Environment and Business
Project ENBUS 402B
Winter 2019

Instructors & Advisors: Profs. Goretty Dias & Dan Murray

Teaching Assistants: Basak Topcu & Natalie Garstka

Location: HH 334 Tuesday & Thursday 10:00-11:20 a.m.
RCH 204 10:00-11:20 a.m.
DC 1351 for lectures (select dates: see schedule)
FINAL EVENT: Env. 3, 4th floor, 4:30-9:20 p.m. April 4 (one day only)

Contact Information

Name	Email	Phone	Office	Office Hours
Dr. Goretty Dias	gdias@uwaterloo.ca	x38571	EV3 4251	Mon. & Wed. 2:00 – 3:00 p.m.
Dr. Dan Murray	d4murray@uwaterloo.ca	x31898	EV3 4239	Tues. & Thurs. 12:30 – 1:30 p.m.
Basak Topcu	basak.topcu@uwaterloo.ca			See Widget on LEARN
Natalie Garstka	nkgarstka@uwaterloo.ca			See Widget on LEARN

Pre-requisite: Environment and Business students only

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.**

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:
- Clearly define a problem in a real-world setting
- Design and implement an approach to answer a research question or address a problem
- Develop critical thinking and analysis skills through evaluating academic and grey literature sources for gaps and as evidence
- Develop and practice a variety of oral and written communication skills (e.g. reports, client communications, presentations, etc.)

- Work in an effective team environment by developing and applying personal and team management skills (e.g. accountability, meeting management, peer mentoring, conflict resolution, etc.)

Course Description

This is the final core course of the Environment & Business program. It focuses on the application of principles learned in earlier courses in the context of a particular research situation. This is accomplished via group projects of sufficient scope to demonstrate **mastery of problem-solving, critical thinking, integration and communication** on a selected topic related to environment and business, or on selected environmental issues related to a specific business operation.

It is your opportunity to apply the knowledge you have acquired over the past four years from your courses and co-op terms on a project that integrates environment and business concepts.

The first half of the course (ENBUS 402A) focused on building the foundation for your project (e.g. research topic development, conducting a literature review, research methods and design, data collection, managing your team and your project and developing your communication skills). The second part of the course (ENBUS 402B) will focus on finalizing data collection, data analysis and achieving the objectives of your proposal. The final product of ENBUS 402A/B will be a comprehensive written report, communication deliverable, and an oral poster presentation 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 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 402A and ENBUS 402B.

Course Fee

You will be required to pay $60 ($53.10 + HST) as a course fee. This will go to offset costs associated with the final event at the end of Winter term (e.g. facility rental and food, judges' travel, poster printing, etc.). Although the fee is only due in January, you are STRONGLY encouraged to pay it now, while you have funds. You can do this easily here https://shop.uwaterloo.ca/

This is a cheap course. You are basically getting 3 credits for $60, as there are no required texts. And you get a great experience for this.

Course Resources

Advisor

Each team will be assigned an advisor (one of the instructors) who will work with the team for both semesters on any problems, ideas, providing resources, advice (of course), etc.

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.

BOSS

When we tell you to go to the BOSS, it means to refer to the "Book of Student Success" which is course manual developed to provide everything you need to know about the course, from assignments, to succeeding in this project. It is your responsibility to read everything thoroughly, understand the assignments and evaluation, and ask questions if something is not clear. The BOSS is set up so you can easily find topics through the table of contents, and through hyperlinks. You are expected to prepare for certain lectures by reading sections of the BOSS. Follow the Schedule document on LEARN to know what to read and prepare.

Recommended Text

The Little, Brown Handbook, H. Ramsey Fowler and Jane E. Aaron
The Little, Brown Handbook provides reliable and thorough coverage of the basics of writing: the writing process, grammar and usage, research and documentation, while also giving detailed discussions of critical reading, academic writing, reading and writing arguments, writing in various disciplines, and public writing.

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

Meeting Rooms
You can book rooms EV3-4222 and EV3-4268 through Cheri Oestreich (cmoestreich@uwaterloo.ca) for client or advisor meetings only. If you need a phone for the meeting, you can also obtain it from Cheri. Please give **AT LEAST 24 hour** notice for room and phone bookings. These rooms are used by the entire Faculty of Environment, so they are not guaranteed to be available. Early bookings are strongly recommended.

Professionalism in the Course and in Working with Clients

Most of you will be working with clients throughout the fall and winter parts of this course. Remember that you are UW ambassadors and that your positive behaviour (attitude, professionalism, etc.) with clients is critically important in the following ways:

1. it will be reflected in a good client evaluation in the second part of this course, which affects your grade;

2. it will provide opportunities to potentially get you references and jobs in the future; and

3. it ensures that clients will return with more projects for future students, giving them the same opportunities as you have.

