

AY20 Expedited Program Review – Optional Program Response to the Dean’s Findings Form

Date: February 28, 2020

To: John Stalvey, Interim Provost

From: Shannon Donovan, Associate Professor of Environmental Studies and Chair of the Department of Geography and Environmental Studies

Cc: John Petraitis, Dean, College of Arts and Science
Shannon Donovan, Dorn Van Dommelen, Audrey Taylor

Re: AY20 Expedited Program Review: Optional Program Response to Dean’s Recommendation

Program/s in this review: Environment & Society

Program response to dean’s findings

Ten years ago, almost to the day of Dean Petraitis’ announcement that our program is recommended for deletion, the Environment and Society major was approved by the Board of Regents. That approval came after years of planning. Initially, UAA developed an environmental studies minor, which was approved in the late 1990s. But, knowing how crucial environmental work was to the State of Alaska, a core group of interdisciplinary faculty from a number of colleges worked diligently together, supported by Dean Liszka, Provost Driscoll, and Vice Provost Quimby, to bring UAA into the 21st century to offer a bona fide degree program focused on the environment.

The program was conceived and designed to not be a traditional environmental studies or science program. Rather, we wanted to create a major that would provide maximum benefit to the State of Alaska. So, we held several focus group sessions with professionals working in the field of environmental impact assessment and mitigation and asked them how our program should be structured. We listened and created a major that trains students to be a part of the process that helps to develop Alaska’s resources responsibly. Students, all of whom are BS students, take traditional environmental science and studies courses as well as required writing, communications and civic engagement classes, focused field methods and GIS work, as well as applied professional development coursework and internships. It is important to recognize that our community-focused approach to education is illustrative of the commitment to community engagement and the Public Square commendation given by the NWCCU during UAA’s latest successful institutional accreditation.

While we have had graduates for less than a decade, and have been staffed with, at most, four full-time faculty members (currently we have three), our student outcomes have been impressive. We have consistently been praised for our innovative ways of measuring student outcomes through eportfolios, but the more important outcome has been that our graduates work in the field. We have had 91 graduates and been able to track 55 of them post-graduation. Of those, at least 67% are working in an environmental field. Part of the reason for this is that there are jobs in environmental fields. According to the Department of Labor and Workforce Development about 180 jobs are open each year in work for which our graduates are trained.

AY20 Expedited Program Review – Optional Program Response to the Dean’s Findings Form

Dean Petraitis has chosen to cut this program because “demand is modest” and it has comparatively small number of majors, but **what this reductionist view does not account for is the fact that our demanding major produces graduates who are workforce ready. We have the data to demonstrate this point.** Many of the majors retained in the college may have exceptionally large numbers of graduates, but in some cases there is no direct correlation between the major in which they are graduating and possible jobs. If the University of Alaska Anchorage is truly committed to workforce development, decisions to retain programs should be based on program track record and demand for graduates in the state, not demand by freshmen for the program. On that note, we see a significant number of students transferring into our program in their freshman or sophomore years, after they take our gateway ENVI A111 (Physical Geography) or ENVI A211 (Environmental Science) courses. You cannot be interested in what you do not know, but once students are aware that they can study Environment & Society as a major at UAA, a number of them consider it and ultimately make the decision to graduate from the program.

Furthermore, our program teaches students in other majors. We teach the gateway freshman course in the International Studies Program (GEOG/INTL A101), which was retained, and BIOL A473, but, most importantly, our program is crucial in the delivery of the Natural Sciences degree program, environmental science option, which Dean Petraitis did not appear to take into account in his narrative. This option in the major currently has 40 students enrolled and has seen 26 students graduate since 2012. In that option, students are required to take ENVI A211, ENVI A211L, ENVI A212 and a large number of them take GEOG A375, ENVI A370, ENVI A470, and ENVI A490. If it were not for these courses playing a central role in the curriculum, the Natural Sciences degree program could not be offered in its current form, as it simply would not have focused environmental courses.

