Course Overview

This course is designed to function as a capstone learning experience for forestry majors, allowing students to integrate and reflect on coursework from across the forestry curriculum (AUCC 4c). In this class, you will work as part of a team to develop a management plan for a real forest stand in the context of its management environment. Over the course of the semester, you will develop the tools required to create a stand management plan through lectures, labs, assignments and in-class discussions of a broad array of topics, from functioning effectively as a member of a team, to financial analysis of silvicultural alternatives.

The progression of coursework for F 421 is roughly as follows: functioning in a team; review of silvicultural practices in the central Rocky Mountains; assessing forest stands; developing management alternatives; translating direction from forest policy and administration into management objectives and evaluation criteria; financial analysis of alternatives; and preparing professional documents and reports. Assignments and labs throughout the semester will require you to develop proficiency using the Forest Vegetation Simulator silvicultural planning utility and to communicate effectively in writing and in oral presentations. This course builds upon core competencies of writing, speaking, and problem solving in an integrative and complementary way (AUCC 4a).
Course Goals and Objectives

Goals:
Students will develop the skills necessary to evaluate forest stands within specific management contexts, develop appropriate, ethical management plans, communicate key aspects of stand management effectively to other foresters as well as non-specialists, and implement management alternatives and assess their effectiveness over a defined time horizon.

Specific objectives for students (from the Society of American Foresters Standards, Procedures, and Guidelines for Accrediting Educational Programs in Professional Forestry):

- Demonstrate the ability to make ecosystem, forest, and stand assessments.
- Demonstrate the ability to design and implement comprehensive inventories that meet specific objectives using appropriate sampling methods and units of measurement.
- Demonstrate the ability to analyze inventory data and project future forest, stand, and tree conditions.
- Demonstrate the ability to develop and apply silvicultural prescriptions appropriate to management objectives, including methods of establishing and influencing the composition, growth, and quality of forests, and understand the impacts of those prescriptions.
- Demonstrate the ability to analyze the economic, environmental, and social consequences of forest resource management strategies and decisions.
- Demonstrate the ability to develop management plans with specific multiple objectives and constraints.
- Demonstrate understanding of professional ethics, including the Society of American Foresters Code, and recognition of the responsibility to adhere to ethical standards in forestry decision making on behalf of clients and the public.

Course Prerequisites

F 230, F 321, F 322 and F 325

Required Texts and Materials

There is no required textbook; however, readings will be posted on RamCT throughout the semester.

Important Dates to Remember

Dates and assignments are tentative, and can be changed at the discretion of the professor.

Mandatory field trips: Sat. Sept. 12  
Sat. Sept. 26
Last day to withdraw: Mon. Oct. 19
Fall break: Mon. Nov. 23 – Fri. Nov. 27
Final examination: Tues. Dec. 15, 4:10 p.m.

Schedule of Assignments

Labs:
This course includes weekly lab assignments that are designed to guide students through preparation of a stand management plan. Most labs can be completed in the time allotted provided students review lab materials (e.g. readings, instructional videos) before coming to class.
Assignments:
Assignments include readings, participation in class discussions, and short writing assignments and exercises.

Final Project:
Students will be assigned to groups early in the semester. Each group will complete a final project consisting of development of a management plan for a real forest stand. Final project grades will be assigned to groups based on a written report and oral presentation due in the final week of class. Labs and assignments throughout the semester are intended to help groups progress towards completion of final projects. However, the final project grade is independent of lab and assignment grades.

Basis for Final Grade

Students will be assigned individual grades for labs and assignments except where explicitly noted by the instructor. Final project grades will be assigned to groups. Peer grades will be assigned to individuals based on feedback from members of each student’s final project group.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent of Final Grade</th>
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<tbody>
<tr>
<td>Labs</td>
<td>40%</td>
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<tr>
<td>Assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Final Project:</td>
<td>25%</td>
</tr>
<tr>
<td>(Written Report)</td>
<td>(20%)</td>
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<tr>
<td>(Oral Presentation)</td>
<td>(5%)</td>
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<tr>
<td>Peer grade</td>
<td>10%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
<td>80-89</td>
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<tr>
<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
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<tr>
<td>F</td>
<td>&lt;60</td>
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Course Policies

Late Work Policy:
Late work will not be accepted unless prior approval is obtained from the instructor. This policy may be relaxed at the discretion of the instructor given reasonable justification for the late work (e.g. illness, family emergency).

Extra Credit Policy:
Extra credit will not be offered for this course.

