

ONEH*1000 Introduction to One Health

Winter 2023 Section(s): C01

Department of Integrative Biology Credit Weight: 0.50 Version 1.00 - January 06, 2023

1 Course Details

1.1 Calendar Description

This course introduces One Health, an approach to understanding, managing and mitigating local and globally complex societal challenges at the intersection of human, animal and environmental health. The course will examine the scope and integrative nature of One Health and its historical development; explore concepts of health from scientific and socio-cultural perspectives; introduce a basic framework for Open Health inquiry; and relate current challenges such as climate change, pollution and environmental contamination, emerging and zoonotic diseases, antimicrobial resistance, bio- and cultural diversity loss, and food insecurity to a One Health perspective. Key skills such as systems thinking, communication and professionalism in the field of One Health will also be developed.

1.2 Timetable

Please see WebAdvisor and CourseLink for the latest information. In-person classes will be held Tuesdays and Thursdays from 1:00pm - 2:20pm from Monday January 9th - Monday April 10th. Class time will be devoted to introducing key One Health concepts and exploring their applications and implications. Lectures, small and large group discussions, and guest speakers will be incorporated into the class meetings.

1.3 Final Exam

This course will have a final exam.

Date: Saturday April 22nd 2023, 2:30 pm - 4:30 pm

Location: TBD

Exam date, time, and location are subject to change. Please see WebAdvisor for the latest information. Information regarding the format of the exam will be posted on CourseLink.

2 Instructional Support

Instructional support contact information is listed below. Teaching Assistant contact information will be posted on CourseLink.

Questions regarding course content delivered by the Course Instructor, assessments (assignments, midterm exam, final exam), grades, or other course questions or concerns should be directed to the Teaching Assistant or Course Instructor. As One Health is transdisciplinary and collaborative, there will be guest lectures throughout the course. Some of your questions may regard the material taught by them. If there are specific questions for any quest lecturers, please reach out to the Course Instructor.

2.1 Instructional Support Team

Instructor: Grace Nichol

Email: gnicho01@uoguelph.ca

Office: Virtual/In-person

Office Hours: Please use email as the first method of contact with Grace

Nichol.

There will be scheduled weekly office hours for this course. Information regarding the dates and times will be posted on

CourseLink.

3 Learning Resources

3.1 Required Resources

CourseLink (Software)

https://courselink.uoguelph.ca

This course makes extensive use of CourseLink, the University of Guelph's online learning environment. The course website will provide information and updates about the course, including schedules, quizzes, discussions, FAQs, grades and course content.

Please Note: Official final exam information will be posted by the Office of Registrarial Services on WebAdvisor under the Exam Information link. Please check both WebAdvisor and CourseLink for final exam information.

3.2 Recommended Resources

Online Reference Texts (Textbook)

The following recommended texts are all available online through the McLaughlin Library, University of Guelph: https://www.lib.uoguelph.ca/.

- 1. Zinsstag, J., Schelling, E., Crump, L., Whittaker, M., Tanner, M., & Stephen, C. (Eds.). (2020). **One Health: the theory and practice of integrated health approaches.** CABI.
- 2. Cork S, Hall DC & Liljebjelke K. **One Health Case Studies**: Addressing Complex Problems in a Changing World. 5M Publisher; 2016.
- 3. Deem SL, Lane-deGraaf KE, Rayhel EA. Introduction to One Health: An Interdisciplinary Approach to Planetary Health. Wiley Blackwell, 2019.
- 4. Meadows D. **Thinking in Systems A Primer**. White River Junction, Chelsea Green Publishing, 2008.

Electronic Resources (Website)

- 1. One Health Initiative website at http://www.onehealthinitiative.com/index.php.
- 2. One Health Commission website at https://www.onehealthcommission.org/.

4 Learning Outcomes

The course learning outcomes are based on the One Health Core Competencies established for the University of Guelph. For the purposes of this course, core competencies include an holistic understanding of health, systems thinking, critical thinking, communication, and professionalism in the field of One health.

4.1 Course Learning Outcomes

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

- 1. Describe the goals of a One Health approach for addressing complex societal challenges and identify its distinguishing attributes
- 2. Formulate a holistic definition of health that draws on scientific and sociocultural perspectives
- 3. Describe the interdisciplinary, systems-based approach used to understand, investigate, disseminate and address problems from a One Health perspective
- Identify the strengths and challenges of integrating diverse perspectives to address a problem
- 5. Identify possible interconnections between animal, human and environmental health using concept mapping and consider the possible direction and intensity of their interactions.

- 6. Identify key health challenges facing society, currently and historically, and determine whether and how they may benefit from a One Health approach
- 7. Effectively communicate ideas through a variety of media for a range of audiences
- 8. Using select examples of One Health research, identify sources of evidence needed to identify and support a One Health approach
- 9. Describe professional attitudes and skills needed in the field of One Health including leadership, networking, ethical considerations, and diversity thinking

5 Teaching and Learning Activities

Sessions will be delivered in-person. Students are encouraged to attend all classes if they wish to be successful in this course.

