

**THE ECOLOGY AND CONSERVATION OF TROPICAL WILDLIFE  
WIS 3434 (Section 0210): Fall Semester, 2014**

**INSTRUCTORS:**

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**OFFICE HOURS:**

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**TEACHING ASSISTANT:**

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**OFFICE HOURS:**

Time: ----  
Place: -----

**LECTURE/DISCUSSION:**

**Day/Time:** Tuesday, Period 7 (1:55-2:45) and Thursday Periods 7-8 (1:55-3:50)

**Location:** ROG 0110

**COURSE OBJECTIVES:** This course has three principal objectives: (1) To gain an understanding of the evolutionary and ecological factors that shape patterns of tropical diversity. (2) To learn some of the ways in which humans utilize tropical wildlife. (3) To understand the threats faced by tropical ecosystems and explore alternatives for their conservation. Although examples will be drawn from a variety of tropical ecosystems, the course will focus primarily on the Neotropics.

**COURSE MATERIALS:**

**1) Recommended Textbook, available at the UF bookstore, Amazon.com, and other bookstores**

Kricher, J. 2011. Tropical Ecology. Princeton University Press, Princeton, NJ.

**2) Required readings and materials will be available on the course web page:**

- Open your Internet browser and navigate to <https://lss.at.ufl.edu>

**NOTE:** If you are going to create a bookmark for e-learning login, please bookmark <http://lss.at.ufl.edu>, not the actual login page or the "My Workspace" page once you are in e-Learning.

- Click the big orange "e-Learning" button.

- Login using your gatorlink username and password. After logging in, you will be taken to your "My Workspace," where you can access the course site in which you are enrolled. You will see them listed across the top of the screen.

**EVALUATION (=GRADING):**

The grades for this course are based on the following assignments/exams:

1st Exam ( <i>October 9</i> ):	200 points
2nd Exam ( <i>November 20</i> ):	200 points
1st Draft of Wikipedia Project ( <i>due October 16</i> )	50 points
2nd Draft of Wikipedia Project ( <i>due November 13</i> )	50 points
Final Submission of Group Project ( <i>due December 4</i> )	100 points
Participation in discussion sessions:	50 points
<b>TOTAL</b>	<b>650 points</b>

**Final Grades will be assigned on the following scale:**

**A** = ≥93%, **A-** = 92-90%, **B+** = 89-87%, **B** = 86-83%, **B-** = 82-80%, **C+** = 79-77%, **C** = 76-73%, **C-** = 72-70, **D+** = 69-67%, **D** = 66-63%, **D-** = 62-60%, **E** = 59% and below. Please note that Letter grades of C-, D+, D, D- or E are not considered passing at the graduate level.

**Attendance policy:** Attendance at all sessions is required. Please arrive on time as a courtesy to your colleagues (and please turn off your cell phones!).

**Make-up and late assignment policy:** The grade of late assignments will be reduced 10 points for each day they are late. If you need to miss an exam for whatever reason (conference, illness, family emergency, etc.), please contact u as soon as possible to make arrangements to take a make-up exam.

**Regrades:** Requests for re-evaluation of exams, quizzes, and other assignments will only be considered if they are accompanied by a letter explaining why you think you deserve additional credit and how many additional points. The deadline for submitting these requests is **one week** after the work has been returned.

**Accommodation for Students with Disabilities:** The Disability Resource Center in the Dean of Students Office provides students and faculty with information and support regarding accommodations for students with disabilities in the classroom. For more information, see: <http://www.dso.ufl.edu/drc/> Students Requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation. If you have a disability and need special facilities or time for taking tests, please register with the Disability Resource Center (DRC). *We will gladly follow any recommendation the DRC makes if it will help you do well in class.*

**Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:**

- a) University Counseling Center, 301 Peabody Hall, 392-1575, Personal and Career Counseling.
- b) SHCC mental Health, Student Health Care Center, 392-1171, Personal and Counseling.
- c) Center for Sexual Assault/Abuse Recovery and Education (CARE), Student Health Care Center, 392-1161, sexual assault counseling.
- d) Career Resource Center, Reitz Union, 392-1601, career development assistance and counseling.

