ONEH*4000 - Applications of One Health

Fall 2026 Course Outline
Section: 01
Credits: 1.00

Land Acknowledgement: Guelph

The University of Guelph resides on the ancestral lands of the Attawandaron people and the treaty lands and territory of the Mississaugas of the Credit. We recognize the significance of the Dish with One Spoon Covenant to this land and offer respect to our Anishinaabe, Haudenosaunee and Métis neighbours. Today, this gathering place is home to many First Nations, Inuit, and Métis peoples and acknowledging them reminds us of our important connection to this land where we work and learn.

Calendar Description

This course is the capstone experience for students in the Bachelor of One Health degree. Students will integrate and refine their knowledge and skills in One Health and apply them to explore and address an authentic One Health challenge in collaboration with an external organization or community. Topics will vary among semesters and focus on challenges at the intersection of animal, human and environmental health such as environmental protection, zoonotic disease, biodiversity conservation, sustainable food systems and climate change adaptation. Working in groups, students will implement a One Health problem solving framework involving systems analysis, informational interviews, gap analysis, solution ideation and developing an action plan based on One Health criteria.
Prerequisite(s): 14.00 credits including ONEH*3000
Restriction(s): Registration in the BOH degree.
Department(s): Department of Integrative Biology

Course Fit Within Program/Curriculum

This course is the capstone experience for students in the Bachelor of One Health (BOH) degree. As it involves independent study of an authentic societal challenge and interactions with community partners, it meets the requirements of an experiential learning course on campus.

Lecture Schedule

MonWedFri 10:30am-11:20am in GRHM*2310 (9/10 to 12/22)

Lecture periods will be used in several different ways, including guest lectures, lessons on tools for problem solving, class discussions, and group work

Seminar Schedule

Day	Time	Location
Wed	3:30 - 5:20 pm	MACS 121

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Wed	3:30 - 5:20 pm	MACS 121

Instructor Information

Dr. Brian Husband
Professor
Email: bhusband@uoguelph.ca
Office: SSC 1469
Office Hours:
By appointment, virtual or in-person

Dr. Ruth Rivkin
Instructor
Email: rrivkin@uoguelph.ca
Office: TBD
Office Hours:
By appointment, virtual or in person

Dawson Skelton
Graduate Teaching Assistant
Email: dskelton@uoguelph.ca

Communication by Instructors

The primary mode of communication by the instructors, outside of classes, will be through CourseLink. Please check the course announcements on a regular basis for weekly plans and updates. If necessary, urgent announcements may be sent to the class via email.

If you wish to speak to the instructors outside of class, please contact them via email. Place the course code in the subject line to ensure your message is seen. A response will be provided with 24 hours.

Course Resources

Course Website (CourseLink)

The CourseLink website (https://courselink.uoguelph.ca/shared/login/login.html) will contain information related to all aspects of the course including announcements, learning outcomes, resources, lecture notes, assignment dropbox, assignment instructions, grading rubrics and gradebook.

For assistance with the CourseLink website, contact CourseLink Support at courselink@uoguelph.ca; tel: 519-824-4120 ext. 56939; tollfree (CAN/USA): 1-866-275-1478.

External Resources

Various external resources for improving team function and problem solving skills will be provided as tutorials or videos via the course website as needed. Students will be directed to them at the appropriate time.

Campus Resources

If you are concerned or have questions about any aspect of this course, please contact the instructors as soon as possible via email. They will be pleased to meet.

If you are concerned or have questions about any aspect of your academic program, please make an appoint with the BOH Academic Advisor (https://www.uoguelph.ca/registrar/enrolment-records/academic-advisors) (boh@uoguelph.ca).

