Fall 2015



"No institutions in modern society are better equipped to catalyze the necessary transition to a sustainable world than colleges and universities. They have access to the leaders of tomorrow and the leaders of today. What they do matters"

- David W. Orr, The Last Refuge, 2004

ERS 210 Greening Communities Research Communications Transformation

Environmental Analysis and Solutions III: Greening Communities

This course considers how 'green' communities might be fostered in a contemporary urban setting. It includes concepts and theories related to transformational learning, community resilience, socio-ecological systems thinking, communications, and public engagement. Students learn some basic qualitative methods which are then applied to a term project. Field sites are located in the Region/City of Waterloo (and the University of Waterloo). Students also learn how to undertake research in an ethical manner and how to effectively communicate their ideas and findings.

Instructor:

Natalya Melnychuk Class time: Mon 8:30-10:20 pm Location: AL 105 Office Hours: Monday (all day) RM TBD nmelnych@uwaterloo.ca

TUT 101 8:30-10:20 Th RCH 106 T.A. TBD

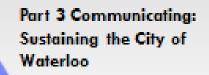
TUT 102 10:30-12:20Th 3519 T.A. TBD

TUT 103 12:30-02:20W DWE 3519 T.A. TBD

Learning Objectives:

The learning objective of this course is intended to equip students to know how to foster sustainable communities through the ethical application of qualitative research methods and their effective communication to a wider audience.

 Skills: Knowledge of qualitative methods, research ethics, and secondary research Introductory knowledge of concepts of community sustainability Communications abilities: oral, visual, listening, and multi-media
 Subject: Case study of City of Waterloo
 Goal: Developing skills with the ultimate goal of fostering socio-ecologically sustainable communities



Conducting primary research Part 2 Investigating: Out into the community

Approaches to ethical research; primary research methods, introduction to sustainable communities Part 1 Exploring: Researching the City of Waterloo

Greening Communities: Research Methods and the City of Waterloo

Figure 1: Steps in the research process and course structure

	Lectures and Weekly Tasks (* indicates an action item)		
Week 1: Sept 14 Introduction	Learning by doing: An experiential approach to learning research methods to foster sustainable communities	 Readings: Bryman et al.: Part 1 pp.1-42: General Research Orientations; Research Designs Tutorial: Introductions Introduction to social research methods: discussion of key points from readings, Ch 1 & 2 organize into groups of four; discuss research topics *Hand-in Field Trip and Emergency Contact Forms to TA 	
Week 2: Sept 21 What is a sustainable community and how do we research it?	Defining terms, and using assessment criteria in qualitative research with respect to sustainable communities. The role of secondary and field research Guest Speaker	 Readings: Blue Economy Initiative (2014) Blue City: The Water Sustainable City of the Near Future http://www.blue-economy.ca/sites/default/files/BEI%20Blue%20City%20report_econics_final.pdf Gibson R.B. (2006) Sustainability assessment: basic components of a practical approach http://www.tandfonline.com/doi/pdf/10.3152/147154606781765147 Tutorial: Groups finalize a topic area for research (see Appendix below) Groups begin considering how to frame their topics and design their surveys and interviews in the context of Gibson (2006) criteria 	

Week 3 Sept 28 The Ethical Researcher and Research Ethics	The first steps: an ethical approach to research: Guest Sacha Geer, Office of Research Ethics	 Readings: Bryman et al.: Chapter 11 Ethics *Tutorial: Field trip: REEP House <u>http://reepgreen.ca/</u> Location: At your tutorial time, go to 20 Mill Street, Kitchener, Ontario, N2G 2Y3. (This is a two hour tour. Let your tutor know if you have to leave a little early to get to your next class, or ask your next instructor for permission to be a little late) *Assignment 1: Each student submits Research Ethics Certificate via dropbox Sept 28 11:59 pm (required milestone)
Part 2 Investig	ating: Out into the comr	nunity
Weeks 4-5	Oct 5	Readings for two weeks:
Oct 5 and Oct 19 NOTE: No	Survey design, Questions and Interviews for Sustainable Communities: Mock	 Bryman et al.: Chapter 4 Survey Research, Chapter 5 Asking Questions; Chapter 10 Interviewing in Qualitative Research Tutorials (including week of October 12-16 2015):
class on Oct 12 b/c of Thanksgiving	interviews and surveys	 Discuss readings: Surveys, Questions and Interviews Work on Assignment 2
	Oct 19	*Assignment 2: Group Survey and Interview Design, Due October 15, 2015, 11:59pm via dropbox
Barriers to Change and Challenging the Status Quo	Transformational thinking, learning and leadership: World views, biases and assumptions in research	Using the readings and City of Waterloo website, design your surveys and interview questions for your final group presentations and individual projects and submit for ethics approval. (15%) Include your group work form and all your ethics forms – located on Learn under: Project Forms tab.

