

# ENBUS 306 – Research Design

---

## INSTRUCTOR

Professor: Dr. Michael Wood

Office: EV3-4223

Phone: 519-888-4567 x37559

E-mail: mowood@uwaterloo.ca

---

## SCHEDULE

**Lectures:** Mondays 8:30-11:20 am, ROOM EV3-1408

**Office hours:** Mondays and Wednesdays 2:30 – 4:00 pm, EV3-4223

**NO TUTORIALS OUTSIDE OF SCHEDULED LECTURE TIME**

**TAs:**

## COURSE DESCRIPTION

This course introduces students to the basic principles, concepts and values of doing research in environment and business. More specifically this course will utilize the principles and process of design thinking to not only inspiring research questions but also in how the research itself is carried out. It will examine different research strategy and design; define research questions, review relevant literature; address ethical issues of involving human subjects in business research; identify primary and secondary data sources and learn the basics of qualitative and quantitative data collection and analysis; and assess the effectiveness of various ways of communicating research results. This course takes stock of the quantitative research methods covered in the first and second level courses (e.g., ENVS 178 & ENVS 278), introduces the basics of qualitative, quantitative, and mixed methods research, and looks ahead to provide a solid foundation for the fourth year business research projects (i.e., ENBUS 402A & B).

## DELIVERY OF COURSE MATERIAL

1. Material for this course will be delivered by the LEARN system. Go to <https://learn.uwaterloo.ca/>
2. The course syllabus is available on the course website (through the LEARN system). We will discuss it in our first class.
3. I will aim to put up the PowerPoint Presentations up on LEARN immediately following lectures. (Please note that this does not provide ALL of the information that will be delivered in the lecture, but can help guide you through the material.)

4. I will also use the LEARN system to deliver information to students in the course. I expect you to be checking the course website regularly (at least every working day).

## CREATING AN EFFECTIVE LEARNING ENVIRONMENT IN THE LECTURE HALL

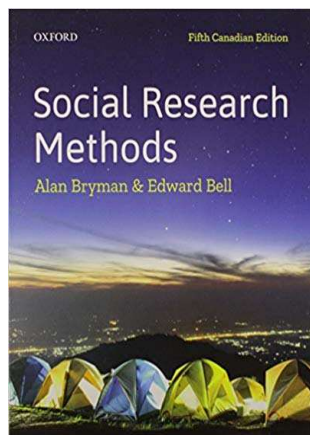
1. I will start 'on time,' so please arrive on time. If you arrive late, please enter through the rear doors of the lecture hall.
2. I will get you out of the classroom in good time – please wait until I dismiss the class to prepare for your departure.
  - a. Please do not disturb your classmates' abilities to learn
  - b. Please do not talk in class
  - c. Please turn off cellphones, etc.
3. Our time together is valuable. I will, however, work to make the lectures informative, relevant and interesting. Throughout the term, I will welcome suggestions as to how the learning environment can be improved. Please speak to me directly, or make comments to your teaching assistant, who can pass on information – anonymously, if you prefer – to me.

## LEARNING OBJECTIVES

The overarching learning objective of this course is to populate a 'toolbox' of methods and the knowledge to know when to use them. More specifically, by the end of the course you should be able to:

1. Identify the range of research methods used to collect information to answer questions;
2. Understand the research process appropriate to various research methods;
3. Contrast research methods for research design and execution;
4. Interpret and communicate research results.

### Required Textbook:



Bryman, A. & Bell, E. (2019) *Social Research Methods, Fifth Canadian Edition*. Don Mills, ON: Oxford University Press, Canada.

ISBN 13: 978-0199029440 (Available in the UW bookstore)

Additional readings will be made available through the library course reserves, which can be accessed through LEARN.

### TIPS FOR SUCCESS

1. Attend all sessions.
2. Come prepared for all sessions, and follow up on all sessions.
3. Plan ahead: check when assignments are due, and when tests and examinations are scheduled.

### COURSE ASSESSMENT

<b>Deliverable:</b>	<b>Weighting:</b>
Midterm test #1 (In-class – Oct 7)	20%
Midterm test #2 (In-class – Nov 11)	20%
Research Design Garage (In-class - weekly)	24%
Peer Evaluation (Due by Dec 3 <sup>rd</sup> @ 11pm)	1%
Final Exam	35%

#### Midterm tests (2 x 20%)

Two in-class midterm tests will be held in weeks 5 and 9. Midterm test #1 will include material from week 1 to 4 and midterm test #2 will include material from weeks 5 to 8. The midterm tests are closed book.

