TIME: 9:30-10:45 T-TH; 1:00-5:00 F

PLACE: Thompson Hall Annex - Tully Auditorium

INSTRUCTOR: Dr. Ian A. Munn  Office: 111 Thompson Hall
Phone: 325-1379  email: imunn@cfr.msstate.edu
Office Hours: 1:30pm - 3:30pm T-Th
(Please make an appointment whenever possible)

PREREQUISITES:

FO 4323 is the prerequisite for this course.

COURSE OBJECTIVES:

Students will develop a forest management plan for property owned by a local forest landowner. Very little new information, tools or skills will be presented in class. Instead, students are expected to utilize the knowledge and skills acquired in all previously completed course work. The course objective is to provide students the opportunity to demonstrate what they have learned and their ability to integrate and apply their education and professional training to a real world problem.

LEARNING OBJECTIVES:

Student will learn through experience how to synthesize information and skills acquired during their forestry education and apply them to real world problems.

GRADING:

Teams will be graded on how well they demonstrate the breadth and depth of their professional competence in required and optional assignments:

Required Assignments:

Statement of Landowner Characteristics and Objectives (10 points):

The team will submit a description of the landowner (e.g. landowner characteristics, particularly those relevant to the management of the property such as family status, employment status, and recreational pursuits) the landowner's mailing address, phone number and email address, a preliminary map of the landowner's property, a brief history of the property, and a detailed list of the landowner's objectives for the forest property. These objectives will serve as the underlying
framework for the management plan. Students should encourage the landowner to provide objectives that require active management of both the pine and hardwood timber and include at least one wildlife species.

**Inventory Proposal (20 points):**

Each team will be assigned a forested property to inventory. Teams will conduct a cursory exam of the property to generate preliminary data to be used in the development of a detailed inventory proposal. Each team will submit an inventory proposal, which includes a detailed cruise plan designed to achieve a sampling error of +/- 10% of the total merchantable volume for merchantable stands (combined) and +/- 20% of the mean number of trees in sub-merchantable stands. The instructor must approve the inventory proposal before the team begins the inventory of the assigned property.

**Forest Inventory Report (40 points):**

After their inventory proposal has been approved, each team will inventory their assigned property and report their findings.

**Forest Management Proposal (0 points; required to pass the course)**

Each team will present to the class a detailed overview of how they propose to manage the property in order to achieve the landowner’s objectives. The overview must include: 1) a description of the target forest, 2) a justification of how this target forest satisfies the landowner objectives, and 3) an overview of the transition management that will achieve the target forest. Presentations should be 15 minutes long. The instructor and class will critique each presentation. The purpose of this exercise is to encourage early initiation of the planning process and to identify any obvious pitfalls in the proposed plans.

**Forest Management Plan (100 points):**

Each team will submit a forest management plan based on the characteristics and objectives of their landowner and a forest inventory of the property. The plan will include, at a minimum,

1. a summary of the landowner objectives,
2. a detailed description of the property
3. an appraisal of the current market value of the property,
4. a narrative description of how the objectives can be met,
5. a detailed set of management prescriptions designed to achieve the objectives,
6. a financial analysis,
7. control procedures and
8. forest inventory projections for key points throughout the planning period based on the initial forest inventory and subsequent management practices.

(See the attached outline for more detailed instructions)
Presentation of Management Plan (30 points):

Each team will present their plan to the class, interested faculty members, and their landowner at the end of the semester. The presentation must summarize the key elements of the plan. All team members must participate in the presentation. Audio-visual aids are strongly recommended. Students will also be required to evaluate presentations by other teams. The order of presentations will be randomly determined.

Final Exam:

There is no final exam in this course.

Additional Required Assignment for FO 6423 Students (20 pts.):

In order to fulfill the extra requirements for a 6000 level course, each FO 6423 student is required to submit a written report (10-20 pages) addressing a topic pertinent to forest management and planning for NIPF landowners.

Optional Assignments:

Registered Foresters Exam: (20 points possible: percentage correct x 20. Points awarded for passing grades only.) Arrangements to take the test will be announced later.