Week 6 Oct 26 Qualitative, Grounded and Ethnographic research: the observer and the observed	Natalya's Lessons from the field: community-based and academic research: water policy and rural Canada or "The good, the bad and can I do that one over?"	 Readings: Bryman et al: Chapter 8, The Nature of Qualitative Research; Chapter 9 Ethnography and Participant Observation Tutorial: Discuss readings *Work on group projects: You may begin your primary research work when you have received clearance from the course instructor
Week 7 Nov 2	City of Waterloo Council Chambers, Guest Presentation Location: 100 Regina St. S. Waterloo	 Readings: Bryman et al.: Chapter 6 Structured Observation Tutorial: *Inform your tutor of the date and time of your interview research participant: Discuss structured observation Work on projects
Week 8 Nov 9 As you go forward: Conducting a qualitative research project	How to undertake a complete research project and report	 Readings: Bryman, Chapter 7 Other sources of data; Chapter 18 Conducting a research Project *Assignment 3 Presentations Due <u>Week of November 9-13 or Week of November 16 - 20</u> in Tutorials: Group Tutorial Presentations (15%): 10 minutes each

Week 9 Nov 16 Peer Assessment	Evaluating qualitative research Conducting a peer assessment: Bloom's Taxonomy	 Readings: Rouse (2012). Evaluating qualitative research: Are we judging by the wrong standards? <u>http://blog.efpsa.org/2012/07/01/evaluating-qualitative-research/</u> University of Central Florida (n.d.) Bloom's Taxonomy <u>http://www.fctl.ucf.edu/TeachingAndLearningResources/CourseDesign/BloomsTaxono my/</u>
		*Assignment 3 Presentations Due <u>Week of November 9-13 OR Week of November</u> <u>16 - 20 in Tutorials: Group Tutorial Presentations (15%): 10 minutes each</u>
Make up class in lieu of Thanksgiving Holiday Saturday Nov 21 (same location and time as regular class)	 Writing Workshop – Preparing and finalizing your Individual Project (Optional but useful for writing up your project) Readings: Lee (2014) Insight for Writing a Qualitative Research Paper http://onlinelibrary.wiley.com/doi/10.1111/fcsr.12084/pdf Pratt (2009) For lack of a boilerplate: Tips on writing up (and reviewing) qualitative research http://aom.org/uploadedFiles/Publications/AMJ/Pratt_Oct%202009.PDF 	
Week 10 Nov 23 Class presentations & the overall message	Presentations of the best presentation from each tutorial group Course summary, and examples of test questions and answers	 *Submit Assignment 4 Final Individual Projects: <u>November 23</u> to course dropbox at 11:59 pm (30%) Tutorial preparation for final test, tutorial and class evaluations

Week 11		No tutorials
Nov 30 You, the research consultant on sustainable communities	In-class Integrative test (20%)	



Required text: Alan Bryman, Edward Bell and James J. Teevan (2012)

