PROPOSAL FOR AN UPPER DIVISION CLUSTER COURSE

Name of faculty member: Dr. Michael L. Cummings

Title of proposed course: Geology of the Oregon Country

When is the course to be offered? Spring Annually

Name of Cluster/Cluster coordinator: Global Environmental Change/ Ansel G. Johnson

Please address the following items in your narrative, keying your text to the corresponding item below:

A. COURSE DESCRIPTION (100 words or less).

G 452 Geology of the Oregon Country (4)
Origin and geologic history of landscape features in Oregon and the Pacific Northwest. Two lectures; one 2-hour laboratory period, one-hour recitation. Prerequisites: upper-division standing and one of the following: G 111, 202, 351, 430, 455.

B. COURSE DEVELOPMENT. Please indicate whether the course is based on an existing course (and if so, please specify), or is a new course in development. If the course is a revision of an existing course, please explain what form the revision will take (this may be addressed under item C).

Note: Please be aware that the new General Education requirement is based on different premises from the former "distribution" requirement, and therefore the academic role of upper division courses in General Education will necessarily be different from the previous role.

This course has been taught as an upper division elective in science under the old general education program, and adapted for teachers, and for Junior Cluster use. This course examines the geology of the Pacific Northwest with several objectives. For the purposes of this cluster, the course will allow students examine the effect of environmental changes on the rocks and life in geological time, as well as the current impact of environmental changes.

C. GENERAL EDUCATION GOALS. Please describe how your pedagogical goals for the course promote the University's goals of General Education as adopted by the Faculty Senate. Please review the relevant sections of the General Education Working Group Report (the document adopted by the Senate in 1993) or the September 16, 1994, report of the General Education Committee (both documents are available in the Office of University Studies, 245 CH). Applicants are reminded that the upper division courses are expected to focus on program goals related to Human Experience and Ethical Issues & Social Responsibility, while continuing to build on the Inquiry and Communication program goals. Course instructors should use active learning strategies and challenge students to display increasingly sophisticated research and communication abilities. Examples of strategies for each of the General Education program goals are listed in the General Education Working Group Report and the report of the General Education
Committee. Attention should also be given to how this course functions in tandem with other courses in the cluster in working toward curricular integration within the cluster.

Colleagues are also reminded that upper division UNST courses are a replacement of the former distribution requirement for coursework in the Arts and Letters, Sciences, and Social Sciences. The Committee therefore anticipates upper division courses with scholarly content of the highest standard, consistent with the content level of the "distribution" courses under the previous General Education requirement, and befitting the University's core undergraduate curriculum.

This course meets Goal 1 Inquiry and Critical Thinking by providing a foundation in fundamentals of geology applied to the region, and then allowing the students to formulate and write about a specific issue in that context. Goal 2 is addressed in two ways in this class. One, it is writing intensive, so writing is stressed throughout the coursework. Secondly, the students have to produce a poster from their research to be presented to the class and the whole geology department. The course also addresses Goal 4 Ethical Issues and Social Responsibility through the subject matter, as well as individual projects that address things like erosion, cleanup of a river, impact of development on streams, etc.

D. COURSE OUTLINE. Please provide a detailed outline of the proposed course. This need not be a completed syllabus, but should include an outline of topics, a preliminary reading list, and the name(s) of instructor(s) committed to teaching the course during its first year.

Dr. Michael L. Cummings offers this course annually Spring Term.


Topic Outline:
Convergent margin geology and introduction to volcanology
Selection and design of research projects
Volcanic systems in the Pacific Northwest
Work on Projects
Evolution of selected hydrologic features of the Pacific Northwest
Progress report on project
Climate change/Exam
Work on Projects
Climate change in the Pacific Northwest
Progress report on project
Mass movement and valley evolution
Work on projects
Earthquake hazards of the Pacific Northwest
Work on projects
Exam/Progress report on project
Final Presentation of projects.