Sessions have been structured to encourage active learning; in addition to individual work, sessions will prioritize group work such as student-led discussions and activities to facilitate collaborative learning and integrative problem-solving across disciplines. Readings may be provided in advance of sessions on CourseLink and students are expected to come prepared for each class having read all relevant materials.

Importantly, this integrative course will considers complex societal challenges at the intersection of human, animal, and environmental health; learning outcomes represent building blocks and cross-cutting themes. We will cover specific learning outcomes during specific class sessions, however we will revisit many of these outcomes continually during class discussions and across multiple lectures as students develop core competencies in One Health.

Guest Lectures:

An important and exciting part of this course will be the presentation of class material by a variety of guest lecturers in the public and private sectors with expertise in One Health. Guest lecturers are used for many important reasons including, but not limited to their ability to: fortify the topics and themes students cover and build on throughout the course; foster student learning in a more interactive, topic-specific manner; foster the true collaborative nature of One Health; demonstrate how the topics students are learning about in this course may be channeled into professions; and help students in developing their personal One Health networks. **Confirmed guest lecturers for relevant classes will be posted in CourseLink.**

6 Assessments

Classes have been designed to foster interactive learning through an online or in-person medium and develop an understanding of and skill-sets pertaining to One Health. Sessions comprise lectures delivered by the main instructor and guest lecturers, class discussion, and peer collaboration. While student participation is not formerly assessed, it is highly encouraged in this course. Participation includes active listening, posing questions, engaging in classroom discussions and collaborating with peers. Quality of participation is valued over quantity.

As part of this course, there are FOUR assignments (3 individual and 1 group), 1 midterm exam, and 1 final exam. A synopsis of course assignments and exams is shown below.

IMPORTANT TO NOTE:

- Accommodations for FINAL exams are <u>NOT THE RESPONSIBILITY OF THE</u>
 <u>INSTRUCTOR OR TA</u>, Students missing a final exam are responsible for applying for a deferred exam through their respective Academic Advising Office.
- Due to the ongoing COVID-19 pandemic, the course may change delivery format.
 Changes to the delivery format of lectures and assessments will be shared on CourseLink.
- Be aware that exams are vulnerable to disruption, e.g. internet connectivity issues, etc.
 Students are instructed to contact CourseLink Support, Phone: 519-824-4120 ext.
 56939, Toll Free: 1-866-275-1478 (Canada and USA), Email: courselink@uoguelph.ca, if they experience any unresolvable internet issues.
- Please review the university's policy on academic integrity. Students are expected to complete their work with honesty and respect for fellow students. All work should be completed individually, unless stated otherwise. Please speak to the instructor if you are unsure of the expectations for a given assignment.

Missed Semester Work:

If a student misses semester work, the student is to approach the instructor directly to request academic consideration. Students should be in contact with the instructor of the course in advance of the due date. Where this is not possible, they must be in contact immediately following the date of the missed work. If the circumstances are affecting multiple courses or are on-going for a significant amount of time, the student should be encouraged to approach a program counsellor for assistance. In some cases, the instructor may request a meeting with the student to discuss their progress. Please note that three midterm exams in 24 hrs, vacation plans, or work are not grounds for consideration.

Late Penalty for Semester Work:

Assessment outlines will include a statement on the penalty for late work (for cases where academic consideration has not been granted). Please note, for some assessments, late work may not be accepted if there is not grounds for academic consideration.

6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Assignment 1: Reflection	5
Assignment 2: One Health Concept Map / Infographic	10
Midterm Exam	20
Assignment 3.1: Group Project - Topic and Paper Submission	5
Assignment 4: One Health Article Summary and Expansion	20
Assignment 3.2: Group Project - Oral Presentation	15
Final Exam	25
Total	100

6.2 Assessment Details

Assignment 1: Reflection (5%)

Due: Wed, Jan 18 **Learning Outcome:** 1, 2

This is an Individual Assignment.

Due Date: Wednesday January 18th 2023, by 11:59 pm

Your first assignment in this course will be a critical reflection based on how you contextualize your relationships with animals, other humans, or the environment - or all of these components. That is, How do you as a human relate to animals/other humans/the environment around us? Additional details will be posted on CourseLink to help quide your reflection.

Assignment 2: One Health Concept Map / Infographic (10%)

Due: Mon. Jan 30

Learning Outcome: 1, 2, 5, 7 This is an Individual Assignment.

Due Date: Monday January 30th 2023, by 11:59 pm

A concept map is a visual representation of the relationships among processes, concepts, or, for the purposes of this course, health events. An infographic is a visual representation of information, data and knowledge intended to present information quickly and clearly. Your task for this assignment will be to create a concept map OR an infographic. There will be a single focus / event of interest. Students should clearly show how environmental, social, economic, human, animal, and other factors are related to the event of interest.

Additional details regarding this assignment will be posted on CourseLink.

Midterm Exam (20%)

Date: Thu, Feb 9, On-Line or In-Person, class time

Learning Outcome: 1, 2, 3, 4, 5, 7

This is an Individual Exam.

