

Program Review – Annual Program/Discipline Update
Administrative Response and Follow Up
2020-2021

Program/Discipline: Environmental Studies (ESR)

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Date: April 22, 2021

This section is for Administration to provide feedback.

To be prepared by Division Dean(s) and reviewed by DOI(s).

Introduction

First of all, we deans for ESR would like to express our thanks to and appreciation for the ESR SAC faculty. We recognize the time and effort you spent preparing this Annual Discipline Update while at the same time, you provided instruction in your classes, navigated a challenging academic year, and implemented PCC's new pilot process of reflecting on your courses and work as a SAC. We appreciate all that you have done in support of PCC students, your colleagues, and the overall work and mission of the college. Thank you.

1. Strengths and successes of the program as evidenced by the data, analysis and reflection:

A. Enrollment trends

Enrollment in the majors program has been steady over the last three years, with an apparent increase in enrollment during 2020-2021. This is especially noteworthy because prior to the move to remote instruction last spring, ESR classes were only offered face-to-face. ESR faculty effectively rallied to provide remote instruction when the college made the change and enrollment overall increased.

In the non-majors courses, enrollment has shown a slight decline, a trend which matches the overall decline in college enrollment. However, the individual sustainability course, ESR 141, has remained

steady, and the SAC anticipate the newly designated general education science course, ESR 140, will attract additional enrollment.

B. Highlighting the Environmental Studies Center

The RCESC provides an excellent opportunity for ESR students to perform extensive hands-on research experience for those in the majors classes, as well as students in other disciplines who utilize it, i.e., Environmental Landscape Management Technology program students. We noted your observation that additional release time may be needed to manage the Center, especially if course offerings increase.

C. High Rates of Student Success in ESR

It is noteworthy that ESR student success rates are high, even in the 80-90% range in campus-based courses over the last three years. In addition, the entry level courses for the ESR majors program do not appear to be “weeder” courses or barriers to the major, based on generally high pass rates students experience in those classes as well.

As noted in your ADU, ESR Instructors strive to make courses interesting and relevant by adjusting curriculum to include issues and topics relevant to students. This practice demonstrates a culturally responsive approach and is to be commended. This is encouraging!

Additional notes:

Congratulations on preparing your students for a success transition into an Environmental Science and Management major at PSU!

We look forward to learning the results of your work on the ESR 172 signature assignment after implementing your revisions.

Areas of challenge or concern, if any:

A. Increase the accessibility of all classes, and majors classes in particular

Previously, the majors courses were only offered at Rock Creek due to the readily available hands-on research experience there. This has restricted access to those students who for varying reasons are not able to travel to Rock Creek. Please continue to pursue how to provide access to the majors courses. Developing hybrid courses that would necessitate less frequent trips to Rock Creek might be one method of doing this. Are there possibilities for developing hands-on research sites at other PCC campuses or centers located in urban areas?

As mentioned above, our PCC Centers, e.g., Hillsboro Center and Newberg Center, serve students who are interested in science and Newberg Center successfully ran ESR 140 and 171 classes in past years. Offering courses to students in these locations would build the ESR program while providing access to science courses to those in more remote locations.

Your desire to convert additional ESR courses into hybrids is commendable. As you implement these changes, you can also emphasize the fact that faculty are working to make their curriculum as environmentally-friendly and sustainable as possible.

B. Student success rates among different populations

When examining data for small numbers of students, asking whether something is “statistically significant” is a thought-provoking question. PCC data for ESR classes shows that Black students enroll in ESR courses at a lower rate, and for those who do enroll, they experience lower pass rates. Although the numbers are not large enough to be “statistically significant,” it is important to look closely at disparities that students of color and other minoritized groups of students face in our classes. Students come to us with lives and environments that can interrupt or interfere with their education. There are ways we can adjust our curriculum or andragogy to help mitigate some of these. Consider how we assess class participation, as one example. Do students lose points if they miss class? If so, are we really measuring and grading what we intend to? Are there other assumptions we make about the amount of background knowledge a student may have from previous science or math courses?

In addition, research indicates “the professional sphere of environmental studies and sciences often excludes people of color on numerous levels, including in research, job opportunities, and work/university culture.”

In 4 out of 5 **non-majors** ESR classes, students who were offered a Pell grant were as or more likely to successfully pass the course than those who did not. What might be the reason for this higher level of success? Are there additional supports available to those students? Are fewer assumptions being made regarding a student’s prior knowledge or experience in science or math?

In 3 out of 5 **majors** ESR classes, students who were offered a Pell Grant, were less likely to successfully complete the course. Again, what might be the reason for this difference?

How can the ESR SAC take this knowledge and awareness to the next level to create solutions to these issues? The deans with ESR encourage the ESR SAC members to familiarize themselves with PCC’s [How we get to YESS](#) webpage and opportunities to take action individually and as a SAC.

