9704 Research Methods [2022-2023]

Wednesdays 2:30 – 5:30 p.m. Eastern Standard Time
(First Meeting: Sept. 14, 2022 in classroom 2120)

Professor: Kersi D. Antia
Phone: (519) 661 4179
Office: Room 2360
Email: kantia@ivey.ca (best way to contact me)

The schedule may be juggled (e.g. to accommodate changes to guests’ availability etc…). Also, to accommodate whatever may change with COVID, we may have to change the class format (online to hybrid; hybrid to in person, etc.).

“…data analysis alone does not enable researchers to achieve their main goal, namely, to answer questions. To reach that goal, researchers must concentrate on their design: it must be as sound as possible, and it must be appropriate for the questions they want answered… Though there are numerous techniques of data analysis, no techniques, regardless of its elegance, sophistication, and power can save the research when the design is poor, improper, confounded, or misguided. As we have stated, and will state again, sound inferences and generalizations from a piece of research are a function of design and not statistical analysis…”
(Keppel & Zedeck, 1991, pg. 12)

This course will introduce different ways of conducting research. The focus is on methodological and philosophy of science issues – it is not a statistics class. It will help you develop skills to conduct and evaluate research. By the end of the course, you will have some appreciation of the research process. But this course will not make you an expert and it only marks the beginning of your methodological training.

Enrolment Restrictions

Enrollment in this course is restricted to graduate students in the Ivey PhD Program, as well as any student that has obtained special permission to enroll in this course from the course instructor as well as the Graduate Chair (or equivalent) from the student’s home program.

Evaluation: I will assess your performance as outlined below:

<table>
<thead>
<tr>
<th>Graded Component</th>
<th>Weighting</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Contribution through the Term</td>
<td>40%</td>
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<tr>
<td>Proposal</td>
<td>Not graded (but feedback provided)</td>
<td>October 5, 2022</td>
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<tr>
<td>Abstract (&lt;200 words)</td>
<td>5%</td>
<td>October 19, 2022</td>
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<tr>
<td>Introduction</td>
<td>5%</td>
<td>November 2, 2022</td>
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<tr>
<td>Background, Literature Review</td>
<td>15%</td>
<td>November 23, 2022</td>
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<tr>
<td>In-class Presentation</td>
<td>20%</td>
<td>December 7, 14, 2022</td>
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<tr>
<td>Final manuscript</td>
<td>15%</td>
<td>December 14, 2022</td>
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The final average in this class will likely be in the 80% to 85% range, though there is no policy specifying it cannot be higher or lower. 90%+ = A+ (= truly exceptional); 80-90% = A (doing just fine); 70-80% = B (‘we should talk’).

Materials:

(1) A. F. Chalmers, What Is This Thing Called Science? (3rd edition please)
(2) Leonard Bickman and Debra J. Rog, Applied Social Research Methods (a good reference book – an electronic version is available for download from Western Libraries; I’m assigning readings based on 2nd edition)
(3) Various readings (articles, book chapters) available on a network folder + PDFs of the remaining readings (i.e. excluding assigned books) are located at \ivey.ca\PHDShared\Research Methods Course.

Contribution: The course is a seminar, a format that requires you to speak. I evaluate your contribution on the quality and quantity of your verbal contributions. Do all the readings carefully. Be thoughtful. Make well-substantiated and logical arguments. Be critical. Take risks. Listen. Ask questions, answer questions, respond to comments, wonder aloud, provoke discussion etc… regularly during classes. Comments that are unambiguously based on a thorough reading of the assigned readings are especially appreciated.

Research Paper: Write a paper on a management topic that interests you. The paper must be de novo (e.g. independent of other current or past coursework or workplace efforts). The topic can be related to something you became interested in before (e.g. master’s thesis), but the paper and the theoretical model must be original. Also, you may use an idea given to you by a professor at Ivey, or even work with that person to develop your ideas, but you must be the ‘primary’ on the paper (e.g. first author) and be the major force driving the ideas and paper forward. Though you may work with a professor on the conceptualizing of the paper, it is not permissible to have them read or provide feedback on a draft of the manuscript prior to handing it in and it is not permissible to use any form of copy editor or assistance in writing the paper. It must represent your own work.

