SUSTAINABLE CITIES IN THE 21ST CENTURY: NAVIGATING A NETWORKED WORLD

In person: June 2-June 13 (daily) 1:00 pm to 4:30 pm
The course site will be open from May 4 onwards for students to do some online work in preparation for two weeks of in-person classes.

Draft – may be subject to minor revisions

COURSE DESCRIPTION

As the 21st century unfolds, cities around the world are becoming transformed by a dynamic tension taking place between burgeoning global and technological forces and those which seek to protect and reaffirm valued cultures and healthy communities. For better or worse, cities and various forms of human interaction are being fundamentally altered by the rapid adoption of information technology (IT) in all aspects of life. Facebook, Twitter, Fast Cities, Smart Grid, E-democracy, the Digital Divide, the Creative Economy, and the Surveillance Society are all recent constructs of the new information society—and they are re-shaping the very fabric of our cities. Sustainable Cities in the 21st Century explores the rights and responsibilities of citizens as they navigate local institutions and socio-ecological environments in the context of a networked world. Field trips, multi-media, presentations from guest speakers, and seminar discussions will enhance a collaborative, interdisciplinary learning approach.

Pre-requisite: Students should have taken a previous course related to one of the following: Canadian local communities, environment, governance, planning or urban design. This is a blended course with preparatory readings and research conducted by distance on-line in advance of two weeks of in-person meeting followed by a project to be completed on-line. (Note: a previous technical knowledge of information technology is NOT expected or required for this course.)

COURSE OBJECTIVES AND LEARNING OUTCOMES

You, as a student in this course will investigate how citizens navigate their city when exercising their individual rights as well as their civic responsibilities within different complex spheres of experience: namely the home, the neighbourhood, the community and the global market place.

By the end of the course you will be able to:

Course Instructors:

Mary-Louise McAllister (ERS)
Email: mlmcalli@uwaterloo.ca
Phone: 519-888-4567 x35614
Office: EV2 2009

Mark Groulx (Planning)
Email: mgroulx@uwaterloo.ca
Phone: 519-888-4567 x32420
Office: EV2 2043

Office Hours:
Instructors will generally be available during the two-week period and via e-mail or appointment throughout the duration of the course

Course Details:
Room: EV2 1001
Time: 1:00 - 4:30 (June 2nd to June 13th)
- effectively analyse and communicate the importance of sustainability and environmental stewardship in an urban context;
- clearly distinguish ways that information technology can be used to empower and disempower citizens within local governance processes; and
- articulate how your role as citizen and environmental professional shapes, and is shaped by, information technology and its influence on spatial, social and knowledge mobility.

**READINGS**

There is no required textbook for this course. All course readings are available through e-reserves. Required readings are listed by class below. Optional supplementary multimedia content (e.g. podcasts, TEDtalks, Documentaries) will be made available through Learn.

**COURSE REQUIREMENTS AND ASSESSMENT**

<table>
<thead>
<tr>
<th>Assignment*</th>
<th>Due Date</th>
<th>Weight</th>
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<tbody>
<tr>
<td>1 Readings reflections</td>
<td>May 30</td>
<td>15%</td>
</tr>
<tr>
<td>2 Digital Evidence Warehouse</td>
<td>June 6</td>
<td>15%</td>
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<tr>
<td>3 Inclusive Urban Spaces: Council Proposal</td>
<td>June 12/13</td>
<td>20%</td>
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<tr>
<td>4 Region of Waterloo 2025: Sustainability Issue Project</td>
<td>July 25</td>
<td>30%</td>
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<tr>
<td>5 Seminar Participation</td>
<td>Assessed throughout the course – online and in person</td>
<td>20%</td>
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*Late assignments penalty – 5 marks a day (not percentage points)*

**Seminar Participation**

Active and engaged participation of all members of a course is crucial to a successful seminar environment. This is an intensive, interactive 2-week block course. You are expected to attend every class. As such, only serious personal or health considerations will be accepted as reasons for absence. If this is the case, please inform one of the instructors immediately. Be prepared and willing to share your analyses, interpretation and perspectives related to an issue, to attend to alternative viewpoints, and where appropriate, to explore differences in a respectful but critical manner. This is a collaborative, inclusive learning environment where students and instructors are open to learning from each other.

The readings selected for this course will directly inform this active and engaged participation, which is why all readings need to be done in preparation for each class.
The readings selected are challenging, but evocative. An effort has been made to include a mix of popular and academic sources that promote diverse perspectives on the range of course topics. Marks will be based on demonstrated knowledge of the readings as well as your overall engagement. At the beginning of each class, students will be randomly called upon to discuss the main themes of the readings.

