

Welcome to the UGA Maymester Study Abroad in Australia and New Zealand

Natural History of the South Pacific

BIOL 4910 Advanced Topics in Biology (3 credits)

This is a sample syllabus intended as a general guide only and deviations may be necessary (a final syllabus will be included in the course-book or available by contacting the office)

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Course Description

This course explores the native flora and fauna of Australia, New Zealand, and/or other islands of the South Pacific. With extensive field trips into forests, coral reefs and other unique habitats, we will explore the natural history of the plants and animals of this region as well as how they interact with one another. We will also examine how the geology, climate, and peoples of the region have shaped the ecology and evolution of the organisms and how changing climatic conditions may affect them in the future. The course will involve a mix of extensive fieldwork, lectures, and independent projects and, because it is offered in conjunction with FANR 4271, *Sustaining Human Societies and the Natural Environment*, students will understand how human societies have been shaped by and affected nature.

Course Objectives

The following topics will be covered:

1. Tropical Rainforest
 - a. What defines a "Rain Forest"?
 - b. What characterizes a tropical forest?
 - c. Why are they important?
 - d. Why is the biodiversity of tropical rain forests higher than that of most terrestrial environments?
 - e. How are nutrients and energy cycled in a rain forest?
 - f. Why are some plants and animals considered "living fossils"?
 - g. What adaptations have evolved in plants and animals that allow them to succeed in this environment?
 - h. How are changing climatic conditions affecting the rain forests of the south Pacific?
2. Coral Reef
 - a. How are coral reefs formed?
 - b. Why are they important?
 - c. Why is the biodiversity of coral reefs higher than that of most marine environments?
 - d. How are nutrients and energy cycled in a coral reef?
 - e. Why are plants and animals considered "living fossils"?
 - f. What adaptations have evolved in plants and animals that allow them to succeed in this

- environment?
- g. How are changing climatic conditions affecting the coral reefs of the south Pacific?
3. Temperate Forests
- a. What distinguishes a temperate forest from a tropical forest?
 - b. How does the biodiversity of temperate forests compare to that of tropical rain forests?
 - c. What adaptations have evolved in plants and animals that allow them to succeed in this environment?
 - d. How are changing climatic conditions affecting the temperate forests of the South Pacific?
4. Scrublands and Outback
- a. What distinguishes a scrubland from a forest?
 - b. How does the biodiversity of scrublands compare to that of forests?
 - c. What adaptations have evolved in plants and animals that allow them to succeed in this environment?
 - d. How are changing climatic conditions affecting the dryer regions of the South Pacific?

Course Credit

Credit is offered for 3 semester hours at the undergraduate level (4910) in BIOL (Biology).

Prerequisites

BIOL 1107/L and BIOL 1108/L.

Attendance

Punctual attendance at all scheduled program–related activities is required, including group meetings, discussions, field excursions, as well as lectures and any other scheduled activities. Participation in field activities (such as hiking, snorkeling, swimming, etc.) is voluntary and at the discretion of the student; however, should you wish not to participate you must inform the instructor. An excused absence or decision not to participate in one or any of these field activities will not affect your course grade. During the field studies, no student may leave the group without the consent of the faculty supervisor. Unless an absence is approved by one of the instructors or the program director, students will lose 10% of their final grade for each day or part-day they fail to participate. Unexcused absences or chronic late arrival to program activities may, at the discretion of the Program Director, be grounds for dismissal from the program.

Late and Missed Assignments

Because of the nature of this course and the tight schedule, assignments are not accepted late without prior approval from the instructor.

Academic Honesty

All academic work must meet the standards contained in the University's Culture of Honesty policy (www.uga.edu/honesty). All students are responsible for informing themselves about those standards before performing any academic work. The penalties for academic dishonesty include (but are not limited to) award of a failing grade for the course, suspension, notification placed on the student's transcript of their having been found guilty of cheating, and expulsion from the university, and ignorance is not an acceptable defense. Academic dishonesty will be reported to the University Academic Policy Panel.

Special Accommodations

Any student(s) who require special accommodation(s) or other requirements in this course must contact the instructor before or at the UGA on-campus orientation and register with UGA Disability Resource Center (www.drc.uga.edu). Some activities include moderate exercise, such as hiking and snorkeling.

Course-book

You are required to bring a laptop or notebook with Microsoft Word software (ipads, kindles, or other similar electronic reading devices are not acceptable for course assignments). The course-book will be provided electronically via jump drive, which is available for purchase at Bel-Jean's Copy/Print Service, 163 East Broad St, Athens, GA 30601. To purchase, please order online from <http://www.bel-jean.com/study-abroad-uga.php>, via phone at 706.548.3648 or via email at campusrep@bel-jean.com. An optional hardcopy is also available, though not required. The program accepts no responsibility for lost or stolen items and we recommend that you consider purchasing insurance for any expensive personal items before bringing them on the course.

Optional Reading

For pre-departure (optional) reading, we recommend:

- Bryson, B. (2000). *In a sunburned country*. New York: Broadway Books.
- Clarke, M. (1970). *For the term of his natural life*. Adelaide: Rigby, Seal Books.
- Diamond, J. (1998). *Guns, germs, and steel: The fates of Human societies*. New York: W.W. Norton & Company.
- Hughes, Rr. (1987). *The fatal shore: The Epic of Australia's founding*. New York: Alfred A. Knopf Inc.
- Ihimaera, W. (1987). *The whale rider*. Orlando: Harcourt Books.
- Hulme, K. (1986). *The bone people: A novel*. Washington D.C.: Penguin Books.
- Low, T. (2002). *The new nature: Winners and losers in wild Australia*. Camberwell, Australia: Viking Australia.
- Morehead, A. (1966). *The fatal impact: The invasion of the South Pacific, 1767-1840*. London: Hamilton.
- Pilkington, D. & Garimara, N. (1996). *Follow the rabbit proof fence*. St. Lucia, Australia: University of Queensland Press.
- Rose, D. (1992). *Dingo makes us human: Life and land in an Aboriginal culture*. Cambridge: Cambridge University Press.
- Shute, N. (1950). *The legacy (a town like Alice)*. New York: Morrow.

Course Requirements

Field modules (70%)

The field modules are location-based questions to be answered as individually written 250-word essays, peer-reviewed essays, group debates, site quizzes, and/or research projects (due at intervals throughout the program – see the *Itinerary*). Refer to the *Field Modules Introduction and Overview* for details on assessment expectations and submission requirements for each of the various forms of modules.

Final exam (30%)

The exam may draw material from any reading, field exercise, lecture, or discussion, and you may refer to your notes from lectures and field activities. Approximately 70% of the exam will be short, objective (completion, multiple choice, t/f, etc.) questions drawn from lectures, field experiences, or readings, and 30% percent of the exam will be essay based. Date as listed on the itinerary.

Grade Assessment

Final grades will be assigned as follows:

A	93 –100 percent
A-	89.5 – 92.9 percent
B+	87 – 89.4 percent
B	83 – 86.9 percent
B-	79.5 – 82.9 percent
C+	77 – 79.4 percent
C	73 – 76.9 percent
C-	69.5 – 72.9 percent
D	59.5 - 69.4 percent
F	below 59.4 percent

Course Itinerary

Refer to the sample itineraries available online. Final itineraries will be distributed on arrival in-country or contact the office for the most recent version.

Sample