Social Research Methods, Third Canadian Edition ISBN 13: 9780195442960

Available in the UW bookstore

Course Assignments and Grading Requirements

Assignment 1 Research Ethics Tutorial Due Sept. 28 – email to tutor	Required milestone – You need this certificate to proceed to Assignment 2
Assignment 2 Group survey and interview design proposal assignment (15%) <u>Due</u> <u>Oct. 15 by 11:59 pm.</u>	Submit group survey and interview questions, topic context, and academic justification of design using Bryman et al. textbook. <u>Note, you</u> <u>may not proceed with fieldwork until you have</u> <u>ethics approval</u> Mark based on peer-assessment of group process across Assignment 2 &3 (1/3 of mark) and instructor/TA assessment of proposal product (2/3 of mark)
Assignment 3 Sustainable Waterloo? Group tutorial presentations (15%) <u>Due Week of November 9-13 OR Week of</u> <u>November 16-21</u> in tutorials	10-minute group presentations in tutorials Mark based on peer-assessment of group process Assignment 2 &3 (1/3 of mark) and instructor/TA assessment of presentation product (2/3 of mark)
Assignment 4 Final Individual Sustainable Waterloo? Projects <u>Due November 23</u> to course dropbox at 11:59 pm (30%)	Individual projects on Sustainable Waterloo? These are to be individual student submissions drawing on secondary research and your primary research group surveys and interviews An in-class closed book test that demonstrates
Final Integrative Test: You the consultant on fostering a Sustainable Waterloo. Test in class <u>November 30</u> (20%)	an ability to apply the lessons learned in the course to a consulting project on urban sustainability
Tutorial (10%) and Class (10%) Participation	 10% for <u>tutorial participation</u> throughout the whole term (5% attendance + 5% engaged participation) 10% for class participation throughout whole term (achieved by submitting 10 individual or group response (in-class) through LEARN to questions posed in class)

Assignment 1: Research Ethics Tutorial Required milestone – you may not undertake field research nor complete the course if you do not complete this certificate Due September 29 in tutorial.

The tutorial can be found at this address: <u>http://pre.ethics.gc.ca/eng/education/tutorial-didacticiel/</u>. *The certificate takes about 3-6 hours to complete*.

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 Office of Research Ethics (http://iris.uwaterloo.ca/ethics/). The ethics review and clearance processes are intended to ensure that projects comply with the guidelines established through Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) (http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS_2_FINAL_Web.pdf) 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.).

All students must complete the research ethics tutorial (the TCPS Online Tutorial) and submit their certificate online. No other assignments in this course will be marked or allocated a grade without the submission of the ethics certificate.

Learning Outcome: The ethics certificate is needed before you can conduct ethical community research. This tutorial will teach you why it is essential that you pay attention to ethics when conducting research.

Assignment 2 & 3: Group project Interview, Survey, Analysis and presentation: The Case of the City of Waterloo's water sustainability

Each four-person group in a tutorial group will be conducting primary research in the City of Waterloo based on assessing some aspect of the city's 'blue' sustainability. Each group will produce a final presentation which includes contributions from all members of the group. Each group will first devise a list of sustainability criteria based on course materials or other readings The group will then assess the progress of the city towards 'blue' sustainability applying their criteria to a topic area.

All members of the group need to peer edit the whole group's contribution and are responsible for understanding and knowing the content of the whole presentation. Each member of each group is collectively responsible for attending and undertaking the following field research and presenting those findings in an effective communications format.

Note: evaluation of Assignment 2 & 3 will be via peer-assessment of the group's process and by the course instructor and TA for the final products (written project proposal and presentation).

<u>Assignment 2:</u> Group project proposal – interview and survey design, topic context and criteria justification

Step 1: Organize into groups and choose a topic area (see Box 1 & 2 for examples)

Step 2: Develop criteria for sustainable community in the context of your topic using course and other material such as the REEP House visit and other secondary literature

Step 3: Hand in ethics forms and group project proposal (15%). See LEARN website under tab: Research Project forms

Step 4: Conduct primary field work, namely an interview and a survey on the topic

a) Interview –an interview with someone knowledgeable about a topic area of interest to your group (i.e. someone with applied knowledge of the topic area – this can be a graduate student, professor, government official, a member of a local advisory council, owner of a business, or a member of an ENGO). As noted, a graduate student can be used as an expert for the purposes of the interview. Survey – undertake a survey of 15-20 people on the same topic as the interview, and put the results in chart form and graph form and analyze them. Make sure that you note the limitations of the survey and what would be required for a statistically significant survey.

Step 5: Assess how well the City of Waterloo is progressing towards sustainability using your criteria and drawing on the findings of the information from the interview and survey, the visit to City Hall, the City of Waterloo Website, structured observation, etc.

Assignment 3: Group project Interview, Survey and Analysis Presentation

Step 6: Communicate your findings as a team via PowerPoint presentation (15%).

Box 1: Examples of Possible Project Topics:

All topic choices must be approved by your tutorial assistant

- Assessing the City of Waterloo's stormwater management policy.
- Assessing the City of Waterloo's pricing for residential and commercial water. Are the prices fair, do they promote efficient water use, and protect water quality?
- How are water restrictions determined by the City of Waterloo? What factors are used to make those decisions and who is included in the decision-making process?
- What is the City of Waterloo's stance on bottled water and how well are they doing?
- How well is the City of Waterloo doing in terms of reclaiming and restoring sensitive water-based ecological areas (e.g. creeks, riparian zones, lakes)?
- What opportunities are there for citizens to get involved in local water stewardship? How well does the City of Waterloo support these opportunities?

