TOPICS IN MARINE BIOLOGY Group Contract, 8 or 12 units, Spring 1989 Description

Faculty: Dr. Peter Taylor

"Topics in Marine Biology" presented views of modern and ancient marine life, featuring the history of marine environments and marine organisms, and modern marine ecology. Students participated in sections on marine ecology and marine paleohistory for 8 units, and, optionally, in the marine biology section for an additional 4 units.

Marine Ecology Seminar: This seminar was based on Readings in Marine Ecology (J.W. Nybakken 1986). Three to four articles (reprinted in the text) were covered each week. Each student presented two articles during the quarter, and was expected to be prepared to discuss the other articles each week. The articles were about research studies or were reviews of topics in intertidal ecology, subtidal benthic ecology, estuarine ecology, and coral reef ecology.

Marine Paleohistory Survey: The paleohistory of marine life (marine organisms and environments) was surveyed through weekly assigned reading in <u>Earth and Life Through Time</u>, 2nd Edition (S.M. Stanley 1989). Students were expected to write responses to questions focusing on the marine aspects of each chapter, which were reviewed, discussed, and expanded during weekly meetings.

Marine Paleohistory Seminar: Students were organized into teams of two to research selected topics of marine paleohistory for presentations to the class. Three or four topics were presented each week in the seminar; each team researched and reported two topics during the quarter. Each team also produced written reports of its two topics. The topics were arranged by geological time periods, with the student-teams reporting variously on selected fossil organism-groups or significant events (major extinctions, glaciation, etc).

Marine Biology Seminar & Topical Research: Each student electing this subunit selected a marine biological topic to review using library sources, for presentation orally or as a poster exhibit, and as a written report. For the marine biology seminar, early sessions were devoted to students' presentations of selected periodical articles on a wide variety of topics; each student presented one article. The talks and posters on the researched topics were presented during the final sessions.

<u>Field Trips</u>: Three field trips were conducted to: (1) observe a diversity of marine organisms and their adaptations, at a public marine aquarium (The Seattle Aquarium); (2) examine marine fossils of Paleogene (Eocene-Oligocene) age (Lincoln Creek Formation, Lewis County); and (3) examine marine life and ecology at a rocky intertidal site on the shore of the Strait of Juan de Fuca (Tongue Point Marine Preserve).