BIOL 4035.90 Ecology of the Amazon May 2011 3-Week Mini-Term Syllabus

Class meetings: Monday, Tuesday, Wednesday and Thursday, 6:00 – 10:05pm

Bayou Building 2230

Instructor: Dr. Cindy Howard

Office: Bayou Building, Faculty Suite 3525

Telephone: (281) 283-3745 (please leave a message if you don't get an answer)

E-mail: howardc@uhcl.edu (best way to contact me)

Office hours: Mon, Tue, Wed and Thu 4-6pm; other times by appointment

Webpage: http://sce.uhcl.edu/howard/

Course text and materials

Kricher, J. 1999. *A Neotropical Companion: An Introduction to the Animals, Plants and Ecosystems of the New World Tropics*, 2nd edition. Princeton University Press, Princeton, NJ. 451p. ISBN 0-691-00974-0.

Kricher, J. 2011. *Tropical Ecology*. Princeton University Press, Princeton, NJ. 632p. ISBN 978-0-691-11513-9.

PowerPoint slides for each lecture will be available through Blackboard 9 at or before 12:00pm each class day. Other course information can be found at http://sce.uhcl.edu/howard/ under Courses: BIOL 4035.

Prerequisites:

General ecology recommended.

Course objectives

To provide students with a conceptual knowledge of tropical rain forest ecology, particularly the neotropical rainforest of the Amazon basin. Topics covered include physical and geomorphological characteristics; ecology, taxonomy and natural history of tropical plants and animals; coevolutionary relationships between plants and animals; forest-human interactions; conservation and ethnobotany.

Learning outcomes

Upon successful completion of this course, students will be able to relate the various environmental and hydrological dynamics of the neotropics to their ecological diversity; to interpret the special adaptations of neotropical plants and animals and apply them to unique coevolutionary relationships; and analyze human impacts on tropical rainforest systems.

Course format

Class lectures and discussions, video and slide presentations, ethnobotany sampling. Lecture attendance is strongly recommended, as the exams will cover material presented in lectures that is not necessarily found in the textbook. All students who successfully complete this course will be eligible for discounted fees on any future UHCL Amazon expedition.

Evaluation

Three exams will cover all material presented in class, as well as reading assignments and videos. Each exam will consist of two parts and will be worth one-third of the final course grade. The two exam parts will consist of (1) a required, closed book/notes objective section and (2) an optional, closed book/notes, extra-credit taxonomy section.

| Grading scale: | Α | 92-100% | В | 80-85% | С | 70-75% | D | 60-65% |
|----------------|----|---------|----|--------|----|--------|----|--------|
| | A- | 88-91% | B- | 78-79% | C- | 68-69% | D- | 58-59% |
| | B+ | 86-87% | C+ | 76-77% | D+ | 66-67% | F | <58% |

All students are expected to take exams on the dates scheduled on the syllabus. There will be no make-up exams in this course. Instead, all students will have the opportunity to replace their lowest test score (objective section only) with the score on an optional comprehensive final, available following Exam 3 on the last day of class. BIOL 4035 students may also attend earn extra credit by attending journal article presentations by the BIOL 5535 students in class on June 1 and turning in a short summary of the presentations on the last day of class. Due to time constraints of the mini-term, there will be no other opportunities for extra credit.

Class attendance

Class attendance is strongly recommended. Handout materials will be available through Blackboard for students who miss class; however, the handouts represent outlines of the lecture materials and may not contain sufficient information to succeed on exams without additional lecture notes.

Information on university closures due to weather or other events can be obtained from the UHCL hotline (281-283-2221) or http://www.uhclemergency.info/go/site/1522/.

The course instructor may send messages to students during the semester regarding class schedule updates or changes, using the students' university email accounts.

Incompletes and withdrawals

The last date to drop this course without a grade penalty is <u>May 28, 2011</u>. In accordance with UHCL policy, an incomplete grade (I) can only be assigned if the student is making satisfactory progress, but cannot complete the course for a documentable reason.