If you are struggling to succeed academically, McLaughlin Library (https://www.lib.uoguelph.ca/) is a central place on campus for providing academic and research support to University of Guelph students. Meet with their staff (https://www.lib.uoguelph.ca/using-library/appointment-booking/), attend a workshop (https://cal.lib.uoguelph.ca/calendar/library_events/?t=g), or use their online resources (https://learningcommons.lib.uoguelph.ca/) on time management, taking exams, and general study skills:

- Writing (https://www.lib.uoguelph.ca/writing-studying/writing-resources-workshops/) and English as an Additional Language (https://www.lib.uoguelph.ca/writing-studying/english-language-support/)
- Research Assistance (Finding Sources) (https://www.lib.uoguelph.ca/writing-studying/research-assistance/)
- Studying and Time Management (https://www.lib.uoguelph.ca/writing-studying/studying-resources-workshops/)
- Supported Learning Groups (SLGs) (https://www.lib.uoguelph.ca/writing-studying/studying-resources-workshops/slgs/)
- Presentations (https://www.lib.uoguelph.ca/writing-studying/studying-resources-workshops/group-work-and-presentations/)
- Data and Publishing (https://www.lib.uoguelph.ca/scholarship-publishing/research-lifecycle-support/)

Cost of Textbooks and Learning Resources

Textbook / Learning Resource	Required / Recommended	Cost

Students are advised that prices are often determined by the publisher or bookstore and may be subject to change.

Course Learning Outcomes

1. Analyze a complex problem using a One Health approach by identifying key factors and assessing the interactions affecting sustainable healthoutcomes.
2. Apply a breadth and depth of knowledge in animal, human, and environmental health and their relationships to understand a complex problem.
3. Examine a complex problem using qualitative and quantitative methods to develop evidence-based solutions to complex problems.
4. Assess health from socio-cultural and scientific perspectives, and understand impacts at different scales, from local to global.
5. Create solutions using creative and divergent, evidence-based, approaches and evaluate their impact on resilience and sustainability.
6. Demonstrate strong networking, communication, and interpersonal skills in a professional setting to facilitate respective interactions amongstinternal team members and external collaborators.
7. Communicate concepts, insights, and potential actions for a complex problem based on a One Health analysis using written, oral, and visualmodes of communication.
8. Reflect on and communicate the personal and professional attributes achieved within the course or throughout the program of study.

Student rights Responsibilities

As a student in this course, you are entitled to: 1) be treated with respect and dignity; 2) a learning environment where you can be yourself, express your own ideas, and make mistakes; 3) receive constructive feedback in a timely fashion; and 4) receive academic consideration when there are eligible grounds, and appropriate accommodations when registered with
Student Accessibility Services.

As a student in this course, you have a responsibility to conduct yourself with honesty and professionalism, and with respect and compassion for your peers, instructors, and external guests.

Schedule of Topics and Assignments

Week of	Topic	Activities	Due
9/11	Introduction to Course	Complete course survey	
9/14	Working in Teams	Class OH checklist; Team Charter	Sept 22
9/21	The OH Challenge	Presentations by sponsor and associates	
9/28	Problem Exploration: Systems Analysis	Systems mapping and systems behaviour	Oct 13
10/5	Problem Exploration: Literature Validation	Literature review, community interview prep	Oct 13
10/12		Thanksgiving Holiday	
10/14	Problem Exploration: Community Consultation	Interview preparation, Conduct interviews	
10/19	Problem Reframing: Gap Analysis and Problem Reframing	Gap analysis and problem definition	Oct 28,30 Nov 6
10/26	Problem Reframing: Presentation and Discussion	Create poster, present posters, discuss	Oct 28,30
11/2	Solution Development: Ideation	Brainstorming and researching solutions	Nov 17
11/9	Solution Development: Evaluation and Decision Making	Solution evaluation, decision making	Nov 17
11/16	Solution Development: Implementation Plan and Prototyping	Developing implementation plan and prototyping	Nov 25,27
11/23	Final presentations	Present to sponsor	Nov 25,27
11/30	Wrap up Final Report	Finalizing all aspects of the project	Dec 4

12/7	Complete final reflection and Peer Evaluation	Dec 11

Assessment Breakdown

Description	Weighting (%)	Due Date
Team charter	5%	Week 2 (Sept 22)
Systems map & annot bibl	15%	Week 5 (Oct 13)
Problem presentation & discussion	5%	Week 7 (Oct 28,30)
Final Problem Statement	15%	Week 8 (Nov 6)
Evaluation of Solution	10%	Week 10 (Nov 17)
Final Presentation	10%	Week 11 (Nov 25,27)
Final Report	25%	Week 12 (Dec 4)
Final Reflection	5%	Exam Week (Dec 11)
Peer/Inst Evaluation	10%	Exam Week (Dec 11)

Assessment Details

Team charter

5%

Your team will develop and present a set of goals and operational principles to guide all future work.