And while the Environment & Society degree program supports the Natural Sciences degree program, it is important to note that their learning outcomes are very different. The Environment & Society learning outcomes are:

- Explain the fundamental role of natural/living systems in supporting life and social well-being, enabling beneficial relationships between people and the natural world, and underpinning the key human threats to the environment.
- Demonstrate the ability to employ the following liberal education skills in a disciplinary and professional setting: critical thinking, problem solving, and decision-making; conceptual engagement with ethics and civic issues; use of the scientific method; and technical writing skills.
- Apply the following skill sets to address environmental problems and develop solutions in professional, academic, and civic settings: communication and teamwork, stakeholder engagement, field research techniques, environmental assessment, survey design, data collection and analysis, mapping techniques, knowledge of key environmental laws and policies, environmental planning.

While the Natural Science degree programs outcomes are:

- Design and implement scientific investigations to explore natural phenomena using experimentation, which includes exploration and discovery, and testing ideas (gathering and interpreting data)
- Clearly and accurately communicate scientific ideas, theories, and observations in oral and written forms
- Apply scientific data, concepts, and models to craft interdisciplinary explanations of scientific ideas across two of the natural sciences

While there are clearly crossovers between these programs, they are not interchangeable and one cannot replace the other. In fact, if the Environment and Society program and its courses are deleted, the Natural

AY20 Expedited Program Review – Optional Program Response to the Dean’s Findings Form

Science environmental option is completely unsustainable as a true environmental program. The end result would be that the largest university in Alaska, in the largest and most resource rich state in the United States, would have no environmental program. (It’s also relevant to note that our students take courses in a range of subjects outside of the department: ANTH, PHIL, CEL, GEOL, BIOL, GIS, ECON, ENGL, SOC, and others - in fact, our major makes a few courses in CAS and other colleges viable in the first place, notably ECON A210, PHIL A303, ENGL A478, BIOL A473, and CEL A292.)

This is highly problematic. When we asked Dean Petraitis, during the meeting in which our program was cancelled, how he could justify the decision to cut environmental studies/science at this point in our planet’s history his response was “I’m not going to get into the weeds”. This is an unconscionable response. Our program not only prepares students to be prudent, professional, and unbiased stewards of our natural resources, we also teach about key threats to our planet. The only way that a UAA student can be introduced in a systematic and thorough way to the science behind global climate change is through our GER courses. In ENVI/GEOG A111 students are introduced to key atmospheric processes and climate principles. ENVI A211 systematically discusses the biophysical impacts of climate change and in ENVI A212 students learn about the human consequences of the greatest existential crisis humanity has faced. GEOG/INTL A101 further links climate change to global issues and problems. Is UAA really prepared to summarily cancel the only set of courses that teach about the science of global climate change?

We would also like to point out that it is a disservice to our rural and Alaska Native communities to delete a program that provides training and education for jobs that are available now in remote Alaska. Environmental testing and remediation, development of alternative energy systems, environmental health and safety, NEPA/environmental planning, wildlife/fisheries management, and climate change adaptation are all fields that students graduating from the Environment and Society program are prepared to enter. Workforce development in these fields has created stable, high paying positions that are available now in rural villages, and students from those communities should have the opportunity to receive an education within the State of Alaska that enables them to be competitive for these jobs. To do otherwise would be to disregard the rights of our rural and Indigenous population to equal education and employment opportunities.

To emphasize this point, one can look at recent ANSEP internship placements. Historically, ANSEP students have done internships in more traditional math or engineering based fields. Over the last few years, more and more ANSEP students have found internships with agencies or organizations doing environmental work in the fields listed above. A few to mention include USGS, US Fish and Wildlife Service, the Arctic Research Consortium of the U.S., BLM, the National Park Service, and the U.S. Forest Service. Many of those placements occurred outside of Anchorage or Fairbanks, indicating the availability of employment outside urban Alaska for students trained in environmental studies. Rather than cut our program, why is UAA not providing us the resources with which to further develop a pipeline for rural and Native students to come to ANSEP through the Summer Bridge program, intern with an environmental organization, graduate with a BS in Environment & Society, and then go on to get a stable, relatively high paying job in a rural community in Alaska? This would enhance the long-term viability of Alaska’s rural communities, increase retention of a trained workforce in Alaska, and provide opportunities for high school students to envision a path to success that leads directly through UAA and CAS.