Grades of "Incomplete":
Per university policy, an instructor may assign temporary grade of Incomplete to a student who demonstrates that he or she could not complete the requirements of the course due to circumstances beyond the student's control and not reasonably foreseeable. A student must be passing a course at the time that an Incomplete is requested unless the instructor determines that there are extenuating circumstances to assign an Incomplete to a student who is not passing the course. When an instructor assigns an Incomplete, he or she shall specify in writing using the Department Incomplete Grade Form the requirements the student shall fulfill to complete the course as well as the reasons for granting an Incomplete when the student is not passing the course. The instructor shall retain a copy of this statement in his or her grade records and provide copies to the student and the department head or his or her designee. (Section I.6 of the Academic Faculty and Administrative Professional Manual)
Disability Access:
Colorado State University is committed to providing reasonable accommodations for all persons with disabilities. Students with disabilities who need accommodations must first contact Resources for Disabled Students before requesting accommodations from the professor. Resources for Disabled Students (RDS; http://rds.colostate.edu/home) is located in room 100 of the General Services Building. Their phone is (970) 491-6385 (V/TDD). Students who need accommodations in this course must contact the professor at the beginning of the semester to discuss needed accommodations.

Attendance Policy:
Students are expected to attend all classes unless they are unwell or are unable to attend due to a University-sanctioned activity. For the purposes of this regulation, University-sanctioned activities include competitions, events and professional meetings in which students are officially representing the institution. Appropriate sanctioned activities include:
  a. Intercollegiate athletics;
  b. Collegiate club sports and competitions;
  c. Conferences and workshops recognized by the University not related to academics;
  d. Commitments on behalf of the University (ASCSU, band, etc.); and
  e. Professional activities recognized by the University related to academics.
Department heads or their designated representatives must approve sanctioned professional and departmental activities. Other sanctioned activities must be approved by the appropriate program director on record with the Division of Student Affairs offices or the Department of Athletics.

The instructor will make a reasonable effort to allow students to make up quizzes missed as a result of University-sanctioned activities or illness provided the instructor is informed of the absence prior to the missed class. Students should look to RamCT and/or fellow students for lecture material missed as a result of absences.

Religious Accommodation:
Participation in official University activities, e.g., an out-of-town athletic event, or special religious observances may provide a legitimate reason for an excused absence. The student is responsible for discussing this with the instructor at the beginning of the semester.

Final Exam Policy:
Final examination week is part of the regular semester. Student attendance shall be consistent with University policy.

If a student has three or more final examinations (not classes) scheduled for the same day or if conflicts of examination times occur, the student may negotiate a time change with the instructors involved. If the parties involved cannot find a mutually agreeable time, the Registrar's Office indicates which courses must be changed. Note: The Registrar’s Office must be notified at least one week prior to Final Examination Week to allow instructors time to make appropriate accommodations. It is the student’s responsibility to initiate negotiations.

Any student who has a conflict with the examination schedule must inform the instructor as soon as possible before the examination. If an agreement cannot be reached between the instructor and student as to the appropriateness of a make-up examination the student should appeal to the department head.
http://www.registrar.colostate.edu/final-exams
**Professionalism Policy:**
Per university policy and classroom etiquette; mobile phones, iPods, etc. **must be silenced** during all classroom and lab lectures. Those not heeding this rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, etc., and have been warned may suffer a reduction in their final class grade. When emailing the instructor or TA, please include your full name, CSU ID, and the course number in your email.

**Academic Integrity:**
The Department of Forest and Rangeland Stewardship takes academic integrity seriously. At minimum, academic integrity means that no one will use another's work as their own. The CSU writing center defines plagiarism this way:

> Plagiarism is the unauthorized or unacknowledged use of another person's academic or scholarly work. Done on purpose, it is cheating. Done accidentally, it is no less serious. Regardless of how it occurs, plagiarism is a theft of intellectual property and a violation of an ironclad rule demanding "credit be given where credit is due."


If you plagiarize in your work you could lose credit for the plagiarized work, fail the assignment, or fail the course. Each instance of plagiarism, classroom cheating, and other types of academic dishonesty will be addressed according to the principles published in the CSU General Catalog (see page seven, column two: http://www.catalog.colostate.edu/FrontPDF/1.6POLICIES1112f.pdf).

Of course, academic integrity means more than just avoiding plagiarism. It also involves doing your own reading and studying. It includes regular class attendance, careful consideration of all class materials, and engagement with the class and your fellow students. Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, we will ask you to sign the CSU Honor Pledge as part of completing all of our major assignments. While you will not be required to sign the honor pledge, we will ask each of you to write and sign the following statement on your papers and exams:

"I have not given, received, or used any unauthorized assistance."

**Library & Research Help**
The CSU Libraries Help Desk provides research and technical assistance either in person at Morgan Library or by phone at 970-491-1841. Jocelyn Boice is the librarian supporting this course. Contact her by email at jocelyn.boice@colostate.edu or by phone at 970-491-3882 to ask questions or set up an appointment for in-depth research help.