Make it a small enough idea that you can get it done, but a big enough one that if you collected data on it, you could present it next year at a conference. The papers you submit should be aimed at a quality that would generate interest from reviewers at good journals in your field. Do not propose a meta-analysis or conceptual paper. The paper must be logical, persuasive, and put theory front and centre. It must attempt to make an explicit and significant contribution, and must demonstrate a good grasp of the literature. The paper includes everything you would typically see in a top journal article up to (but not including) the “Study 1” section. That is:

- Title page (title, your name + abstract of <=200 words)
- Introduction section (e.g. Position paper. What are you examining? What is the research question? Why is this paper important and interesting? What do you intend to contribute? What is the general approach?). Read an empirical paper from any top journal – this is what your need to emulate. Just a reminder: this section must clearly state your research question.
- Background, Literature Review: Derived from and supports your research question. This section should include hypotheses generation.
- Figures, tables etc… You must include an explicit theoretical model (not a process model), a picture of how you conceptualize the relationships among your core variables.
- References: must be accurate and complete.

Due: 5 pm, Wednesday Dec. 14, 2022. Submit via LEARN (which will submit the papers to Turn It In). You are limited to 3000 words of text (not including references, tables and figures, contribution statement, abstract/title page). It is vital that you keep a good length/contribution ratio – let me say this another way: if you only have 2500 words of content, don’t use the remaining 500 words because you feel compelled to get to 3000. High quality is better than high quantity. You must develop your ideas logically and clearly. I value depth over breadth in this endeavour. You are free to hand the paper in early but you are only permitted to hand it in once.
Text Formatting: typed, double-spaced, 1-inch margins, 12-point font, Times New Roman. For other formatting issues (e.g. references, tables/figures…), adopt the style used by a top research journal in your respective field. Please place your figures and tables in the text of the paper (not at the end).

Course Rules:

- I will not accept late deliverables except by prior written arrangement or unless I receive what I judge to be unambiguous evidence of extenuating circumstances in which case it is at my discretion how to handle grading. Otherwise, late papers, assignments etc… will earn an automatic grade of zero.

- I expect you to attend all classes and I expect you to be on time. If you plan to be absent or late, email me ahead of time. If you miss 3 or more classes, you will fail the course. If you miss a class, you are responsible for completing the assignment and readings on time.

- Pay attention to the quality of your writing/arguments (well-organized and articulated; specific and clear meanings; perfect formatting etc…). I tend to be hard on poorly written assignments.

- I use Turn It In.com for all written assignments: “All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnititin.com (http://www.turnitin.com).” See also https://www.lib.uwo.ca/tutorials/plagiarism/ and https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_grad.pdf.

Academic integrity: Plagiarism and other forms of academic dishonesty will be dealt with consistent with the official policies of the university. This concept applies with equal force to all assignments and is considered a major Scholastic Offence. I will be holding you, as a PhD student, to a high standard of integrity and professional conduct. If you have concerns, queries etc…, talk to me immediately. If you feel yourself to be under pressure and are tempted to do something you know you shouldn’t, talk to me before you do anything regrettable. I am not inflexible and I will always try to work something out with people acting in good faith. During my time at Ivey, I have seen many PhD students leave the university due to academic integrity violations. Talk to me. Here is some language that the university requires: “Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

Mental Health: As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. For example, to support physical activity, all students, as part of their registration, receive membership in Western’s Campus Recreation Centre. Numerous cultural events are offered throughout the year. Please check out the Faculty of Music web page http://www.music.uwo.ca/, and our own McIntosh Gallery http://www.mcintoshgallery.ca/. Information regarding health- and wellness-related services available to students may be found at http://www.health.uwo.ca/

Students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), or other relevant administrators in their unit. Campus mental health resources may be found at http://www.health.uwo.ca/mental_health/resources.html

To help you learn more about mental health, Western has developed an interactive mental health learning module, found here: http://www.health.uwo.ca/mental_health/module.html. This module is 30 minutes in length.
and provides participants with a basic understanding of mental health issues and of available campus and community resources. Topics include stress, anxiety, depression, suicide and eating disorders. After successful completion of the module, participants receive a certificate confirming their participation.

**Accessible Education Western (AEW)**

Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW), a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.

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Reading List:

Session 1: Interesting Research (Sept. 14)
- Davis (1971), “That’s Interesting!”