If a student is unable to write one of the midterm tests (due to extenuating circumstances (e.g., illness), supported by appropriate documentation (e.g., doctor's note), then their other midterm test will be weighted at 25%, and their final exam will be weighted at 50%. Students must complete at least one of two midterms or they will be required to retake the course.

#### Research Design Garage (24%)

The Research Design Garage (RDG) will provide students with multiple opportunities to put some of the principles, concepts, and methods (i.e., tools) introduced in the lectures into practice. The RDG will also provide an opportunity for students to deepen their knowledge of the challenges associated with using these tools. The lowest grade from your RDGs will be dropped in calculating your group grade (best 8 of 9).

The tasks that will be completed during the allotted class time are highly interactive, dynamic, and will require your full attention and participation. Each task will build on the previous one to move your garage from your topic of interest through your design to help your garage practice skills needed to

complete the RDG Research Proposal (discussed below). Completed tasks are due by 11:00 pm the day of class and must be uploaded on LEARN. Details of each activity will be provided in the tutorial. Only one submission per group is required. Each RDG is worth 3%.

During the first class, students will meet up with their pre-assigned group members (teams of five), come up with a name for their garage, complete the Garage Contract (found on LEARN) and come up with a list of **three to five** potential topics (in order of preference). One group member (on behalf of the garage) will submit the aforementioned to their respective Dropboxes on LEARN by 11 pm on the day of class. The instructor will then select a topic from the list based on appropriateness and to ensure there is minimal overlap in topics between garages and will inform the garages of their research topic by Friday, Sept 13<sup>th</sup>. If no list of topics is submitted, a topic will be assigned to the garage by the instructor.

#### **Peer Evaluation Factor Adjustment - DUE by Dec 3<sup>rd</sup> at 11 pm (1%)**

Each garage member's grade will be calculated based on the RDG grade multiplied by a factor adjustment based on peer evaluations (using PEAR). The factor adjustment for each group member (which must be substantiated with comments in PEAR) can range from 80 to 120 and will be generated based on anonymous evaluation of oneself and their group members' performance. Importantly, the factor score assigned by individuals to their group members must sum to the integer (x100) of the number of group members (e.g., 5 group members = 500 points to be allocated across all members). The average of the factor scores for each student will be multiplied against the RDG group grade to calculate the individual group evaluation grade.

Students will each receive 1% for completing the peer evaluation. Anyone who does not complete the peer evaluation by the deadline will forfeit the 1% and will have their grade calculated as if their response was the same for all group members (i.e., 100).

#### **Final Exam (35%)**

There will be a final exam administered during the final exam period. The exam will cover content from the entire semester and will consist of a combination of multiple-choice, short-answer, and long-answer questions. A key element of the exam will be on applying what you have learned through the course to develop a sound, logical, and realistic research design.

## COURSE SCHEDULE

Date	Lecture	Readings	Deliverables
Class 1 Sept 9	<ul style="list-style-type: none"> <li>Welcome &amp; review of syllabus</li> <li>What is research design?</li> </ul>	Bryman & Bell Chapter 1	SETUP <ul style="list-style-type: none"> <li>Meet up with your 5-member garage</li> <li>Pick a name for your garage</li> <li>Discuss and complete Team Contract (on LEARN)</li> <li>Pick a topic</li> </ul>
Class 2 Sept 16	Research Orientation	Bryman & Bell Chapter 2	RDG #1
Class 3 Sept 23	Research Ethics	Bryman & Bell Chapter 3	RDG #2
Class 4 Sept 30	Quantitative and Qualitative Methods	Bryman & Bell Chapter 4, 9	RDG #3
Class 5 Oct 7	The Literature Review	*Knopf (2006); *Taylor	Midterm #1 (In-Class)
<i>Oct 14 – No Class; Thanksgiving</i>			
Class 6 Oct 21	Survey Research	Bryman & Bell Chapter 5	RDG #4
Class 7 Oct 28	Structured Observation	Bryman & Bell Chapter 6	RDG #5
Class 8 Nov 4	Interviewing	Bryman & Bell Chapter 11	RDG #6
Class 9 Nov 11	Ethnography and Participant Observation	Bryman & Bell Chapter 10	Midterm #2 (In-Class)
Class 10 Nov 18	Content Analysis	Bryman & Bell Chapter 12	RDG #7
Class 11 Nov 25	Qualitative Data Analysis	Bryman & Bell Chapter 13	RDG #8
Class 12 Dec 2	Mixed Method Research & Course Review	*Creswell (2014) - Chapter 10	RDG #9

\*Readings available through course reserves

# Course Policies

## ADDRESSING YOUR INSTRUCTOR

When addressing your instructor either verbally or in writing, a good rule of thumb to follow is to use the title “Professor” followed by the last name. This holds for all instructors irrespective of whether they have their Ph.D. (where the title “Doctor” is warranted) or not.

