Marine Biology Group Contract Fall Quarter 1975-76

<u>Objectives</u>. The objectives of this program were to develop an understanding of the classification, structural organization and ecology of significant marine organisms, to develop familiarity with local species, and to survey the major features of the sea as an environment.

<u>Program Structure</u>. Two lectures, two laboratory exercises, and one seminar each week constituted the program core. Short field trips to several habitats (salt marsh, sandy open coast, estuarine mud flats, southern Puget Sound rocky intertidal) were conducted. Two weeks of collection, laboratory studies, visits to rocky intertidal shores and deep dredging at the Friday Harbor Laboratories were included in this experience.

<u>Books</u>. Readings in Marine Ecology (Nybakken, ed., Harper & Row); Introduction to Marine Biology (McConnaughey, Mosby Co.); Guide to Common Seaweeds of British Columbia (Scagel, B.C. Provincial Museum); Keys to the Invertebrates of Puget Sound, etc. (Kozloff, U. of Washington Press); Seashore Life of Puget Sound, etc. (Kozloff, U. of Washington Press); Invertebrate Zoology (Barnes, Saunders Co.); Life in the Sea (Thorson, McGraw-Hill).

Lectures/Films. Lectures provided systematic treatment of the marine plants, cnidarians, annelids, arthropods, molluscs, echinoderms and vertebrates. Other lecture topics included plankton dynamics, deep sea biology, marine zoogeography and hydrography of Puget Sound. Films used were The Beach-River of Sand, Salt Marshes: Border Between Land and Sea, and Whales, Dolphins and Man.

<u>Seminars</u>. Weekly seminar discussions dealt with specific studies of the ecology of salt marshes, planktonic larval forms, benthic communities, intertidal food chains, oceanic productivity and other topics. Papers describing these studies are in Nybakken, Readings in Marine Ecology.

Laboratory Exercises. These provided initial familiarization with species keys, and introductions to anatomical features of many taxa.

Friday Harbor Laboratories (University of Washington) Field Trip. Mastery of species keys, recognition of large numbers of local species, an opportunity to observe specimens from deep water and points near the oceanic coast were made possible by this experience, as were comparisons of the Friday Harbor blota with that of the far southern Puget Sound.

<u>Research Project</u>. Each student was required to complete an independent study of specific organisms and/or oceanic phenomena related to the content of the program, and to submit a written report of the results.