**ENBUS 403A: SUSTAINBLE ENTREPRENEURSHIP PROJECT**

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**Office Hours:** By appointment

**Lectures:** Wednesdays 8:30-11:20am ROOM EV3 4408 or MS Teams

**Teaching Assistants (TAs):**

There are no TAs for this course

**Course Calendar Description**

A project course to integrate ideation, communication and problem-solving skills with venture proposal and prototype preparation. Students will learn about and be connected with various elements of the local entrepreneurship ecosystem. A sustainability lens will be used to assess the solution proposed. Teamwork is encouraged.

## Welcome back

NOTE: This course outline is a contract between the instructors and students. It is YOUR responsibility to:  
• Completely read this course outline and syllabus.  
• Understand its content.

## Contact Us

| **Who and Why** | **Contact Details** |
| --- | --- |
| **Instructor**   * Course-related questions (e.g., course content, deadlines, assignments, etc.) * Questions of a personal nature | **Post your course-related questions** to the **Ask the Instructor** discussion topic\*. This allows other students to benefit from your question as well.  **Questions of a personal nature** can be directed to your instructor.  ***Instructor***: Sean Geobey: *[sean.geobey@uwaterloo.ca](mailto:dan.murray@uwaterloo.ca)*  ***TA***: This year there will be no TAs for this course  Your instructor checks email and the ***Ask the Instructor*** discussion topic\* frequently and will make every effort to reply to your questions within 24 hours, Monday to Friday. When emailing the instructor, please indicate the course code in the subject line.  \*Discussion topics can be accessed by clicking **Connect** and then **Discussions** on the course navigation bar above.  Instructor experience in the Spring semester demonstrated that there was not a lot of participation in online office hours. Instead of a fixed office hour, your instructors are available for a Microsoft Teams call by appointment. We can meet one-on-one, or with your team. Don't hesitate to reach out via email to book a time to talk! We can accommodate different time zones to ensure al students have access to the instructors. |
| **Technical Support**   * Technical problems with Waterloo LEARN * Technical problems with PebblePad | [learnhelp@uwaterloo.ca](mailto:learnhelp@uwaterloo.ca?body=Name:%20%0D%0AUser%20ID:%20%0D%0ACourse:)  Include your full name, WatIAM user ID, student number, and course name and number.  Technical support is available during regular business hours, Monday to Friday, 8:30 AM to 4:30 PM (Eastern Time).  [LEARN Help Student Documentation](https://uwaterloo.ca/learn-help/students) |
| **Student Resources** | [Student Resources](https://uwaterloo.ca/extended-learning/learn-online/student-resources)   * Academic advice * Student success * WatCards * Library services and more |

### Announcements

Your instructor uses the **Announcements** widget on the Course Home page during the term to communicate new or changing information regarding due dates, instructor absence, etc., as needed. You are expected to read the announcements on a regular basis.

To ensure you are viewing the complete list of announcements, you may need to click Show All Announcements.

### Discussions

The course instructors have provided an ***Ask the Instructor*** discussion forum. Use the Ask the Instructor Forum when you have a question that may benefit the whole class. Also, check this forum to see if your question has already been answered before reaching out to your instructor.

Discussions can be accessed from the Course Home page by clicking Connect and then Discussions on the course navigation bar.”

## Course Description and Learning Outcomes

### Course Description

The application of the principles learned in earlier courses will focus on a particular project. Applications may include group projects of sufficient scope to demonstrate mastery of problem-solving, integration and communication on a selected topic related to environment and business, or on selected environmental issues related to a specific business operation.

This is the final core course of the Environment & Business program. The course is your opportunity to apply the knowledge you have acquired over the past four years from your courses and co-op terms to address a real-world sustainability problem that integrates environment and business concepts. This is accomplished by building out a new entrepreneurial solution to a sustainability issue you have identified, demonstrating **mastery of problem-solving, critical thinking, and communication** in the process.

The first half of the course (ENBUS 403A) will focus on understanding the complexity of the problem space you are working within (e.g. problem definition, situation analysis, conducting a literature review, solution identification and evaluation, developing your communication skills, and reflecting on your role as a social innovator). The second part of the course (ENBUS 403B) will focus on testing/refining your solution through primary research and data analysis and developing an implementation plan for your business model. The final products of ENBUS 403A/B will be a full business model coupled with a system map of your problem area at the end of the Winter term.

It is expected that through this project course, you will have gained all the skills required to work on research projects as an entrepreneur (ie. founding or co-founding a social purpose organization), in the workplace (i.e. get a good job and be a good employee) or in in academia (i.e. grad studies). **Important Note:**  You will receive a separate mark for ENBUS 403A and ENBUS 403B.

