Lab Syllabus
ORH 4804L Annual and Perennial Gardening Lab
Spring, Odd years
1 Credit

Milton
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5988 Hwy 90
Milton, FL 32570

Course Description:
ORH 4804L Annual and Perennial Gardening Laboratory
Credits: 1; Prereq: BOT 2010C or BSC 2010; Coreq: ORH 4804.
A hands-on lab to implement identification, production, propagation, installation, and maintenance of annual and perennial specialty garden designs. Activities include assessment (site evaluation and diagnosis), planting (design, site preparation and installation) and maintenance of the color portion of landscapes utilizing local gardens and plants produced in lab. Weekend field trip may be required.

Learning Objectives: At the conclusion of this course, the student will be able to:

- Recognize and identify 50+ annual and perennial plant species by common and scientific name through exposure to locally available live plant samples and application of concepts introduced as part of on-line lectures and hands-on laboratory exercises such as plant propagation, production, out-planting and maintenance activities.
- Gain annual and perennial plant production experiences via crop management activities, evaluation of crop performance and interpretation of annual and perennial plant growth performance across geographic regions and growth zones.
- Assess annual and perennial plant use and practice implementation of garden design concepts through the development of specialty garden designs, compiling lists of recommended plants, and participating in critiques of specialty garden designs.
- Practice implementation of garden management concepts via assessment and analysis of established annual and perennial gardens and development of a management activity plan/outline.

Websites
CANVAS (for supplemental lectures, print-outs, additional readings, plant identification lectures, Lab Workbook, group assignment descriptions, discussions, etc.) https://lss.at.ufl.edu/

Annuals and Perennials Plant Database with images http://hort.ufl.edu/faculty/orh4804/index.shtm

Optional Texts:

Optional readings:
Lab Format and Structure

- **Format:** See local posting for lab day and time. The use of tools and some outdoor, physical work can be expected. You will be notified when these outdoor activities are scheduled so that you can dress appropriately. A field trip will also be scheduled, and your local lab may occur on a Saturday.

- **Plant Identification:** Students will be exposed to almost 200 different plant species between the lecture and lab components of the class but only quizzed on 50 plants. A core set of plants representing several key groups of annual and perennial species are presented as part of the lecture course in CANVAS beginning in week 2. An additional list of plant species to be covered in this lab will be provided by your local lab instructor. There will be three cumulative ID exams. On exam days, plan on taking a 20-minute quiz followed by other scheduled lab activities. The exams are cumulative, meaning that by the end of the semester the identification exams will cover all 50 plants. These will be administered and graded by your local instructors for a total of 80 points, as designated below.

- **Written Assignments:** Five written exercises are described within the Lab Workbook. The Lab Workbook Exercises will be due one week after they are assigned. The Lab Workbook is provided in an electronic format and may be accessed in the WEEK 0 module in CANVAS. The written assignments may be completed on the pages of the lab workbook during lab but the lab report must be submitted as a written assignment via CANVAS.

- **Plant Production:** Each lab site will be assigned a group of plants to produce from a liner stage to a marketable plant. You will be asked to measure growth parameters, evaluate the growth and visual quality of these plants and to keep a photo log of your plants. There are three production assignments associated with this group of plants as outlined below. Students will collect data and information as a group but individual and independent lab reports will be prepared. For individual, independent lab reports there shall be no collaboration on synthesis, interpretation or presentation of results. Data collected for these assignments is not optional and must be turned in as scheduled to allow for statewide coordination and comparison of results.

- **Annual and Perennial Planting Projects:**
  
  **Germination of Annual/Perennial Seed:** Each student will germinate one or more flats of seed provided in lab and monitor the four stages of plug development. You will be responsible for the care of the seeded trays and present the seedling performance orally and in written format. This assignment is worth 10 points and will be graded using a rubric.

  **Individual Container Project:** Each student will be given a container for greenhouse plants to be transplanted into (you will choose the design and plants for your individual container). You will be responsible for caring for your container garden. This includes watering, fertilizing, weeding, protecting from unusual cold temperatures, etc. This assignment is worth 10 points and will be graded using a rubric.

