

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

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

Course Code and Number: BIO 442		Number of Credits: 8 <u>Course credit policy (105)</u>																	
Course Full Title: Tropical Field School																			
Course Short Title (if title exceeds 30 characters):																			
Faculty: Faculty of Science		Department (or program if no department): Biology																	
Calendar Description: Students have an opportunity for an in-depth investigation of specialist areas in tropical biology, under the guidance of experts in the field. Note: Students must check with the biology department to determine course availability and content area for a particular semester.																			
Prerequisites (or NONE):		Any three BIO courses numbered 200 or above and permission of the department.																	
Corequisites (if applicable, or NONE):																			
Pre/corequisites (if applicable, or NONE):																			
Equivalent Courses (cannot be taken for additional credit) Former course code/number: Cross-listed with: Equivalent course(s): <i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i>		Transfer Credit Transfer credit already exists: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Transfer credit requested (OREg to submit to BCCAT): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes, fill in transfer credit form) Resubmit revised outline for articulation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No To find out how this course transfers, see bctransferguide.ca .																	
Total Hours: 180 Typical structure of instructional hours: <table border="1"> <tr> <td>Lecture hours</td> <td>15</td> </tr> <tr> <td>Seminars/tutorials/workshops</td> <td>30</td> </tr> <tr> <td>Laboratory hours</td> <td>45</td> </tr> <tr> <td>Field experience hours</td> <td>90</td> </tr> <tr> <td>Experiential (practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Online learning activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td>Total</td> <td>180</td> </tr> </table>		Lecture hours	15	Seminars/tutorials/workshops	30	Laboratory hours	45	Field experience hours	90	Experiential (practicum, internship, etc.)		Online learning activities		Other contact hours:		Total	180	Special Topics Will the course be offered with different topics? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, different lettered courses may be taken for credit: <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit <i>Note: The specific topic will be recorded when offered.</i>	
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Other contact hours:																			
Total	180																		
		Maximum enrolment (for information only): 24 Expected frequency of course offerings (every semester, annually, every other year, etc.): as interest and instructor availability																	
Department / Program Head or Director: Allan Arndt		Date approved: September 2017																	
Faculty Council approval		Date approved: September 8, 2017																	
Campus-Wide Consultation (CWC)		Date of posting: October 13, 2017																	
Dean/Associate VP: Lucy Lee		Date approved: September 8, 2017																	
Undergraduate Education Committee (UEC) approval		Date of meeting: October 27, 2017																	

Learning Outcomes

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

- a) Acquire ecological knowledge and explore specific biological characteristics of the tropical ecosystem being studied.
- b) Research and apply specific biological knowledge and concepts to solve a biological problem in a field setting.
- c) Collaborate in small and large groups settings to develop research methodology to carry out field work to investigate and answer a biological question.
- d) Use critical thinking and problem-solving techniques in a small group setting to develop solutions to research problems.
- e) Evaluate field data, summarize and discuss observed and collected results.
- f) Communicate scientific observations through one, or more methods (posters, discussions, presentations etc.)
- g) Engage in discussions on contemporary biological, social and indigenous issues of the region being visited.

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)

The student can expect a combination of lecture and student seminar presentation. There will be a large component of field work, which will vary depending on the site being visited, but may include small research projects, observational learning in the field, practical conservation field work, demonstrative learning from local experts in the field, site specific visits for experiential learning etc.

Grading system: Letter Grades: ☒ Credit/No Credit: ☐ Labs to be scheduled independent of lecture hours: Yes ☐ No ☐

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 (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1.		<input type="checkbox"/>		
2.		<input type="checkbox"/>		
3.		<input type="checkbox"/>		
4.		<input type="checkbox"/>		
5.		<input type="checkbox"/>		

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

Typical Evaluation Methods and Weighting

Final exam:	%	Assignments:	%	Midterm exam:	%	Practicum:	%
Quizzes/tests:	%	Lab work:	%	Field journal:	25%	Shop work:	%
Term paper:	30%	Seminar presentation:	15%	Project report:	30%	Total:	100%

Details (if necessary):

Typical Course Content and Topics

This course is designed to take advantage of biological expertise within the department and in the community.

Introduction to Tropical Ecosystem Diversity:

- What are the tropics: brief geographical and climatic overview
- Latitudinal and altitudinal patterns of diversity
- Neotropics vs. paleotropics, α , β and γ diversity
- Influence of climate and topography on life zone distribution

Conservation Issues and Approaches:

- Endangered species monitoring
- Causes and consequences of habitat loss
- Edge effects and other abiotic effects of fragmentation
- Identifying conservation priorities (hotspots, gap analysis, red-lists, GIS)
- Parks and reserves (successes, failures, buffer-zone management, private lands, ecotourism)
- In-situ vs. ex-situ conservation examples
- Wildlife management: hunting and farming for conservation

This course is expected to vary each time it is offered, depending on the instructor and the specialist area to be investigated.