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.

Peer Assessment: As there is a significant amount of group work in this course students will be asked to assess the contributions of their team members. In instances where there is clear agreement (supported by clear evidence) within the team that individuals have not been contributing in a fair manner to the team's project the instructors will adjust the students grade for the group work portion of the course.

Team Conflict and Individual Performance Management: As students in this course you represent yourselves, your group, the Environment and Business Program, Faculty of Environment, and University of Waterloo. Course instructors maintain the ability to manage groups and individual students in order to protect the reputation of the University. 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, or pull clients, and to scope out an appropriate project and evaluation to meet course requirements for those students who no longer have a group.

Summary of Course Assessment Items

All assignments should be submitted online using Learn. Please see B-BOSS document for description of assignments. Milestones marked in blue shading.

Assessment	Description	Due Date*	Weight (%)
Milestone: Gantt Chart	Provide a Gantt chart or project management plan detailing proposed actions to complete project	Tuesday, Week 2, January 15, 11:59 pm	5
Milestone: Advisor Meeting 1	Each Team will meet with their advisor to present research findings and discuss future steps.	Between Week 3 & 4	5
Milestone: Report Template	Report template (showing heading and body text font, spacing, draft structure and table of contents)	Friday, Week 4, February 1, 11:59 pm	2.5
Final draft of full report	Final polished draft of the full report	Friday, Week 7, March 1, 11:59 pm	15
Milestone: Advisor Meeting 2	Each team will meet with their advisor to discuss feedback on the Final Draft of Full Report	Between Week 9 & 10	5
Milestone: Poster Template	Poster Template (showing font size and type, colour scheme, and draft layout)	Friday, Week 8, March 8, 11:59 pm	2.5
In-class presentations	Present your poster pitch with your draft poster	Week 11 (Tues. & Thurs.)	5
Project Presentations	Your team's final poster presentation to colleagues and a panel of judges in last week of course.	March 28 at 3 pm- Poster due for printing April 4, 4:30 -9 pm- Final event- compulsory	15
Final Report	Report presents the evidence, research process, results, and recommendations. It is academic in nature (in text references).	April 3, 11:59 pm	25
Meeting client deliverables/ expectations	How well you have met the deliverables set out by client. To be evaluated by client and/or instructor.	Client will evaluate group at end of semester.	10

Reflection	INDIVIDUAL ASSEMENT ITEM: Personal reflection on what you have learned in the process of the experiential learning experience of 402	April 3, 11:59 pm	10
Peer Evaluations	Evaluation of team members.	Interim evaluation due Feb. 16, 11:59 pm Final evaluation due April 6, 11:59 pm	Potentially adjust individual's grade based on contribution.

Tentative Schedule

If needed, we reserve the right to add or move lectures as needed to provide you with the best learning experience.

Week	Tuesday		Thursday	
Week 1	Jan. 8	**Lecture in DC 1351:** Review course outline- group meetings to get started- work on Gantt chart First full class- Course outline and expectations review and Q&A	Jan. 10	Open class time
Week 2	Jan. 15	Open class time	Jan. 17	Open class time
Week 3	Jan. 22	Open class time	Jan. 24	Open class time
Week 4	Jan. 29	In Workshop Presentation: Preparing the report	Jan. 31	Open class time
Week 5	Feb. 5	Open class time	Feb. 7	Open class time
Week 6	Feb. 12	**Lecture in DC 1351**: How to prepare an effective poster	Feb. 14	Open class time
Reading Week	Feb. 19	**Reading Week**	Feb. 21	**Reading week**
Week 7	Feb 26	Open class time	Feb. 28	Open class time
Week 8	Mar. 5	**Lecture in DC 1351:** How to present a poster	Mar. 7	Open class time
Week 9	Mar. 12	Open class time	Mar. 14	Open class time
Week 10	Mar. 19	Open class time	Mar. 21	Open class time
Week 11	Mar. 26	**Lecture in DC 1351:** Poster pitches-compulsory lecture! Information about final presentations.	Mar. 28	**Lecture in DC 1351:** Poster pitches
Week 12	Apr. 2	Open class time	Apr. 4	**No Class Today**
FINAL EVENT **Thursday April 4, 4:30 – 9:30 p.m.**				

Special Instructions for this Course

Group Work Any work submitted by a group of students must include the following disclosure:

Group Assignment Disclosure

Please read the checklist below following the completion of your assignment. Once you have verified these points, hand in this signed checklist with your assignment.