**Assignment 1: Reading Reflections**

The course site will be open from the beginning of term from May 4 onwards. In the month preceding the two-weeks of in-person meetings, you, as the student should begin your course readings given that we will be meeting every day for two weeks. The reading reflections assignment is a 1,000 word (15%) paper drawing on at least three of the readings from the course. It should reflect your personal research interests illustrated with ideas from some of your real-life examples and experiences. Make sure that you integrate the paper around a particular question or theme. For example, if you are interested in green design, sense of place or civic engagement, you can choose one of those topics illustrated by three or more of the readings. You can use first-person when writing but remember that it is an academic assignment that requires essay form and correct citation formatting. You are encouraged if possible to meet with either instructor or send an email before May 16th to discuss your ideas for the reading reflections paper.

**Assignment 2: Inclusive Urban Spaces**

Student groups of two or three will select a public space (e.g. downtown core, urban park, etc.) within the Region of Waterloo for the focus of their inclusive urban spaces assignment. (This will be organized in advance on the course website). You will critically assess the space from the perspective of inclusiveness, public engagement, social and/or biophysical sustainability, and social innovation. You will then propose how the site can be enhanced to foster civic engagement through a creative use of media: this could range from storytelling to information and communications technologies (ICTs).

On June 12th, 2014 each group will have 20 minutes to solicit support for their project through a presentation to a mock panel of local councillors. Presentations should make a strong case for the project’s appropriateness given the local context. Elements to address in the presentation should include, but are not limited to:

- an overview describing users of the site and their motivations for its use;
- a critical assessment of the site’s current challenges and opportunities for civic participation and inclusivity;
- a brief review of precedents illustrating similar projects in other urban contexts;
- a description of the proposed project, including a discussion of its anticipated impact, contextual fit, and feasibility; and
- a well-designed, evocative presentation.

**Assignment 3: Digital Evidence Warehouse (on-line Due June 6)**

To facilitate the collection and organization of information and ideas related to your inclusive urban spaces project, you will organize their own project information online.
This digital evidence warehouse should include links to information documenting the site (e.g. reports, local news stories, etc.) including peer-reviewed articles. Each component included should contain 1-2 sentences describing the relevance to the project. The goal is to collaboratively develop a helpful and informative ‘warehouse’ of information that can be accessed by students doing their final project. The digital evidence warehouse will be assessed in terms of the quality of information that has been collected, and how well the organization of the information communicates the team’s proposed project.

Assignment 4: Region of Waterloo 2025 Project

In this course, you will complete an individual project that is a creative exercise in sustainable urban visioning. Using a well-defined sustainability lens, students will critically examine current societal trends in the development and application of information and communications technologies (ICTs), and present an evidence-based argument (supported by academic literature) for how some aspect of the Region of Waterloo will differ in 2025 as a result of these trends. The analysis could examine trends towards or away from sustainability. For example, the focus could include innovations that facilitate energy or water conservation, creative inclusive places, efficient transit systems, public surveillance systems, gated communities, the digital divide, local governance processes, and/or local policies.

As part of this assignment, discuss your role as a citizen and how closely your vision of some aspect of the Region of Waterloo in 2025 fits your worldview, and how this would shape your capacity and approach to promoting sustainability and environmental stewardship as an environmental professional. (Make sure that you use proper citations and academic format in the essay piece). This project can be communicated in a variety of ways. Options include, but are not limited to, a traditional essay (3000 words) or a shorter essay (1000 words) with the addition of a podcast, 10-minute video (i.e. short documentary), infographic, audio story, website, or 3D digital animation.

COURSE OUTLINE

<table>
<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>June 2\textsuperscript{nd} 2014</td>
<td>Virtual places and civic spaces: the 21\textsuperscript{st} century citizen</td>
</tr>
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Seminar: Mary Louise McAllister
Meeting Location: EV2 1001

Required Reading(s):
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<tr>
<th>Date</th>
<th>Event Title</th>
<th>Details</th>
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| June 3rd 2014 | More digital, less natural? Human landscape interaction in a virtual age   | Seminar: Mark Groulx  
Meeting Location: EV2 1001 first, and then outdoors on the UW campus – dress for the weather (e.g. if it is raining)  
Required Reading(s):  
Williams, E. (2011) *Environmental effects of information…* |
| June 4th 2014 | Bringing sustainability and pro environmental behaviour home again          | Field Trip: REEP House for Sustainable Living or approved alternative if you’ve already visited the site  
Meeting Location: REEP House  
Required Reading(s):  
http://reepgreen.ca/ - review the webpage and see how technology is used for sustainable housing decisions |
| June 5th 2014 | Is home a haven? Surveillance and sousveillance in 21st Century cities     | Seminar: Mary Louise McAllister  
Meeting Location: EV2 1001  
Required Reading(s):  
Galdon-Clavell, G. (2013). *(Not so) smart cities?*  
Yiftachel, O. (1998). *Planning and social control* |
| June 6th 2014 | Entrepreneurial cities: Experiences of urban redevelopment and the IT sector in Kitchener, Ontario | Field Trip: Downtown Kitchener Tour  
Meeting Location: TBD  
Required Reading(s):  
Harvey, D. (2013). *The right to the city.* |
| June 9th 2014 | Transforming the City in the 21st Century                                   | Speaker: Pierre Filion  
Meeting Location: EV2 1001  