Box 2: Example of a project topic: Assessing bottled drinking water consumption at the University of Waterloo (Assignments 2 and 3)

Assignment 2:

Step 1: Organize into groups and chose topic of bottled drinking water at the University of Waterloo

Step 2: Develop criteria for assessment: e.g. public access to drinking water fountains, personal preference; supportive university policies, etc. (backed up with literature)

Step 3: Hand in group project forms and ethics forms along with questions for survey, interview and rationale

Step 4: a) Interview a graduate student working on water issues; b) undertake survey of students to see who buys bottled water and why, and who doesn't and why; undertake structured observation at on campus food facilities

Step 5: Apply criteria from Step 2

Assignment 3:

Step 6: Present your assessment of bottled drinking water at the University of Waterloo in an engaging way in your final group presentation

Each student will undertake an individual project based on his or her group's primary field work that was collected for Assignment 2. Materials include a) your group's survey b) your group's interview c) structured observation including, but not limited to the City Hall visit and the City of Waterloo website d) other secondary research materials including course materials

- a) **Conventional Essay**: Write a university level essay drawing on your primary field work findings (survey, interview and structured observation) and analyse the findings. The piece should include at least 10 references, five of which should be academic sources. (2000 words maximum).
- b) The photo-journalism article: undertake a photo-journalism approach (1500 words maximum). Examine your group's primary field work and take <u>your own</u> photos of topic. How sustainable is the City of Waterloo in your topic area? Where is there room for improvement? Do you have recommendations? Use an Alternatives Journal A\J article (<u>http://www.alternativesjournal.ca/sustainable-living</u>) as a guide. The piece should include at least six academic sources. All photos must be your own and taken by you. No photos from the internet. Make sure that each photo has a proper credit with date and place taken. Note that if you take a picture of someone, you must get their permission on a consent/release form prior to taking the picture and to be able to use it and publish it on the course webpage. (See Appendix for "Consent For Video [or Photographs] Form").

Learning Outcome of group and individual projects: learn how to apply for research ethics approval, devise a relevant set of questions dealing with the topic of assessing sustainability, to recognize the strengths and limitations of the research design, evaluate them against a set of criteria backed up with secondary literature, and to communicate your findings effectively, graphically, and in written text. The goal is to foster development of university-level research, critical analysis, organizational and communications skills. The test will cover information presented in the text, lectures, and presentations and illustrated with examples. You will also be presented with a hypothetical situation and will need to choose the appropriate methods and show how you would design and implement a qualitative research study if you were hired by the city as a consultant. You will have some choices of questions to be answered.

Learning Outcome: The goal of the test is as follows:

- to ensure that you have a basic knowledge of the qualitative research methods available to you that you can use in future assignments and research; and
- to make sure that you have been effectively introduced to the idea of how one might foster a sustainable (green), resilient community using those research methods.

Meaningful participation is not just about showing up, although attending class and tutorials is a pre-requisite. For that matter, showing up and having many opinions does not necessarily constitute meaningful participation either. Quality is more important than quantity. In the context of this course, meaningful participation enriches the immediate environment—makes it more interesting and thought-provoking. It is based on a collaborative learning approach where no one person has a monopoly on the answers or available discussion time. Participants are informed through reading, observing, listening, 'ground-truthing' and thinking. Those engaged in meaningful participation recognize the power dynamics in the room; respect the opinions and world views of others by listening carefully with an open-mind and by acknowledging those views. Participation can also be noted occur in both written and verbal context. *Most notably, your mark will be assigned on the demonstrated knowledge of the readings in the text, lecture content, and contribution to tutorial assignments*.

<u>Tutorial participation:</u> 5% for attendance (.5 reduction for each class missed unless you have a documented exception or a permissible conflict. Always check ahead with your tutor). 5% for tutorial contributions using the stated criteria above.

<u>Class participation:</u> 10% for submission of writing exercises submitted in ten lectures via LEARN (1% per submission). Exercises will be due at the end of every class and will focus on learning material covered during that day's lecture.

