FOREST VEGETATION-COURSE NOTES

INSTRUCTOR
Dr. Emily Scott, 154 NR Bldg., scottemi@msu.edu
Office Hours: M 2:00 – 3:00, W 1:00-2:00, or by appointment

REQUIRED TEXTBOOK

HELPFUL WEBSITES

Lecture:
1. Tree of Life Web Project
   http://www.tolweb.org/tree/
2. Angiosperm Phylogeny Website
   http://www.mobot.org/MOBOT/research/APweb/welcome.html
3. Phylogenetic Systematics
   http://evolution.berkeley.edu/evolibrary/article/phylogenetics_01

Lab:
1. Virginia Tech Dendrology
   http://www.fw.vt.edu/dendro/dendrology/main.htm
2. University of Connecticut Horticulture
   http://www.hort.uconn.edu/plants/index.html
3. Auburn Forestry (good for southern species)
   http://www.forestry.auburn.edu/samuelson/dendrology/index.html
4. Wikipedia (actually has some good species descriptions and up to date classification info! – just search on species, genus, family names)
   http://en.wikipedia.org/wiki/Main_Page

MATERIALS
Field Notebook or Clipboard – Required
10X Hand Lens – Required (Student Bookstore or http://www.forestry-suppliers.com/)
Sensible Shoes - Required
Pocket knife or pruning shears – Recommended

LECTURE
M and W 9:10 – 10:00 225 NR Bldg.
In lecture, we will discuss the basic biology, ecology, and taxonomy of woody plants. General topics include: morphology and anatomy, reproductive biology, physiology, life
history, variation, ecological associations, taxonomy and systematics. In addition, we will cover in detail the taxonomy, ecology, natural history, regeneration ecology, economic importance and management of important tree genera native to North America. We will also do some in-class activities to help you engage the lecture material. Feel free to ask questions during class! There will be two lecture exams in this course. These exams cover only material from lecture and are non-cumulative. Lecture materials are available on the web through ANGEL.

LABORATORY

W 3:00 – 5:50 Southeast Entrance NR Building

The laboratory component of this course will be devoted to the study of the identification, life history, and environmental tolerances of approximately 120 species of woody plants. An important component of this course will be learning to use vegetation characteristics to interpret the landscape – its history, its future, and its productive potential. On the afternoon field labs we will leave from the southeast entrance to the NR building promptly at 3:00 pm, so it is critical that you show up for lab on time with a positive mental attitude! We go out REGARDLESS OF WEATHER! so wear appropriate clothing! There will be graded exercises every lab, plus one lab midterm, and a lab final. ALWAYS BRING HAND LENS, YOUR CLIPBOARD, AND APPROPRIATE FIELD CLOTHING ON WEDNESDAYS!

Lists of new plants to be covered each week in lab will be available online via ANGEL at least 5 days prior to lab. You are expected to have learned the family name, scientific name, common name, and general characteristics of each plant BEFORE COMING TO LAB. To do this you should read the description in your field guide and/or utilize one of the many electronic study options (See above). Feel free to make use of any other plant manuals, field guides, or web sites that you have access to.

In every lab but two, we will visit 20-30 plants; 10 of these will be quiz plants and the remainder will be teaching plants. Quiz plants can be from any of the species you have been assigned for the current week and all previous weeks (EVERYTHING IS CUMULATIVE IN LAB!). For each quiz plant you will be asked to provide the family name (1), genus name (2 pts), specific epithet (1 pt), and common name (1 pt). Teaching plants will always be from the current week’s list. Your instructor or TA will use the teaching plants to demonstrate the distinguishing characters for each species. The lab midterm and final will be a combination of indoor and outdoor identification.

EVALUATION POLICIES

Attendance will not be taken, but there will be numerous in-class activities that will contribute significantly to your final grade. Remember that lab exams are always cumulative, while lecture exams are not. Grades in this course will never be curved;
therefore you are not in competition with your classmates. Everyone can earn a 4.0 in this course. Ten graded lab quizzes (50 pts each) will make up a significant portion of your grade in this course. At the end of the semester we will drop your lowest quiz score and use the remaining 9 to calculate your quiz average. For example, suppose you earn the following scores on weekly lab exercises: 40, 35, 26, 17, 25, 32, 37, 25, 31, 38. We would drop your lowest score (17) and calculate an average based on the remaining 9 (32 or 64%). There will also be an optional quiz given Wednesday, November 27 that can be used in exchange for another quiz. Missed lab quizzes, exercises, or exams can only be made up/excused with written proof of a medical problem or family emergency. Please contact the instructor as soon as possible if you foresee any problem that will conflict with you fulfilling the requirements of this course.

Final Course Grade

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<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Lecture Activities</td>
<td>15%</td>
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<tr>
<td>Lecture Exam I</td>
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<tr>
<td>Lecture Exam II</td>
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<tr>
<td>Lab Quizzes</td>
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<tr>
<td>Lab Midterm</td>
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<td>Lab Final</td>
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Grading Scale

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<td>0.0</td>
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ACADEMIC CONDUCT

Don’t Cheat! Studying with others is encouraged (see Study Tips), but don’t attempt to give each other answers during quizzes or exams, don’t sneak peeks at other’s answers, and don’t construct elaborate schemes to find out quiz/exam material ahead of time. If we see any of this happening you will receive a 0 for that assignment and the incident will be reported to the student’s academic dean.