### Learning Outcomes

This course is intended to let you apply the knowledge obtained in the Environment and Business program to a real problem. By the end of this course, you will be able to:

* Create a clear definition of a problem in a real-world setting
* Create an implementable business solution to a real-world problem
* Analyze a complex problem using critical thinking, analysis and systems thinking skills and use this to create a system map
* Apply a variety of oral and written communication skills
* Self-evaluate your personal and/or teamwork capacities by developing and applying personal and project management skills
* Critique business solutions

## Course Assessment

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessment** | **Description** | **Due Date** | **Weight (%)** |
| Pre-class work | Preparation work in advance of each week's class, to be completed whether or not the class is attended. | Sun. 11:59 pm every week before class | 10 |
| Post-class work | Complete work in or reflect upon each week's class, to be completed whether or not the class is attended. | Sun. 11:59 pm every week after class | 10 |
| Problem Pitch | Develop a short pitch for the importance of the problem domain you are working in and the impact of developing a novel solution | Sun. Sept. 26 at 11:59 pm | 5 |
| PESTEL Analysis | Political, Economic, Social, Technological, Environmental, and Legal (PESTEL) Analysis of trends impacting your problem domain | Sun. Oct. 3 at 11:59 pm | 10 |
| Literature Review | Review academic literature tied to your problem domain | Sun. Oct. 24 at 11:59 pm | 20 |
| Strategy Evaluation Matrix | Evaluate potential solutions for the problem domain to select an effective solution | Sun. Nov. 14 at 11:59 pm | 10 |
| System Map & Leverage Points | Create a visual description of the problem domain and identify key leverage points | Sun. Nov. 21 at 11:59 pm | 10 |
| Presentation | Prerecorded presentations highlighting your research and the direction you plan on taking your solution that will be available to expert reviewers and the whole class. | Sun. Dec. 12 at 11:59 pm | 15 |
| Individual Reflection | **Individual Assessment:** Personal reflection on what you have learned in the process of the experiential learning experience of 403A | Sun. Dec. 12 at 11:59 pm | 10 |

## Course Schedule

Tentative course schedule. Detailed content and activities can be found in Weekly folders under Content/Table of Contents on LEARN.

|  |  |  |
| --- | --- | --- |
| **Week** | **Class** | **Content/Activity** |
| Week 1 | Sep. 8 | **Introduction to ENBUS 403**  Scoping your project and defining your problem |
| Week 2 | Sep. 15 | **Understanding Complex Systems**  **Schedule Advisor Meeting #1**  PESTEL Analysis, Macro-trends  Framing a Problem Pitch |
| Week 3 | Sep. 22 | **Identifying Actors and Leverage Points**  **Problem Pitch due September 26 at 11:59 pm.**  Identifying problems, Situational analysis |
| Week 4 | Sep. 29 | **Reviewing the Literature - Target Market and Intervention Strategies**  **PESTEL Analysis due October 3 at 11:59 pm.**  System Mapping  **Quantum Valley Problem Pitch applications due** |
| Week 5 | Oct. 6 | **Mapping Relationships**  **Schedule Advisor Meeting #2**  Leverage and scale |
| Reading Week | Oct. 13 | Take a break and take care of yourself! |
| Week 6 | Oct. 20 | **Developing Sustainability Strategies**  **Literature Review due October 24 at 11:59 pm.**  **Schedule Advisor Meeting #3**  Brainstorming responses to problems |
| Week 7 | Oct. 27 | **Strategy Evaluation**  Strategy evaluation matrix |
| Week 8 | Nov. 3 | **Selecting a Strategy**  Applying desirability, feasibility, viability analysis |
| Week 9 | Nov. 10 | **Presenting Effectively**  **Strategy Evaluation Matrix due November 14 at 11:59 pm.**  Understanding audience and tone |
| Week 10 | Nov. 17 | **Revising Presentation**  **System Map and Leverage Points due November 21 at 11:59 pm.**  **Advisor Meetings (if necessary)**  Providing peer feedback |
| Week 11 | Nov. 24 | **Revising Presentation**  **Advisor Meetings (if necessary)**  Receiving peer feedback  **Quantum Valley Problem Pitch Finals** |
| Week 12 | Dec. 1 | **Revising Presentation & Preview of ENBUS 403B**  **Advisor Meetings (if necessary)**  Pivoting towards solutions and business models  **Jack Rosen applications due** |
| Exam Period | Dec. 8 -  Dec. 23 | **Reflection due December 12 at 11:59 pm.**  **Presentation due December 12 at 11:59 pm.**  Relax, recharge, reorient for the Winter |

## Materials and Resources

### Textbook(s)

There is no required textbook for this course.

