

Senior Seminar: Ecology and Conservation of Neotropical Rainforests

BIO 485 Fall 2006

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Time: 3:30-4:45 TU, TH
Location: FJB
Textbook: Kricher, J. 1997. A Neotropical Companion. 2nd Ed. Princeton University Press,
Princeton, New Jersey.

Goals: Rhodes requires all of its students to participate in a senior capstone experience. The purpose of this experience is to allow students to integrate knowledge from different sources and to refine their writing and speaking skills. In this class we will accomplish these objectives as part of a seminar on the ecology and conservation of Neotropical rainforests. **A seminar course is one in which the participants teach and learn from each other through reading and discussion.**

Specifically, my goals for this senior seminar are to give you the opportunity to:

1. Learn about the ecology and conservation of Neotropical rainforests.
2. Refine your critical thinking skills and the ability to integrate different sources of information into a coherent picture.
3. Understand and evaluate how science is done by finding, reading and discussing the relevant literature in the field.
4. Develop your speaking and writing skills.

To achieve these goals, the semester will be divided into three sections, and the seminar will be organized and run differently during each section, although all sections will require you to read and discuss the relevant literature on this topic.

1. During the first section of the semester, you will work in groups of two or three students. Each group will develop and present a lecture to the class based on a chapter from Kricher's "A Neotropical Companion".
2. During the second section of the semester, you will work individually. Each student will lead a class discussion on a paper from the primary literature.
3. Each student will choose a topic for in-depth research early in the semester. During the third section of the semester, each student will make a longer, formal PowerPoint presentation on his or her topic. Students will also submit a research paper on that topic. Finally, each student is expected to attend two of the three Biology Department seminars during the semester and to submit a summary and critique of the departmental seminars.

The six components of the course

1. Group presentations (chapters from the textbook)

Each group of students will read a chapter from Kricher's "A Neotropical Companion". You will sign up for a chapter and presentation time during the first class period. See attached for a list of chapters that will be covered. They will then prepare and give a **30-minute presentation** to the class on that chapter. It is up to the group members to decide on the main points to be covered. Group members may find it necessary to read supplemental materials in order to develop a full understanding of the concepts to be presented. The group should provide handouts of lecture notes and other materials to supplement their presentations. **All students in the class will read all chapters that are being presented, and all students will submit three discussion questions based on the material in the chapter. Discussion questions will be due at the beginning of class.**

2. Student-led class discussions (papers from the primary literature)

Each student will read a paper from the primary literature. He or she will then prepare and give a **15-minute summary and critique** of the paper to the class, after which he or she will lead the class in a discussion of the paper. Papers may be chosen from a list provided by the instructor (see attached), or students may select another paper with my prior approval. **All students in the class will read all papers that are being discussed, and all students will submit a written summary and critique of each paper. Summaries and critiques will be due at the beginning of class.**

3. PowerPoint presentation (research topic of the student's choice)

Each student will select a topic by 21 September for in-depth research. You will sign up for a presentation date on the 21 September. Topics must be approved by me. The student will read several sources from the primary and secondary literature, which will form the basis for a formal, **45-minute PowerPoint presentation** as well as for a written research paper. The student will choose one of the sources as the focus of the PowerPoint presentation and will provide copies of that paper to all other students in the class **at least one week prior to their presentation**. Because the PowerPoint presentation will focus primarily on one paper, it should not merely be a reading of the research paper. **All students will read all papers assigned to the class by the presenters, and all students will submit a written summary and critique of each paper. Summaries and critiques will be due at the beginning of class.**

4. Written materials (all written materials must be typed)

For the group presentations – All students (including the presenters) will submit three written discussion questions from each chapter of the book that is being presented. The questions should address the main topics of the chapter and should provoke thoughtful discussion of the material. Due at the beginning of class.

For the student-led discussions – All students (including the discussion leader) will submit a 500-word summary and critique of each paper that is being discussed. See attached for detailed instructions for preparing the summary and critique. Due at the beginning of class.

For the PowerPoint presentations – All students (except for the presenter) will submit a 500-word summary and critique of each paper that has been assigned by the presenter. These summaries and critiques will be no different than those prepared for the student-led discussion papers. See attached for detailed instructions. Due at the beginning of class. The student who is making the presentation will submit a 2500-word research paper. See attached for detailed instructions for preparing the research paper. Due at the time of the PowerPoint presentation.

For the departmental seminars – All students will submit a 500-word summary and critique for the two Biology Department seminars during the fall semester. These summaries and critiques will be no different than those prepared for the student-led discussion papers. See attached for detailed instructions. Also see attached for a schedule of the departmental seminars. Due the Thursday following the seminar.

5. Class participation

A seminar is only as good as its participants, and for a class to be excellent, everyone needs to be there and be prepared to participate. **You are required to attend all classes and to be on time.** Late appearances and unexcused absences will result in a loss of points. Remember, the goal of a seminar is for us to learn from one another. If you are confused during a presentation, stop the presenter and ask a question. Your participation in that capacity will probably help others in the class to better understand the concepts. At the end of the semester your performance will be rated approximately as follows:

- 20 pts -- participated frequently (at least once during each class) and added substance to the discussion
- 15 pts -- participated frequently (at least once during each class)
- 10 pts -- participated occasionally (not every class period)
- 5 pts -- participated rarely (once every couple of weeks), or questions and comments did not contribute much to the discussion
- 0 pts -- said something once or twice, or did not participate.

6. Attendance and critique of two departmental seminars

The Biology Department will host two seminars during the fall semester. Each student must attend the seminars and submit a summary and critique the following Thursday. If you cannot attend one of these seminars, you may substitute another seminar at the University of Memphis, University of Tennessee, etc. It will be your responsibility to find an alternative and have it approved before attending the seminar.

Grading and evaluation (600 pts total)

Presentations, etc. (200 pts total)	
Group presentation	50 pts
Student-led discussion	50 pts
PowerPoint presentation	100 pts
Written materials (280 pts total)	
Discussion questions for group presentation	30 pts (6 at 5 pts each)
Summary/critique for student-led discussions	120 pts (12 at 10 pts each)
Summary/critique for Powerpoint presentations	110 pts (11 at 10 pts each)
Summary/critique for departmental seminars	20 pts (2 at 10 pts each)
Student research paper (related to PowerPoint presentation)	100 pts
Class participation	20 pts

Final notes

I expect you to adhere to the **Rhodes Honor Code**. Cheating, including plagiarism, will not be tolerated, and will be dealt with according to the Honor System procedures.

I will be happy to accommodate students with **documented disabilities**. Please see me early in the semester so that we can work together with Student Disability Services to accommodate you.

This syllabus is tentative. I reserve the right to make changes, as necessary, especially if the class size changes.