Session 2: Writing (Sept. 21)
- Cochrane (2005), “Writing Tips for Ph.D. Students”

Session 3: Retractions, Reviewing, and Ethics (Sept. 28)
Peruse the Retraction Watch website (https://retractionwatch.com). Generate a list of the common reasons that papers are retracted. It would be helpful if you focused on retractions that occur in business or social sciences journals, especially good ones. We will discuss your findings in class.

- Houston and Hulland (2021) “Reviewers as Developmental Coaches”

Background Reading: Bickman and Rog, Chapter 4

Session 4: Research Productivity (Oct. 5)
- Williamson and Cable (2003) “Predicting Early Career Research Productivity: The Case of Management Faculty”

We will NOT be meeting on October 12 – have a good break!

Session 5: Scientific Method (October 19)
WATCH:
- https://www.youtube.com/watch?v=o8GA2w-qrcg
- https://www.youtube.com/watch?v=EYPapE-3FRw
- https://www.youtube.com/watch?v=Dkijkh3OjjeA

- Chalmers, Chapters 1, 5-7

Session 6: Theory (October 26)
- Flexner, “The Usefulness of Useless Knowledge”

Background Reading: Chalmers, Chapter 8, 9
Session 7: Scale Development, Measurement (November 2)

- Bennett and Robinson (2000) “Development of a Measure of Workplace Deviance”

Session 8: Grounded Theory/Humanistic Inquiry (November 9)

WATCH:
- https://www.ted.com/talks/brene_brown_the_power_of_vulnerability
- https://www.youtube.com/watch?v=IJyNoJCAuzA
- https://www.youtube.com/watch?v=R1vskiVDwl4

- Chalmers, Chapter 2, 4

Background Reading: Bickman and Rog, Chapters 8, 9 and 17

Session 9: Self-Report Measures and Biases (November 16)

- Sawyer (1975) “Demand Artifacts in Laboratory Experiments in Consumer Research”

SOME NEWER METHODS AND THEIR APPLICATION

Session 10: Causal Inference (November 23)

- Fremeth, Holburn, Richter (2016), “Bridging Qualitative and Quantitative Methods in Organizational Research: Applications of Synthetic Control Methodology in the U.S. Automobile Industry”

Session 11: Web Scraping & Text/Image Analysis (November 30)


Sessions 12, 13 (December 7, 14): Student Presentations
You will have been working on your problem/phenomenon and developed your ideas to the point you have a specific research question. You should be able to clearly articulate the intended (managerial and/or theoretical) contributions of addressing the research question. You should have reviewed the literature, developed hypotheses (at least 2, no more than 4), drawn a theoretical model and identified how you will go about studying (i.e. empirically) the question. All of this is the topic of your presentation. In other words, this is a presentation of your paper, in advance of handing it in. You have 20 minutes and may use up to 10 Powerpoint slides.
1. COURSE DESCRIPTION

This course continues from its first half taught by Professor Antia. At the end of the course, you will be required to submit a complete version of the research paper that you started in the first half of the course (i.e., the term paper submitted in December). You will also be required to give a conference-style presentation of the paper sometime in the last two weeks of the course.

We will spend most of the course discussing data-related problems, how they impact inferences about the population being studied, and how they can be handled. While most emphasis will be on quantitative research, the issues that we will address have implications for all social science and management research, regardless of method. Although technical material will be discussed when necessary, emphasis will be placed on theoretical foundations and conceptual understanding.

2. COURSE REQUIREMENTS

Grades will be based on five elements:

1. weekly seminar participation/leader (20%)
2. position papers (20%) - Due weekly at noon on the Thursday before class
3. presentation slides (10%) – Due at noon on Thursday, February 17, 2023
4. paper presentation (15%) - Dates to TBD
5. final term paper (35%) - Due Friday, April 14, 2023 at 3pm
All written assignments must be submitted on Learn (https://learn.ivey.ca/courses/4232). They must typed, double-spaced, in 12-point font, and submitted as a PDF file. Except under extenuating circumstances, late assignments will not be accepted.

2.1 Weekly seminar participation/leader (20%)

The course will be most successful if everyone participates. If you don’t participate regularly, and on a weekly basis, you will get a poor grade. Still, opinion alone is not good enough. You will be evaluated on your ability to critique the readings and to put them in a wider context. Aside from regular weekly seminar participation, each student will take the role of seminar leader in two classes. I will determine the specific dates (and associated readings) for these roles during the first seminar on January 13th.