1. All team members have referenced and footnoted all ideas, words or other intellectual property from other sources used in the completion of this assignment.
2. A proper bibliography has been included, which includes acknowledgement of all sources used to complete this assignment.
3. This is the first time that any member of the group has submitted this assignment or essay (either partially or entirely) for academic evaluation.
4. Each member of the group has read the full content of the submission and is assured that the content is free of violations of academic integrity. Group discussions regarding the importance of academic integrity have taken place.
5. Each student has identified his or her individual contribution to the work submitted such that if violations of academic integrity are suspected, then the student primarily responsible for the violations may be identified. Note that in this case the remainder of the team may also be subject to disciplinary action.

Course:		
Assignment:		
Date:		
	UW Student #	Signature

Course Policies

Communications with Instructor and Teaching Assistants: *We are VERY happy to make ourselves available to help you succeed in this course.* All communication with students must be through either the student's University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

Make sure you consult your course resources before sending us a question. We **will not answer** any questions that have already been answered in class, on Learn, or in course materials. We will reply to questions not covered by these sources within 2 business days (Monday to Thursday).

In the subject line include the course number and a meaningful descriptor of why you are contacting us.

Policy on Use of Electronics and Electronic Media in Class Laptop use in-class
Laptops are permitted in class for **course-related purposes only.** We request that you have a sense of courtesy and respect and do not misuse the computer in class. Anybody found accessing the internet for other purposes **will be asked to leave the class**. We also refer you to university policy:

University Policy 33 ("Ethical Behaviour") states that "no member of the University community (faculty, staff, student) may unduly interfere with the study, work or working environment of other members of the University or any aspect of another's University activity." The policy adds that "A 'poisoned environment' (or one that is intimidating, hostile or offensive) can be created based on any of the prohibited grounds under the Ontario Human Rights Code, and can be described as comment or conduct that is contrary to the aims of maintaining a supportive, respectful and tolerant environment." Using a laptop to view potentially offensive, inappropriate or distracting images during class could certainly contravene this policy, and we would therefore have the responsibility to direct a student to refrain from this activity during class.

We may ask that you close your laptops for short times during certain activities, such as during a small group discussion. In the past, we have had students complain that it is hard to concentrate in the midst of all the tapping being made by classmates who are taking notes with laptops. If we get complaints throughout the semester, we may designate a "laptop zone".

LEARN
We will be using LEARN online for this course. The course website will be the PRIMARY mode of communication for this course. Check this website daily for announcements and other material that may be added from time to time. Handouts as well as lecture notes will be added to the website throughout the semester.

Detailed descriptions of the requirements for each assignment will be placed on Learn (D2L). Unless otherwise noted on the Assignment outline, all assignments must be **submitted electronically to Learn (D2L)** by the indicated deadline.

It is your responsibility to ensure that your Learn (D2L) email address is kept up to date so you do not miss any emails we might send.

Cell phones and other mobile devices

Please make sure that cell phones and similar devices are turned off while in-class.

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.**

For remarking:

- Print a paper copy directly from the course website that clearly shows the date of the materials, and includes all comments and grading that was provided by the instructors/TAs.

- Include your own coversheet (typed or handwritten is fine) with your name and your specific request for remarking.

On your coversheet 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.

- Remarks must be submitted to the professor's office, mailbox, or under the door in paper form. Email requests for remarks will not be accepted.

- 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%.

Unclaimed assignments

Unclaimed assignments will be retained until one month after term grades become official in Quest. After that time, they will be destroyed in compliance with UW's confidential shredding procedures.

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

Academic integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check the Office of Academic Integrity for more information.]

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4. When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for his/her actions. [Check the Office of Academic Integrity for more information.] A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate associate dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline. For typical penalties, check Guidelines for the Assessment of Penalties.

Appeals: A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals.

Note for students with disabilities: AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

Turnitin.com: Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit alternate assignment.

Intellectual Property: For further information on IP related to teaching, please see https://uwaterloo.ca/legal-and-immigration-services/sites/ca.legal-and-immigration-services/files/uploads/files/volume_1_issue_3_winter_2018.pdf and the Guidelines for Faculty, Staff and Students Entering Relationships with External Organizations Offering Access to Course Materials, https://uwaterloo.ca/secretariat/faculty-staff-and-students-entering-relationships-external. The following text is recommended:

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. 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).

Recording lectures: Use of recording devices during lectures is only allowed with explicit permission of the instructor of the course. If allowed, video recordings may only include images of the instructor and not fellow classmates. Posting of videos or links to the video to any website, including but not limited to social media sites such as: facebook, twitter, etc., is strictly prohibited.

Mental Health: The University of Waterloo, the Faculty of Environment and our Departments/Schools consider students' well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or emotional. Please note that help is available. Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services http://www.uwaterloo.ca/counselling-services is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

Religious Observances: Students need to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

Research Ethics: 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.). If the development of your research proposal consists of research that involves humans as participants, the please contact the course instructor for guidance and see: https://uwaterloo.ca/research/office-research-ethics