Research Boot Camp for PhD Students

Period: a.y. 2023/24 – 2 sem.

Instructors:

Prof. Nilanjana (Nel) Dutt

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Course Goals

The seminar provides a crash course in writing a research paper. We start by developing research ideas and then communicating them in writing and through presentations. We will work iteratively on theory development (this applies to both management theories and the logic underlying your hypotheses). We will also engage in the basics of data construction and analysis. Our goal with these activities is to help you construct a research paper where the theory i.e., the concepts in the front end of the paper are being measured and explored in by the data and methods.

This is a great class to kickstart your second-year project. If you are designing an experiment for your second-year paper, you can use this class to get feedback on the experiment and the broader research question. Students will use their own datasets from ongoing or anticipated projects. If you do not have your own data, you can use existing datasets or simulate data. Replications of existing papers are also appropriate.[1]

Each week, we focus on a critical step of developing a paper. We start by developing a research question, expanding it to the paper's introduction, and developing a hypothesis. We then identify and construct a dataset that allows us to test our theory. Last, we analyze the data and present the results. In the final session, all students will present their completed papers.

[1] Expectations for replications will be slightly different given that students will not be developing any new ideas. You must submit a final paper that directly builds upon the ideas discussed in class.

By the end of the course, you will have your own original research paper. The final deliverable is a 20-page (double-spaced all-inclusive *maximum*) paper. The paper must include:

1. A research question and its motivation and theoretical background.
2. Main hypothesis, or proposition, and proposed mechanisms.
3. A detailed empirical section that must include a description of the dataset you have built and an overview of the analysis and findings.

The goal of the course is to provide you with a roadmap for writing the first draft of any research paper.

Course Professors

Nel Dutt (nilanjana.dutt@unibocconi.it) – Associate Professor of Management and Technology at Bocconi University. Nel received her PhD in Strategy from the Business School at Duke University, USA and has been teaching at Bocconi since. Nel's researches how external environmental and political factors affect firm performance and strategic change.

Thorsten Grohsjean (thorsten.grohjean@unibocconi.it) – Assistant Professor of Management and Technology at Bocconi University. Thorsten received his PhD in Management from LMU Munich. He explores in his research how individuals and groups overcome the challenges associated with the development of new knowledge, skills, and abilities.

Course Information

- Attendance is required.
- The majority of class time will be composed of student presentations and a discussion of the homework. At the end of class, we will summarize what we have learned and prepare for the next week's homework.
- The class will typically happen once a week from 9-12 am in room 4-E4-SR01.
- Office hours are by appointment.

Course Reading & Statistical Software

- For large-scale empirical analysis, it is essential to have access to Stata 17 (recent versions such as Stata 12-16 is also fine). If you prefer R, SPSS or Python, that would work as well but we will be unable to provide you any code.
- There is no required textbook for this course. All required readings are online. Students should do all readings themselves *before coming to class*.

Optional Resources

The following texts are helpful for doing research.

For data analysis:

- Joshua Angrist: “Mostly Harmless Econometrics”
- Kennedy: “A Guide to Econometrics”

For writing:

- George Gopen: “The Sense of Structure: Writing from the Reader's Perspective”
- Hal Varian: “How to Build an Economic Model in Your Spare Time”
- Steven Pinker: “The Sense of Style”
- Grammarly or other online tools to improve writing and grammar

Course Grading

- 50% of the grade will come from in-class participation. Showing up to class will not guarantee your participation grade but missing a class will guarantee that you miss out on your participation grade. So, attend our session, do the readings, and be engaged. Give your peers feedback or ask questions.
- 50% of the grade will come from the final paper. We primarily assess the degree to which you are able to show improvement in your paper relative to your in-class presentations. As such, the final paper must be a culmination of your in-class work. While we understand that it is difficult to write an excellent paper in 6 weeks, we want you to feel comfortable with all aspects of paper construction.
- The final paper will be due roughly two weeks after the last class. Tentative submission date is May 18th.

Course Readings and Homework

Class 1

1. Reading: Earl Babbie, The Practice of Social Research, 14th Edition – Part 1: An Introduction to Inquiry
2. Come to class prepared to discuss a research question; keep in mind the criteria mentioned in the readings of the week and be prepared to discuss your question and give feedback to others in class
3. Choose a dataset and be prepared to answer some questions about the dataset. You can use your own data or download a dataset from http://five.dartmouth.edu/ or any other source (here is a source of psychology datasets: https://docs.google.com/spreadsheets/d/1ejOJTNTL5ApCuGTUciV0REEEAqvhI2Rd2FCoj7afops/edit#gid=0). Students can also conduct their own studies or ask faculty members for data to replicate existing paper. Reach out to our own faculty whom you may be interested to collaborate with!
4. Another alternate: https://datasetsearch.research.google.com/
5. Think about what programs you will use for statistical analysis.

