

TROPICAL ECOLOGY PCB 3374 FALL 2016

Dr. JOHN GEIGER (geigerj@fiu.edu); email is best but must use ‘**PCB 3374**’ in subject line.

Fall 2016: M & W: 5:00-6:15pm AHC3-110
 Office: OE 224
 Office Hours: M-1:00-3:00pm, Tu-4:00-6:00pm or by appt.

SCHEDULE ***:

M 22 Aug.	First Meeting -Syllabus***, Introduction and lecture on Overview of Tropical Ecology-not covered in text
W 24 Aug.	Ch. 1: Tropical EVR & Climate (pgs. 1-24)
M 29 Aug.	Lecture on Tropical Seas-not covered in text
W 31 Aug.	Ch. 2: Deserts & EVR Factors (pgs. 26-56)
M 5 Sep.	Labor Day Holiday – NO class
W 7 Sep.	Ch. 3: Grasslands & PP (pgs. 59-79)
M 12 Sep.	Exam # 1: Chs. 1, 2, 3, ‘Overview of Tropical Ecology’, & ‘Tropical Seas’
W 14 Sep.	Ch. 4: Savanna & Population Dynamics (pgs. 81-139), Pt. 1
M 19 Sep.	Ch. 4: Savanna & Population Dynamics (pgs. 81-139), Pt. 2
W 21 Sep.	Guest Lecturer #1: TBD
M 26 Sep.	Ch. 5: Lakes & Biogeochem. Cycling (pgs. 142-201), Pt. 1
W 28 Sep.	Ch. 5: Lakes & Biogeochem. Cycling (pgs. 142-201), Pt. 2; HW #1 due (on Paper from Guest Lecturer #1, hardcopy)
M 3 Oct.	Ch. 6: Rivers & Estuaries (pgs. 204-239), Pt. 1
W 5 Oct.	Ch. 6: Rivers & Estuaries (pgs. 204-239), Pt. 2
M 10 Oct.	Exam # 2: Chs. 4, 5, and 6
W 12 Oct.	Guest Lecturer #2: TBD
M 17 Oct.	Ch. 7: Wetlands & Succession (pgs. 241-257), Pt. 1
W 19 Oct.	Ch. 7: Wetlands & Succession (pgs. 241-257), Pt. 2
M 24 Oct.	Ch. 8: Tropical Rain Forests & Biodiversity (pgs. 259-312), Pt. 1; HW #2 due (on Paper from Guest Lecturer #2, hardcopy)
W 26 Oct.	Ch. 8: Tropical Rain Forests & Biodiversity (pgs. 259-312), Pt. 2
M 31 Oct.	Ch. 9: Mountains & Community Gradients (pgs. 315-332)
W 2 Nov.	Ch. 10: Mangroves & Decomposition (pgs. 334-355), Pt. 1
M 7 Nov.	Guest Lecturer #3: TBD
W 9 Nov.	Ch. 10: Mangroves & Decomposition (pgs. 334-355), Pt. 2; HW #3 due (on Paper from Guest Lecturer #3, hardcopy)
M 14 Nov.	Exam # 3: Chs. 7, 8, 9, and 10
W 16 Nov.	Guest Lecturer #4: TBD

M	21 Nov.	Ch. 11: Coral Reefs & Community Ecology (pgs. 358-393)
W	23 Nov.	Ch. 12: Islands & Evolutionary Ecology (pgs. 395-425), Pt. 1; HW #4 due (on Paper from Guest Lecturer #4, hardcopy)
M	28 Nov.	Ch. 12: Islands & Evolutionary Ecology (pgs. 395-425), Pt. 2; TROPICAL SCRAPBOOK DUE
W	30 Nov.	Ch. 13: Cities & Human Ecology (pgs. 427-450)
M	5 Dec.	Exam # 4: Chs. 11, 12, and 13; NOTE Other Time: 5:00-7:00 pm

*****Syllabus and/or schedule is subject to change at professor's discretion.*****

Syllabus Document: This syllabus serves as a legally binding contract between the professor and students. Every aspect of the course is outlined within this document. If there are any questions or problems (e.g., schedule conflict with a holiday or personal issue), these need to be brought to my attention THE FIRST WEEK OF CLASS. Otherwise, all dates, class formats, etc. are set within this document. Any changes to the syllabus will be immediately shared with students in class and via electronic postings (i.e. emails, BlackBoard).

