1 Course Details

1.1 Calendar Description

This special topics course explores selected themes, topics, and/or applied practices that are not covered by existing courses and do not have a natural disciplinary home. Any unit may request an offering through the Office of Graduate and Postdoctoral Studies.

1.2 Course Description

This course exposes students to novel research from various fields —from computer science to health and nutrition, sociology, marketing, and ecology— to explore complex challenges that urban environments face with regards to food access, mobility, and overall population health. Drawing from Canadian (including First Nations) and global contexts, students will engage in implementation science; this is, they will learn how to move knowledge into action from early stages of conception to execution, testing, scale up, and evaluation. Students will dive into state-of-the-art implementation science methods that range from effective community engagement to computational science. Overall, the course will encourage students to think critically and integrate knowledge and practice to solve complex societal problems and find ways to make cities healthier, more livable, and more resilient.

1.3 Timetable

This course will consist of lectures (1 hour/week) by various speakers from diverse disciplines and institutions, online readings related to the lectures (3 hours/week), discussions (1.5 hours/week), and assignments as directed (5-6 hours/week).

1.4 Final Exam

There is no final exam for this course.
2 Instructional Support

The role of the instructors is to deliver a lecture on a weekly basis, suggest additional readings that complement their lecture, engage in question and answer with students, and provide guidance for student discussions. Instructors will also be responsible for reading and grading student reflections as well as for providing formative feedback on these written pieces. Instructors will also serve as mentors and guide students in the select of a topic to pursue for their final paper. Instructors will evaluate and provide feedback on both draft and final versions of this paper.

2.1 Instructional Support Team

Course Co-ordinator: Madison Rodrigue  
Email: admin@smart-training.ca  
Telephone: 519-824-4120 X 56715

Program Head: David Ma  
Email: davidma@uoguelph.ca  
Telephone: +1-519-824-4120 x52272  
Office: ANNU 342

3 Learning Resources

3.1 Required Resources

Course Website (Website)  
Course materials, news, announcements, and grades will be regularly posted to the UNIV*6900 Healthy Cities CourseLink site. Students are responsible for checking the site regularly and for communicating with the instructors as needed using their institutional email address.

4 Learning Outcomes

4.1 Course Learning Outcomes

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

1. Describe and integrate concepts and perspectives from diverse disciplines that are key to the study of healthy cities and implementation science.
2. Discuss and reflect on the applicability of various implementation science methods to solving challenges in urban environments.
3. Propose solutions to a specific healthy cities problem of their choice, justifying the selection of methods and predicting potential outcomes.
4. Showcase leadership and networking skills with peers and instructors.
5. Demonstrate aptitude for interdisciplinary collaboration and co-learning.

5 Teaching and Learning Activities

5.1 Course Topics and Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>What is ‘Implementation Science’?</td>
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<td>Week 2</td>
<td>Systems Thinking</td>
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<td>Week 3</td>
<td>Cities and Smart Cities</td>
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<td>Week 4</td>
<td>Convergence by Design</td>
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<td>Week 5</td>
<td>Sex and Gender Based Analysis (SGBA+)</td>
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<td>Week 6</td>
<td>Digital Health and Patient Centered Outcomes</td>
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<tr>
<td>Reading</td>
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<td>Week 7</td>
<td>Socio-spatial Epidemiology</td>
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<td>Week 8</td>
<td>Introduction to Modelling</td>
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<td>Week 9</td>
<td>Community-based Participatory Research Healthy</td>
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<td>Week 10</td>
<td>Introduction to Data Science and AI, Natural Language Processing, Text processing, Data Availability</td>
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<tr>
<td>Week 11</td>
<td>Introduction to Health Economics</td>
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<tr>
<td>Week 12</td>
<td>Design Methods</td>
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</tbody>
</table>

6 Assessments

6.1 Marking Schemes & Distributions

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
<th>Weighting</th>
<th>Learning Outcome(s) Assessed</th>
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</thead>
<tbody>
<tr>
<td>Weekly reflections (9 required in total)</td>
<td>Weekly, before the next lecture</td>
<td>45% (5% each)</td>
<td>1, 2, 4</td>
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</tbody>
</table>
Assessment Descriptions

**Weekly reflections:** Students submit weekly reflections on lecture and readings to CourseLink discussion boards, for instructors and peers to see. Reflections will be assessed as missing (0%), adequate (2.5%) or in-depth (5%) by the instructor. Reflections should be 250-500 words, double spaced, informal but clearly (concisely and cohesively) written, and should describe the student’s critical reflection on the method explored during the week. Students must submit at least nine reflections throughout the course. If more were submitted, the nine reflections with the highest marks will be considered for the grade.

**Group facilitation:** Each student will facilitate the discussion for at least one week. The student weekly lead will lead the group discussion (up to 90 minutes) based on the content from the lecture, the readings, and weekly reflections of all students. The student lead is responsible for compiling and submitting a final list of questions to the speaker of the week, who will get back to students in the next few days. Group facilitation will be assessed as did not complete (0%), completed but was unprepared (7%) or completed and was prepared (i.e., had read materials, came prepared with good group questions) (15%).

**Final methods paper – outline:** The topic/scope of the paper can be very open and designed with an instructor to be appropriate to the student’s level and goals (e.g., undergrads, a detailed in-depth review of a method of interest; first-year master’s student, a proposed research design combining one or more methods from the course to a Healthy Cities problem; PhD student, an applied thesis chapter using one of the methods, or a more in-depth, publishable review paper on applications of the methods learned in their field(s) of interest. The purpose of the outline is 5 to provide an early opportunity to structure the purpose, methods, key arguments, and initial citations for their paper. A detailed rubric for evaluation will be provided.

**Final methods paper – final draft:** This paper should represent a culmination of their learning, and the assessment can reflect the extent to which feedback provided at the outline stage was incorporated into the final draft. Students should also have the option to incorporate learning and insights from fellow students, by citing their short reflective papers and
discussions, as appropriate. A detailed rubric for evaluation will be provided.

7 University Statements

7.1 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.

7.2 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.uoguelph.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

7.3 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-regregchg.shtml

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

7.4 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.

7.5 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

7.6 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
7.7 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.

7.8 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

7.9 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.

7.10 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).

7.11 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-safe-return/
- 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.