Class 2

1. Reading: Earl Babbie, The Practice of Social Research, 14th Edition – Part 2: The Structuring of Inquiry: Quantitative and Qualitative
2. Homework: The homework should comprise 2 Slides.
   - The first paragraph of your paper in the following format:
     1. This is an important issue → this sentence should signal the broad research focus
     2. Here is what the existing literature says → this sentence should tell us which community of scholars you are speaking to. Aim for a mix of old and new scholarship
     3. Here is an interesting and relevant gap / something missing/ new part of the issue that is not considered → this sentence should tell us is new here
     4. Here is what we are saying/ finding → this sentence tells us what we learn
   - Concepts Table (refer to the slides from Class 1)

Class 3

1. Readings: None
2. Homework
   - The revised first paragraph of your paper in the following format:
     1. This is an important issue
     2. Here is what the existing literature says
     3. Here is an interesting and relevant gap / something missing/ new part of the issue that is not considered
     4. Here is what we are saying/ finding
   - Revised concepts table
   - 1 main hypothesis
   - Explanation of the mechanisms for the hypothesis

Class 4

Homework

- Slide 1 should reflect a clear main hypothesis along with an indication of the Independent Variable, Dependent Variable, and Mechanism.
- Slide 2 should include an updated Concepts Table with the Independent Variable, Dependent Variable, and Mechanism Variables (if applicable), the operationalization of these variables measures, i.e. how you will measure your variables, and Data Sources.
- Slide 3 should include a summary statistics table of your dataset.

Class 5

Homework

- Slide 1 should state the hypothesis.
- Slide 2 should show a cross tab or visual of the main pattern of interest.
- Slide 3 should show a simple regression model.
- Be prepared to talk about which methods you used and why. Share if you got similar results using a different model. Did you cluster standard errors? Share any other pertinent information.

Class 6

1. Homework: Please prepare a 10 minutes presentation of your research question and findings.

Course Schedule: Classes will typically run from 9-12 am with some exceptions.

Session	*Date*	*Theme*	*Class Plan*
1	April 11	*What is a research question?*	• Class will be from 2:45-6:00pm • Discussion of research questions • Discussion of possible datasets
2	April 18	*Formalizing the research question*	• Present the first paragraph of your paper answering the research questions you have prepared. • Present the concepts table you have created.
3	May 2	*Constructing an argument*	• Present the focal hypothesis that will be the focus of your paper.
4	May 9	*Data construction*	• Construct a dataset that will answer your chosen research question. • Prepare a presentation for the class that explains: o The RQ o Why you believe the chosen dataset can answer this question. o How you constructed the dataset. o Main variables o Problems with the dataset
5	May 16	*Data Analysis*	• Analyze the dataset and present basic findings • Prepare a presentation for the class that explains: o Which methods you used and why?

			○ What do the results mean? Address the empirical findings and economic impact. ○ Do you believe the results? Why or Why not? ○ What will you do next?
6	May 23	*Final Presentation*	• Each student will prepare 10-minute presentations of the final paper for the class. ○ The presentation must cover the introduction and empirical findings.

Class Miscellaneous:

1. Being a researcher requires being a producer as well as a consumer of research (reviewing, attending seminars, and workshops). This class will help you do both.
2. You will get out of this class, what you put into it. If you take the class's feedback to improve your paper every week, you will have a much-improved final paper. If you attend class passively, you will not see much improvement.
3. One idea one paper. While you may start broader project for your dissertation, keep your individual papers simple and focused.
4. Along the same lines, one paper one theory (usually).
5. The goal at the end of the class: you should be able to explain your paper in one sentence. Only once you understand what you are doing, can you decide whether it is interesting or not.

All the final papers must comprise a research question and dataset. Beyond that, we are quite flexible. Several journals have short papers; such a paper is the goal for this class.

For every class, we require a student to volunteer to be a timekeeper. This student will time all the student presentations. We will have about 12 minutes for each student.
To save time, we will run a flipped classroom. We will share slides the day before. Please ask questions at the start of class. We will save the last 10 minutes to go over the HW.
Be proximate with colleagues, advisors, present regularly, come to the seminars, have your own seminars and workshops.