

Holistic Biology 2010 -- General Plan

Week 1: Overview and history of the Monterey Peninsula. Ethnic and environmental diversity of the Monterey Peninsula and holistic approaches to ecology. Projects overview. Field work on local rocky intertidal fauna and zonation.

Readings: Richard Henry Dana, *Two Years Before the Mast*, selections from E. F. Ricketts, *Between Pacific Tides*, and Robert Louis Stevenson excerpts.

Field trips: Point Lobos Whaling Museum, Monterey Custom House, Larkin House

Creative writing: Objects and artifacts.

Guest speakers: J. Walton, D. Epel, J. Pearse (UCSC), S. Palumbi

Week 2: Intertidal ecology. Intertidal ecology and fictional transformations. Field work will examine historic transects in the Hopkins intertidal.

Readings: Steinbeck's *Cannery Row*, Robinson Jeffers' poetry, Ricketts' essays and selected scientific papers.

Field trips: abalone farm and Jeffers' Tor-House, Carmel.

Creative writing: Tidepool metaphor.

Guest speakers: T. Thomas, B. Thompson, J. Walton, D. Croll (UCSC)

Week 3: Oceanography and biology of the open sea. Oceanography; mesopelagic and pelagic biology; oxygen and nitrogen.

Readings: Rachel Carson, *Under the Sea Wind*, plus selected scientific and philosophical works.

Field trips: Monterey Bay research cruise, trip to Stanford main campus, MBARI

Creative writing: A day at sea

Guest speakers: L. Zeidberg, F. Chavez (MBARI), J. Field (NOAA), R. Parrish, P. Tyack (MIT), K. Arrigo, B. Robison (MBARI), C. Safina,

Week 4: Biology and conservation of the Sea of Cortez. Exploration in Baja California; oceanography and biology of the Sea of Cortez; climate change; marine conservation efforts.

Readings: *Log from the Sea of Cortez* (Steinbeck and Ricketts), Antiscript for *Forgotten Village*, plus selected scientific works.

Field trips: Elkhorn Slough

Creative writing: To be determined

Guest speakers: J. Ingle, M. Caldwell, M. Silberstein, G. Somero, R. Cudney

Week 5 (April 26 – May 1): Journey to the Sea of Cortez. Begin with overland journey. Visit missions at San Javier and Loreto. Geology of Santa Rosalia and Tres Virgenes volcanoes, squid fishery, visit Instituto Tecnológico Superior de Mulege.

Creative writing: journals

Field work participants: W. Gilly, C. Gilly

Week 6 (May 2-8): A Week at Sea. Intertidal transects at the 1940 Steinbeck-Ricketts site, Punta Lobos (Isla Espiritu Santo). Explore Sierra de Laguna or Cabo Pulmo. Move onto *Don Jose* (May 5) for shipboard studies focused on oceanography and pelagic ecology – Humboldt squid and sperm whales in the area of Farallon San Ignacio with deployments of National Geographic Crittercam and recordings of sperm whale vocalizations.

Creative writing: journals.

Field work participants: W. Gilly, C. Gilly, M. Beman (UC Merced), U. Markaida (Ecosur), C. Salinas and J. Ramos (CIBNOR), F. Guerrero (CICMAR), K. Abernathy (National Geographic)

Week 7 (May 9-15): Exploring Wilderness. Continue shipboard studies until May 11, followed by exploration of Isla Santa Catalina – desert, rocky intertidal and subtidal.

Creative writing: journals.

Field work participants: as Week 6; after May 11 – W. Gilly, S. Shillinglaw, C. Baxter, N. Burnett, J. Pearse, V. Pearse, R. Sagarin

Week 8 (May 16-21): Intertidal Studies. Intertidal surveys of invertebrates at Punta Marcial, Punta San Francisco and Isla Cayo as part of our long-term monitoring effort. Kayak and snorkle in mangrove ecosystem on Isla San Jose. Return to Alta California.

Creative writing: journals.

Field work participants: same as May 11-15.

Weeks 9/10: Projects, presentations and papers. Final data analysis for projects at Hopkins. Preparation of written reports. Oral presentations at Holistic Biology Symposium (June 1st or 2nd).