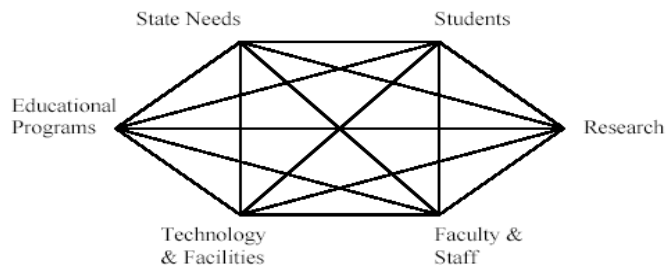


**University of Alaska Board of Regents**  
**Program Approval Summary Form**

MAU: Southeast  
Title: Bachelor of Arts in  
Geography/Environmental Studies  
Bachelor of Science in  
Geography/Environmental Resources  
Target admission date: Spring 2010



**How does the program relate to the Education mission of the University of Alaska and the MAU?**

- \*Who promoted the development of the program?
- \*What process was followed in development of program (including internal and external consultation)
- \*Impact on existing programs and units across MAU and system, including GERs.

The proposed B.A. in Geography/Environmental Studies and B.S. in Geography/Environmental Resources degrees were developed by UAS faculty in response to student demand and in collaboration with the UA Geography Program. In the Natural Science Program, we currently offer a B.S. in Environmental Science (ENVS), which is a highly quantitative degree focused on preparing students for graduate school. Students that leave this degree program typically leave UAS or get a B.L.A degree. During the tenure of the ENVS degree, students have consistently asked for additional degree options in environmental studies/resources. At the same time, the creation of the UA Geography Program provided the opportunity to develop new environmentally themed degrees at UAS that are closely tied to a larger statewide effort.

The proposed degrees were developed by ENVS faculty at UAS in close consultation with colleagues in Humanities and Social Science because of the highly interdisciplinary nature of the proposed Geography/Environmental Studies degree. There was also close collaboration with the UA Geography program such that both proposed degrees share common core courses with the UA Geography degrees being offered at UAF. Thus, portability will be a cornerstone of the proposed degrees with the idea that the UA Geography Program will co-market geography degree offerings at UAF and UAS and faculty on both campuses will work to ensure that students have opportunities to study at both MAUs during the course of their degrees.

The proposed degrees leverage existing classes and faculty resources both at UAS and across the UA system through the UA Geography Program. At UAS, the proposed degrees will be centered on existing classes in the Environmental Science Program and will include environmentally-oriented classes in Biology, Social Science and Humanities. Consultations in the development of these degree programs included: Natural Science colleagues; Dr. Mike Sfraga, UA Geography Director; Dr. James Everett, Interim Provost/Dean of Arts and Sciences; Dr. Kevin Krein, Humanities Chair; Dr. Dan Monteith, Social Sciences Chair, Barbara Hegel, UAS Registrar; and the UAS Faculty Senate and Curriculum Committee.

The proposed B.A. and B.S. degrees support UAS' goal of providing high quality undergraduate liberal arts programs that are "rooted in its unique natural setting" and that also "contribute to the economic development of the region and the state". Career opportunities for graduates from the B.A. program include: environmental consultant, park ranger or interpreter, eco-tourism guide, or teacher. Career opportunities for graduates from the B.S. program include: state and federal agency manager or scientist, planner, environmental technician, environmental consultant, and GIS technician.

The development of the proposed degrees also meets the objectives identified in the UAS Strategic Plan. Initiative 1, to become the state's leading liberal arts institution, requires "viable majors, with particular attention to the needs of Masters of Arts in Teaching candidates and those preparing for graduate education." The Strategic Plan notes that "student surveys repeatedly cite the lack of degree offerings and upper division course work as a major factor in choosing not to enroll at UAS or to transfer to another institution after the first two years." The degrees proposed here will dramatically increase student retention in the Environmental and Geographic Sciences and will also allow UAS (and the broader UA system through the UA Geography Program) to better compete for students both inside and outside of Alaska who seek high-quality education that will prepare them for specialized employment and graduate-level training in environmental fields.

