1 Course Details

1.1 Calendar Description

First part of the two-semester course ENVS*4001/2. The course permits the student the opportunity to integrate both the skills and knowledge acquired in earlier courses through application to current environmental problems and issues. Group research problems and exposure to critical environmental policy issues will form the core elements of the course. This is a two-semester course offered over consecutive semesters. When you select it you must select ENVS*4001 in the Fall semester and ENVS*4002 in the Winter semester. A grade will not be assigned to ENVS*4001 until ENVS*4002 is completed.

Equates: ENVS*4011
Restrictions: 12.00 credits, Registration in the BSC(Env) program.

1.2 Course Description

This course is the capstone course for the BSc (ENVS) Majors. This course is designed to prepare students as environmental professionals and will consist of two components: 1. A group research project - The main purpose of this project is to have students consult for an external client to focus on a current environmental issue and provide the opportunity to obtain real-world experience within an interdisciplinary environmental science context involving natural, physical, and social science elements. 2. A proposal - This activity will require your group to prepare a proposal for a real-world request for business for environmental professionals. Seminars and workshops will be conducted to focus on the development of the skills necessary to be an environmental professional, including design thinking, project management, preparing a CV, presentation skills, critical and constructive evaluation, and teamwork.

1.3 Timetable
Monday 7:00pm-9:50pm, Virtual meetings

(Note: this may change for the winter semester)

Course requirements:

<table>
<thead>
<tr>
<th>Project</th>
<th>Assignment</th>
<th>Due Date</th>
<th>Contribution to Final Mark (%)</th>
<th>Learning Outcomes Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Project</td>
<td>Literature Review / Annotated Bibilography</td>
<td>October 9, 2020</td>
<td>10</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td></td>
<td>Work plan</td>
<td>October 9, 2020</td>
<td>10</td>
<td>1, 2, 3, 4</td>
</tr>
<tr>
<td></td>
<td>Poster Presentation</td>
<td>End of March</td>
<td>10</td>
<td>4, 5</td>
</tr>
<tr>
<td></td>
<td>Final Report</td>
<td>End of W21</td>
<td>30</td>
<td>4, 5</td>
</tr>
<tr>
<td>Proposal</td>
<td>Background and Objectives</td>
<td>November 20, 2020</td>
<td>5</td>
<td>1, 2</td>
</tr>
<tr>
<td></td>
<td>Team</td>
<td>November 20, 2020</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Approach and Milestones</td>
<td>February 26, 2021</td>
<td>5</td>
<td>1, 2, 4</td>
</tr>
<tr>
<td></td>
<td>Budget</td>
<td>February 26, 2021</td>
<td>5</td>
<td>1, 2</td>
</tr>
</tbody>
</table>
### 2 Instructional Support

#### 2.1 Instructional Support Team

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
<th>Telephone</th>
<th>Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor</td>
<td>James Longstaffe</td>
<td><a href="mailto:jlongsta@uoguelph.ca">jlongsta@uoguelph.ca</a></td>
<td>+1-519-824-4120 x54269</td>
<td>ALEX 307</td>
</tr>
<tr>
<td>Instructor</td>
<td>Adam Gillespie</td>
<td><a href="mailto:agilles@uoguelph.ca">agilles@uoguelph.ca</a></td>
<td>+1-519-824-4120 x52075</td>
<td>ALEX 225</td>
</tr>
<tr>
<td>Course Co-ordinator</td>
<td>Alyson Brown</td>
<td><a href="mailto:alysonb@uoguelph.ca">alysonb@uoguelph.ca</a></td>
<td>+1-519-824-4120 x53393</td>
<td>ALEX 221</td>
</tr>
</tbody>
</table>

#### 2.2 Teaching Assistants

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Assistant</td>
<td>Tahmid Huq Easher</td>
<td><a href="mailto:thuqeash@uoguelph.ca">thuqeash@uoguelph.ca</a></td>
</tr>
<tr>
<td>Teaching Assistant</td>
<td>Kimber Munford</td>
<td><a href="mailto:kmunford@uoguelph.ca">kmunford@uoguelph.ca</a></td>
</tr>
</tbody>
</table>
3 Learning Resources

4 Learning Outcomes

4.1 Course Learning Outcomes

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

1. Apply a design thinking methodology to analyze and develop a solution to a real-world environmental problem.

2. Practice using problem solving techniques, in teams, to examine multiple solutions to the environmental challenge, incorporating a variety of perspectives through engaging with others in a group setting.

3. Engage in meaningful consultation with stakeholders (community members, industry experts etc.) to inform the development of the project solution.

4. Justify why the chosen solution meets the needs of the client using evidence-based perspectives and solutions.

5. Present the solution to the client in a written report and an oral presentation.

6. Present an up to date curriculum vitae highlighting relevant skills and knowledge related to the industry.

7. Build an emotionally intelligent mindset demonstrated through self-reflective practice.

5 Teaching and Learning Activities

5.1 Seminar

**Topics:** Seminars and workshops will occur periodically with a focus on professional development. Topics to discuss will include design thinking and project management, among others.

5.2 Lab

**Topics:** This course has one 3-hour ‘lab’ per week and will primarily be used to arrange for group update meetings.
6 Assessments

6.1 Assessment Details

Literature review / Annotated Bibliography (10%)
  Date: October 9, 2020
  Learning Outcome: 1, 2

Workplan (10%)
  Date: October 9, 2020
  Learning Outcome: 1, 2, 3, 4, 5, 7

Proposal Background and Objectives (5%)
  Date: November 20, 2026
  Learning Outcome: 1, 2, 3

Proposal Team (5%)
  Date: November 20, 2020
  Learning Outcome: 6

Proposal Approach and Milestones (5%)
  Date: February 26, 2021
  Learning Outcome: 1, 2, 4

Proposal Budget (5%)
  Date: February 26, 2021
  Learning Outcome: 1, 2, 4

Poster presentation (10%)
  Date: TBD end of March
  Learning Outcome: 1, 2, 3, 4, 5

Final Report (30%)
  Date: TBD - End of W21 term
  Learning Outcome: 1, 2, 3, 4, 5, 7

Peer evaluation (10%)
  Date: April 10, 2021
  Learning Outcome: 7

Progress updates and self-reflection (10%)
  Learning Outcome: 7

7 Course Statements

7.1 Grading Policies:

Assignments must be submitted via Courselink dropbox before midnight on the due date.
Poster assignments will be due during the appropriate lab period or otherwise as assigned.
All late assignments will receive a 10% deduction for each day, or part thereof, that they are late.

7.2 Course Policy on Group Work:
Group work is mandatory in this course.

7.3 Course Policy regarding use of electronic devices and recording of lectures:
Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

8 University Statements

8.1 Email Communication
As per university regulations, all students are required to check their e-mail account regularly: e-mail is the official route of communication between the University and its students.

8.2 When You Cannot Meet a Course Requirement
When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Graduate Calendar - Grounds for Academic Consideration
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions
https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml

8.3 Drop Date
Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml
8.4 Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website https://www.uoguelph.ca/sas

For Ridgetown students, information can be found on the Ridgetown SAS website https://www.ridgetownc.com/services/accessibilityservices.cfm

8.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community—faculty, staff, and students—to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be
construed as an academic offence should consult with a faculty member or faculty advisor.

Undergraduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Graduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

8.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph’s procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars
https://www.uoguelph.ca/academics/calendars

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

8.10 Illness

The University will not normally require verification of illness (doctor’s notes) for fall 2020 or winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.