

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: BIO 418		Number of Credits: 4 Course credit policy (105)															
Course Full Title: Ethnobotany Course Short Title: <i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>																	
Faculty: Faculty of Science		Department (or program if no department): Biology															
Calendar Description: <p>The relationship between plants and human cultures, with a focus on the Indigenous Peoples and environments of northwestern North America. Use of plants as foods, materials and medicines, plant nomenclature and folk classification, and the role of plants in religion and mythology.</p> <p>Note: Students with credit for BIO 421Q cannot take this course for further credit.</p>																	
Prerequisites (or NONE):		60 university-level credits including BIO 210.															
Corequisites (if applicable, or NONE):																	
Pre/corequisites (if applicable, or NONE):																	
Antirequisite Courses <i>(Cannot be taken for additional credit.)</i> Former course code/number: BIO 421Q Cross-listed with: Dual-listed with: Equivalent course(s): <i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>		Special Topics <i>(Double-click on boxes to select.)</i> This course is offered with different topics: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, topic will be recorded when offered.)</i>															
		Independent Study If offered as an Independent Study course, this course may be repeated for further credit: <i>(If yes, topic will be recorded.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) Yes, no limit															
		Transfer Credit Transfer credit already exists: <i>(See bctransferguide.ca.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Submit outline for (re)articulation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i>															
Typical Structure of Instructional Hours <table border="1"> <tr> <td>Lecture/seminar hours</td> <td>45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td>45</td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td>Total hours</td> <td>90</td> </tr> </table>		Lecture/seminar hours	45	Tutorials/workshops		Supervised laboratory hours	45	Experiential (field experience, practicum, internship, etc.)		Supervised online activities		Other contact hours:		Total hours	90	Grading System <input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit	
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Labs to be scheduled independent of lecture hours: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes		Maximum enrolment (for information only): 24 Expected Frequency of Course Offerings: 2 years <i>(Every semester, Fall only, annually, etc.)</i>															
Department / Program Head or Director: Gregory Schmaltz		Date approved: July 2021															
Faculty Council approval		Date approved: October 8, 2021															
Undergraduate Education Committee (UEC) approval		Date of meeting: November 26, 2021															

Learning Outcomes:

Upon successful completion of this course, students will be able to:

1. Identify the relationships between plants and Indigenous/traditional cultures.
2. Summarize how botany and biochemistry are used in identifying and understanding the ethnobotanical value of a given plant species.
3. Demonstrate the skills and methods used to collect, classify and preserve plant materials.
4. Differentiate the main categories of plant use by Indigenous Peoples and identify how plant value depends on cultural context, both material and spiritual.
5. Analyze how traditional plant knowledge has been utilized in our modern world, and the bioethics of using Indigenous knowledge.
6. Discuss the use of plants in Indigenous cultures.
7. Design a laboratory exercise to investigate the Indigenous use of plant materials.

Prior Learning Assessment and Recognition (PLAR)

☒ Yes ☐ No, PLAR cannot be awarded for this course because

Typical Instructional Methods *(Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.)*

Lectures will include: student presentations, demonstrations, small group discussions, audio-visual presentation, the use of models, videos, PowerPoint presentations, and charts.

Laboratory exercises, in a series of three-hour laboratory sessions, will complement the materials given in lectures.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials *(If more space is required, download Supplemental Texts and Resource Materials form.)*

Author	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. Schultes	Ethnobotany: evolution of a discipline	<input checked="" type="checkbox"/>		2008
2. Nancy Turner	Ancient pathways, ancestral knowledge: ethnobotany and ecological wisdom of Indigenous Peoples of northwestern North America	<input checked="" type="checkbox"/>	McGill	2014
3.		<input type="checkbox"/>		

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

Typical Evaluation Methods and Weighting

Final exam:	40%	Assignments:	10%	Field experience:	%	Portfolio:	%
Midterm exam:	20%	Project:	10%	Practicum:	%	Other:	%
Quizzes/tests:	%	Lab work:	20%	Shop work:	%	Total:	100%

Details (if necessary):

Typical Course Content and Topics

- Origins of agriculture
- Stimulating beverages
- Herbs and spices
- Starchy staples
- Legumes
- Grasses
- Medicinal plants
- Psychoactive plants
- Poisonous and allergy plants

Laboratory exercises:

- What's in food: carbohydrates, proteins, Vitamin C, lipids
- Bioactivity of Plants: potential identification of medicinal plants – two labs
- Plant structural materials – wood and fibers
- The spice of life – the sources and biochemistry of spices
- Students design and present short labs