Grading of Papers and Presentations

Effective Fall 2001, numeric grades on a scale from 0-100 are used in grading all assignments at the University of Waterloo. Evaluation and Marking Rubrics will be posted on LEARN. The following list will give you an idea of the basis upon which numeric grades are assigned:

90-100%: Work that shows a high level of initiative and is clearly above and beyond what is expected at a second year level. Referencing, style, grammar/spelling, content and the development of ideas are all superior.

80-89%: Work that shows good initiative and is above what is expected at a second year level. Referencing, style, grammar/spelling, content and the development of ideas are all good. **70-79%:** Work that shows initiative and is about what is expected at a second year level, but one or more problems are evident in referencing, style, grammar/spelling, content and/or the development of ideas.

60-69%: Work that does not demonstrate initiative, has a series of problems in referencing, style, grammar/spelling, content and/or the development of ideas, and overall, does not fully convince the reader that the topic has been well considered

50-59%: Work that is substandard/sloppy in places, has many problems in referencing, style, grammar/spelling, content and/or the development of ideas, and overall, raises more questions in a reader's mind than the work answers.

40-49%: Work that is of consistently poor quality, demonstrates gaps in comprehension of the assigned material, and/or indicates that not enough time was taken to properly address the assignment

<40: Work that is clearly of poor quality, demonstrates a lack of comprehension of the assigned material, shows little attempts at a personal development of ideas or efforts to back up arguments with suitable evidence, and/or indicates that the work was completed 'at the last minute'.

Submitting Assignments:

All assignments should be submitted via LEARN only unless otherwise indicated. All students must make arrangements for their assignments to be submitted to the appropriate dropbox on LEARN by the time and date indicated in the weekly schedule. Assignments should not be handed to the professor in class or emailed to the professor, unless indicated. LEARN provides a date and time stamp for all assignments submitted to the dropbox – this will be the date used to determine any late penalties that will be applied.

Late Assignments:

The assignment will be graded as per the above guidelines, and then **5% will be deducted for each day an assignment is late**. Extentions will be granted only in cases of a documented medical condition (including psychological) or an extreme family/personal emergency.

Please ensure that you are diligent in *backing up computer files* and making *draft copies* of all assignments, as computer/disk failures, printer problems, etc, will not normally be considered a valid reason to waive the late assignment deduction. NOTE: Perhaps the easiest way to prevent computer file loss is to send to yourself an email attachment of your assignment after each significant work session.

Course Advisories:

Workload

Full-time university enrolment, as the name suggests, is a full-time job. A full-time load per term constitutes five courses and assumes that the student will spend nine hours a week on each course. The assigned course workload is assessed at that amount including class time, tutorials, field trips, readings and assignments. In this course, the readings are heavily weighted at the beginning to leave time for the students to work on the assignments at the end. Make sure that you keep up on the readings because you will need to be able to apply them to your assignments and final test.

Email

University policy requires that official email correspondence is to be addressed to UW userids. Please make sure that you use an active ENV email account in correspondence with the professor and TAs.

Electronics and Laptop Use in Class

To be skilled communicators, we need to be adept in a wide diversity of communications technologies. Sometimes, I will encourage you to use your computers and other times, I will encourage you to put them down and engage in active listening. Please also do your best to ensure that smart phones, cells or similar devices are turned off while in class, however entertaining they might be!

University Requirements

Academic Integrity: In order to maintain a culture of academic integrity, member of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. Refer to Academic Integrity website (https://uwaterloo.ca/academic-integrity/) for details.

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 (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-70) Student Petitions and Grievances, Section 4. When in doubt, please contact the department's administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g. plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71 (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/policy-71) Student Discipline. For typical penalties check Guidelines for the Assessment of Penalties (https://uwaterloo.ca/secretariat/policies-procedures-guidelines/guidelines/guidelines-assessment-penalties).

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.

Note for Students with Disabilities: AccessAbility Services (http://uwaterloo.ca/disabilityservices/), 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 office at the beginning of each academic term.

Turnitin.com: Plagiarism detection software (Turnitin) will be used to screen assignments in this course. This is being done to verify that use of all material and sources in assignments is documented. In the first week of the term, details will be provided about the arrangements for the use of Turnitin in this course.

Note: students must be given a reasonable option if they do not want to have their assignment screened by Turnitin. See: http://uwaterloo.ca/academicintegrity/Turnitin/index.html for more information.