Course Materials: *Tropical Ecosystems and Ecological Concepts*, 2nd edition. Patrick L. Osborne, 2012. Cambridge University Press. ISBN-13: 978-0-521-17734-4

BlackBoard: The entire course will be administered through BlackBoard. The BlackBoard login can be found here: [FIU BlackBoard login](#)
The syllabus, and other class updates will be posted here (considering posting lecture slides???)
Students are responsible for checking the site and keeping up with all posted materials and information. Please contact me if you have questions about using this site.

Email: Please get an FIU student email address and check it daily. Any bulk emails I send to the class will be sent to this address only, and you will be responsible for all bulk emails I send.

Course Learning Objectives: At the course completion, successful students will:

- be able to locate the tropics,
- describe basic climatological patterns and the phenomenon responsible for them,
- describe tropical ecosystems and how they function, and
- understand some of the conservation issues that impact these biologically diverse ecosystems.

During my lectures, I will use active-learning approaches (i.e. **iClicker**) to help reinforce the learning experience. These activities are designed to draw you into the educational process. While this approach reduces lecture time, it does reinforce learning of key concepts and will help you develop critical thinking skills. Exposure to a variety of research scientists and their work will help you grasp the importance of the research process.

Lecture Structure:

—Lecture slides are produced to be an excellent learning tool for students. The core course material will be a part of the presentations, but additional material will be covered in lecture. Therefore, attendance and engagement during the presentations will be critical, but not totally sufficient, to ultimate success (i.e. an A).

—We will be taking breaks during the presentations so that all students have a chance to actively engage in learning the material rather than simply listening to the sound of my voice. These breaks will be used for active learning experiences, such as **iClicker** questions. Extra paper (i.e. loose leaf, torn from your notebook) will be required so that students may jot down short pieces of information from these active learning breaks over the course of the lecture period. These daily lecture activities will constitute your ‘Class Participation/Attendance’ grade component.

—I may often begin class with a quick synopsis of a current local or global events story that relates to the lecture of the day. Students will be responsible for the material in these opening discussions.

Grade Components and Proportions:

Exams – 4 Exams (15% each)	60%
Class Participation (i.e. lecture break activities/ iClicker ?’s) & Attendance	15%
Homework – from Guest Lecturer papers (4 X 4% each)	16%
Tropical Ecology Scrapbook	9%

Exams: There will be 4 Exams. All exam scores will count towards your final grade. There will be **NO** make-up exams, except with: 1) a document verified death in immediate family, or 2) a document verified hospitalization of student during scheduled exam day and time. There will be absolutely **NO** deviation from this policy under any circumstances.

Each of the tests is partially cumulative. Each primarily will include the material covered within that section of the course (80-90%). The remainder of the exam will be drawn from the information on previous tests. Exams will include material from the lectures, research lectures, and the book. Test format may include short answer, multiple choice, true / false, graphic interpretation, and essays. Your grade will be based, without exception, on the following scale:

- A 90 – 100%
- B 80 – 89
- C 70 – 79
- D 60 – 69
- F < 60

Class Participation & Attendance: This portion of your overall grade will incorporate ALL of the daily lecture break activities that we will perform each lecture. Therefore class attendance and engagement are necessary to fulfill this component. I will require the use of the iClicker1 or 2 device for this course. They can be purchased at the bookstore or online sources. I will post information on how to register your device for this course. ‘Official’ points will start being collected on **Monday, 29 August.**

Homework (#1-4): For each research paper review, read the assigned paper and answer the following questions: Be sure to answer all questions. Grading of these is primarily based on questions 1, 5, and 6.