In addition, UF provides an educational and working environment for its students, faculty, and staff that is free from sex discrimination and sexual harassment. For more about UF policies regarding harassment, see: <http://www.dso.ufl.edu/studentguide/studentconductcode.php#s4041>

**Honor Code:** All students are required to abide by the Student Honor Code. For more information about academic honesty, including definitions of plagiarism and unauthorized collaboration, see: <http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>

**Software Use:** All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

## COURSE OUTLINE

<u>Week</u>	<u>Date</u>	<u>Lead</u>	<u>Topic</u>	<u>Readings</u>
1	8/26	All	Course introduction, current research	
	8/28	EB	Tropical soils, nutrient cycling, and energy flow	Kricher 1, 10
2	9/2	JB	Species diversity 1: Historical perspectives, Speciation	Kricher 2, 4
	9/4	JB	Species diversity 2: Latitudinal & altitudinal diversity gradients	Kricher 2, 4
3	9/9		<b>Discussion:</b> Mayle et al. 2000 <i>Hand out Wikipedia assignment</i>	
	9/11	JB	Major tropical ecosystems 1: Forests	Kricher 3, 5, 11, 12
4	9/16	EB	Major tropical ecosystems 2: Savannas	
	9/18	EB MS	Tropical communities 1: Fish Wikipedia review	Kricher 7
5	9/23	JB	Tropical communities 2: Herps	
	9/25	JB	Tropical communities 3: Mammals, Birds	
6	9/30	EB	Tropical communities 4: Arthropods Biotic Interactions 1: Pollinations	Review Kricher 7
	10/02	EB	<b>Discussion:</b> Boyle 2010 <i>Wikipedia updates</i>	
7	10/7	RP	<b>Discussion:</b> Novotny et al. 2002; Novotny et al. 2006	

<b>10/9</b>		<b>EXAM 1</b>		
8	10/14	JB	Biotic interactions 2: frugivory and seed dispersal	Kricher 8
	10/16	JB	Biotic interactions 3: herbivory and trophic cascades	
		EB	<b>Discussion: Holbrook &amp; Loiselle 2009</b> <i>(1st draft of Wiki project due)</i>	
9	10/21	EB	Biotic interactions 4: ants and plants	Kricher 6
	10/23	JB	Forest dynamics and disturbance	Kricher 14
10	10/28	EB	Deforestation and habitat fragmentation	
	10/30	EB	<b>Discussion: -----</b>	Kricher 9, review 6
11	11/4	EB	Fire and climate change	
	11/6	JB	Logging and non-timber forest products	Kricher 13, 15
12	11/11		Holiday – no class	
	11/13	EB	REDD and payments for ecosystems services	
			<b>Discussion: “people in parks” essays</b> <i>(2nd draft of Wiki project due)</i>	
13	11/18	JB	Lecture: Agroecology	
	<b>11/20</b>		<b>EXAM 2</b>	
14	11/25		Free day to work on wiki projects	

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	11/27	NO CLASS: Thanksgiving
15	12/2	Work on wiki projects
	11/4	<b>FINAL SUBMISSION OF WIKI PROJECT</b>
16	12/9	Discussion, evaluations
		<b>THERE IS NO FINAL EXAM IN THIS CLASS</b>

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## ADDITIONAL READINGS – WIS 3434

### Week 3 Discussion:

- 1) Mayle, R. E., R. Burbridge, and T. J. Killeen. 2000. Millennial-scale dynamics of southern Amazonian rain forests. *Science* 290:2291-2294.

### Week 6 Discussion:

- 1) Boyle, W. A. 2010. Does food abundance explain altitudinal migration in a tropical frugivorous bird? *Canadian Journal Zoology* 88: 204-213.

### Week 7 Discussion:

- 1) Novotny, V., Drozd, P., Miller, S. E., Kulfan, M., Janda, M., Basset, Y., Weiblen, G. D. (2006) Why are there so many species of herbivorous insects in tropical rainforests? *Science* 313, 1115-1118 (Includes supplementary material, commentary, and correspondence.
- 2) Novotny, V., et al. (2002) Low host specificity of herbivorous insects in a tropical forest. *Nature* 416, 841-844.

### Week 8 Discussion:

- 1) Holbrook, K. M., and B. A. Loiselle. 2009. Seed dispersal in a neotropical tree, *Virola flexuosa* (Myristicaceae): does hunting of large vertebrates limit seed removal? *Ecology* 90:1449-1455.

### Week 10 Discussion:

- 1) Pounds et al. 2006. Widespread amphibian extinctions from epidemic disease driven by global warming. *Nature* 439:161-167 (**read the original article and the responses**).

### Week 12 Discussion: *Read in the following order:*

- 1) Schwartzman, S., A. Moreira, and D. Nepstad. 2000. Rethinking tropical forest conservation: Perils in parks. *Conservation Biology* 14:1351-1357.
- 2) Terborgh, J. 2000. The fate of tropical forests: a matter of stewardship. *Conservation Biology* 14:1358-1361
- 3) Redford, K. H., and S. E. Sanderson. 2000. Extracting humans from nature. *Conservation Biology* 14:1362-1364.
- 4) Colchester, M. 2000. Self-determination or environmental determinism for indigenous peoples in tropical forest conservation. *Conservation Biology* 14:1365-1367.
- 5) Schwartzman, S., D. Nepstad, and A. Moreira. 2000. Arguing tropical forest conservation: People versus parks. *Conservation Biology* 14:1370-1374.