6 drop rule limitation (undergraduate students)

Students who entered college for the first time in Fall 2007 or later should be aware of the course drop limitation imposed by the Texas Legislature. Dropping this or any other course between the first day of class and the census date for the semester/session does not affect your 6 drop rule count. Dropping a course between the census date and the last day to drop a class for the semester/session will count as one of the six permitted drops. Students should take this into consideration before dropping this or any other course. Visit www.uhcl.edu/records for more information on the 6 drop rule and the census date information for the semester/session.

Academic honesty

Please carefully review the UHCL Academic Honesty Policy in the current UHCL catalog. Every student enrolled in this class is expected to abide by the UHCL Honesty Code, which states, "I will be honest in all my academic activities and will not tolerate dishonesty." Your participation in this class constitutes your acceptance of the UHCL Academic Honesty Policy. Dishonesty of any kind (e.g., plagiarism,

cheating on exams) is absolutely unacceptable in this course. All academic code violations will be reported to the Dean of Students and can result in a grade of "F" on an assignment or test, a grade of "F" in the course or suspension from the university (see catalog). Your written work may be checked for plagiarism at any time. For the full UHCL Academic Honesty Policy, please refer to http://prtl.uhcl.edu/portal/page/portal/PRV/FORMS_POLICY_PROCEDURES/STUDENT_POLICIES/Academic Honesty_Policy.

Special academic accommodations

Students requiring special academic accommodations with regard to exams, etc. should contact the Disabilities Services Office at 281-283-2627 (http://prtl.uhcl.edu/portal/page/portal/UAO).

Electronics

Use of cell phones, pagers, PDAs or similar electronic devices is generally not permitted during class periods. Cell phones must be silenced or turned off and must be stored out of sight for the duration of the class period. Exceptions may be made on a per class period basis and must be cleared with the course instructor prior to the start of class. Laptop computers may be used in class only for taking lecture notes.

Additional sources for material presented in class

In addition to the course textbooks, there will be many other sources used for material presented in class. These include published works (books, field guides and peer-reviewed journal articles) and data, experience and images collected by the course instructor. All references will be made available on request to students wishing further information on subjects presented during the class lectures.

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Course schedule (subject to revision):

| Date | Topic | Reading (Neotropical Companion) | Reading (Tropical Ecology) |
|--------------|---|---------------------------------------|----------------------------------|
| Mon 05/16 | Course introduction (syllabus, schedule, class policies) Introduction to tropical rainforests and the Amazon | Chps. 1, 2, 3, 8 | Chp. 1 |
| Tue 05/17 | Amazon rainforest geomorphology and soils; plant communities | Chps. 3, 4 | Chps. 2, 11 |
| Wed 05/18 | Neotropical rainforest plant ecology and community succession | Chps. 2, 3, 8 | Chps. 3, 4, 5, 6 |
| Thu 05/19 | Exam 1 (6-8pm) Amazon rainforest ecology video | | |
| Mon 05/23 | Neotropical rainforest plant-animal coevolutionary relationships | Chps. 3, 5, | Chps. 6, 7, 8 |
| Tue 05/24 | Ecology of Amazon insects and other terrestrial arthropods Ecology of Amazon fish | Chps. 3, 5, 6, 8, 13 | Chps. 7, 8. 12 |
| Wed 05/25 | Ecology of neotropical rainforest reptiles and amphibians Amazon rainforest ecology video | Chps. 8, 13 | Chp. 7 |
| Thu 05/26 | Exam 2 (6-8pm) Ecology of neotropical rainforest birds | Chps. 8, 12 | Chps. 8, 12 |
| Mon 05/30 | Memorial Day holiday – no class | | |
| Tue 05/31 | Ecology of neotropical rainforest mammals Amazon human ecology, agroforestry and conservation | Chps. 7, 8, 13, 14 | Chps. 8, 12, 13, 15 |
| Wed 06/01 | Amazon ethnobotany [foods and medicines from the rainforest] Graduate student presentations of Amazon research articles | Chps. 6, 7 | |
| Thu 06/02 | Exam 3 (6-8pm) Optional Comprehensive Final Exam (replaces objective section on lowest exam score) (8:15-10pm) | | |