Project Learning Tree Workshop: (10 points for successfully completing the workshop) Scheduled for Saturday, March 21st, 8:30 am – 3:00 pm, Tully Auditorium. Students must notify the instructor in writing or by email by class time, January 23, 2015 if they wish to attend the Project Learning Tree Workshop.

Tree Farm Inspectors Training Course: (10 points for successfully completing the course) Scheduled for Friday, February 27th, 1:00 pm – 5:00 pm, Tully Auditorium. Students must notify the instructor in writing or by email by class time, January 23, 2015 if they wish to attend the Tree Farm Inspectors Training Course.

Course grades will be awarded as follows:

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<thead>
<tr>
<th></th>
<th>FO 4423</th>
<th>FO 6423</th>
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<tbody>
<tr>
<td>A</td>
<td>190 points and above</td>
<td>A – 210 points and above</td>
</tr>
<tr>
<td>B</td>
<td>160-189 points</td>
<td>B - 180-219 points</td>
</tr>
<tr>
<td>C</td>
<td>140-159 points</td>
<td>C - 150-179 points</td>
</tr>
<tr>
<td>D</td>
<td>120-139 points</td>
<td>D - 130-149 points</td>
</tr>
<tr>
<td>F</td>
<td>below 120 points</td>
<td>F - below 130 points</td>
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Team members will evaluate each other’s contribution to the project. Each team member’s project grade will be adjusted according to the evaluation received from the other team members.

Assignments are due at a specific date and time. The penalty for late submission is ten percent of the possible score per calendar day. All reports must be typed and double-spaced. All required assignments must be submitted. Any team that does not submit all required assignments will receive an F for the course.

Students who sign up for Project Learning Tree and Tree Farm Inspector Training are expected to attend. Those who sign up but do not attend will be penalized 10 points. The penalty will be waived if the student presents a valid written excuse to the instructor before the scheduled workshop day.

CRUISING EQUIPMENT:

Teams may check out cruising equipment at the beginning of the semester for use in field exercises related to this class only. All equipment checked out should be returned when the Forest Inventory Report is submitted. Team members are responsible for returning the equipment in good condition. Team members are expected to pay reasonable repair or replacement costs for damaged or missing equipment. Final grades for team members will not be assigned until all equipment checked out by that team has been returned or arrangements have been made for its repair or replacement.

ATTENDANCE:

Attendance is mandatory during presentations. Absenteeism during this portion of the course will result in a 20 point per absence penalty. The penalty may be waived if the student presents a valid written excuse to the instructor before the scheduled presentation day.

RESERVE MATERIAL:

Example management plans and Mississippi's Best Management Practices Handbooks are on reserve in the Switzer Reading Room.

ASSISTANCE FROM THE INSTRUCTOR:

The intent of this course is to provide students an opportunity to integrate and apply the knowledge and skills acquired in all previously completed course work to a real world problem. Students are expected to respond in a professional manner. A satisfactory management plan will require hard work. Teams are advised to keep the instructor informed as to their progress. Don't hesitate to discuss any problems that arise with the instructor immediately. Students are welcome to drop by the office during the scheduled class, lab and office hours.
For questions on subject matter covered in other classes, students should first review their class notes and/or appropriate textbooks. If that fails, direct your questions to that course's instructor. For questions directly related to the assignments, students should see the instructor.

IMPORTANT INFORMATION:

Student Honor Code: Mississippi State has an approved Honor Code that applies to all students. The code is as follows: “As a Mississippi State University student, I will conduct myself with honor and integrity at all times. I will not lie, cheat, or steal, nor will I accept the actions of those who do.” Upon accepting admission to Mississippi State University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor Code. Student will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the MSU community from the requirements or the processes of the Honor Code. For additional information, please visit: http://honorcode.msstate.edu/policy

Title IX: MSU is committed to complying with Title IX, a federal law that prohibits discrimination, including violence and harassment, based on sex. This means that MSU’s educational programs and activities must be free from sex discrimination, sexual harassment, and other forms of sexual misconduct. If you or someone you know has experienced sex discrimination, sexual violence and/or harassment by any member of the University community, you are encouraged to report the conduct to MSU’s Direction of Title IX/EEO Programs at 325-8124 or by email to titleix@msstate.edu. Additional resources are available at http://www.msstate.edu/web/security/title9-12.pdf, or at http://students.msstate.edu/sexualmisconduct/.