1. What was the purpose of the paper, that is, what was the paper testing or what was its real objective?
2. What aspect of the paper did you find to be most interesting?
3. What aspect of the paper was most confusing?
4. Which graphical presentation was most helpful and which was most confusing and Why?
5. What was the most important point of the paper, that is, what is the message the paper is trying to convey?
6. What question would you like to ask the speaker to increase your understanding of his/her subject area.

These homework assignments are due at the start of class (i.e. **5:00pm**) on the dates indicated, submit them as hardcopy.

Tropical Scrapbook: During the course of the semester, you will collect electronic news articles concerning the tropics. Provide the date you found the article, the full url and write a **3 sentence synopsis** of the article. There are several sources (Yahoo News, Google News, the New York Times, NPR, Sciencedaily). Your scrapbook will be graded based on the number of articles included, semester-long activity, and the quality of your synopses. Last year students had as many as 80 articles.

Grading Policy Addendums:

—My first priority is the success of my students. Please feel free to come and see me in my office at any time. I will work extraordinarily hard to help you do well. Do not hesitate to take advantage of that.

—Students will be graded on their performance in the above areas ONLY. Any extra-curriculum activities (work, sports, army, applying for jobs) or special needs (you have to get an A to graduate, scholarship requirements) will not have ANY influence concerning the final grade. Future career plans will have ZERO influence on the grade you receive in this class. Incomplete grades will be considered only under extraordinary circumstances.

—I will record attendance, and attending lectures will be essential to do well on the tests. We will frequently cover information in lecture that will not be covered in the lecture slides. The slides provide core information, but we will go beyond these basics with more advanced

discussion/information in lectures. Specifically, success on the analytical questions will be dependent on class attendance.

—Plan to come earlier than usual for the day of the exam - it is your responsibility to be sure that the day of the exam you will not face any conflict with other activities. If you arrive to an exam more than 30 minutes late, or after the first person finishes the test (whichever comes first), you will not be allowed to take the exam and will receive a score of 0 (zero). I will not approve excuses that are within a student's control (e.g., not enough time to study, headache, car wouldn't start, I had to go for a job interview, I did not wake up early, traffic was terrible, etc.). You well know that Miami traffic is awful – that is NOT an excuse for being late.

—In order to qualify for a makeup exam (either from absence or tardiness), there must be a valid university-approved excuse. Students who simply do not show up for the exam will not be allowed to take a makeup exam and will receive a score of 0. No makeup exams will be given in the absence of a university-approved excuse. Examples of university-approved excuses include: documented medical emergencies, death of members of immediate family, and jury duty. A car accident will be accepted as an excuse only if the student provides a police report.

—Exam dates are set, and will not be changed. Make note of these immediately and plan accordingly. If you have a conflict, meet with me during the first week of class.

—Cheating will not be tolerated, and will be actively rooted out of this course. All personal items on test day must be left at the front of the room; only pencils will be allowed at the students' seats. I will give one warning for cases of expected cheating. The second warning will result on a zero for that exam – no questions asked. This will be strictly enforced, and I will not be lenient.

FIU Policies

Honor Code: More generally, I expect every student to maintain the highest standards of academic integrity. You are expected to follow the FIU Student Code of Conduct:

<http://www2.fiu.edu/~oabp/misconductweb/1acmisconductproc.htm>

Sexual Harassment Policy: FIU's sexual harassment policy is available at:

[http://bot.fiu.edu/files/Reg%20104.%20Sexual%20Harassment%209-12-08%20\(Final\).pdf](http://bot.fiu.edu/files/Reg%20104.%20Sexual%20Harassment%209-12-08%20(Final).pdf)

Other FIU Policies: <http://compliance.fiu.edu/ethics.htm>