TOPICS IN MARINE BIOLOGY Group Contract, 8 or 12 units, Spring 1987

"Topics in Marine Biology" was organized as three parts: a seminar on marine ecology, a seminar on marine paleohistory, and individual research on selected marine biological topics. Students could elect to participate in the two seminars for 8 units, or in the two seminars plus the research project for 12 or 16 units.

Seminar on Marine Ecology (2 units)

This seminar was based on <u>Readings in Marine Ecology</u> (J. W. Nybakken 1986). Two to four articles were covered each week: each student presented two articles during the quarter, and was expected to read and be prepared to discuss at least one article each week. The articles were about research-studies or reviews of intertidal ecology, subtidal benthic ecology, estuarine ecology, and coral reef ecology.

Seminar on Marine Paleohistory (6 units)

Students were organized into teams of three or four 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 three topics during the quarter. Each team also produced written reports of its three topics for inclusion in a "book" on marine paleohistory. Each team served once as editors of the reports for one week's seminar. The seminar was organized chronologically by geological time periods, with the student-teams reporting variously on selected groups of fossil organisms, plate-tectonic geography, environmental conditions, and significant events of the period, such as major extinctions. Reading was assigned in <u>Earth and Life Through Time</u> (S. M. Stanley 1986) to serve as background about concepts of paleontology and about the respective geologic periods.

Individual Research on Selected Topics (4 or 8 units)

Each student electing this subunit selected a topic from a suggested list to research using library sources. The research culminated in an oral presentation to the class and a written report. The recommended perspective for the reports was "What every marine biologist should know about...(topic)", as if included in a book in this vein. A research seminar was held during earlier weeks to start the projects and later to hear and discuss the presentations.

Field Trips

Two optional field trips were conducted to exemplify paleohistory and marine ecology featured in the seminars. One trip was to examine marine fossils in a nearby Tertiary formation, and to observe a major migration-stopover of shorebirds in a local estuary. The other trip was to examine marine life at a rocky intertidal site on the shore of the Strait of Juan de Fuca.

Faculty: Dr. David Milne and Dr. Peter Taylor (Coordinator)