddenly found myself unable to stop once I got started. The sincerity behind Dr.Roman and Dr.Hobbs responses motivated me to ask something that perhaps I otherwise would've spent the rest of my life wondering. " If the college truly believes what it states in its Missions and Values statements, it will institutionalize the funding for ENVIS and ESC field courses. The quotes above are indicative of the kinds of feedback we get for these courses each time they are taught.

College Goals:

1.4 Reduce equity gap in Black/AA college enrollment; 2.3 Increase access to affordable course materials; 2.6 Reduce equity gap in persistence for Black/AA students; 3.2 Reduce equity gaps in degree/certificate completion; 3.3 Reduce equity gaps in transfer attainment; 3.4 Increase collaboration with universities

SAP Phase:

New

Resource Requests

Reimbursement For Professor Incurred Field Trip Expenses

Enhancement:

This request is associated with "Secure Permanent Funding For Field Courses." As noted this should be part of a permanent budget for ENVIS as field course costs are recurring each semester. Filed courses (1) are critical to our department's mission (2) embody the college's mission and

values (3) are required for every ENVIS major. Field courses have transportation, facilities, and tour costs that professors must pay to participate in the courses with their students. For instance, our ENVIS 142F course requires round trip ferry service to the Wrigley Environmental Institute on Catalina Island, shore boat shuttle service, housing and food while on the island, and tours that are led by the institute staff. Professors for ENVIS 105LF must pay for parking and/or entrance fees for themselves at numerous locations, such as the Fullerton Arboretum, Orange County Zoo, Santa Ana Zoo, and the Aquarium of the Pacific. Additional costs are associated with ENVIS 196F and will be associated with field trips that are currently under development.

Personnel-Related:

No

Resource Category:

Other

Quantity:

1

Unit Cost:

\$5,000.00

TotalCost:

\$5,000.00

Student Field Course Expenses

Enhancement:

This request is associated with "Secure Permanent Funding For Field Courses." As noted, this should be part of a permanent budget for ENVIS as field course costs are recurring each semester. BP 4300 states, "No student shall be prevented from taking a field trip or excursion, which is integral to completion of the course because of lack of sufficient funds." Field trip costs are barriers to access for our students, the majority of which are Low Income. Field courses (1) are critical to our department's mission (2) embody the college's mission and values (3) are required for every ENVIS major. Costs may include park entrance fees, camping fees, site specific guide fees, and facility fees.

Personnel-Related:

No

Resource Category:

Other

Quantity:

1

Unit Cost:

\$25,000.00

TotalCost:

\$25,000.00

Acquire Equipment Necessary to Teach Current and Planned Field Courses

Short Description:

Providing hands-on field-based experiences for students requires appropriate equipment. Necessary equipment includes, but is not limited to, (1) measuring tools such as tape measures, sampling grids, and clipboards (2) means to access hard to reach field sites for observation and sampling, such as kayaks to observe marine species up close, view geologic features on vertical cliff faces, and collect samples in marine and freshwater systems (3) discipline specific scientific instrumentation such as aerial and underwater drones, salinity, depth, and temperature meters, and soil meters (4) Safety equipment for remote field locations, such as an electric power cell (generator) for powering lighting, boiling water, and charging cell phones and scientific instruments. This request includes collaboration with the ESC department's No Student Left on Land initiative which would increase boat and kayak based activities to engage students in ocean studies. Climate equity dictates inclusive participation in the blue economy. The Department expects that FC will play a role in climate equity and the blue economy. We hope to advertised and incorporate blue economy themes to broaden participation. The ENVS and ESC programs regularly collaborate to co-teach courses and offer students a breadth of hands on, field based, environmental and sustainability focused learning.

MeasurableOutcomes:

This equipment will allow us to better prepare students for transfer and employment, as they acquire the skills and expertise required in our discipline. Students with the knowledge and skills facilitated by these instruments will be more successful in securing internships, employment, and transfer. Having the resource to teach more diverse courses will increase retention and may allow us to build a certificate program if we can ensure students have the skills community partners need. In collaboration with the ESC department's No Student Left on Land initiative this SAP will contribute to increased enrollment in field courses and ocean-based courses. Diversifying our course offerings, degree programs, and skills development will allow us to recruit more students from more diverse backgrounds and with greater breadth of interests that we can currently support.

College Goals:

1.2. Increase equitable usage of apprentiship/internship; 1.4 Reduce equity gap in Black/AA college enrollment; 1.5 Outreach strategies for prospective students/family; 2.3 Increase access to affordable course materials; 2.6 Reduce equity gap in persistence for Black/AA students; 3.2 Reduce equity gaps in degree/certificate completion; 3.3 Reduce equity gaps in transfer attainment; 3.4

Increase collaboration with universities

SAP Phase:

In Progress

Resource Requests

Kayaks And Associated Use And Safety Equipment

Enhancement:

This request is connected to our "Acquire Equipment Necessary to Teach Current and Planned Field Courses" SAP. Please see that for justification. Includes collaboration on "No Student Left On Land" initiative with ESC. 12 Kayaks and associated use and safety equipment.

Personnel-Related:

No

Resource Category:

Equipment

Quantity:

12

Unit Cost:

\$1,500.00

TotalCost:

\$18,000.00

Portable Power Station Electric/Solar Generator

Enhancement:

This request is connected to our "Acquire Equipment Necessary to Teach Current and Planned Field Courses" SAP. Please see that for justification. Necessary for providing safety lighting, boiling water, and charging field equipment in remote location for field classes.