  **Plant Lecture Project:** Students will choose plants from the list of plants that we are growing or have in the landscape and complete a detailed species report that will be submitted in CANVAS. (Plant selection should avoid plants presented in the plant group presentations from the lecture course). Your student lecture should include: scientific name, common name, botanical description, growth form, size, flower description, culture, tolerances, and use. Information on hybrid parentage, closely related species, or other available cultivars is encouraged. Presentations may use PowerPoint, video, photography, or other digital presentation methods that can be submitted via CANVAS. This assignment is worth 10 points and will be graded using a rubric.

  **Field Trip:** During a required scheduled lab day we will take a field trip to a commercial plug producer. Students will summarize the operation in a one page or less report and submit the report the following week. Field Trip reports will be submitted via CANVAS. This assignment is worth 5 points.

**Landscape Project Assessment and Discussion**
As a group students will design, install and maintain one or more garden projects using the plants grown and studied in class. These may include container and landscape gardens on campus. Your local site instructor will coordinate and grade your participation. This activity is worth 5 points for participation.
Student Evaluation
You will be graded on the accuracy, conciseness, and grammar of your work. Questions regarding your performance are welcome. Grading follows University standards and will be based on the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td><strong>Graded by Dr. Thetford</strong></td>
<td></td>
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<tr>
<td>Lab Workbook Exercises</td>
<td>75</td>
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<tr>
<td>Exercise #1 – Taxonomy, Nomenclature, Terms (10)</td>
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<tr>
<td>Exercise #2 – Leaf Terminology (10)</td>
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<td>Exercise #3 – Flower Anatomy (10)</td>
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<td>Exercise #4 – Site and Soil Analysis (15)</td>
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<tr>
<td>Exercise #5 – Plant Selection, Garden Layout and Cost Analysis (30)</td>
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<tr>
<td>Statewide Production and Assessments</td>
<td>30</td>
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<tr>
<td>Production Assignment 1 - Site Information and Production Protocol (10)</td>
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<tr>
<td>Production Assignment 2 - Plant Report 1 (10)</td>
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<tr>
<td>Production Assignment 3 - Plant Report 2 (10)</td>
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<tr>
<td>Plant Lecture Project</td>
<td>10</td>
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<tr>
<td><strong>Graded by local Site Instructors</strong></td>
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<tr>
<td>Plant identification quizzes</td>
<td>80</td>
</tr>
<tr>
<td>Annual and Perennial Planting Projects</td>
<td>20</td>
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<tr>
<td>Germination of annual/perennial seed (10)</td>
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<tr>
<td>Container design and presentation (10)</td>
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<tr>
<td>Field Trip Report</td>
<td>5</td>
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<tr>
<td>Landscape Project Assessment and discussion</td>
<td>5</td>
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<td>Total</td>
<td>225</td>
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• Grading follows University standards and will be based on the following scale:

<table>
<thead>
<tr>
<th>TOTAL POINTS</th>
<th>PERCENTAGES</th>
<th>ASSIGNED GRADE</th>
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<tbody>
<tr>
<td>212 - 225</td>
<td>94 - 100</td>
<td>A</td>
</tr>
<tr>
<td>202 - 211</td>
<td>90 - 93</td>
<td>A-</td>
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<tr>
<td>195 - 201</td>
<td>87 - 89</td>
<td>B+</td>
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<tr>
<td>186 - 194</td>
<td>83 - 86</td>
<td>B</td>
</tr>
<tr>
<td>179 - 185</td>
<td>80 - 82</td>
<td>B-</td>
</tr>
<tr>
<td>172 - 178</td>
<td>77 - 79</td>
<td>C+</td>
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<tr>
<td>163 - 171</td>
<td>73 - 76</td>
<td>C</td>
</tr>
<tr>
<td>157 - 162</td>
<td>70 - 72</td>
<td>C-</td>
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<tr>
<td>150 - 156</td>
<td>67 - 69</td>
<td>D+</td>
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<tr>
<td>141 - 149</td>
<td>63 - 66</td>
<td>D</td>
</tr>
<tr>
<td>135 - 140</td>
<td>60 - 62</td>
<td>D-</td>
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<td>&lt;135</td>
<td>&lt;60</td>
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Student Responsibilities
• Attendance: You are expected to attend all meetings of the class, including a scheduled fieldtrip.
• Preparation: You are responsible for printing the lab hand-outs.
• Plant ID Quizzes: In order to do well in this lab, students will need to spend considerable time studying living samples and power points, and practicing rote memorization of the scientific, common and family names. A digital camera or smartphone can aid you in this aspect of the lab.
• Handing in written assignments: Unless otherwise stated, all assignments must be turned in via CANVAS. For assignments not submitted via canvas the assignment must be turned in at the beginning of class on the due date.
• Completion of all assignments: You must complete all assignments and participate in class in order to pass the course. Data collection for class assignments is not optional as student collected data are needed by others for subsequent assignments.
<table>
<thead>
<tr>
<th>Week</th>
<th>Lab Topic</th>
<th>Lab Activity and Assignments</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>J11</td>
<td>Lab organization; Introduction of students/faculty; Tour of greenhouses and Teaching Garden.</td>
<td>Lab safety; Planting of plugs for statewide production projects. Assess greenhouse for Production Assignment 1</td>
<td></td>
</tr>
<tr>
<td>J18</td>
<td>Vegetative propagation Seed germination</td>
<td>Due: Production Assignment 1 - Site Information and Production Protocol Seed Germination</td>
<td>10</td>
</tr>
<tr>
<td>J25</td>
<td>Plant Nomenclature and Plant Groups Plant ID review</td>
<td>Due: Lab Workbook Exercise #1 Taxonomy &amp; nomenclature</td>
<td>10</td>
</tr>
<tr>
<td>F1</td>
<td>Morphology review Plant ID review</td>
<td>Due: Lab Workbook Exercise #2 Leaf terminology</td>
<td>10</td>
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<tr>
<td>F8</td>
<td>Crop management Plant ID review</td>
<td>Evaluate plants for Production Assignment 2 Due: Lab Workbook Exercise #3 Flower anatomy</td>
<td>10</td>
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<tr>
<td>F15</td>
<td>Field Trip</td>
<td>Due: Production Assignment 2 - Plant Report 1</td>
<td>10</td>
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<tr>
<td>F22</td>
<td>Plant ID review</td>
<td>Plant ID Quiz 1 Due: Field Trip Report</td>
<td>25 5</td>
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<tr>
<td>M1</td>
<td>Plant ID review</td>
<td>Evaluate plants for Production Assignment 3 Container planting</td>
<td>10</td>
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<tr>
<td>M8</td>
<td>Lecture Exam this week – no lab</td>
<td></td>
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<tr>
<td>M15</td>
<td>Spring Break</td>
<td></td>
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<tr>
<td>M22</td>
<td>Site and Soil Analysis Plant ID review</td>
<td>Landscape project discussion and planning Due: Production Assignment 3 - Plant Report 2</td>
<td>5 10</td>
</tr>
<tr>
<td>M29</td>
<td>Plant ID review</td>
<td>Plant ID Quiz 2 Due: Lab Manual Exercise #4 – Site and Soil Analysis</td>
<td>25 15</td>
</tr>
<tr>
<td>A5</td>
<td>Plant Selection, Garden Layout and Cost Analysis</td>
<td>Student presentations (Container and germination projects)</td>
<td>20</td>
</tr>
<tr>
<td>A12</td>
<td>Plant ID review</td>
<td>Due: Lab Manual Exercise #5 – Plant Selection, Garden Layout and Cost Analysis</td>
<td>30</td>
</tr>
<tr>
<td>A19</td>
<td>Student Presentations Plant ID review</td>
<td>Student Presentations Due</td>
<td>10</td>
</tr>
<tr>
<td>A26</td>
<td>Landscape Project Assessment and discussion</td>
<td>Cumulative ID Exam Greenhouse clean-up</td>
<td>30</td>
</tr>
<tr>
<td>M3</td>
<td>Lecture Final Exam</td>
<td>No Lab</td>
<td>225</td>
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</table>
Grades and Grade Points
For information on current UF policies for assigning grade points, see
https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/.