C. Adapting ESR courses to reach additional students

It makes good sense that you would continue to investigate how to adapt your program and your courses when we return to face-to-face classes so that you may reach students who cannot travel to Rock Creek for the majors classes. Hiring another FT ESR faculty member, developing hybrid course offerings are great suggestions for ways to do this.

In addition, you might consider working with the PCC Centers to offer ESR classes there, as well as investigating how to access additional hands-on research sites other than our own Environmental Studies Center at Rock Creek.

You might also consider promoting upcoming majors classes to students currently taking a non-majors class, if you haven’t already done so. Instructors from the upcoming majors classes being offered the

following term could visit a non-majors class to give a short presentation on topics they will explore. An informative and appealing handout could also be developed with bullet points highlighting the key topics in upcoming classes and posted within D2L, or included as a class announcement. Students in the non-majors classes have already shown an interest in the field, why not aim to attract them to the next level? The handouts could also be distributed to advisors for use in talking with students.

3. Need for additional data and data analysis

The ESR deans support your desire for more access to data regarding students who experience disabilities, data from other PCC STEM classes, access to demographic data for PCC as a whole and STEM areas more broadly, in addition to a statistical analysis of the data you have received.

4. Need for additional faculty

Currently, there is only one FT faculty member for ESR. They are located at Rock Creek, and have 0.2 FTE release time to manage the Environmental Studies Center. The SAC seeks approval to hire an additional FT faculty for ESR. The deans of ESR support this request, and recognize the impact having a FT faculty member on the eastside could have on courses offered to students, program growth and stability. As mentioned in your review, ESR is an interdisciplinary field and all ESR faculty are also members of other SACs, essentially doing double-duty in terms of SAC administrative work. An additional FT faculty member would help alleviate some of that load.

2. Reflection on goals and resources:

Having enough FT and PT instructors is central to offering the classes students need. We deans have been asked to provide a list of positions needed for block hire in 21-22. Please provide your current dean with detailed justification for the new FT position as well as your request for an MYC. This will enable us to support your request!

Meeting with the Pathway Advisors assigned to support ESR students will benefit your future students and your program. Advisors may be available to attend SAC meetings. Check with your current dean for support in making those connections.

3. Recommended next steps:

Proceed as planned on program review schedule

Follow up conversation needed with SAC, Dept Chair(s) and Dean

Follow-up conversations will help bring your recommendations to reality. As we move into a new [organizational structure](#), the conversations should include the new Program Dean over Life Sciences

and Bioscience and the new ACP Dean over Science, Computing and Engineering, in consultation with the current science deans and SAC chairs.

4. Additional comments/questions:

The table below is a suggestion for a project list, with suggested timelines and initial suggestions for participants and outcomes.

Project	Initial Action and Participants	Timeline and Next Steps
Hire one additional FT faculty	Dean to add eastside faculty position to district list for consideration. Please submit to your deans any additional justifications you may have to help bolster support for this position in 2021	April 2021 for subsequent all-college consideration in spring-summer 2021
Add one additional MYC position in ESR (this person could teach across multiple campuses or sciences)	Dean to request MYC position for consideration to start in Fall 2021. Please submit to your deans any additional justifications you may have to help bolster support for this position in 2021	April 2021 for subsequent all-college consideration in spring-summer 2021 Ideal implementation in Fall '21
Develop and offer ESR 140 to be able to offer as a hybrid (gen. ed. science course with no lab)	Look for additional funding opportunities, consult with new program dean and dean re: unfulfilled needs/funding Faculty to take advantage of upcoming professional development opportunities through Online Learning	Ongoing Training being offered currently and through summer
Improve recruitment efforts into Majors program classes (ESR 150, 200, 201, 202, 204)	Work with Pathway Advisor Faculty teaching majors courses do short presentations in non-majors classes to generate interest	Invite Pathway Advisor to Fall SAC meeting
Increase outreach and recruitment efforts to engage students of color in ESR	Work with advising and outreach at PCC, and then look to the wider community.	Look for support for advising, outreach, and curriculum improvements

<p>courses, especially ESR majors and sustainability courses.</p>	<p>Continue to revise curricula and integrate environmental and climate justice throughout.</p> <p>Seek additional partnerships within PCC</p> <p>Continue process in 2021-22</p>	<p>Engage in outreach</p> <p>Curriculum revisions (TIIP grant, and informal)</p>
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References

Victoria Bortfeld. "This 'Green' Space Shouldn't Be So White." *State of the Planet*, Columbia Climate School, 23 Aug. 2020, news.climate.columbia.edu/2020/08/21/environmental-sciences-anti-racism/.

McLean, S. (2013). The whiteness of green: Racialization and environmental education. *The Canadian Geographer/Le Géographe Canadien*, 57(3), 354-362. (Laura has a copy she can share with the ESR SAC)