WILD 6730
Forest Community Ecology
Credits: 4
Instructor: James A. Lutz

Course Objectives
After taking this course, students should be able to enter a forest ecosystem and analyze its present state, make inferences about its past, and speculate about its future. The class goal is to provide students with the skills to interpret, apply, and contribute to the body of ecological knowledge. Although the lectures and readings change from year to year based on current developments and instructors, the class has always and continues to develop four areas of expertise:

- **Information gathering**: critical review of ecological literature, conceptual synthesis of lectures, field observations of ecological patterns, and systematic measurement of forest structure, composition, and general characteristics.
- **Synthesis**: gather information from multiple, different sources into conceptual frameworks, develop ideas, insights, predictions or hypotheses about ecological patterns and processes.
- **Assessment**: quantitative analysis of ecological data (the two quantitative assignments use techniques almost universally applicable in analyzing vegetation).
- **Communication**: clearly and concisely convey your insights in the written form including predictions, results and interpretations of ecological concepts, use graphical and tabular displays of data to enhance communication of data and concepts.

The course is broken into three sections. First, we examine the role the physical environment plays in determining species and community distributions. Second, we look at natural stand development and biotic interactions that shape forested ecosystems. Third, we examine the role of disturbance in shaping these ecosystems.

We will use the primary literature for examples of important ecological processes and you will be expected to have read that information before coming to each class. References for each lecture will be posted to the website. Lectures will aim to tie together research from a number of studies to further our understanding of the systems or processes we are studying. The course will use examples from western North America to illustrate ecological principles as a means of building knowledge of systems to which students are most likely to conduct research. I will also weave examples from other forested ecosystems into lectures to increase our breadth of knowledge and to discuss some aspects of community ecology that are not as prominent in North American forested ecosystems.

**Required Text**
None. Readings are from the scientific literature.

**Evaluation**
Performance is evaluated with three essay responses to discussion questions, two data analyses (and reports), and a take home final exam consisting of three essay responses to discussion
questions. Assignments are evaluated at the standard expected of submission to professional journals. The rigor of these assignments is meant to prepare you for the standards of scientific writing expected of all graduate students in the College of Natural Resources.

Assignment Details
All assignments must be submitted by email, with text in Microsoft Word format (figures can be in PDF format). Format all work as follows: Times Roman, 12 point font, double spaced, 1” margins all around. Put your name, date, and assignment in the footer. Discussion papers are two pages maximum. Data analyses are four pages maximum. All communications are emailed to your registered email address. Assignments are due at midnight on the “Date Due” listed in this syllabus, or as updated on-line. Please limit your citations to those covered in the readings or in lectures.

The course has 100 total points. Your overall numerical score for the course is the sum of those components. Your grade for the class will be no lower than the following conversion: A, 93-100; A-, 90-92; B+, 87-89; B, 84-86; B-, 80-83; C+, 77-79; C, 74-76; C-, 70-73; D, 64-69; F, <63.

Point Distribution
Discussion Paper #1 – 9 points
Data Analysis #1 – 13 points
Discussion Paper #2 – 13 points
Data Analysis #2 – 13 points
Discussion Paper #3 – 13 points
Final Exam Discussion Paper #4 – 13 points
Final Exam Discussion Paper #5 – 13 points
Final Exam Discussion Paper #6 – 13 points

Students with Disabilities
The Americans with Disabilities Act states: "Reasonable accommodation will be provided for all persons with disabilities in order to ensure equal participation within the program. If a student has a disability that will likely require some accommodation by the instructor, the student must contact the instructor and document the disability through the Disability Resource Center, at least two weeks before the start of the course. Any request for special consideration relating to attendance, pedagogy, taking of examinations, etc., must be discussed with and approved by the instructor. In cooperation with the Disability Resource Center, course materials can be provided in alternative format--larger print, audio, diskette, or Braille."

Plagiarism
“Plagiarism includes knowingly representing by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials” (Student Code page 10). I expect that all the work you do in this class will be your own.

Attendance
I expect students to attend all lectures and discussion sections.