**What State Needs met by this program.**

- \*Information describing program need and why existing programs in UA system are not able to meet it.

Within the state of Alaska, there is a need for students to be broadly trained in geography/environmental science because the majority of the income in the state is derived from natural resources. One-sixth of the state's

economy comes from traditional natural resources, such as fishing, timber, mining, and agriculture, while two-thirds is dependent on oil and the federal government. Moreover, many of the federal government jobs are in natural resource fields. The B.S. degree will train students for high-demand environmental jobs within Alaska. In addition, the B.A. degree will provide opportunities to train teachers that are highly-qualified in geographical and physical sciences.

The proposed degrees complement existing degree programs at UAS and leverage resources both at UAS and system-wide through the UA Geography Program. Additionally, offering these degrees at UAS will allow unique cross-MAU opportunities for students to be trained in geographical and environmental science in both southeast and the interior because of the student exchange opportunities through the UA Geography Program.

#### What are the **Student** opportunities and outcomes? Enrollment projections?

The proposed curricula provide a broad foundation in liberal arts as well as specialized training in geographical and environmental sciences. Students will be prepared to utilize multidisciplinary and interdisciplinary approaches to problems such as those posed by climate and environmental change. Students will gain: 1) interdisciplinary and integrated understanding of the physical, climatic, and ecological processes, 2) the skills and tools necessary to observe, measure, analyze, and model landscape patterns and changes in these patterns, 3) an ability to see and understand *relationships between* physical, biologic, and climate processes, and how humans interact with and respond to changing landscape.

The Current and projected (2009-2011) degrees awarded are shown below. Bachelor's degrees represent a total for UAS Arts and Sciences. Environmental Science and Geography (Environmental Studies and Environmental Resources degrees) represent the existing and proposed degrees. Note that projections are conservative based on less than 5% growth.

	2006	2007	2008	2009	2010	2011
Bachelor's Degrees	117	110	120	125	130	136
BS Environmental Science	6	2	4	5	6	7
* BS Environmental Resources				1	2	3
* BA Environmental Studies				2	5	8
<b>Total Degrees (ENVS and GEOG)</b>	<b>6</b>	<b>2</b>	<b>4</b>	<b>8</b>	<b>13</b>	<b>18</b>

#### Describe **Research** opportunities:

Research skills are developed in all of the lab courses required for the two degrees. In addition, all graduates will be required complete a capstone course (GEOG 490) and, in the B.S. degree, students will be required to complete a directed research project or internship. Undergraduate research is currently a cornerstone of the UAS Environmental Science degree and because ENVS faculty will be delivering the bulk of the classes in the proposed Geography degrees, there will be ample opportunities for undergraduates to be involved in faculty research projects.

#### Describe Fiscal Plan for development and implementation:

\*Identify funding requirement, sources and plan to generate revenue and meet identified costs to include:

- \*Indirect costs to other units (e.g. GERs)
- \***Faculty and Staff**
- \***Technology, Facilities** and Equipment

Faculty resources are currently sufficient for delivering the majority of the classes in the proposed B.A. and B.S. programs. Existing faculty in the Environmental Science Program all have strong teaching and research credentials within the field of Environmental Science/Geography and one faculty member (Hood) has a Ph.D. in Geography. Successful growth of the program may require additional faculty and teaching assistants in the future to 1) allow all of the courses in the proposed degrees to be offered at UAS and 2) to fulfill student demand for courses.

Egan Library resources, including serials, books, online databases and other electronic media, are sufficient to support the scholarly resource requirements of the proposed B.A. and B.S. degrees. No new facilities are needed to implement the program as it will utilize existing Environmental Science Facilities. No major additional costs are projected for implementing the proposed B.A. and B.S. degree programs.