Support Services: Students who need academic accommodations based on a disability should visit the Office of Student Support Services, 01 Montgomery Hall, call 662-325-3335, or visit the website at www.sss.msstate.edu.

COURSE OUTLINE:

(Note: This course does not hold regularly scheduled classes. Scheduled classes and associated contact hours are indicated by asterisk. For the remainder of the course, the topics and contact hours listed represent activities that students will undertake in completing the required assignments.)

I. Basics of Planning – 3 contact hours*
   Generic Management Plans and Planning
   Forest Management Plans

II. Landowner Characteristics and Objectives – 2 contact hours
   Landowner interviews
   Development of preliminary property description and maps

III. Inventory Report – 14 contact hours
Preliminary cruise
Assessment of necessary cruise intensity in light of preliminary cruise results

Inventory proposal
- Required cruise intensity
- Plot type and location
- Product specifications
- Species list
- Data requirements

Final Inventory
- Inventory cruise
- Stand delineation and mapping
- Compilation of cruise data at stand, forest-type and property levels
- Assessment of statistical accuracy
- Assessment of timber, wildlife, and recreational values

IV. Management Plan – 20 contact hours
- Development of optimal forest structure in light of landowner objectives
  - Optimal rotation age
    - Assessment criteria – financial and/or biological
  - Optimal forest composition by stand type and age class structure
- Management units
  - Unit specific objectives
  - Location
- Development of optimal transition management
- Harvest Scheduling
- Non-timber considerations
- Constraints – legal, social, biological, operational

Economic Assessment
- Current property value
- Cash flow from prescribed activities
- Value of property under optimal forest structure
- Projected profits/opportunity costs

Development of Work Plan
- Schedule of activities
- Activity specifications (e.g., residual basal area, seasonal constraints, etc.)

Plan for Monitoring and Evaluation
- Assessment of ongoing activities
  - Required inspections and associated protocol and scheduling
  - Evaluation Criteria
    - Compliance with instructions
    - Achieving intended outcomes
- Procedures for Plan Modification

V. Presentation of Plans – 6 contact hours*
## TENTATIVE COURSE SCHEDULE – 2015

<table>
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<th>Date</th>
<th>Event</th>
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| January 13 | Course Introduction  
Discussion of Landowner Objectives and Introduction to Management Plans |
| January 15 | Introduction to Management Plans (continued);  
Student Questions; Assign Landowners/Property;  
Team Leaders Sign Out Cruising Equipment; Cursory Cruise and Inventory Instructions |
| January 19 | Martin Luther King Holiday                                              |
| January 23 | Landowner Objectives Due at Noon                                       |
| January 23 | Sign up for Project Learning Tree, Tree Farm Inspector Course          |
| January 23 | T Cruise tutorial                                                       |
| February 6 | Inventory Proposal Due at noon (Strongly recommend earlier submission.) |
| February 17| ETS General Education assessment test (class attendance required)      |
| February 9-12 | Instructor Out                                                             |
| February 27| Tree Farm Inspectors Short Course (1-5 pm Tully Auditorium)             |
| March 6    | Inventory Reports Due @ 4 pm  
Team Leaders Return Cruising Equipment  
Topic and Preliminary Literature Review for Graduate Report Due |
| March 9-13 | Spring Break                                                            |
| To Be Arranged | Registered Forester's Exam                                               |
| March 17   | Review of Management Plan Components (Optional)                        |
| March 19, 20 | Meet with Instructor to present plan outline                            |
| March 21   | Project Learning Tree (all day Saturday  8am – 3:30pm)                  |
| March 23-27| Instructor Out                                                           |
| April 17*  | Management Plans Due @ 4 pm, Graduate Report Due.                       |
| April 21,23,24* | Team Presentations                                                      |

* Dates subject to change!!

Extra lectures or labs may be scheduled during the semester. If so, the instructor will notify students in advance via email at their university email address or through MyCourses. Students are expected to check on a daily basis.