

The UAF Faculty Senate passed the following at Meeting #183, May 7, 2012:

MOTION:

The UAF Faculty Senate moves to approve a Minor in Geophysics.

EFFECTIVE: Fall 2012
 Upon Chancellor’s approval.

RATIONALE: See the program proposal #12-UNP on file in the Governance
 Office, 312B Signers' Hall.

Overview:

The Department of Geology and Geophysics currently has a minor focused on the geology side of the department, but no minor available for those interested in Geophysics. We regularly get students interested in Geophysics because of its application to the oil industry, volcanoes, earthquakes, glaciers, climate, and related studies relevant to living and working in Alaska. Because of the prerequisites necessary to accomplish the coursework proposed for this minor, the most likely students to request it are Physics, Math, Chemistry, Engineering or similar majors. In particular the Geophysics minor can provide these students with rigorous, quantitative, intriguing Earth Science applications for the theories and fundamentals they are acquiring as students in these other departments. UAF has a world-renowned research program in geophysics. The minor would help connect the geophysics expertise to a pool of undergraduate students seeking to gain breadth and flexibility for future opportunities in either academia or the workforce.

Proposed Minor Requirements:

Geophysics Minor

- 1. Complete the following*:
 - GEOS F10IX- The Dynamic Earth 4 credits
 - GEOS F112X- The History of Earth and Life ... 4 credits
 - GEOS F377 0- Ice in the Climate System 3 credits
 - GEOS F318- Solid Earth Geophysics- 3 credits
 - GEOS F406- Volcanology 3 credits
 - GEOS F431- Foundations of Geophysics..... 4 credits
 - Minimum credits required..... 21 credits

Relationship to the “Purposes of the University”:

The Geophysics Minor highlights the diversity of topics housed beneath the Geoscience umbrella and provides students with a clear path to a concentration in geophysics. Because the minor consists of courses required for all Geoscience students (GEOS 101 and GEOS 112) and courses

that are central to the Geophysics Option (all other courses), the minor places no additional demands on faculty workloads. Unless this minor attracts more than 5 students per year, we do not foresee a need for additional space. Therefore, while we expect a small increase in enrollments within the Geoscience degree program, the minor provides a service to students at little cost to the department or college.

The Geophysics Minor is intended to provide a path for students in Physics, Math, Chemistry, Engineering or other science who wish to learn in more depth about how the basic sciences can be applied to study the Alaskan landscape. As mentioned above, we regularly get students interested in Geophysics because of its application to the oil industry, volcanoes, earthquakes, glaciers, climate, auroras, environmental engineering, and related studies relevant to living and working in Alaska. This program will provide a connection between UAF undergraduate students and UAF's world renown expertise in Geophysics in research and graduate studies. In particular, this minor would provide a conduit for undergraduate students to engage in innovative research pertinent to Alaska's changing landscapes.

Catherine F. Cahill 5/7/12
President, UAF Faculty Senate Date

APPROVAL: 
Chancellor's Office

DATE: 5/8/12

DISAPPROVED: _____
Chancellor's Office

DATE: _____