Attendance and Make-Up Work
Requirements for class attendance and make-up exams, assignments and other work are consistent
with university policies that can be found at:
https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/.

COVID Response Statements
For face to face courses a statement informing students of COVID related practices such as:
We will have face-to-face instructional sessions to accomplish the student learning objectives of this
course. In response to COVID-19, the following policies and requirements are in place to maintain
your learning environment and to enhance the safety of our in-classroom interactions.

• You are required to wear approved face coverings at all times during class and within
buildings. Following and enforcing these policies and requirements are all of our responsibility.
Failure to do so will lead to a report to the Office of
Student Conduct and Conflict Resolution.
• This course has been assigned a physical
classroom with enough capacity to maintain
physical distancing (6 feet between individuals)
requirements. Please utilize designated seats and
maintain appropriate spacing between students.
Please do not move desks or stations.
• Sanitizing supplies are available in the
classroom if you wish to wipe down your desks
prior to sitting down and at the end of the class.
• Follow your instructor’s guidance on how to enter
and exit the classroom. Practice physical distancing
to the extent possible when entering and exiting the
classroom.
• If you are experiencing COVID-19 symptoms
(Click here for guidance from the CDC on
symptoms of coronavirus), please use the UF
Health screening system and follow the instructions
on whether you are able to attend class. Click here
for UF Health guidance on what to do if you have
been exposed to or are experiencing Covid-19
symptoms. • Course materials will be provided to
you with an excused absence, and you will be given
a reasonable amount of time to make up work. Find
more information in the university attendance
policies.

Online course with recorded materials privacy
Statement:
Our class sessions may be audio visually recorded
for students in the class to refer back and for
enrolled students who are unable to attend live.
Students who participate with their camera engaged
or utilize a profile image are agreeing to have their
video or image recorded. If you are unwilling to
consent to have your profile or video image
recorded, be sure to keep your camera off and do
not use a profile image. Likewise, students who un-
mute during class and participate orally are
agreeing to have their voices recorded. If you are
not willing to consent to have your voice recorded
during class, you will need to keep your mute
button activated and communicate exclusively
using the "chat" feature, which allows students to
type questions and comments live. The chat will not
be recorded or shared. As in all courses,
unauthorized recording and unauthorized sharing of
recorded materials is prohibited.

Online Course Evaluation Process
Student assessment of instruction is an important
part of efforts to improve teaching and learning. At
the end of the semester, students are expected to
provide feedback on the quality of instruction in
this course using a standard set of university and
college criteria. Students are expected to provide
professional and respectful feedback on the quality
of instruction in this course by completing course
evaluations online via GatorEvals. Guidance on
how to give feedback in a professional and
respectful manner is available at:
https://gatorevals.aa.ufl.edu/students/. Students will
be notified when the evaluation period opens and
can complete evaluations through the email they
receive from GatorEvals, in their Canvas course
menu under GatorEvals, or via
https://ufl.bluera.com/ufl/. Summaries of course
evaluation results are available to students at:
https://gatorevals.aa.ufl.edu/public-results/.
Academic Honesty
As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code

Software Use:
All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities
The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Campus Helping Resources
Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.
• University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu

Counseling Services
Groups and Workshops
Outreach and Consultation
Self-Help Library
Wellness Coaching

• U Matter We Care, www.umatter.ufl.edu/
• Career Connections Center, First Floor JWRU, 392-1601, https://career.ufl.edu/

Student Complaints:
Residential Course:
•Online Course:
http://www.distance.ufl.edu/student-complaint-process

Cell phones and other electronic devices may be used to photograph plants during class but must be placed in silent mode. Students who receive or make calls/messages during class will be asked to leave. Students engaging in disruptive behavior (e.g., talking, texting, etc.) will be asked to leave the class. Repeat violations of these rules will result in dismissal from class.