BOT 2710: Practical Plant Taxonomy
Fall, 2019

Course Syllabus and Information

Class Location & Time:
   Lecture: Tuesday & Thursday 2nd period (8:30-9:20 AM), Bartram 211
   Laboratory: 4 sections (Thurs. per. 6-8; Thurs. per. 10-12; Fri. per. 2-4; Fri. per. 6-8);
               Rolfs 105

Instructors: Drs. Doug Soltis & Pam Soltis, 301 Dickinson Hall; 273-1963 & 273-1964;
E-mail addresses: dsoltis@ufl.edu & psoltis@flmnh.ufl.edu

Office Hours: Wednesday 10:00 - 11:00 AM or by appointment

Teaching Assistants: Anthony Melton (aemelton@ufl.edu); Maria Beatriz de Souza Cortez
(mariabiacortez@gmail.com)

Herbarium: 379 Dickinson Hall. Herbarium library has useful books on plant systematics and
identification and is open from 9:00 AM - 5:00 pm (closed during lunch). Request admittance at
Front Desk of Dickinson.

Course Website: Course materials and related information will be posted on the course E-
Learning (Canvas) website at http://elearning.ufl.edu/. You are responsible for all
announcements made in class and/or posted on the course website for this course. Log in with
your gatorlink userID and password.

           Sinauer Associates; Third Edition is also fine.
           (2) Laboratory Manual, available as a pdf on course website.
           (3) Optional: Castner, J. 2004. Photographic Atlas of Botany. (can also be
               obtained through lab, usually more cheaply)

Required equipment: Two dissecting needles, single-edged razor blades, forceps.
A 10X hand lens is optional.

Grading: Grade based on total of 600 points:
        2 tests (100 points each)
        10 lab quizzes (10 points each)
        lab notebook (50 points; due weekly)
        lab practical (50 points)
        final exam (100 points)
        2 assignments (50 points each; details to come later)
        optional extra credit projects (keying - 15 points; plant collection - 15 points, based on a
collection of 15 plants, pressed, dried, and identified, with labels, due on Monday of final
exam week; see Appendix 2 of text for details of how to identify plants and prepare a
herbarium specimen; movie nights; other opportunities)

All test questions come from information presented in lecture and lab, but READ YOUR
BOOKS for context and further information.

Grading Scale:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90% or above</td>
<td>A, A-</td>
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<tr>
<td>80-89%</td>
<td>B+, B, B-</td>
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<tr>
<td>70-79%</td>
<td>C+, C, C-</td>
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<tr>
<td>60-69%</td>
<td>D+, D</td>
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<tr>
<td>59% &amp; below</td>
<td>E, failing</td>
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Letter grades will be assigned following assessment of the distribution of scores, so these values
are approximate.

Note that a C- will not be a qualifying grade for critical tracking courses. In order to graduate,
students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). A
C- average is equivalent to a GPA of 1.67, and it therefore does not satisfy this graduation
requirement. For more information on grades and grading policies, please visit:

UF Counseling Services:

- Resources are available on-campus for students having personal problems or lacking clear
career and academic goals. The resources include:
  - UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and
    psychiatric services.
  - Career Resource Center, Reitz Union, 392-1601, career and job search services.
- Many students experience test anxiety and other stress related problems. “A Self Help Guide
  for Students” is available through the Counseling Center (301 Peabody Hall, 392-1575) and
  at their web site: http://www.counsel.ufl.edu/.

Honesty Policy:

- All students registered at the University of Florida have agreed to comply with the following
  statement: “I understand that the University of Florida expects its students to be honest in all
  their academic work. I agree to adhere to this commitment to academic honesty and
  understand that my failure to comply with this commitment may result in disciplinary action
  up to and including expulsion from the University.”
- In addition, on all work submitted for credit the following pledge is either required or implied:
  “On my honor I have neither given nor received unauthorized aid in doing this assignment.”
- If you witness any instances of academic dishonesty in this class, please notify the instructor or
  contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional
  information on Academic Honesty, please refer to the University of Florida Academic Honesty

Accommodation for Students with Disabilities:

- Students who will require a classroom accommodation for a disability must contact the Dean
see the University of Florida Disability Resources website for more information at: http://www.dso.ufl.edu/drp/services/.