Course learning outcomes assessed: # 6, 8

Systems map and bibliography

15%

You will map the system of interest (Maitland Valley watershed) by identifying its main components, interactions, and key interest-holders. You will validate the system using literature research, web resources, guest lectures, and discussions with community members

Course learning outcomes assessed: # 1,2,4,7

Problem presentation

5%

Your group will present the primary problem of interest in a brief presentation, including the specific problem, the current state of affairs and the impact on community and watershed health.

Course learning outcomes assessed # 3,6,7

Final problem statement

15%

Here, you will refine the ideas given in the problem presentation one more time and present a polished report.

Course learning outcomes assessed: #6,7

Solution evaluation

10%

Your group will present your ideas for OH solutions and show the evaluation scheme you used to narrow that down to a single "best" solution.

Course learning outcomes assessed # 4,5,6

Final presentation

10%

Your group will present the results of your work, from background to the problem and solution, to an interested audience

Course learning outcomes assessed: # 7

Final project report

25%

This assignment is the culmination of all the work your group has done, presented in written and graphic format.

Course learning outcomes assessed: # 1,2,3,4,5,6,7

Final reflection

5%

Here you will reflect on the OH problem solving framework that you have used in this course and its impact on you, personally and professionally. this is an opportunity to revisit the OH checklist that you wrote in the first week.

Course learning outcomes assessed: # 8

Team contribution evaluation

10%

You will receive feedback on your contributions as a team member through the semester and give your team mates feedback. The instructor will also provide their own input.

Course learning outcomes assessed: #6

Last Day to Drop Course

The final day to drop Fall 2026 courses without academic penalty is the last day of classes: December 04

After this date, a mark will be recorded, whether course work is completed or not (a zero is assigned for missed tests/assignments). This mark will show on the student's transcript and will be calculated into their average.

Course Policies

Attendance

This course moves at a brisk pace with frequent assignments. Attendance in lecture periods and seminar is therefore critical for meeting deadlines and succeeding in this course. Since the bulk of work is completed in teams, poor attendance will impact not only the absent student but also the rest of the team. Please notify the instructors and your team members of any anticipated absences so appropriate steps can be taken. It is your responsibility to make up for missed classes by reviewing CourseLink announcements, consulting with team members, and taking the initiative to make up for the lost ground.

Late Assignments

This course comprises multiple assignments which follow a progression in a problem solving process and are sometimes due in close succession. Additional time is built into the due datesw for each assessment. It is the team's responsibility to meet the specified due dates. I there are medical, psychological or compassinate grounds that interfere with meetiing a deadline, please contact an instructor for academic consideration. Otherwise, late submissions will not be accepts oe week beyond the deadline and will carry a one time 10% deduction.

Academic Integrity

Students are expected to uphold the highest standards of acadeic integrity 9see Standard Statements, below).

Submitted assignments should be original work generated by members of the team. Misrepresenting the work of others as your own (or your group's) is considered plagiarism and will be treated as such. Please take all precautions to avoid plagiarism (or the perception of it) and always ask for assistance or advice rather than taking a chance.

Generative AI can be a useful tool as an aid in your learning - usually middle stages of assignment completion, when exploring potential organization of ideas and factors to be considered by the group; however, it must not be used to produce the final (or near to final) version.

Specific instructions regarding generative AI will be given for each assignment. Please pay particular attention to the assignment instructions. In most cases, the group will be expected to develop their ideas without the use of AI, first, and then to augment and edit with the guidance of AI, before finally verifying and editing the final versions. When it is used, you must acknowledge its use and students should be prepared to provide prompts used in AI conversations, pre-AI versions and documents with tracking, for comparison. So, track your assignment development and save updated versions on a regular basis.

