HORTICULTURAL SCIENCE AND PRACTICES LABORATORY

HORT 202

COURSE POLICY AND SYLLABUS

SPRING 2013

Mr. Matthew W Kent

Lab Hours:
Monday sec 501: 2:00pm - 4:50pm
Tuesday sec 502: 12:45pm - 3:35pm
Wednesday sec 503: 9:10am - 12:00pm
Wednesday sec 504: 2:00pm - 4:50pm
Thursday sec 505: 12:45pm - 3:35pm

All lab sections are held in HFSB 112

Course Objectives (Learning Outcomes)

Horticultural Science and Practices Lab is designed to provide a broad understanding of Horticulture through basic and applied science. This is achieved through weekly quizzes over concepts, applied laboratory exercises that emphasize teamwork in creating and interpreting qualitative and quantitative data and synthesis of underlying concepts in group discussion, observation and discussion of specimens and technique on field trips, and written individually prepared in-depth analysis of team-collected experimental results.

- Botany
  o Learn scientific terminology to describe plant structures
  o Understand basic taxonomic relationships of plants

- Plant Biochemistry & Physiology
  o Understand the basic phenology of plant materials and the scientific means to manipulate the underlying plant physiology for practical purposes
  o Application of chemical growth regulators to illustrate the junction of biochemistry and economic horticulture
  o Introduction to plant essential elements
  o Experimentation with fertilizer application levels as a means of demonstrating physiological response, and as a platform for the discussion of environmental responsibility

- Soil Science
  o Provide a working knowledge of basic soil components
  o Introduction to soil conservation and use of sustainable materials for plant husbandry
  o Understanding of introductory soil chemistry and its impact on plant growth

- Entomology
  o Understanding of basic economic entomology of horticultural crops
  o Rediscovery of utility of scientific terminology, as applied to insects

- Horticulture
  o Basic understanding of asexual and sexual plant propagation techniques
  o Basic understanding of the care of landscape plant materials
  o Introduction to basic Horticultural mathematical calculations

Prerequisite: HORT 201 or registration therein.

Required Text
General Horticulture Laboratory Manual; Second Edition; David Wm. Reed
ISBN 0-8087-9470-1
Instructor Information

<table>
<thead>
<tr>
<th>Matthew Kent, Lecturer</th>
<th>Tulle Alexander, TA</th>
<th>Paige Graves, TA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues, 12:45pm</td>
<td>Mon, 2:00pm</td>
<td>Wed, 9:10am</td>
</tr>
<tr>
<td>Wed, 2:00pm</td>
<td>Thur, 12:45pm</td>
<td></td>
</tr>
<tr>
<td>HFSB 407 (office)</td>
<td>HFSB 517 (office)</td>
<td>HFSB 418 (office)</td>
</tr>
<tr>
<td>HFSB 403 (lab)</td>
<td>HFSB 502 (lab)</td>
<td>HFSB 402 (lab)</td>
</tr>
<tr>
<td>845-4528 (lab)</td>
<td>845-0135(lab)</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:mkeagle@tamu.edu">mkeagle@tamu.edu</a></td>
<td><a href="mailto:tulle5586@neo.tamu.edu">tulle5586@neo.tamu.edu</a></td>
<td><a href="mailto:paige_g_08@neo.tamu.edu">paige_g_08@neo.tamu.edu</a></td>
</tr>
</tbody>
</table>

Office Hours
Each instructor will inform you of his/her office hours during lab. If you need one of us, phone and office numbers as well as e-mail addresses are provided above.

Attendance and Make-up Labs

- Attendance is mandatory and you must attend each lab in its entirety. A late arrival (after the quiz is over) and/or early departure (before the entire class is dismissed) will result in a zero on the weekly quiz.
- We realize that emergencies may prevent you from attending lab. If this occurs, you are allowed to attend another lab section. However, you must get permission from both your instructor and the instructor who teaches the lab you wish to attend in advance.
- All make-up labs must occur the same week as the missed lab. It is not possible to make up a lab after the missed week, whether the absence is excused or unexcused, due to the changing lab setup.
- Make-up labs are only allowed for university acceptable excuses or with permission of the instructor. Excused absences are defined in the Student Rules (see http://student-rules.tamu.edu/rule7.htm). Labs change every week, so make-up labs can only occur during the week they are missed. If the missed lab cannot be made up during that week, your quiz grade for that week will be a 0.
- You may only miss 3 labs. If you have 4 or more excused absences, you will receive a grade of “I” (incomplete). If the majority of your absences (3) are unexcused, you will receive a grade of “F” in the course.

Grading

HORT 202 is a separate course from HORT 201 and will have a separate 1 hour grade. Grades are determined as follows:

- Weekly quiz grades = 50%
- Lab report = 50%

A. Weekly Quizzes:
Weekly quizzes will be given. You will be allowed to drop a maximum of 2 quizzes, with your grade being determined from a minimum of 9 quizzes. Each quiz will be worth 10 points. 80% or 8 points of each quiz will be based on the previous week’s lab material. 20% or 2 points of each quiz will be based on the current week’s lab material. Therefore, you are required to read each week’s lab material BEFORE coming to class. Each quiz will be 10 minutes long and start 5 minutes after class time. If you arrive while a quiz is in progress, you may take the quiz but you must complete it by the standard completion time (i.e., you will not be given an extension). If you arrive after the quiz has been completed, you will receive a grade of 0 for that quiz. Any student departing from lab early will have his/her quiz invalidated (a grade of 0) and will be considered absent for that lab. Clarification:
This policy dictates that there will be no make-up quizzes given whether the absence is excused or unexcused. Two quiz grades will be dropped to compensate.

