LANDSCAPES AND BIOGEOGRAPHY Group Contract, 12 Units, Winter, 1988

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This program covered the subjects of geomorphology and biogeography through lectures, seminars, and reading. It also presented selected geological and ecological methods through laboratory and field exercises.

Lectures in Geomorphology and Biogeography

Lectures were presented by the faculty on geomorphological structure, materials, and processes, and on the biogeography of Pacific Plate shorefishes, pinniped biogeography, and Phanerozoic paleogeography. Invited speakers presented lectures on the ecological biogeography of butterflies, Australian plant biogeography, and ecological preserves in the USSR.

Texts, Study Questions, and Review Seminar on Geomorphology and Biogeography

The texts for assigned reading were <u>Earth's Changing Surface: An Introduction to</u> <u>Geomorphology</u> (M.J. Selby, 1985 - omitting chapters on periglacial, eolian, ultimate planation, and landforms of the tropics), and <u>Biogeography</u> (James Brown & Arthur C. Gibson, 1983). The weekly reading assignments were supported by study questions variously for written responses and for group discussion. The reading and study questions were discussed in a weekly Review Seminar.

Topic Seminar on Geomorphology and Biogeography

Each student was expected to present a ten-minute talk about a scientific article in geomorphology or biogeography, and to participate in discussions of articles presented by others in a Topic Seminar conducted during a five-week period.

<u>Book Seminar</u>

A seminar on <u>The Klamath Knot</u> (David R. Wallace, 1983), presenting philosophical musings about geological, ecological, and evolutionary character of the Klamath Mountains, was conducted during the final week of instruction.

Geological and Ecological Methods

Geological methods included a field exercise on mapping and laboratories on the characteristics and identification of minerals and rocks (Simon & Schuster's Guide to Rocks & Minerals). Ecological methods included field surveys of forest vegetation (college campus), of a Puget Sound beach, and of waterbirds in Olympia Harbor (Budd Inlet, South Puget Sound). Geological and ecological methods were featured together in a field exercise on descriptive observations and field-journal writing, and in field trips to the Pacific Coast (estuarine marshlands; ocean beach and dunes) and a coal strip-mine (mining geology and landscape restoration). Students were expected to write a field journal, laboratory notes, and brief reports, as applicable.

<u>Faculty</u>: James Stroh (geology) Peter Taylor (ecology)