Personnel-Related:

No

Resource Category:

Equipment

Quantity:

1

Unit Cost:

\$1,500.00

TotalCost:

\$1,500.00

Field Data Collection Kits**Enhancement:**

This request is connected to our "Acquire Equipment Necessary to Teach Current and Planned Field Courses" SAP. Please see that for justification. Each kit includes: tape measures, flags, sampling quadrats, soil samplers, soil color books, and soil meters.

Personnel-Related:

No

Resource Category:

Equipment

Quantity:

10

Unit Cost:

\$520.00

TotalCost:

\$5,200.00

Earth and Environmental Systems Collaboration

Short Description:

Increase the collaboration across ESC, ENVS, and GEOG. These three programs complement each other and students benefit from observing and experiencing the cross-cutting themes related to climate change and sustainability. Furthermore, students experiencing climate anxiety will find community among the departments as experienced by student feedback from ENVS 142. (See student feedback in field course SAP). Create a common web portal for these 3 programs to support students interested in pursuing sustainability related degrees.

Measurable Outcomes:

Increase enrollment of student who complete more than one ESC, ENVS, and GEOG course. Create a campus community that supports sustainability and climate resilience. Empower students toward climate equity. Recruit greater diversity and build equity within and between these programs.

College Goals:

1.2. Increase equitable usage of apprenticeship/internship; 1.4 Reduce equity gap in Black/AA college enrollment; 1.5 Outreach strategies for prospective students/family; 2.3 Increase access to affordable course materials; 2.6 Reduce equity gap in persistence for Black/AA students; 3.2 Reduce

equity gaps in degree/certificate completion; 3.3 Reduce equity gaps in transfer attainment; 3.4 Increase collaboration with universities

SAP Phase:

Completed

Resource Requests

Earth and Environmental Systems Collaboration

Enhancement:

This request is connected to our "Earth and Environmental Systems Collaboration" SAP. Please see that for justification. This funding will go for Earth Sciences, Environmental Sciences, and Geography common web portal to: - Elevate the programs and courses relevant to the 21st century student - Highlight careers and transferrable skills that each discipline offers - Offer a one-stop shop for students to take courses across the departments that complement each other - Provide up-to-date resources for transfer programs, internships, and other off-campus opportunities.

Personnel-Related:

No

Resource Category:

Other

Quantity:

1

Unit Cost:

\$4,000.00

Total Cost:

\$4,000.00

Hire A Fulltime Faculty Member

Short Description:

This faculty member would have the following responsibilities: 1) Develop and teach new field courses. We require 4 - 5 units of field course composed of 1-2 unit weekend courses for our students to complete these degree. Availability of field courses can be a bottleneck extending the time to graduation for our students. Average time to graduation in our department is 5.38 years. 2) Diversify department course offering. Environmental Sciences is a complex interdisciplinary field. Students who choose our major have a broad range of interests from ecology to evolution to conservation and are interested in the application of these disciplines to a diversity of the earth's systems, including

terrestrial, marine, and freshwater applications. Our 3 unit lecture courses are currently limited to a single course offering. 3) Develop and teach a capstone course. Of the 51 student in the Fall 2018-Fall 2020 cohort only 4 have completed our degree. This is likely in part a result of students having difficulty fitting our field courses into their schedules, partly our limited course offerings failing to feed student's personal and career aspirations, and a sense of a lack of belonging at FC and within our department. Creating a "cradle to grave" set of courses that maintain and engage students while helping them meet their individual educational and career goals could address these limitations. 4) Coordinate outreach. Students in our department need internships that provide practical work experience. These experience could ultimately be incorporated into a certificate program. This requires a coordinator who can focus on overseeing students' internships and projects and coordinate with our community partners. 5) Assist in general department and college operations. As mentioned elsewhere our department was down to one faculty member in F24/S25 and with our recent hire remain down one fulltime faculty member. This puts substantial burdens on individual faculty. Our coordinator has served for 6 years and will serve another 3 years until our recent hire gets tenure. When faculty take leave, there is no one to cover their courses and responsibilities, so students, the department, and the college are impacted.

Measurable Outcomes:

Expected outcome of this hire are: 1) An increase of 350 FTES. 2) Faster times to student graduations. 3) Increased degree success and retention rates. 4) Greater diversity within the department and more equitable student outcomes. 5) More opportunities for student career development.

College Goals:

1.2. Increase equitable usage of apprenticeship/internship; 1.4 Reduce equity gap in Black/AA college enrollment; 2.6 Reduce equity gap in persistence for Black/AA students; 3.2 Reduce equity gaps in degree/certificate completion; 3.3 Reduce equity gaps in transfer attainment; 3.4 Increase collaboration with universities

SAP Phase:

In Progress

Resource Requests

Hire A Fulltime Faculty Member

Enhancement:

This request is connected to our "Hire A Fulltime Faculty Member" SAP. Please see there for details and justification.

Personnel-Related:

This request is connected to our "Hire A Fulltime Faculty Member" SAP. Please see there for details and justification.

Resource Category:

Full-time Faculty

Quantity:

1

Unit Cost:

\$90,000.00

TotalCost:

\$90,000.00