B. Lab Report:

- We will be conducting a series of lab exercises throughout the semester. Most exercises will produce data. Your lab report grade will be based on data collected and questions answered about each exercise. Data will be collected as a group and shared in class. If you are absent, you are responsible for obtaining missing data from the TA.
- Answers to questions in your lab report must be your own and may not be shared.
- You are not allowed to work in groups to develop answers to the questions. Any duplicated/plagiarized answers that are found between lab reports will be considered academic misconduct. If it is determined that you worked with others in developing answers, this will be handled as academic misconduct (see http://www.tamu.edu/aggiehonor).
- If physical assistance is needed to fill out the lab report due to a temporary disability (I can’t fill out my lab exercises by myself because my wrist is broken!), permission must be requested from the instructor.
- Lab reports will be due as experiments are finished. These will occur throughout the semester, however, a large number of these will occur towards the end of the semester. Your lab TA will remind you of the exact dates during the semester. For lab reports turned in after the due date, the grade for that report will be reduced by 10% per day late.
Americans with Disabilities Act (ADA) Policy Statement
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information, visit http://disability.tamu.edu.

Copyrights
Please note that all handouts and supplements used in this course are copyrighted. This includes all materials generated for this class, including but not limited to syllabi, exams, in-class materials, review sheets, and lecture outlines. Materials may be downloaded or photocopied for personal use only, and may not be given or sold to other individuals.

Academic Integrity Statement and Policy
No form of academic misconduct will be tolerated in HORT 202 lab. Be aware that copying answers during lab quizzes, any copied or plagiarized answers, or any answers developed in discussion with others in lab reports are forms of academic misconduct. Please refer to Student Rules (http://student-rules.tamu.edu/) and the Honor Council Rules and Procedures (http://www.tamu.edu/aggiehonor). It is the student’s duty to read, understand and comply with these policies. "An Aggie does not lie, cheat or steal, or tolerate those who do."

Hazardous Materials Statement
Do not perform any procedure until all risks are understood and all actions can be performed in a safe, informed manner. When in doubt, ask for help.
- Hazards in the Hort 202 laboratory include:
  - Chemicals
    - fertilizer solutions (Lab 10)
    - plant growth regulators (Lab 6)
    - rooting compounds (Lab 8)
    - cleaning solutions (Lab 9)
    - concentrated sulfuric acid (Lab 9)
    - Chemicals will be handled with gloves, and with protective clothing when appropriate. Students will be strictly monitored. Any improper exposure to these chemicals should be reported to the instructor immediately.
  - Air-borne Irritants (Labs 4-10)
    - perlite
    - vermiculite
    - Particulate masks will be issued to students when appropriate. Students with respiratory problems may be exempt from primary contact with these components with a doctor’s excuse, or by permission of the instructor.
  - Mechanical Hazards (Lab 8 & 9)
    - The use of sharp instruments in lab is required, and students should exercise caution. The best way to avoid injury is to proceed slowly and follow instructions.
Syllabus

Your lab book is divided into sections: Laboratory 1 through Laboratory 14. We will cover 1 laboratory section per week, except week 4. We will be covering these laboratory sections in the order presented in the notebook, except the final two labs, which are switched. A tentative schedule follows:

<table>
<thead>
<tr>
<th>Calendar Week</th>
<th>Laboratory Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1, Jan 14-17</td>
<td>Lab 1, Orientation to the Laboratory</td>
</tr>
<tr>
<td>Week 2, Jan 21-24</td>
<td>Lab 2, Recognition of Plant Structures</td>
</tr>
<tr>
<td>Week 3, Jan 28-31</td>
<td>Lab 3, Plant Identification &amp; Taxonomy</td>
</tr>
<tr>
<td>Week 4, Feb 4-7</td>
<td>Lab 4 &amp; 5, Temperature &amp; Light</td>
</tr>
<tr>
<td>Week 5, Feb 11-14</td>
<td>Lab 6, Growth Control</td>
</tr>
<tr>
<td>Week 6, Feb 18-21</td>
<td>Lab 7, Growing Media &amp; Soils</td>
</tr>
<tr>
<td>Week 7, Feb 25-28</td>
<td>Lab 8, Asexual Propagation</td>
</tr>
<tr>
<td>Week 8, Mar 4-7</td>
<td>Lab 9, Sexual Propagation</td>
</tr>
<tr>
<td>Week 9, Mar 11-14</td>
<td><strong>Spring Break</strong></td>
</tr>
<tr>
<td>Week 10, Mar 18-21</td>
<td>Lab 10, Nutrition &amp; Fertilizers</td>
</tr>
<tr>
<td>Week 11, Mar 25-28</td>
<td>Lab 11, Pest Identification &amp; Control</td>
</tr>
<tr>
<td>Week 12, Apr 1-4</td>
<td>Lab 12, Landscape Plants (field trip)</td>
</tr>
<tr>
<td>Week 13, Apr 8-11</td>
<td>Lab 14, Overview of Turfgrasses (field trip)</td>
</tr>
<tr>
<td>Week 14, Apr 15-18</td>
<td>Lab 13, Overview of Vegetables and Gardening (field trip)</td>
</tr>
<tr>
<td>Week 15, Apr 22-25</td>
<td>Help Week, Remaining Lab Reports Due</td>
</tr>
</tbody>
</table>