

**SYSTEMATICS OF VASCULAR PLANTS
IB 168 & 168L**

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Text: Simpson, M. G. 2006. *Plant Systematics*. Elsevier/Academic Press.

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:

Tues. Jan. 19 Lecture: Introduction/Plant diversity (Baldwin) Lab: Overview	Thurs. Jan. 21 Lecture: Principles of plant systematics (Baldwin) Lab: Review of vegetative structures and functions
Tues. Jan. 26 Lecture: Phylogenetics/Classification (Baldwin) Lab: Review of reproductive structures and functions	Thurs. Jan. 28 Lecture: Lycophytes and eusporangiate ferns (Baldwin) Lab: Lycophytes and eusporangiate ferns
Tues. Feb. 2 Lecture: Leptosporangiate ferns (Baldwin) Lab: Leptosporangiate ferns 1	Thurs. Feb. 4 Lecture: Introduction to seed plants (Baldwin) Lab: Leptosporangiate ferns 2
Tues. Feb. 9 Lecture: Conifers (Baldwin) Quiz 1/Conifers 1	Thurs. Feb. 11 Lecture: Controversies over classification (Baldwin) Lab: Conifers
Tues. Feb. 16 Lecture: Cycads, ginkgos, and gnetophytes (Baldwin) Lab: Cycads, ginkgos, and gnetophytes	Thurs. Feb. 18 Lecture: Origin of flowering plants 1 (Baldwin) Lab: Quiz 2/"Basal" angiosperms 1
Tues. Feb. 23 Lecture: Origin of flowering plants 2 (Baldwin) Lab: "Basal" angiosperms/Ranunculales	Thurs. Feb. 25 Lecture: Caryophyllidae (Baldwin) Lab: "Basal" eudicots/Caryophyllales 1
Tues. Mar. 2 Lecture: Species concepts (Mishler) Lab: Caryophyllales 2	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 VL5B

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**