

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

BIOL 343 – Plants and Peoples

General Course Syllabus (as of January 2020)

About the Course:

Course Description: This course focuses on the interactions of plants and human societies: the role of people in the origin, evolution and dispersal of food, drug and economic plants, and the influences of plants on human societies. Suitable for upper-level Arts students.

To truly understand the interactions between plants and humans (and other organisms) students will study the ecology, structure, reproduction, taxonomy, and chemistry of plants, focusing on flowering plants (angiosperms). Sample topics include how plants spice up our lives from flavours to colour, alter human perception, heal, poison, as well as investigate their cultural uses past and present.

Course Format: Lecture & Laboratory

Credits: 3

Pre-requisites: This course is restricted to students in year 3 or 4.

Course Learning Objectives:

By the end of this course, students will 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: purchase in class for a fee of \$20.

Course website: on Canvas (canvas.ubc.ca).

Evaluation:

Assessment	Weight
Project	20%
Oral or Poster Presentations	5%
Quizzes, Assignments, and Participation (incl. 3-minute short)	20%
Lab Final Exam	25%
Lecture Final Exam	30%

*Students **must** do all non-optional course components to pass the course.

Project: The project provides students an opportunity to research a topic they are interested in, related to plants and people. Students will submit a brief proposal (2-3 sentences) and a final paper of 7-12 pages (single-sided and double-spaced, including references). The general format of the essay will vary depending on the subject, so students should consult the instructor for any questions.

Presentation: Students have an **OPTION** of presenting either orally **OR** as a poster, based on interesting aspects about their project (or another topic they would like to share). Instructors and classmates will examine, evaluate and ask questions during the presentation (oral or poster) session.

Quizzes, Assignments, and Participation: There will be a few quizzes and assignments online and in labs to practice exam-type questions. Each lecture will also start with a short 3-minute presentation by students in the class. Students can sign up for a time slot and pick a topic of choice related to plants and people.

Exams: There will be a written final exam on the Lecture component consisting of multiple choice, short-answer, and essay questions, and a separate Lab Exam which tests information and techniques acquired during the lab portion of the course. Students must pass the lab exam to pass the course.

Schedule of Topics:

Week	Lecture Topic	Lab Topic
1	Unit 1 – Introduction	No labs
2	Unit 1 – Introduction	
	Fieldtrip – UBC Botanical Garden	
3	Unit 2 – History of People and Plants	
	Fieldtrip – Chinatown	
4	Unit 2 continued Unit 3 – Reproduction and Pollination	Lab #1 – Reproduction
5	Unit 4 – Plant Structure	Lab #2 – Plant Structure

6	Unit 4 continued; Pros and Cons of Agriculture Unit 5 – Plant Domestication and Biotechnology, Genetically Modified Plants	Lab #3 – Plant Families: Rosaceae, Cucurbitaceae, Solanaceae, Brassicaceae
7	Unit 6 – Spice up your life!	Lab #4 – Plant Families: Apicaceae, Lamiaceae, Fabaceae, [Chenopodiaceae]
8	Unit 7 – Substances/Materials Extracted from Plants; Fibres and Dyes	Optional Lab: Day to Dye for (dyeing with plant dyes)
9	Unit 8 – Plant Derived Beverages Field trip - Arboretum	Lab #5 – Plant Families: Asteraceae, Poaceae, Lily-like Monocots
10	Unit 9 – Meds/Poisons Fieldtrip – Beaty Biodiversity Centre	Lab #6 – Meds/Poisons Antibiotic Assay
11	Unit 9 – Meds/Poisons	Lab Exam
12	Unit 10 – Ethnobotany Antibiotic Assay	
Fieldtrip to Museum of Anthropology		
13	Presentations	Presentations

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 are 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](#).