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<tr>
<th>Day</th>
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<th>Event</th>
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<th>Reading(s)</th>
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<tr>
<td>7</td>
<td>June 10th</td>
<td>Civic community mapping (Centre for Community Mapping)</td>
<td>EV2 1001</td>
<td>Filion, P. &amp; Kramer, A. (2012). Transformative metropolitan development...</td>
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<td>2014</td>
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<td>Civic community mapping (Centre for Community Mapping)</td>
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<td>Speakers: Don Cowan, Co-map</td>
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<td>Meeting Location: EV2 1001</td>
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<td>Required Reading(s): Centre for Community Mapping Website</td>
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<td><a href="http://www.comap.ca/">http://www.comap.ca/</a></td>
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<td>visualization...</td>
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<td>9</td>
<td>June 12th</td>
<td>Mock Council Presentation</td>
<td>EV2 1001</td>
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<td>2014</td>
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<tr>
<td>10</td>
<td>June 13th</td>
<td>Navigating the City: From the local to the global</td>
<td>EV2 1001</td>
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<td>2014</td>
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**Required Readings List:**

**Class 1:**


**Class 2:**


Class 3:

The REEP House website at [http://reepgreen.ca/](http://reepgreen.ca/) - review the webpage and see how technology is used for sustainable housing decisions

Class 4:


Class 5:


Class 6:


Class 7:

Centre for Community Mapping: [http://www.comap.ca/](http://www.comap.ca/) - review the webpage and see how technology is used to connect and share community information

Class 8:


ADDITIONAL IMPORTANT INFORMATION AND UNIVERSITY REQUIREMENTS

Unclaimed assignments will be retained for one month after term grades become official in quest”. After that time, they will be destroyed in compliance with UW’s confidential shredding procedures.

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. www.uwaterloo.ca/academicintegrity/
Students who are unsure what constitutes an academic offence are requested to visit the on-line tutorial at http://www.lib.uwaterloo.ca/ait/

Research Ethics: Please also note that 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 http://iris.uwaterloo.ca/ethics/

Note for students with disabilities: The AccessAbility Office located in Needles Hall, Room 1132, 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 the AccessAbility Office at the beginning of each academic term.

Mental Health: The University of Waterloo, the Faculty of Environment and our Departments 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 (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: Student needs 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. Read Policy 70 - Student Petitions and Grievances, Section 4, www.adm.uwaterloo.ca/infosec/Policies/policy70.htm. When in doubt please contact your Undergraduate Advisor for details. Discipline (as noted above under 2a): A student is
expected to know what constitutes academic integrity, to avoid committing academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs 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. 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, http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm
Within ENV, those committing academic offenses (e.g. cheating, plagiarism) will be placed on disciplinary probation and will be subject to penalties which may include a grade of 0 on affected course elements, 0 on the course, suspension, and expulsion. Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance, http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm
Appendix 1: Marking Rubric

Assignments will be assessed using the following broad criteria

<table>
<thead>
<tr>
<th>Name:</th>
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<tr>
<td><strong>Comprehensiveness:</strong> Was the issue defined, thoroughly considered, investigated and researched within the boundaries of its defined scope? Did it address the main themes of the course and draw on relevant material?</td>
</tr>
<tr>
<td><strong>Research:</strong> Did the student make good use of the course materials and the government and community websites for their field work</td>
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<tr>
<td><strong>Organization:</strong> Was the assignment well organized? Was the material used in the project directly relevant to the subject at hand? How well does the argument flow?</td>
</tr>
<tr>
<td><strong>Quality of Information:</strong> How accurate is the information? Is the information presented in a way that might lead one to some worthwhile conclusions?</td>
</tr>
<tr>
<td><strong>Quality of Recommendations:</strong> Was the argument carefully conceived and defended with evidence in a way that would be persuasive in some way to a diverse group of local decision-makers?</td>
</tr>
<tr>
<td><strong>Written Presentation:</strong> Was the assignment itself carefully and accurately presented? If the spelling and grammar are inaccurate a reader often wonders about the reliability of the information itself. Were the sources properly cited? Was the assignment concise?</td>
</tr>
<tr>
<td><strong>Bloom’s Taxonomy:</strong> Does the assignment reflect the higher order skills described in Bloom’s Taxonomy? See <a href="http://coun.uvic.ca/learning/exams/blooms-taxonomy.html">http://coun.uvic.ca/learning/exams/blooms-taxonomy.html</a></td>
</tr>
</tbody>
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