

EASTERN CONNECTICUT STATE UNIVERSITY
Liberal Arts Program Committee
 Liberal Arts Curriculum Course Substitution Application

Major programs may request that a course within their discipline or area of study be substituted for a Liberal Arts Core Curriculum (LAC) category requirement. Up to two LAC categories, not including the Liberal Arts Colloquium (LAP130) or Tier III category, may be satisfied.

Please submit this request to the LAPC through the LAPC secretary (Cheryl LeBeau) in the office of the Dean of Arts and Sciences.

Department: Environmental Earth Science	
Contact Name and E-mail: James A. (Drew) Hyatt hyattj@easternct.edu	
Major Program: Environmental Earth Science	Course Prefix and Number: EES 224
Course Title: Landform Analysis (with laboratory)	
LAC Tier and Category Substitution: Natural Science Tier II	
Chair Signature:	Date:
LAPC Date Received:	Action:
LAPC Chair Signature:	Date:

This form should be submitted for each course substitution request and include a sample course syllabus. If this involves a change in course title, catalog description or substantial change in course content please submit the appropriate Curriculum Committee forms.

Please describe how the proposed course meets the student learning outcomes of both the specific LAC category and tier category.

This application seeks approval for EES 224 (Landform Analysis, a required EES 4 credit lab course) to substitute as a Tier II Natural Science (with lab) for Environmental Earth Science Majors and Minors. As is argued below, this course helps to address general LAC Tier II learning outcomes, and specifically addresses the learning outcomes for the Tier II Natural Science Category.

General Tier II Learning Outcomes:

Through lecture and laboratory activities students will learn to:

1. Apply diverse methods of inquiry, for example drawing upon skills in reading and interpreting maps and aerial image of the earth surface, to make decisions about the geologic origin of features and to evaluate their impact on human land use and related affairs.
2. Develop creative thinking skills that require both quantitative and qualitative reasoning that utilizes a variety of data related to landscapes in order to infer the origin of specific landforms, and recognize multiple approaches to evaluating the importance of those features to people.

3. Demonstrate the relevance of ethical principles to practical use of the land by people through a consideration of the varied ways in which differing landscapes have practical impacts upon activities and environmentally suitable use of the land by people.

General Tier II Learning Outcomes:

Students taking this course will normally already have completed an EES lecture and laboratory course (either as separate courses, e.g. EES 106 and EES 112, or as a linked lecture and lab course such as EES 104). As well many will also have completed their first 4-credit chemistry course, and some will have taken a second EES 4-credit lab course that examines Earth History. Students will build upon this background to study the nature, origin, and significance to people of surface landforms. This will integrate an understanding of earth materials with visualizations that utilize topographic maps, satellite images, and aerial photographs of the Earth. These activities address specific Tier II Natural science learning outcomes by:

1. Evaluating the quality of scientific data and its interpretation through reading, analysis, and discussion of published papers or other works on the geomorphology of varied landscapes;
2. Acquiring and synthesizing data derived from various map-based sources in order to consider landscape origin and its applied significance to society at large;
3. Applying scientific methods in assessing the potential impact of landscapes on human land use; and
4. Recognizing that the many variables influence landscapes and introduce uncertainty in understanding the origin of landforms. However, by developing knowledge of the sources of this uncertainty landscape scientists can establish the degree of confidence with which predictions of landscape change may be made. The implications of this process to landscape-dependent societal problems will be considered.

In the lecture component of the course, students will be introduced to fundamental geologic controls on landform development, the role of time and space in defining those controls, and the general character of the landscape as a reflection of past and present geologic processes. The significance of these processes on human use of the land and associated ethical implications in relation, for example, to hazardous geologic conditions illustrate the significance of this field of study to society at large. In the laboratory, students are introduced to a variety of qualitative and quantitative techniques for observing, analyzing and interpreting the geologic character of the surface of earth. Lecture and laboratory activities will be assessed through combinations of laboratory reports and exams, literature reviews, field-trip activities, brief in-class presentations, classroom interactions, and lecture exams.

(Revision 10-1-07)