## BIOL 5535.90 Neotropical Rainforest Ecology 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**: <a href="mailto:howardc@uhcl.edu">howardc@uhcl.edu</a> (best way to contact me)

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

Webpage: <a href="http://sce.uhcl.edu/howard/">http://sce.uhcl.edu/howard/</a>

#### **Course text and materials**

Kricher, J. 1999. *A Neotropical Companion: An Introduction to the Animals, Plants and Ecosystems of the New World Tropics,* 2<sup>nd</sup> 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 <a href="http://sce.uhcl.edu/howard/">http://sce.uhcl.edu/howard/</a> under Courses: BIOL 5535.

#### **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, oral presentation of peer-reviewed literature. 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 30% 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. Due to time constraints of the mini-term, there will be no other opportunities for extra credit. The remaining 10% of the grade will be based on review and class presentation of a theme set of three articles from the peer-reviewed literature (article sets will be available on the first day of class).

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.** 

#### **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 lecture material 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 <a href="http://www.uhclemergency.info/go/site/1522/">http://www.uhclemergency.info/go/site/1522/</a>.

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.

#### **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 <a href="http://prtl.uhcl.edu/portal/page/portal/PRV/FORMS\_POLICY\_PROCEDURES/STUDENT\_POLICIES/Academic Honesty\_Policy">http://prtl.uhcl.edu/portal/page/portal/PRV/FORMS\_POLICY\_PROCEDURES/STUDENT\_POLICIES/Academic Honesty\_Policy</a>.

## **Special academic accommodations**

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

#### **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,	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.
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)  Journal articles review report due		