Dickinson College Fall 2010

Forest Ecology & Applications

Syllabus

Instructor

Brian S. Pedersen Associate Professor pedersen@dickinson.edu Kaufman 130

Students are strongly encouraged to meet with the instructor in his office: drop by or make an appointment (there are no regular office hours). To make an appointment, send an e-mail request *suggesting several possible meeting times*.

Meeting times and locations

Lecture: Monday, Wednesday, & Friday 10:30-11:20 a.m. Kaufman 113 Lab: Monday 12:30-4:30 p.m. Kaufman 113

Description

An exploration of the structure and function of forests with a focus on trees. Levels of organization from organs to the biosphere are considered. A set of topics, such as leaf-atmosphere interactions, whole-tree physiology, stand dynamics, energy flows, and biogeochemical cycles, are examined in depth. The effects of human interventions in forests are considered as these provide insights into the processes operating within forests. The course includes quantitative analysis and a substantial field component. Three hours lecture and four hours laboratory each week. This course is numbered BIOL 320 and ENST 340.

Materials

There are three required texts:

Freinkel, S. 2007. American chestnut: The life, death, and rebirth of a perfect tree. University of California Press.

Preston, R. 2007. The wild trees: A story of passion and daring. Random House.

Thomas, PA. 2001. Trees: Their natural history. Cambridge University Press.

Students must have a calculator capable of basic scientific calculations and have it available and working during laboratory meetings and exams. During exams, students may not share calculators or use computers or mobile phones as calculators.

Students must be prepared for field activities with appropriate clothing. This may include rain gear, insulating layers, hats, gloves, and foot wear for walking in dirty and wet conditions. Students should bring drinking water and materials for taking notes.

Schedule and assignments

A course schedule will be provided separately. The schedule is subject to revision.

Reading assignments will come from the required texts, be available electronically, or be provided as hard copy. *These assignments are to be completed by the time of their listing in the course schedule.* Readings in addition to those on the course schedule may be assigned.

Laboratory assignments will be made throughout the semester. A laboratory report may be required at the end of the lab session or later, as assigned.

<u>Grading</u>

Students are not competing for grades in this course. It is possible for all students to receive A grades (and it is possible for no students to receive A grades).

All graded assignments will receive a letter grade. Course grades will be determined by assigning the standard numerical equivalents to the letter grades (e.g., A = 4.00, B + 3.33, F = 0.00) and computing the weighted average using the weights below.

In addition, students must receive passing grades (D- or better) on the laboratory and final exam components of the course to receive a passing grade in the course.

Midterm exams. The two 50 minute midterm exams will cover everything considered in the course prior to the exam. These exams are each worth 8% of the course grade.

Final exam. The 3 hour final exam will cover everything considered in the course. The final exam is worth 20% of the course grade.

Laboratory work. Grades for the lab component will be based on a variety of assignments, to be made throughout the semester. Together, these assignments are worth 40% of the course grade.

Book and journal reviews. These assignments are detailed in a separate handout. Each of the two reviews is worth 4% of the course grade.

Oral reports. This assignment is detailed in a separate handout. The oral report is worth 4% of the course grade.

Participation and cooperation. Your active participation in the course and cooperation with the instructor and other students is worth 12% of the course grade. Active participation includes maintaining an open and curious mind, diligently working on assignments, being prepared for and thinking during class meetings, engaging with colleagues during course meetings, asking questions of the instructor and other students, and answering questions posed by the instructor and other students. Active participation also includes taking responsibility for presenting lab work to the class and leading discussion of readings, as assigned.

Policies

By remaining enrolled in this course, students are indicating their acceptance of this syllabus.

Academic integrity. Dickinson College's Community Standards will be strictly enforced and violators will be prosecuted.

Appealing grades. Requests for reconsideration of an assignment grade must be submitted to the instructor, in writing, within one week of the assignment's return. The request must include the complete graded work.

Attendance. Attendance is expected at all course meetings. Students who miss meetings are responsible for what they missed, including new assignments, changes in assignments and assignment deadlines, and changes in future meeting times or locations. If you miss a meeting, or portion of a meeting, communicate first with your colleagues and then with your instructor to learn what you missed. Students do not need to provide excuses for absences (except as noted under *Missed and late work*, below).

Computers. Students are expected to make effective use of computers. Lost files, printer problems and similar issues are not valid excuses for submitting late work. Regularly backup work in progress and allow sufficient time to complete assignments.

Extra credit. There are no opportunities to earn extra credit in this course. To be fair to all students, the course grade for every student will be based on the same set of assignments.

E-mail. Students are responsible for course information sent to their Dickinson e-mail address. Check your e-mail regularly and insure that you always have sufficient space to receive new messages (messages will not be resent if they are returned).

Instructions. Students are expected to carefully follow all instructions provided. Failure to do so will adversely effect your course grade.

Missed and late work. Opportunities to submit work late or take exams at another time will be provided only in justifiable circumstances and with appropriate documentation (as determined by the instructor). If late work is allowed, a grade penalty may be imposed. If late work is not allowed, the assignment grade will be F.

Responsibility. Students are responsible for their learning in this course. If you do not understand instructions or material, notify the instructor. If you would like additional feedback on your progress in the course, contact your instructor.

Special needs. Students with special needs (e.g., learning disabilities) must request accommodation in advance. Normally, this means notice during the first two weeks of the semester.

Syllabus changes. This syllabus, and the course schedule and assignments, may be modified during the semester following reasonable notice. Please notify your instructor of any possible errors in the syllabus, schedule, or assignments.

Written submissions. Unless otherwise instructed, all written work must be typed double-spaced in a font about the same size as the one used here. Use standard 8.5×11" white paper with clean edges and 1" margins around the text. Single- and double-sided printing are both acceptable. Pages must be bound, in order. Your full name must be clearly shown on the first page. Additional style and format guidelines for particular assignments may be provided. Spelling, clarity of writing, and compliance with format requirements will be considered in assigning grades on written assignments, including exams.

Important dates

Midterm exam 1

Last day to submit first book or journal review

Midterm exam 2

Friday, October 1 (1030am)

Friday, October 15 (by 5pm)

Friday, November 5 (1030am)

Friday, November 5 (1030am)

Friday, December 10 (by 5pm)

Wednesday, December 15 (9am-noon)