#### Recommended Text

*Social Research Methods,*A. Bryman, and E. Bell, 4th Canadian Edition, Oxford. (2019 ENBUS 306 Text Book)

OR

*Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, J. Creswell and J. Creswell.  5th Edition, SAGE, California. (2018 ENBUS 306 Text Book)

**AND**

Osterwalder, A., & Pigneur, Y. (2010). *Business model generation: a handbook for visionaries, game changers, and challengers*. John Wiley & Sons.

### Resources

## Advisor

You will work with your advisor throughout the term on any problems, ideas, providing resources, advice (of course), etc. In addition to two required advisor meetings, it's up to your team to decide how often you want to meet. We recommend setting up regular meetings with your advisor, and canceling them 24 hours ahead if you don't need them. You should send an agenda by email 24 hours prior to the meeting, and send action items to the advisor after the meeting.

For most students the advisor will also be the course instructor. However, for specific projects other expertise may be more critical and a different advisor may be better suited to your work.

## Experts

As appropriate, your advisor may suggest you get help from subject matter experts, who could be another faculty member, or any other appropriate resource.

[Library COVID-19: Updates on library services and operations](https://uwaterloo.ca/library/covid-19-updates-library-services-and-operations).

## Writing and Communication Centre

The Writing and Communication Centre (WCC) works with students as they develop their ideas, draft, and revise. Writing and communication specialists offer one-on-one support in planning assignments, synthesizing and citing research, organizing papers and reports, designing presentations and e-portfolios, and revising for clarity and coherence.

You can make multiple appointments throughout the term, or you can drop in at the Library for quick questions or feedback. To book a 25- or 50-minute appointment and to see drop-in hours, visit [uwaterloo.ca/wcc](http://uwaterloo.ca/wcc). Group appointments for team-based projects, presentations, and papers are also available.

**Please note** that communication specialists guide you to see your work as readers would. They can teach you revising skills and strategies, but will not change or correct your work for you.

## Intended Learning Outcomes and Course Assessments

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|  | **Assessment Methods (AM):** | | | | | | | |
| **My Place** | | **My Problem** | | | | **My Solution** | |
| **ILOs:** | Fall Reflection | Pre-/post-class templates | Problem Pitch | Literature Review | PESTEL Analysis | System Map & Leverage Points | Strategy Evaluation Matrix | Presentation |
| Create a clear definition of a problem in a real-world setting |  | X | X | X | X | X |  |  |
| Create an implementable business solution to a real-world problem |  | X |  | X |  |  | X | X |
| Analyze a complex problem using critical thinking, analysis and systems thinking skills and use this to create a system map |  | X |  | X | X | X |  |  |
| Apply a variety of oral and written communication skills | X | X | X |  |  | X |  | X |
| Self-evaluate your personal and/or teamwork capacities by developing and applying personal and team management skills | X | X |  |  |  |  | X |  |
| Critique business solutions |  | X |  | X | X | X | X |  |

## Course and Department Policies

### Course Policies

### Professionalism in the Course

Remember that what you will be facing in this project course is very similar to what happens in the work world. In the workplace you will have to work with people who fail to carry their weight on a team project, and you will also have to be professional in your meetings, in communications, etc. with your manager and co-workers.

### Team Contract - if you are working in a team

Your team should revisit your team contract at the beginning of the semester, and modify it if needed based on your previous team performance. Were there any issues in the fall? Were expectations not clear? Make sure you all are on the same page.

### Team Conflict and Individual Performance Management - if you are working in a team

As students in this course you represent yourselves, your group, the Environment and Business Program, Faculty of Environment, and University of Waterloo.

**In the event of clear and ongoing poor performance, unresolvable conflict, or lack of effort by one or more members of a project team, the course instructors reserve the right to remove students from a group, reform groups,  and to scope out an appropriate project and evaluation to meet course requirements.**

### Policy on Remarking of Assignments

If you feel a mistake has been made in marking on assignments you can request a remark **within 1 week of your grade being posted on LEARN.**

Inform the instructor of your specific request for remarking. You must specify the sections you want addressed, a rationale for why it deserves consideration, with specific reference to the rubric and assessment criteria.  General requests are not acceptable. The Professor will remark the entire submitted work for consistency with the rubric, with special attention to the specific request noted by the student. The mark may increase or decrease as a result.

## Policy on Late Submissions

Please advise the instructor of any issues as soon as you are able to, and preferably before the assignment deadline.

