

TROPICAL COASTAL ECOLOGY

CAS BI/EE 440/640

4 Credits

Prerequisites: Admission to the Tropical Ecology Program

Descriptive ecology of coastal zone flora and fauna of Ecuador including terrestrial and inshore marine ecosystems, the Galapagos Archipelago and conservation concerns.

A total of about 25 hours of lecture will be presented. Time in the field will include about 10 days along the central Ecuadorian coast and one week in the Galapagos Islands. Field time will be dedicated to exposure to various habitats and the organisms that inhabit them. Directed individual research projects will also be completed in the field.

Objectives: Students are expected to gain basic understanding of the tropical coast, its flora and fauna, and the exploitation of marine and lowland resources.

Grading:

Grades are defined by a standard 10-point scale and are based on **participation** in-group activities (10%) ranging from regular class attendance to hikes, the **field notebook** (10%), a final **written exam** (55%), and a **practical exam** (25%). Tests will be developed from lecture material, field experiences and readings.

Topics: (subject to change)

The ecosystems and distribution of:

Coastal Plain

Tropical dry forest

Choco

Estuarine Systems

River bays, deltas and mangroves

Shoreline and shallow marine systems

Sandy shore vs. rocky shore

Reefs

Practical survey of marine organisms

Exploitation/development

Agriculture

Fruit and cattle operations

Aquaculture

Shrimp farming industry

Fisheries

Crustaceans and mollusks, sea cucumbers

Tuna, sharks, cetaceans, etc.

Galapagos

Environmental problems and concerns

