This syllabus is a general representation of the course as previously offered and is subject to change.

BIOL/APBI 210 – Vascular Plants

General Course Syllabus (as of September 2019)

About the Course:

Course Description: A comparative study of pteridophytes, gymnosperms and angiosperms, integrating form, function and ecology. This course is designed to introduce students to the major lineages of vascular plants, including the ferns, gymnosperms and flowering plants. Students will be introduced to basic plant structure (anatomy and morphology) and diversity, as well as topics in plant evolution. An understanding of vascular plants is essential for global citizens with interests in biodiversity, ecology, agriculture, forestry, medicine and biochemistry.

Course Format: Lecture and Laboratory
Credits: 4
Pre-requisites: One of BIOL 121 or SCIE 001 (or 8 transfer credits of first-year biology).

Course Learning Objectives:

By the end of this course, students should be able to:

- Evaluate the interactions between plants and people currently and throughout history.
- Interpret different views of the advent of agriculture, its impact on society, and the development of crop plants.
- Assess the issues surrounding plant and environmental manipulation by humans including breeding, genetic engineering. habitat loss, and influences on ecosystems.
- Explain how plants are perceived and used in different cultural contexts.
- Identify and explain general structural features, characteristics, and taxonomy of economic plants.
- Develop a knowledge base for critical evaluation of scientific issues in plant science.
- Choose topics of interest to explore within this area of study.
- Perpetuate interest/enthusiasm about plants and biodiversity.

Textbooks and Additional Resources:

Lab Manual (required): students must come to a lab during the first week of classes to pay a lab fee ($20.00 cash), get a lab manual, and confirm their lab registration. Students should also bring their textbook to lab.

Textbook (required): Biology of Plants, 8th edition, by Raven, Evert and Eichhorn (2012)

- Students may use the older 7th edition of the textbook, but if so the instructors will not be able to provide relevant page numbers.
- Students may also buy e-book access without the physical copy. Students are encouraged to search for the options that best fits their budget.
- Mastering Biology access is also included with the Bookstore purchase for additional practice questions, but purchase of this publisher content does not count towards class points and is optional.

Website: the course web site is hosted by Canvas. Students can access the website by going to www.canvas.ubc.ca and signing in using their campus-wide login.

Evaluation:

The grades breakdown may vary by term. Below is an example from 2018W:

Assessment	Weight
Lecture Portion:	
• Lecture in-class test (1)	12%
• Lecture in-class test (2)	12%
• Lecture final examination (cumulative)	24%
• In-class clicker assignments	2%
Laboratory Portion:	
• Laboratory mid-term examination	18%
• Laboratory final examination	25%
• Assignments & Quizzes	7%

NOTE: Students must pass the lab portion of the course to pass the course.

Course policy for in-class tests and lab mid-term: Students who miss the lab midterm, or a lecture in-class test must provide medical documentation within 48 hours of the missed exam/test to be eligible to write a make-up or have marks shifted to the final. Make ups are not possible for missed lab exam marks will be shifted to the final.

Schedule of Topics:

Below is an approximate schedule of lecture and lab topics (subject to change):

Week	Lecture Topic	Lab Topic
1	Course Overview The Plant Cell	-
2	The Plant Cell (continued) Organization of Plant Body	Lab 1: Intro
3	Organization of Plant Body (continued)	Lab 2: Cell/Tissue
4	Roots	Lab 3: Roots
5	Shoots	Lab 4: Stems
6	Photosynthesis **IN-CLASS TEST (1)**	Lab 5: Leaves
7	Phylogenetic Diversity of Plant Structure	**Lab Midterm**
8	Sex in Vascular Plants Seedless Vascular Plants	Lab 6: Clubmosses & Horsetails
9	Seed Plants: Seeds & Pollen	Lab 7: Ferns
10	Vascular Plants and Humanity	Lab 8: Conifers
11	**IN-CLASS TEST (2)** Evolutionary Themes	Lab 9: Angiosperms
12	Evolutionary Themes (continued) Flowering Plants	**Lab Final**
13	Flowering Plants and Review	-

University Policies:

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence.

UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom.

UBC provides appropriate accommodation for students with disabilities and for religious, spiritual and cultural observances.

UBC values academic honesty and students ae expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions.

Details of the policies and how to access support are available on the UBC Senate website.