Due Date: Thursday February 9th 2023, during class time (1:00 pm - 2:20 pm)

Further details regarding the midterm examination will be provided on CourseLink closer to the exam date.

Assignment 3.1: Group Project - Topic and Paper Submission (5%)

Date: Thu. Feb 16 Learning Outcome: 6, 8 This is a Group Assignment.

Due Date: Thursday February 16th 2023, by 11:59 pm

Groups will submit a summary of their chosen presentation topic and a list of academic sources they will incorporate into their presentation using appropriate sourcing formats.

More information will be available on CourseLink.

Assignment 4: One Health Article Summary and Expansion (20%)

Due: Wed. Mar 15

Learning Outcome: 1, 2, 3, 4, 6, 8

This is an Individual Assignment.

Due Date: Wednesday March 15th 2023, by 11:59 pm

Students will be asked to choose an article from list presented. They will be required to provide a summary of the article, and to identify a concept, theory, analysis or other element from the article to expand on further.

More details will be provided on CourseLink.

Assignment 3.2: Group Project - Oral Presentation (15%)

Date: March 21, 23, 28, 30

Learning Outcome: 1, 2, 3, 4, 6, 7, 8, 9

This is a Group Assignment.

Due Dates: This assignment will be delivered over <u>FOUR</u> days: March 21st, 23rd, 28th, 30th, and will be held in-person during class time (1:00 pm - 2:20 pm).

One Health by definition is collaborative. For this assignment, students will be assigned to groups to foster collaborative engagement and put into practice many of the fundamental principles of One Health including lecture material related to planning, developing, and conducting online presentations. Each group is responsible for presenting a scientific presentation on a topic. The emphasis on this assignment is harnessing skills to **effectively and concisely** communicate complex topics in health. Creativity is **strongly encouraged** and students may choose from a variety of communication modes including PowerPoint presentations, infographics, pre-recorded videos, etc.). Student groups may choose to present one topic from a range of One Health topics including but not limited to: How can we avoid a future pandemic? Why do novel diseases arise? A One Health Story about... How is One Health important to the preservation of our environment/our planet?

More information will be provided on CourseLink

Assessment will be conducted at the group level and will be based on planning, organization, and delivery of the material.

Final Exam (25%)
Date: Sat, Apr 22

Learning Outcome: 1, 2, 3, 4, 5, 6, 7, 8, 9

This is an Individual Exam.

Date: Saturday April 22nd 2023, 2:30 pm - 4:30 pm

Location: TBD

The final examination will cover all of the course material for the semester. The course is scaffolded to provide many diverse learning opportunities that build on existing knowledge. Therefore, the final examination will be summative. Assimilating the information gleaned

from the course material will be the final step to putting all of the One Health foundational pieces together. The examination will provide an excellent opportunity for students to showcase their skill-sets acquired during this Introduction to One Health course.

Exam date, time, and location are subject to change. Please see WebAdvisor for the latest information. More details about the final examination will be posted on CourseLink and WebAdvisor.

7 Department of Integrative Biology Statements

7.1 Academic Advisors

If you are concerned about any aspect of your academic program:

Make an appointment with a program counsellor in your degree program. <u>B.Sc.</u>
 <u>Academic Advising or Program Counsellors</u>

7.2 Academic Support

If you are struggling to succeed academically:

- Learning Commons: There are numerous academic resources offered by the Learning Commons including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills.
 You can also set up individualized appointments with a learning specialist.
 http://www.learningcommons.uoguelph.ca/
- 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: http://www.lib.uoguelph.ca/get-assistance/studying/chemistry-physicshelp and http://www.lib.uoguelph.ca/get-assistance/studying/math-stats-help

7.3 Wellness

If you are struggling with personal or health issues:

- Counselling services offers individualized appointments to help students work through personal struggles that may be impacting their academic performance. https://www.uoguelph.ca/counselling/
- Student Health Services is located on campus and is available to provide medical attention. https://www.uoguelph.ca/studenthealthservices/clinic
- For support related to stress and anxiety, besides Health Services and Counselling

Services, Kathy Somers runs training workshops and one-on-one sessions related to stress management and high performance situations.

http://www.selfregulationskills.ca/

7.4 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 (FIPPA) http://www.e-laws.gov.on.ca/index.html. 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 please see the Undergraduate Calendar.

(https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml)

7.5 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 as they become available.

8 University Statements

8.1 Email Communication

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

8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

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

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

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

8.3 Drop Date

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

Undergraduate Calendar - Dropping Courses https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml

Graduate Calendar - Registration Changes https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml

Associate Diploma Calendar - Dropping Courses https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml

8.4 Copies of Out-of-class Assignments

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

8.5 Accessibility

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

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

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

Use of the SAS Exam Centre requires students to make a booking at least 14 days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time.

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

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

8.6 Academic Integrity

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

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

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

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

8.7 Recording of Materials

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

8.8 Resources

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

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

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website

(https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

8.10 Illness

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).

8.11 Covid-19 Safety Protocols

For information on current safety protocols, follow these links:

- https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safereturn/
- https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.