Sustainable Management Studies 603

METHODS

Winter, 2019

RCH 212  Thursdays, 11:30am – 2:20pm

Instructor: Dr. Laszlo Sarkany
Email Address: lsarkany@uwaterloo.ca
Office Location: EV3 - 4301
Office Hours: Tuesdays, 9am – 11am, or by appointment

Formal course description:

“This course will introduce quantitative and qualitative research methods such as statistical methods, case study analysis, life cycle assessment, survey methods, impact measurement, etc. Students will learn skills like risk assessment methods, sustainability measurement and reporting, qualitative and quantitative data analysis, literature review, ethical aspects of research and proposal writing.”

COURSE DESCRIPTION:

The aim of this course is to introduce students to the appreciation of the metatheoretical, conceptual, analytical and methodological tools to undertake independent research dealing with sustainable management. The five-module course is focuses on such key topics as the philosophy of science and social science, situating the research question(s) within broader the literature on the topic, research design, and qualitative and quantitative methodologies and techniques. While enrolled in this course, students will gain an appreciation for the conceptual, analytical and practical skills necessary to pose astute research questions, conduct focused literature reviews, identify gaps in the relevant literature, decide on a study design, and operationalize their research questions.

As students traverse the contours of the ontological and methodological aspects of the relevant scientific principles, students will be encouraged to continually think of ways the theoretical and metatheoretical aspects of science and social science inform their own research projects. Familiarity with the conceptual aspects of research will enable students to employ a healthy sense of (self) criticism in relation to their own work, and will enable them to constructively evaluate and critique other relevant research as well.

The order in which the modules are addressed in the course outline provides a potential path by which one is able to conceptualize, operationalize and report or write a research proposal or articles for publication. Students are strongly encouraged to pay a close attention to both, the individual modules and the way in which the five modules create a full research process.
LEARNING OBJECTIVES

By completing this course, will be able to have an appreciate of the research process, be able to differentiate between different perspectives on research, design and complete research projects that are coherent and organized, and be able to critically evaluate their own research and the research of other scholars.

TABLE OF MODULES

| MODULE 1 – Philosophy of Science and Social Science |
| January 8th and 10th | Introductions |
| January 15th and 17th | Epistemology, Ontology, and the Scientific Method |

| MODULE 2 – Literature Review |
| January 22nd and 24th | Literature Review and Critique |
| January 29th and 31st | The Role of Theory |

| MODULE 3 – Research Design |
| February 5th and 7th | Research Questions and Hypotheses |
| February 12th and 14th | Designing Research |

| MODULE 4 – Methodologies |
| February 19th and 21st | READING WEEK |
| February 26th and 28th | Qualitative Research |
| March 5th and 7th | Quantitative Research |
| March 12th and 14th | Mixed Method Approaches |

| MODULE 5 – Research Techniques |
| March 19th and 21st | Qualitative Techniques |
| March 26th and 28th | Quantitative Techniques |
| April 4th | In-class test |

OFFICE HOURS

Please note that above and beyond my regularly scheduled office hours, I will be more than happy to meet anyone by appointment. I will be on campus on Tuesdays and Fridays, and so meeting after class is always a possibility. In addition, I am available via email as well as Skype. Please allow a maximum of 48-hour turnaround for email or Skype calls.

TEXTS

Theory:


Research Design:

Research Praxis:


*Texts are available for purchase in the University of Waterloo bookstore. You will be able to access additional readings through the Dana Porter Library and the Internet.*

Course Requirements, Expectations, and Standards:

**GRADING**

I) Weekly Seminar Participation: 20%
II) Seminar Leadership: 20%
III) Seminar Rapporteur: 10%
IV) Reflection Journal Entries: 20%
V) In-Class Test: 30%

**COURSE REQUIREMENTS:**

**WEEKLY SEMINAR PARTICIPATION**

You will be expected to attend, and fully participate in, all class meetings. Active and focused participation during meetings will be inherently important not only for completing the course, but also for your personal intellectual development. Keys to success in regards to this course component hinges on the following:

1) For each meeting, you are expected to read all the assigned readings and skim at least some of the recommended texts. Please note that you will be evaluated on the quality of your participation and not on the frequency by which you participate.
2) Your communication during the discussions and presentation should be self-contained and focused on the topic(s) being discussed.
3) As the overall subject matter of the course lends itself to discussions involving a plurality of views and worldviews about research which is inherently personal, please note that you are expected to conduct yourself with utmost professionalism and respect at all times.

