

FORM VERSION: 5/95

DATE REVISED: SEPTEMBER 25, 1998

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

Transfer course A.A. degree applicable course

(check all that apply)

COURSE NUMBER AND TITLE: Biology 195D - Field Studies in Island Ecology

UNIT VALUE: 1, 2, or 3 **MINIMUM NUMBER OF SEMESTER HOURS:** 32, 64, 96

BASIC SKILLS REQUIREMENTS: Appropriate language and computational skills.

ENTRANCE REQUIREMENTS: None

PREREQUISITE:

COREQUISITE:

RECOMMENDED PREPARATION:

SCOPE OF COURSE:

Field study of the unique ecology of islands, emphasizing systematics, speciation, observation and interpretation of the interactions of indigenous and exotic biota, and how the biotic communities of the study island(s) have adapted to the special limitations of their confined environments. *See Class Schedule for locality to be visited. Fee charged.*

SPECIFIC COURSE OBJECTIVES:

The successful students will:

1. demonstrate knowledge gained in the prerequisite course toward analyzing the unique characteristics of island ecosystems.
2. develop an appreciation of islands as miniature crucibles of evolution and rapid speciation.
3. identify and study indigenous species unique to the study island or island cluster, comparing these (through reference literature) with related mainland species, and with sibling or incipient species found in the same island cluster, correlating observable differences with differences in habitat.

4. identify exotic and feral species on the study island(s) and attempt to assess their impact on indigenous species and on the successional characteristics of the island community.
5. demonstrate an understanding of the various ways in which islands are formed, including the geologic history of the study island(s), and how colonization of the study island(s) may have been influenced by such factors as current systems, migration, and human activities.
6. apply basic techniques of ecological observation and measurement to gain insight into the distribution, relative species densities, and ecological interactions of island species with one another and with their uniquely constrained habitat.
7. assess, through reading, observation and/or interviews, the effectiveness of local conservation programs with respect to their recognition of the unique biological significance of islands.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

Each field class may have a different itinerary and cover different geographical regions and the island habitats in which plants and animals coexist and evolve. However, a common body of knowledge would include the ecology of the island visited and understanding of the major flora and fauna found there but are not limited to:

1. Unique characteristics of island ecosystems.
2. Islands as miniature crucibles of evolution and rapid speciation.
3. Species indigenous to islands or island clusters.
4. Exotic and feral species on island(s) and impact on indigenous species and succession on islands.
5. Island formation, geological history of island(s) and influences of biotic and abiotic factors related to island colonization.
6. Techniques of ecological observation and measurement utilized to study distribution, densities, and interactions of island species.

REQUIRED READINGS:

College-level references including periodical and book sources. Varies according to locale; a travelling library of field guides and references on island ecology will be brought to the class for use in identification and expanding upon the field log. Other material, such as instructor-generated handouts on island ecology may also be required readings.

Example: Gorman, M.L. Island Ecology. London: Chapman & Hall, 1979.

SUGGESTED READINGS:

A large selection of suggested readings is available to students (e.g., texts by Audubon, Peterson's guides as well as other location-oriented field guides).

REQUIRED WRITINGS:

A field notebook -"LOG" - is required of all students. Writings in the log should include: abiotic and biotic parameters observed, associations and behaviors studied, and a record of species identified. The quantity of writing will vary with the number of units; a minimum of 12 pages or 2,000 words of writing per unit is expected. Proper grammar and linguistic style are required.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short term classes. Outside reading assignments include: predeparture readings in text and other course materials, as well as readings of course materials during trip, study of lecture notes, and preparation and review of field log.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

Lecture-laboratory; in-depth field study.

This course may be offered as a distance education course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply. (See guidelines for preparation for definitions.)

- telecourse
- mediated instruction
- computer assisted instruction

GRADING POLICY AND STANDARDS

Participation in the daily class activities	= 60%
Writings including the "log" (field journal)	= 40%
TOTAL	=100%

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

YES NO Number of times course may be taken for credit 4 times

If yes, identify specific provision of Title 5 Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable: 68161(c)(2)(B)

CONTACT PERSON: DANIEL SOURBEER, x.2775

SIGNATURES ON FILE