STUDIES IN TROPICAL ECOLOGY

CAS BI/EE 441/641 4 Credits

Prerequisites: Admission to the Tropical Ecology Program

Development of a series of original research projects into formal reports including appropriate analysis of data and observations completed previously in the courses of Tropical Montane, Tropical Coastal Zone and Tropical Rainforest Ecology.

Grades are defined by a standard 10-point scale and based exclusively on materials turned in (printed and on diskette) by the official end of the semester. (Please keep copies for your own records.)

A total of about ten topics will be investigated by each student. Personally recorded data and observations that will be used directly for the development of project reports will be included in a **field notebook** (10%)(described elsewhere).

Five to seven of the field projects likely will be primarily of the basic observation type and are referred to as "minor" projects (5-7 X 5% each). A list of basic ideas for these projects is provided. Fieldwork for minor projects should not involve more than a day or two of data collection once an idea or question has been formulated. These are the kinds of projects that may be more compatible with shorter excursions but are appropriate for any site. Reports are to be concise and direct (3-4 pages).

The other 3 or 4 projects (of the "major" category) are to be more thoroughly developed and are expected to involve more time and thought (and preferably should be experimental). To ensure investigation of a greater variety of topics, no more than 4 major projects will be accepted. Commonly, major projects grow from minor project ideas that have been especially successful or have piqued some particular interest. Reports for **major projects** (3-4 X 10% each) should also be more extensive (6-8 pages). Most major projects will probably be developed at sites where we remain in the field longer but comparative studies involving several sites may be acceptable.

Collaboration on projects is encouraged and expected to improve overall quality. Joint reports may include up to three authors; individual credit should be discussed with the instructor. Each student may turn in only enough work to be worth a maximum value of 65% based on these descriptions. A proportional grade will be based on the overall quality of the work (development of the idea/question, research and data collection strategy, depth of supporting evidence and literature, validity of statistical analyses, organization, grammar and written expression). To justify inclusion, all authors must be able to discuss the research topic during the practical exam for that ecosystem.

Two 15-minute **oral presentations** (25%) based on your best projects will be made – one mid-semester (10%) and one at the end (15%). Topic choice must involve the professor(s). Topics become eligible for presentation only upon faculty review of the relevant written report.