Now to some more mundane matters. Dean Petraitis critiques our program demand, particularly in our ENVI courses. Again, the notion that curriculum should be driven by popularity is problematic. But, he fails to recognize that there are multiple reasons why ENVI courses are not highly enrolled compared to GEOG courses which, he points out have high enrolments. 1) We are a young program. Compared to virtually every other program in the college we are on the scene quite recently and the culture of advising

AY20 Expedited Program Review – Optional Program Response to the Dean’s Findings Form

and freshman course selection is tough to break into. But the key issue is likely that 2) we enforce prerequisites. When the ENVI course sequence was designed, we made the conscious decision to have prerequisites so that students taking these courses would be well-prepared to tackle difficult scientific issues. ENVI/GEOG A111 and GEOG/INTL A101 are open courses without prerequisites and many students continue on to the 200-level ENVI sequence, but the reality is that a 200-level course with prerequisites will not have as much enrolment as 100-level courses without will. As a consequence, incoming freshman are not as likely to take ENVI A211 as BIOL A102 or ENVI A212 as PSY 111.

However, as Dean Petraitis points out, we do win converts along the way. Students who want to complete the Environment and Society major must work hard to do so, our program is not a fluff environment program. Students are required to take calculus, biology, chemistry, in addition to our own required heavy courses. It is a testament to our lower-division teaching that our major grows as students take our courses and decide that they appreciate our curriculum. But our program is not a “last resort” program. Students are consistently held to high standards and they are required to take two professional development courses and an internship. They are also required to engage in service learning throughout our courses, and come to appreciate what it means to actually participate in civic processes.

The fact that students are taking internships, field-based classes, and professional development seminars means that our course capacities are not high in ENVI as they are in GEOG. As a consequence, faculty teaching in ENVI produce fewer student credit hours and earn less tuition to cover their instructional costs. However, this is how we were told to design our curriculum - to have several high enrolment GER courses that funnel students into progressively more challenging and professionally driven courses. It is true that ENVI raises less in tuition than it costs in terms of instructional pay, but GEOG does a remarkable job of covering these costs, because of the design of our curriculum.

According institutional research data, GEOG “earned” \$40,624 while ENVI lost \$14,105 for a net gain of \$28,519 over a one-year period. This is more than a number of courses and several programs that were retained during the Expedited Program Review process and have comparable numbers of faculty. Notably, GEOG, with one faculty member, gained more money than a range of other programs and courses and rates as the single highest producer of “Course CHR by Instructor Pay” in the entire College of Arts and Sciences. Yet, Dean Petraitis proposes that this valuable contribution be cut. This mistake is compounded by the fact that the college recently invested in Dr. Dorn Van Dommelen’s faculty development by supporting his completion of a certificate in geographic information systems. That certificate was completed well ahead of schedule, allowing Van Dommelen to already begin teaching GIS and contributing to valuable pedagogical changes to the online courses he teaches.

In addition, it is important to note that ENVI faculty member Dr. Audrey Taylor teaches BIOL A473 which consistently has enrolments over 30/year. This surplus is counted by Biological Sciences and not our program, but it is “ours”. Because both lower-division GEOG courses are cross-listed, we appear to have our number of faculty “overcounted” in ENVI - we have three teaching, not four. This likely doesn’t impact the overall numbers a great deal, but it does complicate issues of cost vs. revenue. For example, INTL seems to be running a deficit in the chart, but the course listed there is actually taught by Van Dommelen as part of his regular GEOG load - it should contribute to GEOG’s surplus.

In conclusion, it is short-sighted to cut this program for the rationale that “deleting the Environment & Society BS will likely have a relatively modest impact on the number of students who come to UAA in the future”, which is the upshot of Dean Petraitis’ argument. By his own admission our program is excellent, but, more importantly, it is critical to the responsible development of Alaska and, frankly, the planet.

AY20 Expedited Program Review – Optional Program Response to the Dean’s Findings Form

As this process was unfolding, and we had no idea that we would be cut, we begged Dean Petraitis to not simply cut programs (not just our own, but others, like Sociology), but to take a strategic approach. We could have partnered with the other sciences to reduce programs and faculty sensibly, coming up with just a few innovative programs. These ideas were brought to the attention of the dean a number of times over the last year. We believe in and practice interdisciplinary work and we value collaboration, we always have. This horrible moment could have been used to build new and creative programs. Imagine if out of the ashes of this fiscal crisis we could be developing a major on environmental and social policy in the North, or science communication, or ecotourism? Instead, we’re left with the deletion of the only completely new academic program and discipline (and perhaps the most crucial) created in CAS in the last 20 years.