**We do not allow late submissions unless you have compassionate grounds for lateness.**Should you not be able to meet a deadline due to compassionate reasons (e.g. illness or death in the family), you **may** be asked for documentation. Technological failures and bad planning (e.g. printers not working, ran out of paper) are NOT acceptable reasons for lateness.

Submissions are due by the times and dates indicated.  Submissions received after this time will be penalized 10 per cent per day, or any part thereof, including weekends (i.e. 10% of an assignment that is worth 10% of your course grade would be penalized 1% of your final grade per day). Only in exceptional cases will this penalty be waived!

If you miss a milestone, you get 0%.

**Intellectual Property**

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. All materials included in the course (e.g., PowerPoint slides, course resources) are made available digitally for your convenience, and are accessible through the LEARN course page.

***THIS IS NOT A RIGHT BUT A PRIVILEGE.***

Please note that the use of these materials is intended for students currently enrolled in ENBUS 403 only. Recording of the lectures (i.e. audio or video) is prohibited without the express written consent of the instructor. The distribution of PDF file, PowerPoint slides, or any other media, either to individuals or to third-party websites (e.g., CourseHero) is strictly prohibited. If there is any evidence that students have distributed said materials, the instructor will remove posted, and cease posting intellectual property (e.g., PowerPoint slides) online and may pursue disciplinary action against the students in question.

Intellectual property includes items such as:

* Lecture content, spoken and written (and any audio/video recording thereof);
* Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
* Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
* Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).
* Course materials and the intellectual property contained therein, are used to enhance a student’s educational experience.  However, sharing this intellectual property without the intellectual property owner’s permission is a violation of intellectual property rights.  For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).
* Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials.  However, doing so without expressed permission is considered a violation of intellectual property rights.
* Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online.  The intellectual property rights owner deserves to know (and may have already given their consent).

## Grading Guidelines

The table below identifies a number of generic elements to guide grading of assignments, but to be clear we do not apply this or the assignment specific grading rubrics mechanically.  The percentage range in brackets is our expectation of how many students would fall in this range – but this does not operate as a curve – rather we would expect to see only a handful of exceptional papers and we would expect the bulk of the marks to fall in the 72 to 80 range.  One might expect that the grades on assignments will improve over the course.

|  |  |
| --- | --- |
| Mark | Expectations |
| > 90% | Exceptional (5% to 10 %) Few or no technical errors (typos, spelling, grammar); clarity in writing style; coherent structure and flow; demonstration of very strong understanding of underlying substantive content and client’s problem; clear and compelling connection made between material and client problem; appropriate reference to source materials; paper presents a logical point of view |
| 80 -  90% | Very good (15 to 25%) Few technical errors; strong understanding of underlying content and client problem; strong connection made between material and client problem; appropriate reference to source material; perhaps a few unreferenced points or reference errors; document is well structured and consistent |
| 72-80% | Good (30 to 50 %) few technical errors; demonstrates solid understanding of course material; demonstrates a reasonable understanding of client problem and connects content to problem; well referenced; document is relatively coherent and somewhat consistent |
| 65 to  72% | Adequate (10 to 20 %); some technical errors; demonstrates a basic understanding of the task and client’s problem; makes some connection between material and client problem; some structure but inconsistent |
| 50 to  65% | Marginal (0 to 10 %) An unacceptable number of technical errors; little apparent attempt to present a coherent application of content to client’s problem; demonstrates a weak understanding of material; inappropriate or missing references; lack of structure |
| < 50% | Inadequate |

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## Research Ethics

If any of your work on your research paper consists of research that involves humans as participants, then please contact the course instructor for guidance and see:  <https://uwaterloo.ca/research/office-research-ethics>. Note that the ‘University of Waterloo requires all research conducted by its students, staff and faculty which involves humans as participants to undergo prior ethics review and clearance through the Director, Office of Human Research and Animal Care (Office). The ethics review and clearance processes are intended to ensure that projects comply with the Office's Guidelines for Research with Human Participants (Guidelines) as well as those of provincial and federal agencies, and that the safety, rights and welfare of participants are adequately protected. The Guidelines inform researchers about ethical issues and procedures which are of concern when conducting research with humans (e.g. confidentiality, risks and benefits, informed consent process etc.).’

### University Policies

Please see the document [University Policies](https://learn.uwaterloo.ca/d2l/common/dialogs/quickLink/quickLink.d2l?ou=716369&type=content&rcode=uWaterloo-2568200) for important information. It is your responsibility to know and understand the policies.

## Territorial Acknowledgement

We acknowledge that we live and work on the traditional territory of the Attawandaron (Neutral), Anishinaabeg, and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes ten kilometres on each side of the Grand River.

### Copyright

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