

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

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

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|--|-----------|---|----|---------------------|--|-----------------------------|--|--|--|------------------------------|--|--|----|--------------------|-----------|--|--|
| Course Code and Number: BIO 498 | | Number of Credits: 2 Course credit policy (105) | | | | | | | | | | | | | | | |
| Course Full Title: Advanced Biological Topics 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>Students will have the opportunity for an in-depth investigation of a specialist area of biology, under the guidance of an expert in the field. Students must obtain a faculty supervisor for this course before registering.</p> <p>Note: This course will be offered under different letter designations (e.g. C-Z) representing different topics. This course may be repeated for credit provided the letter designation differs.</p> | | | | | | | | | | | | | | | | | |
| Prerequisites (or NONE): | | Any three 200-level or above Biology courses and permission of the faculty supervisor. | | | | | | | | | | | | | | | |
| 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: 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 type="checkbox"/> No <input checked="" 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 type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input checked="" type="checkbox"/> 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>15</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></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: Student directed learning</td> <td>15</td> </tr> <tr> <td>Total hours</td> <td>30</td> </tr> </table> | | Lecture/seminar hours | 15 | Tutorials/workshops | | Supervised laboratory hours | | Experiential (field experience, practicum, internship, etc.) | | Supervised online activities | | Other contact hours: Student directed learning | 15 | Total hours | 30 | Grading System <input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit | |
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| Other contact hours: Student directed learning | 15 | | | | | | | | | | | | | | | | |
| Total hours | 30 | | | | | | | | | | | | | | | | |
| Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes | | Maximum enrolment (for information only): 6 Expected Frequency of Course Offerings: Every year <i>(Every semester, Fall only, annually, etc.)</i> | | | | | | | | | | | | | | | |
| Department / Program Head or Director: Gregory Schmaltz | | Date of meeting: October 1, 2021 | | | | | | | | | | | | | | | |
| Faculty Council approval | | Date of meeting: November 5, 2021 | | | | | | | | | | | | | | | |
| Undergraduate Education Committee (UEC) approval | | Date of meeting: January 28, 2022 | | | | | | | | | | | | | | | |

Learning Outcomes:

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

1. Interpret and summarize background concepts and techniques of a specialized area in biology under the guidance of an expert in that area.
2. Analyze and evaluate alternative viewpoints presented in the discussion of the specialist area.
3. Discuss and critique relevant scientific literature and the problems in the field.
4. Describe the historical context, methods of investigation, theory and research results.

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 independent learning and discussions with faculty. Laboratory and field components will be included when appropriate.

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.*)

Relevant papers will be available to students within the UFV library resources.

Typical Evaluation Methods and Weighting

| | | | | | |
|--|-----|-------------------|---|------------|------|
| Student interview: | 10% | Field experience: | % | Portfolio: | % |
| Student research or literature review term paper: | 80% | Practicum: | % | Other: | 10% |
| Public presentation of term work (oral, poster or conference): | | Shop work: | % | Total: | 100% |

Details (if necessary):

Typical Course Content and Topics

Stem cells in biology
 Environmental toxicology
 Advanced human physiology
 River and freshwater ecology
 Invasive species
 Biochemistry of proteins
 Gene annotation of drosophila