

HAWAII

May 2024

BIOLOGY

Gain an appreciation for the marine and terrestrial ecosystems of the Big Island of Hawai'i

We will spend approximately one week on the TWU campus studying introductory material and preparing for the trip. We will then spend four weeks in Hawaii, situated at the Captain Cook area, south of Kona. We will spend half our time on coral reef biology and the remainder on tropical plants, for a total of 6 semester hours of lab science credit. We will be based at the waterfront of the Kealahou Bay Marine Life Conservation District, which includes some of the most spectacular underwater habitat remaining in the Hawaiian archipelago. From there we will visit other areas of the island, including beaches, mountains, and Hawaii Volcanoes National Park.



TRINITY WESTERN UNIVERSITY

HAWAII TRAVEL STUDY



Travel Dates: May 2024

PRIMARY OBJECTIVES

- 1) familiarity with the plant and animal inhabitants of a volcanic island and its fringing coral reef, using field and laboratory techniques
- 2) gain an understanding of ecological relationships between organisms of two of the richest and most diverse habitats on earth: the tropical coral reef and the tropical forest
- 3) discussion points on Christian stewardship of the environment in some of the most beautiful, yet most vulnerable, parts of creation.

COURSES

BIOL 318 TR - TROPICAL BOTANY

As an exploration of the botanical riches of the tropics - focusing on the plant life of Hawaii - this course traces fundamentals of plant taxonomy, physiology, and ecology in relation to complexities of existence on the most isolated island chain in the world. Issues related to indigenous vegetation, including effects of introduced animals and plants, agriculture, and ethnobotany, are discussed. The course involves one week of lectures at Trinity Western and two weeks of lectures and field work in Hawaii.

Cross-listed: GENV 318

Prerequisite(s): BIOL 223 or 281 or 216, and BIOL 262 or instructor's consent. Recommended: BIOL 312 or 314 or 316.HKIN

NB: Summer sessions only. Not offered every year.

BIOL 364 TR - CORAL REEF ECOLOGY

A field course focusing on the systematics and ecology of tropical coral reef organisms. Plants, animals, and physical factors of a fringing coral reef are examined through snorkeling excursions and laboratory studies. One species is chosen for a detailed research project. Includes field course work in Hawaii.

Cross-listed: GENV 364

Prerequisite(s): BIOL 223 or 281 or 216 and BIOL 262 or instructor's consent. Recommended: BIOL 308 or 360.

NB: Summer sessions only. Not offered every year See department chair

INSTRUCTORS

DAVID CLEMENTS, PH.D.



David Clements is a professor of Biology and Environmental Studies at Trinity Western University, where he has taught since 1994. He is the Assistant Dean for research in the Faculty of Natural and Applied Sciences Dr. Clements has investigated a variety of ecological issues such as Garry Oak Ecosystem restoration in the BC Gulf Islands, biological invasions in the Fraser River delta, and the Mile-a-Minute Weed in China's Yunnan Province. He is interested in the ongoing challenges of the adaptability of weeds in combination with other issues, such as globalization and climate change.

KAREN STEENSMA, MSC



Karen Steensma is Professor of Biology and Co-chair of the Geography & Environment Department at TWU. She is also co-owner of a commercial dairy farm in Lynden, WA. Since 1986 she has taught marine ecology, coral reef ecology, zoology, conservation biology and other courses in the Pacific Northwest, as well as field courses in the Hawaiian Islands, the Caribbean, and the South Pacific. Particular interests are molluscs, ecological agriculture, and wildlife management. Research projects have focused on the health of watersheds, endangered species, and invasive species, particularly in agricultural landscapes.



Anna Ogden
E: anna.ogden@twu.ca

P: 605-513-2067
E: TDGLOBAL@TWU.CA

twu.ca/travel