Experiential Learning Component

Experiential Learning (EL) at the University of Guelph means learning through action. EL activities provide students with the opportunity to apply course material to real-world, meaningful contexts.

This course has integrated the following Experiential Learning Components: Course-Integrated Learning (https://www.uoguelph.ca/experientiallearning/students/search-experiential-learning-opportunities/curricular-and-course-based-opportunities-0).

Upon successful completion, this experiential learning course will be reflected on the student's Professional and Career Development Record (PCDR). Learn about the PCDR and experiential learning at www.uoguelph.ca/pcdr (https://www.uoguelph.ca/experientiallearning/pcdr).

Department of Integrative Biology Standard Statements

Academic Advisors

If you are concerned about any aspect of your academic program. Please make an appointment with a program counsellor in your degree program. B.Sc. Academic Advising (https://bsc.uoguelph.ca/)

Academic Support

Science Commons: Located in the library, the Science Commons provides support for physics, mathematic/statistics, and chemistry. Details on their hours of operations can be found at: Chemistry / Physics Help (https://www.lib.uoguelph.ca/using-library/spaces/science-commons/) and Math / Statistics Help (https://www.lib.uoguelph.ca/using-library/spaces/science-commons/)

Course Offering Information Disclaimer

Please note that course delivery format (face-to-face vs online) is subject to change up to the first-class day depending on requirements placed on the University and its employees by public health bodies, and local, provincial and federal governments. Any changes to course format prior to the first class will be posted on WebAdvisor/Student Planning (https://www.uoguelph.ca/webadvisor/) as they become available.

Online Behaviour

Inappropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or Tas
- Using the course website to promote profit-driven products or services
- Attempting to compromise the security or functionality of the learning management system
- Sharing your username and password
- Recording lectures without the permission of the instructor

Personal Information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (http://www.e-laws.gov.on.ca/index.html.html) (FIPPA). This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes.

For more information regarding the Collection, Use and Disclosure of Personal Information policies (https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml) please see the Undergraduate Calendar.

Wellness

If you are struggling with personal or health issues:

- Counselling Services | Student Wellness (https://wellness.uoguelph.ca/counselling) offers individualized appointments to help students work through personal struggles that may be impacting their academic performance.
- Student Health Services (https://www.uoguelph.ca/studenthealthservices/clinic) is located on campus and is available to provide medical attention.
- For support related to stress and anxiety, besides Health Services and Counselling Services, Kathy Somers runs training workshops (https://www.selfregulationskills.ca/programs/relaxation-skills/) and one-on-one sessions related to stress management and high performance situations.

Standard Statements for Undergraduate Courses

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 discourages misconduct. 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.

The Academic Misconduct Policy (https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-misconduct/) is outlined in the Undergraduate Calendar.

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 make a booking at least 10 business days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). For students at the Guelph campus, information can be found on the SAS website. (https://www.uoguelph.ca/sas)

Accommodation of Religious Obligations

If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements.

See the Academic calendar for information on regulations and procedures for Academic Accommodations of Religious Obligations (https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-accommodation-religious-obligations/).

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.

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 undergraduate students 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 the Undergraduate Calendar - Dropping Courses (https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/dropping-courses/).

Email Communication

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

Health and Wellbeing

The University of Guelph provides a wide range of health and wellbeing services at the Vaccarino Centre for Student Wellness (https://wellness.uoguelph.ca/). If you are concerned about your mental health and not sure where to start, connect with a Student Wellness Navigator (https://wellness.uoguelph.ca/navigators) who can help develop a plan to manage and support your mental health or check out our mental wellbeing resources (https://wellness.uoguelph.ca/shine-this-year). The Student Wellness team are here to help and welcome the opportunity to connect with you.

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

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.

Resources

The Academic Calendars (http://www.uoguelph.ca/registrar/calendars/?index) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

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. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration. (https://calendar.uoguelph.ca/undergraduate-calendar/undergraduate-degree-regulations-procedures/academic-consideration-appeals-petitions/)