- It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. After notification, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.
# Outline of Topics

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>August 20</td>
<td>Introduction to systematics (Ch. 1)</td>
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<tr>
<td>August 22</td>
<td>Nomenclature; principles of systematics; phylogenetics (Ch. 2, 3; Appendix 1)</td>
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<tr>
<td>Lab 1</td>
<td>Intro to lab; Field techniques; tools of plant identification; keying; Boltaceae;</td>
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<td>keys, floras, monographs (Appendix 2; Lab 1 and pp 8-10 of lab book)</td>
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<tr>
<td>August 27</td>
<td>Principles of systematics, phylogenetics continued (Ch. 2)</td>
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<tr>
<td>Lab 2</td>
<td>Principles of systematics, phylogenetics continued (Ch. 2)</td>
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<tr>
<td>Lab 2</td>
<td>Species and speciation; hybridization and polyploidy (Ch. 6)</td>
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<tr>
<td>Lab 2</td>
<td>Herbarium tour (pp 8-10 of lab book, from Lab 2); Databases; Phylogeny reconstruction</td>
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<tr>
<td>September 3</td>
<td>Molecular systematics (Ch. 5)</td>
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<td>September 5</td>
<td>Embryophytes, vascular plants, and seed plants: overview (Ch. 7)</td>
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<tr>
<td>Lab 3</td>
<td>Intro to georeferencing and use of georeferenced collection data; Molecular sequence alignment</td>
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<td>September 5</td>
<td>Introduction to the green plants (Viridiplantae) (Ch. 7)</td>
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<td>Lab 4</td>
<td>Vegetative characters (Ch. 4; Lab 2 of lab book); Alternation of generations; Intro to embryophyte clades</td>
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<tr>
<td>September 10</td>
<td>Embryophytes, vascular plants, and seed plants: overview (Ch. 7)</td>
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<td>September 12</td>
<td>Lycophytes (Ch. 8)</td>
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<tr>
<td>Lab 4</td>
<td>Vegetative characters (Ch. 4; Lab 2 of lab book); Alternation of generations; Intro to embryophyte clades</td>
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<tr>
<td>September 17</td>
<td>Ferns (Ch. 8)</td>
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<td>September 19</td>
<td>Gymnosperms: cycads, Ginkgo, Gnetales (Ch. 8)</td>
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<td>Lab 5</td>
<td>Lycophytes, ferns; use and construction of keys (Lab 5 of lab book)</td>
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<td>September 24</td>
<td>Gymnosperms: conifers (Ch. 8)</td>
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<tr>
<td>September 26</td>
<td>Angiosperms: overview and basal lineages (Ch. 9, appropriate sections)</td>
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<tr>
<td>Lab 6</td>
<td>Gymnosperms; key practice (Ch. 8; Lab 6 of lab book)</td>
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<td>October 1</td>
<td><strong>Test 1</strong> (through gymnosperms)</td>
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<td>October 3</td>
<td><strong>First Flower</strong></td>
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<td><strong>NO LAB: HOMECOMING</strong></td>
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<td>October 8</td>
<td>Angiosperms: magnoliids (throughout rest of semester: read corresponding sections from Ch. 9)</td>
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<td>October 10</td>
<td>Eudicot angiosperms: Overview; Ranunculales, Saxifragales</td>
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<tr>
<td>Lab 7</td>
<td>Floral characters (Ch. 4, Lab 3 of lab book); Fruit characters (Ch. 4, Lab 4 of lab book)</td>
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<td>October 15</td>
<td>Eudicot angiosperms (rosids): Malpighiales, Cucurbitales</td>
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<td>October 17</td>
<td>WeDigBio International Transcription Event</td>
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<tr>
<td>Lab 8</td>
<td>Basal angiosperms, magnoliids, Ranunculales, Saxifragales, Malpighiales, Cucurbitales</td>
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*Commented [MOU1]: Use one tree one planet app in one of these early labs*
October 22  Eudicot angiosperms (rosids): Rosales, Fabales
October 24  Eudicot angiosperms (rosids): Fagales, Myrtales, Brassicales
          Lab 9  Rosales, Fabales, Fagales, Myrtales, Brassicales
October 29  Eudicot angiosperms (rosids): Malvales, Sapindales
October 31  Eudicot angiosperms: Santalales, Caryophyllales
          Lab 10  Malvales, Sapindales, Santalales, Caryophyllales

November  5  Test 2 (through rosids)
November  7  Eudicot angiosperms (asterids): Cornales, Ericales
          Lab 11  Cornales, Ericales, Solanales
November 12  Eudicot angiosperms (asterids): Solanales, Gentianales
November 14  Eudicot angiosperms (asterids): Lamiales, Apiales
          Lab 11  Gentianales, Lamiales, Apiales, Asterales
November 19  Eudicot angiosperms (asterids): Asterales
November 21  Angiosperms: monocots Thanksgiving
          Lab 12  Asterales (cont.), monocots
November 26  Angiosperms: monocots
November 28  Thanksgiving
          NO LAB: Thanksgiving
December  3  Angiosperms: monocots

**FINAL EXAM:** Tuesday, Dec. 12, 7:30-9:30 am, place to be announced

**LAB WEBSITE:** e-learning; [http://elearning.ufl.edu/](http://elearning.ufl.edu/)
Log in with your gatorlink userID and password