## COURSE READINGS

All readings can be acquired and downloaded through the LEARN system at the “Library e-reserves” section. These are identified in this course schedule below.

## POLICY ON LATE SUBMISSIONS

Submissions received up to 24 hours after the due date and time indicated above will have a 10 percent penalty applied to them (of the 100% available for that assignment). Submissions received 24-48 hours after the due date and time indicated above will have a 20 percent penalty applied to them (of the 100 available percent for that assignment). Students or groups not handing in their submissions within TWO DAYS of the due date and time will receive a mark of zero on that assignment. Exceptions will be made in extraordinary circumstances (e.g., medical emergencies supported by documentation). Students anticipating that their assignment will be submitted late are encouraged to contact the course instructor at the earliest possible time to make arrangements.

## NOTE ON DIGITAL SUBMISSIONS

**Only digital submissions in MS-WORD or PDF will be accepted.** Any other format will not be graded. All assignments must be submitted through Dropbox on the course website.

## PROTOCOL FOR CONTESTING GRADED ASSIGNMENTS

Upon receipt of your graded assignment (all of which will be graded by our graduate TAs) should you wish to contest the grading of your assignment (outside of simple errors in the addition of marks) the following protocol must be followed:

1. Submit an email to the course instructor detailing why your assignment warrants a review. Please be sure to provide specific examples and justification as to why you feel your grade should be reconsidered. Be sure to include a copy of your graded assignment in the email.
2. The instructor will then review the stated reasons and then decide whether re-grading of the assignment is warranted.
3. Should the instructor deem that re-grading is warranted, the instructor will then ask the student whether they would like their assignment re-graded, recognizing that the student’s grade could go up or down depending on the instructors’ assessment.
4. The student can choose to either have the instructor go ahead with re-grading the entire assignment or stick with their original grade.

## COURSE MATERIAL IS INTELLECTUAL PROPERTY FOR YOUR USE ONLY

All materials included in the course (e.g., PowerPoint slides) 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 102 only. As such, 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 materials, and cease posting intellectual property (e.g., PowerPoint slides) online and may pursue disciplinary action against the students in question.

### **ELECTRONIC COMMUNICATIONS**

- Electronic communication with TAs and Course Instructors must be sent through your official UWaterloo email account. The instructor will not respond to any requests or messages sent via personal email accounts or social media.
- The instructor will try to reply to inquiries from students within two business days. Please ensure that you include a meaningful email subject and be sure to include your name. Queries made near the due dates of assignments or tests may not be answered.
- Make sure you consult the course outline/syllabus, LEARN and other course materials before submitting inquiries through LEARN.
- Laptop use in-class
  - Laptops, smart phones and tablets are permitted in class for course-related purposes only. Anyone who is distracting to other students for off-task activities (e.g. checking email, chatting, social media, non-course sites, playing on-line games, etc.) will be asked to leave the class.
- Devices should be silent in-class.

### **TURNITIN**

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 the alternate assignment.

## University Academic Policies

### INTELLECTUAL PROPERTY

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).

### 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. The University's guiding principles on academic integrity can be found here:

<http://uwaterloo.ca/academicintegrity>. ENV students are strongly encouraged to review the material provided by the university's Academic Integrity office specifically for students: <http://uwaterloo.ca/academicintegrity/Students/index.html>.

Students are also expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. Students may also complete the following tutorial:



<https://uwaterloo.ca/library/get-assignment-and-research-help/academic-integrity/academic-integrity-tutorial>

When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline:

<https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71>. Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance: <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70>.

### 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.

### 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.

### 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. See Policy 70 - Student Petitions and Grievances, Section 4, [www.adm.uwaterloo.ca/infosec/Policies/policy70.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm). When in doubt please contact your Undergraduate Advisor for details.

### 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) [www.adm.uwaterloo.ca/infosec/Policies/policy72.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm)

### UNCLAIMED ASSIGNMENTS

Unclaimed assignments will be retained for 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.

### COMMUNICATIONS WITH INSTRUCTOR AND TEACHING ASSISTANTS

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.

### RECORDING LECTURES

- Use of recording devices during lectures is only allowed with the explicit permission of the instructor of the course.
- If allowed, video recordings may only include images of the instructor and not 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.

### 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**