*** Please note that attendance will be taken during the weekly meetings, and it will count for half (or 50%) of the grade for this component.
DISCUSSION LEADERSHIP

In groups of maximum three, students will be expected to sign up to lead one of the seminar discussions during the first half of each meetings. In order adequately prepare for leading the discussions, students are asked the following:

1) Prepare a maximum 3-page (single-spaced) synthesis – and NOT summary – of the assigned readings. The aim here is to outline how the overall themes in the readings are connected to the theme of the week, and the overall foci of the course. The three-page summaries should have the following three components:
   a. A rationale in regards to the importance of the topic
   b. The synthesis
   c. Stating four to five key questions which will generate a rigorous class discussion
2) The three-page document needs to be posted on the LEARN site of the course by 3:00pm the day before the class – on Wednesdays.
3) During the meeting, the leaders’ first task will be to provide a brief summary of the circulated document, restate the questions, and lead the class in discussions and activities which may include games, etc. (A particularly useful on-line tool that you may want to consider using is ‘Kahoot’ as it encourages class participation via the web, in real-time, using smart phones, laptops, etc.)
4) This presentation should not be longer than 45 minutes.

DISCUSSION RAPPORTEURS

The seminar rapporteur(s) will provide a summary of the key topics, concepts and ideas discussed during a particular seminar and will post a maximum two-page single-spaced document of their summaries and observations by 11.59pm on the Friday following the seminar meeting. The rapporteur(s) will provide a brief, maximum five-minute discussion of the document at the beginning of the class following the one being reported on.

REFLECTION JOURNAL ENTRIES

Each student will be asked to submit a maximum of three (3) entries by April 4th. The best two (2) will be used to assign a grade for this course component. Each entry must be at least 1000-words long, and it must include a reflection on how the weekly readings, seminar discussions, and what the guest speakers and presenters spoke about inform the particular research question, design, or research method considered by each student. In order to complete the assignment, students are encouraged to consider the following questions:

1) Which reading(s) did I find most interesting and why?
2) Which reading(s) did I find the least interesting and why?
3) What ideas, concepts and arguments did I find the most compelling, and why?
4) How may I integrate what I read, learned and heard into my own research project?
IN-CLASS TEST

The test will be held on Thursday, April 4th and will last approximately 2 hours. The purpose of this evaluation tool is to test students’ general understanding of the most important and practical concepts, ideas, methodologies and methods considered during the course. The test will be comprised of the following types of questions:

- Defining terms
- Short answers
- Short and long essay questions
WEEKLY READINGS

MODULE 1: PHILOSOPHY OF SCIENCE AND SOCIAL SCIENCE

Week 1 – Introduction to the course – An Overview

Introductions
A close reading of the syllabus
Code of conduct and expectations

Class discussion: what are research and theory, how do they relate, and why are they important?

Week 2 – Epistemology, Ontology and the Scientific Method

Discussion Leadership – Dina, Tahsan and Sebastian
Rapporteur - Snehaa and Karim

Required:


Recommended readings:


MODULE 2: LITERATURE REVIEW

Week 3 – Constructing, Reviewing and Critiquing the Literature

Discussion Leadership: Darlene, Sam and Josie
Rapporteur: Pedro and Dina

Required readings:


Recommended readings: (2 – 3 pages max; each!)


Week 4 – Theory

Discussion Leadership: Natalie, Aida, Kimiya
Rapporteur: Josie and Darlene

Required


**Recommended readings:**


**MODULE 3 – RESEARCH DESIGN**

**Week 5 – Research Questions and Hypotheses**

*Discussion Leadership: Daniel, Valentina and Pedro*

*Rapporteur: Sam and Natalie*

**Required readings:**


**Recommended readings:**

Week 6 – Issues in Design

**Discussion Leadership: Karim, Adrian**  
**Rapporteur: Aida and Sebastian**

**Required readings:**


**Recommended readings:**


Psychological Bulletin 77(4), 273.


MODULE 3 – METHODOLOGIES

Week 7 – Qualitative Approaches

Discussion Leadership: Sevile, Noor and Elham
Rapporteur: Kimiya and Betsy

Required readings:


Recommended readings:


Week 8 – Quantitative Approaches

Discussion Leadership: [Faculty]
Rapporteur: Valentina and Adrian; Taylor, Sohani and Parnia

Required reading:


Recommended readings:


McEntee, J. C. &Burst, D. V. 2011. Surveying the field: Applying the just sustainability paradigm to survey research. In A. Franklin & P. Blyton (Eds.), Researching sustainability. A guide to social science methods, practice and


Week 9 – Mixed Methods:

**Discussion Leadership: Snehaa, Betsy and Zhi**  
**Rapporteur: Noor and Ahsan**

**Required readings:**


**Recommended readings:**


**MODULE 4 – DATA CODING, ANALYSIS AND INTERPRETATION**

Week 10 – Qualitative Techniques

**Discussion Leadership: [Taylor, Sohani, Parnia]**  
**Rapporteur: Zhi and Daniel**

**Required readings:**


Pratt, M. G. 2009. From the editors: For the lack of a boilerplate: Tips on writing up (and reviewing) qualitative research. *Academy of Management Journal* 52(5), 856-862.


**Recommended readings:**


**Week 11 – Quantitative Techniques**

*Discussion Leadership: [Faculty]*

*Rapporteur: Sevile and Elham*

**Required readings:**


