Seminar topic

Forests are among the most important ecosystems on Earth. The interacting effects of climate change, increased settlement in forests, and other forces have led to difficult questions regarding what is actually driving change in forest ecosystems and what management strategies are most appropriate. In this context, the seminar examines current themes dealing with forest ecology and management and focuses on conducting research in forest ecosystems and deriving appropriate management recommendations from that research.

Course structure

This seminar is structured around the concept of problem-based learning. Thus, within the general topic of forest ecology and management, the specific content of the class will be largely determined by the interests of the students. Emphasis will be placed on the process of inquiry as opposed to the reading and synthesizing of a body of literature. During the first several weeks of class, students will work on developing specific goals for the semester. These goals may include developing a research proposal, a scientific article, a review paper, etc. The next several weeks of class, students will work on these projects. While developing goals and working on projects, students will present their progress (which may include the review of several articles, data analysis, etc.) on a bi-weekly basis in 15 minute presentations that will be followed by 15 minute discussion periods during which the rest of the class offers input, answers questions that the presenter has posed, or asks their own questions of the presenter. The goal of the presentations will be (1) to educate your colleagues about the progress you have made – they will not have done the same readings, analysis, etc. that you have done; remember that the presentations should be geared to the class as a whole and not only the professor, (2) to give you an opportunity to clearly present the material on which you are working to an audience with varied backgrounds – remember that effective teaching and presenting require clear understanding of the subject, (3) to give you an incentive to maintain consistent progress on your work, and (4) to seek feedback and get ideas from your colleagues. The goal of the discussions is not to arrive at correct answers per se, but rather (1) to give the class an opportunity to learn about the various approaches that are being applied in ongoing research, (2) to creatively and openly engage in the process of inquiry, and (3) to offer constructive input to your colleagues. The discussion period should involve the entire group and not only the presenter and professor. The final one-third of the semester will consist of 1-hour long student-led presentations of their final term projects.

In addition to this student-led inquiry, which will be the bulk of the class, we will also have limited assigned readings that we will do as a group and discuss at the beginning of class prior to the student-led presentations. These readings will reflect current themes in forest ecology and management and will be read with greater scrutiny and attention to detail than usual.
Specific readings will be assigned the week before they will be discussed and will be made available on Cicada.

**Grading:** The final course grade will be based on the following:

- 25% weekly presentations
- 25% Participation in discussions and contribution to the seminar
- 25% Oral presentation of term paper
- 25% Term paper