The seminar leader’s role is to stimulate informed discussion and debate around the major ideas of the week’s readings. Rather than summarize the readings separately, you should encourage discussion to consider how the readings overlap, complement each other, and/or contradict each other. [Hint: do not ask questions that have simple yes or no answers.] While you should not lecture, give a PowerPoint presentation or provide extensive handouts, feel free start the seminar with a 5-6 minute discussion of the general theme of the discussion if you feel it might be helpful.

2.2 Position papers (20% - 10 papers x 2 grades each)

You are required to write 10 position papers on the required readings. There are 11 weeks for which a position paper can be written (a 12th week, February 17th, is excluded from the position papers). This means that you have one ‘free’ week of your choice when you do not need to submit a position paper. You will receive 2 points for each satisfactorily completed paper. If I don’t think enough effort was given, you will receive a grade of 0 for that week. If you satisfactorily complete 10 position papers, you will receive 20/20 for this element of the course. I will not provide comments on the position papers.

Each position paper must be at least one page in length and no more than two pages in length (typed, double-spaced, 12-point font). Papers less than a page will automatically receive a grade of 0, and I will not read past the second page. The weekly position papers are due before noon (London, ON time) on the Thursday before the class that deals with the corresponding readings. Late papers will not be accepted.

While all the readings should be discussed, the individual readings should not be discussed separately. Instead, you draw connections between them (and, when possible, tie them to other topics discussed in the course) and raise problems or questions that are meant to stimulate seminar discussion. For the last two weeks of the course, you will write position papers on the presentation slides of your colleagues. In these cases, you should provide constructive criticisms of each paper, tying them together if possible. At the end of each
position paper (but still within the two-page length), you must include three seminar discussion questions.

2.3 Presentation slides (10%): Due Thursday, February 17, 2023 at noon

While I will provide suggestions on the slides for your final paper presentation, I will not grade them. They will be graded by your peers. The standard by which they should be graded is a top-level seminar at a major academic conference. The slides must be submitted (in PDF format) on Learn before Thursday, February 17, 2023 at noon. As mentioned above, students’ presentation slides will also be required readings for weeks 11 and 12.

In terms of general advice, presentation slides should include 1) an introduction to the problem the paper tackles, 2) a brief discussion of previous research and how your paper builds on it, 3) some theoretical foundation (including research questions or hypotheses), 4) information on the data that you employ (and how they were collected), 5) a discussion of the methods used to assess your research questions, 6) a clear description of your main findings, and 7) some discussion of the implications of your results and the limitations of the paper. It should go without saying that the research questions should be convincingly explained.

You must have no more than 20 slides. Avoid using long sentences (and paragraphs); instead use succinct bullet points. Ensure that tables are legible (use at least a 20-point sans-serif font and include only necessary information). Tables and figures must be clear and comprehensible. If they are too complicated, they defeat their purpose (which is to clearly convey complex information). Numerical values in tables should be rounded to two significant digits. Finally, research on visual perception and cognition suggests that slides with white background and dark text are most easily comprehended by most people. As Tufte famously stated, your tables, figures, and slides, should maximize the ‘data to ink ratio’. In other words, do not include unnecessary material of any sort.

2.4 Paper presentation (15%): TBD (last two weeks of course)

Using the slides discussed above, you will present your final paper sometime in the last two weeks of the course. I will determine the schedule for presentations before the seminar on February 24. As mentioned above, your presentation should take the form of a conference presentation. You will have 30 minutes for the presentation. Another 15 minutes will be allotted for a ‘question and answer’ period. I will allow interruptions for points of clarification during the presentation but major questions should be reserved for the 15-minute question and answer period. Your presentation will be evaluated by your peers.

2.5 Final paper (35%): due Friday, April 14 at 3pm

The final paper should be in a state that is nearly ready to submit to an academic journal for publication. It must be between at least 15 pages in length (typed, double-spaced, 12-point font, not including the title page and reference list) but no more than 20 pages (not
including the title page, tables and figures, and reference list). It is just as important to keep the paper less than 20 pages as it is to ensure that you have more than 15 pages. I will subtract 2 points (i.e., 1/35 possible points for the assignment) from your final paper grade for each page less than 15 or greater than 20. I will not read past the 20th page. The paper should be written in a format acceptable for publication in a top academic journal (such as APA, Chicago or MLA style). Footnotes should only rarely be used.

