

INTRODUCTION TO SEED PLANT TAXONOMY - DRAFT

Biology 324, 2011

Lectures: Tuesday and Thursday 10:00-10:50, FNH 60.

Professor: Quentin Cronk, office: Rm. 222, Beaty Biodiversity Centre
e-mail: quentin.cronk@ubc.ca

Laboratories 2:00-5:00 pm Tuesday or Wednesday.

Tuesday: room 3001 Biological Sciences Bldg.

Wednesday: room 3009 Biological Sciences Bldg.

Laboratory Instructor/Coordinator: Shona Ellis, office: 2523 Biol. Sci. Bldg., phone 604-754-7725,
e-mail: shona@mail.ubc.ca

Teaching Assistants: Chris Lee and Erin Manton

TEXTBOOKS and LAB FEES:

Laboratory fee: \$20; please bring to first lab.

Laboratory text: Hitchcock, C. L. and A. Cronquist. 1973. Flora of the Pacific Northwest. Seattle:
U. of Washington Press. REQUIRED - bring to every lab.

Laboratory Manual: Will be distributed in the first lab.

Lecture text: NONE REQUIRED. For reference, the only modern text is: Judd, W. S., C. S.
Campbell, E. A. Kellogg and P. F. Stevens. 2007 (3rd ed.). Plant Systematics, a Phylogenetic
Approach. Sunderland, MA: Sinauer Associates, Inc.

Detailed Lecture Notes: available on the course website. Information on accessing this website is
on a separate handout. Any problems or questions about the website should be directed to
Shona.

IMPORTANT DATES:

Sept 13-14: Fieldtrip to UBC Botanical Garden. Meet at UBC Botanical Garden Entrance.

Oct 25: Lecture midterm examination.

Dec. 1: Collections due.

COLLECTION: Information in the first lab and on the course website.

MARKS IN COURSE: Lecture midterm 30%, Lecture Final 35%, Laboratory Quizzes 25%,
Project 10%.

LABORATORY QUIZZES: No lab quizzes the first two weeks of lab, but you can expect them in
most other labs, including the last scheduled (conifer) lab.

BIOL/APBI 324 SCHEDULES

LABORATORY SCHEDULE:

| DATE | FAMILIES |
|---------|---|
| 6-7 Sep | No Lab – Imagine! |
| 13-14 | Fieldtrip to UBC Botanical Garden |
| 20-21 | Flower parts, Basal Angiosperms and Magnoliids Eudicots: Ranunculaceae |
| 27-28 | Core Eudicots: Caryophyllaceae, Polygonaceae Rosids: Onagraceae |
| 4-5 Oct | Eurosids I: Fabaceae, Rosaceae |
| 11-12 | Eurosids II: Brassicaceae, Malvaceae Basal Asterids: Ericaceae |
| 18-19 | Euasterids I: Lamiaceae, Plantaginaceae, Scrophulariaceae |
| 25-26 | Euasterids I: Boraginaceae, Solanaceae Euasterids II: Apiaceae |
| 1-2 Nov | Euasterids II: Asteraceae |
| 8-9 | Monocots: Iridaceae, Liliaceae, Alliaceae, Orchidaceae |
| 15-16 | Fieldtrip to UBC Botanical Garden – Canopy Walkway |
| 22-23 | Commelinid Monocots: Poaceae, Cyperaceae, Juncaceae |
| 29/130 | Gymnosperms |

LECTURE SCHEDULE:

| Date | Topic |
|---------|------------------------------------|
| 6 Sept. | No School – Imagine That! |
| 8 | 1. Introduction, Flower Parts |
| 13 | 2. Primitive Flowers |
| 15 | 3. Major Groups; Stamens |
| 20 | 4. Perianth Evolution |
| 22 | 5. Floral Evolution |
| 27 | 6. Carpels and Fruits |
| 29 | 7. Inflorescences |
| 4 Oct | 8. Mating Systems |
| 6 | 9. Pollination Syndromes |
| 11 | 10. Nomenclature |
| 13 | 11. Variation and Evolution |
| 18 | 12. Plant Evolution |
| 20 | 13. Genomes and Chromosomes |
| 25 | MID TERM EXAM |
| 27 | 14. Hybridization and Polyploidy |
| 1 Nov | 15. Asteraceae |
| 3 | 16. Taxonomic Characters |
| 8 | 17. Orchidaceae |
| 10 | |
| 15 | 18. Types of Classifications |
| 17 | 19. Chemotaxonomy |
| 22 | 20. Grasses, Sedges, Rushes |
| 24 | 21. Biosystematics |
| 29 | 22. Gymnosperms |
| 1 Dec | 23. Flowering Plant Classification |