SYSTEMATICS OF VASCULAR PLANTS
IB 168 & 168L

Instructor:


Lecture times:  Tu/Th 1:10 - 2 PM, 3030 Valley Life Sciences Bldg.
Lab times:  Tu/Th 9:10 AM – 12 PM (Ben); Tu/Th 2:10 -  5 PM (Tom), both in 3030 Valley Life Sciences Bldg.

Grading Policy:
Lecture and lab grades averaged (each 2.0 units/300 points) -- **enrollment in both lecture and lab is required**

Lecture grade:
(1) Two lecture exams (100 points each)
(2) Paper (≤5 pages of text) on topic in plant systematics:  100 points (toward lecture grade). Details on this assignment will be given in lab.

Lab grade:
(1) Two lab practicals (100 points each)
(2) Four lab quizzes (25 points each)

Course Schedule:

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<th>Dates</th>
<th>Lecture</th>
<th>Lab</th>
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<tr>
<td>Jan. 19</td>
<td>Introduction/Plant diversity (Baldwin)</td>
<td>Overview</td>
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<td>Jan. 26</td>
<td>Phylogenetics/Classification (Baldwin)</td>
<td>Review of reproductive structures and functions</td>
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<td>Feb. 2</td>
<td>Leptosporangiate ferns (Baldwin)</td>
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<td>Feb. 9</td>
<td>Conifers (Baldwin)</td>
<td>Conifers 1</td>
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<td>Quiz 1/Conifers 1</td>
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<td>Feb. 16</td>
<td>Cycads, ginkgos, and gnetophytes (Baldwin)</td>
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<td>Feb. 23</td>
<td>Origin of flowering plants 2 (Baldwin)</td>
<td>&quot;Basal&quot; angiosperms/Ranunculales</td>
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<td>Mar. 2</td>
<td>Species concepts (Mishler)</td>
<td>Plant diversification (Mishler)</td>
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<td>Caryophyllales 2</td>
<td>Botanical Garden/Review</td>
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Thurs. Jan. 21
Lecture: Principles of plant systematics (Baldwin)
Lab: Review of vegetative structures and functions

Thurs. Jan. 28
Lecture: Lycophytes and eusporangiate ferns (Baldwin)
Lab: Lycophytes and eusporangiate ferns

Thurs. Feb. 4
Lecture: Introduction to seed plants (Baldwin)
Lab: Leptosporangiate ferns 2

Thurs. Feb. 11
Lecture: Controversies over classification (Baldwin)
Lab: Conifers

Thurs. Feb. 18
Lecture: Origin of flowering plants 1 (Baldwin)
Lab: Quiz 2/"Basal" angiosperms 1

Thurs. Feb. 25
Lecture: Caryophyllidae (Baldwin)
Lab: "Basal" eudicots/Caryophyllales 1

Thurs. Mar. 4
Lecture: Plant diversification (Mishler)
Lab: Botanical Garden/Review
Tues. Mar. 9
Lecture: Pollination/Reproductive biology (Baldwin)
Lab: **Lab practical 1**

Tues. Mar. 16
Lecture: Biosystematics 1 (Baldwin)
Lab: Rosidae 1

Tues. Mar. 23
RECESS

Tues. Mar. 30
Lecture: Molecular systematics 1 (Baldwin)
Lab: Rosidae 3

Tues. Apr. 6
Lecture: Asteridae 1 (Baldwin)
Lab: Asteridae 2

Tues. Apr. 13
Lecture: Compositae (Baldwin)
Lab: Asteridae 4: Compositae

Tues. Apr. 20
Lecture: "Graminoid" monocots (TBA)
Lab: "Petaloid" monocots 2

Tues. Apr. 27
Lecture: Plant geography 2 (Baldwin)
Lab: Botanical Garden/Review

**Lecture Final**
**Thurs. May 13: 3--6 PM in 3030 VLSB**

Thurs. Mar. 11
Lecture: **Midterm**
Lab: Herbaria tour

Thurs. Mar. 18
Lecture: Biosystematics 2 (Baldwin)
Lab: Rosidae 2

Thurs. Mar. 25
RECESS

Thurs. Apr. 1
Lecture: Molecular systematics 2 (Baldwin)
Lab: **Quiz 3/ Asteridae 1**

Thurs. Apr. 8
Lecture: Asteridae 2 (Baldwin)
Lab: Asteridae 3

Thurs. Apr. 15
Lecture: "Petaloid" monocots (Baldwin)
Lab: **Quiz 4/"Petaloid" monocots 1**

Thurs. Apr. 22
Lecture: Plant geography 1 (Baldwin)
Lab: Grasses/sedges/rushes

Thurs. Apr. 29
Lecture: Systematics and conservation (Baldwin)
Lab: **Lab Practical 2**