3. COURSE SCHEDULE AND REQUIRED READINGS

I suggest that you read the sources in the order in which they appear in the list.

1. **January 13: What ‘should’ research look like?**
   a. objectivity and subjectivity
   b. basic and applied research
   c. publication bias

**Required readings:**


Fanelli, Daniele (2011) ‘Negative results are disappearing from most disciplines and countries’, *Scientometrics*, 90(3): 891-904.


2. **January 20: Representativeness of data**
   a. random samples and classical statistical inference
   b. sampling and inferences from qualitative data
   c. mixed methods

**Required readings:**


*Read these short pieces BEFORE the Grusky et al article:*

- *Monitoring the Crisis: American Voices Project,*
  [https://inequality.stanford.edu/covid/american-voices-project](https://inequality.stanford.edu/covid/american-voices-project)
- *American Voices Project Methodology,*
  [https://inequality.stanford.edu/avp/methodology](https://inequality.stanford.edu/avp/methodology)

3. **January 27: Sample selection issues and solutions**
   a. types of missingness
   b. consequences of missingness for inference
   c. selection bias
   d. tools for correcting for selection bias

**Required readings:**


4. **February 3: Measuring concepts and relationships**
   a. validity and reliability
   b. accounting for mechanisms
   c. single indicators vs composite measures

**Required readings:**


5. **February 10: Exploration and description**
   a. importance of graphical methods
   b. nonlinearity
   c. influential outliers

**Required readings:**


6. **February 17:** Causality, control variables, and interactions
   a. causality, spurious relationships, Simpson’s paradox
   b. mediation and moderation
   c. interaction effects

**Required readings:**


7. **February 24:** Presenting academic papers
   (no position paper; presentations slides due at 3pm)

**Required reading:**

8. **March 3: Assessing importance**
   a. substantive or practical importance revisited
   b. relative importance
   c. effect displays

**Required readings:**


9. **March 10: Assessing change over time**
   a. longitudinal data
   b. repeated cross-sectional and panel data
   c. random effects, fixed effects and difference-in-difference

**Required readings:**


10. **March 17: Cross-national and comparative research**
   a. logic of comparative method
   b. survey comparability
   c. contextual versus compositional effects
   d. multilevel models data

**Required readings:**


11. **March 24: Student presentations (1)**

**Required readings: TBA**

12. **March 31: Student presentations (2)**

**Required readings: TBA**

**April 14:** Final term paper due at 3pm

4. **ENROLLMENT RESTRICTIONS**

   Enrollment in this course is restricted to graduate students in the Ivey PhD Program, as well as any student that has obtained special permission to enroll in this course from the course instructor as well as the Graduate Chair (or equivalent) from the student's home program.
5. ACADEMIC OFFENCES: PLAGIARISM AND ACADEMIC INTEGRITY
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at https://grad.uwo.ca/administration/regulations/13.html

All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

6. SUPPORT SERVICES: HEALTH AND WELLNESS
Students who are in emotional/mental distress should refer to Health and Wellness at Western University https://www.uwo.ca/health/psych/index.html for a complete list of options about how to obtain help. Additionally, students seeking help regarding mental health concerns are advised to speak to someone they feel comfortable confiding in, such as their faculty supervisor, their program director (graduate chair), program coordinator or other relevant administrators in their unit.

As part of a successful graduate student experience at Western, we encourage students to make their health and wellness a priority. Western provides several on campus health-related services to help you achieve optimum health and engage in healthy living while pursuing your graduate degree. See https://www.uwo.ca/health.

7. ACCESSIBLE EDUCATION WESTERN (AEW)
Western is committed to achieving barrier-free accessibility for all its members, including graduate students. As part of this commitment, Western provides a variety of services devoted to promoting, advocating, and accommodating persons with disabilities in their respective graduate program.

Graduate students with disabilities (for example, chronic illnesses, mental health conditions, mobility impairments) are strongly encouraged to register with Accessible Education Western (AEW), a confidential service designed to support graduate and undergraduate students through their academic program. With the appropriate documentation, the student will work with both AEW and their graduate programs (normally their Graduate Chair and/or Course instructor) to ensure that appropriate academic accommodations to program requirements are arranged. These accommodations include individual counselling, alternative formatted literature, accessible campus transportation, learning strategy instruction, writing exams and assistive technology instruction.