# INTERDISCIPLINARY RESEARCH METHODS

(GLOA 605-001, Fall 2016) Tuesday 7:20 - 10:00 PM (West 1004, map) Global Affairs Program, George Mason University

(Last Revised: March 18, 2024)

# INSTRUCTOR CONTACT

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## **COURSE DESCRIPTION**

The class is designed to help you become a good researcher (be it an academic or a practitioner) who can produce a meaningful research output that helps us better understand the world. At least I will treat you so from day-1 and ask you to act like one. In more formal terms, the course is to guide students toward methodological literacy by providing an overview of basic techniques in quantitative and qualitative methods. The course will begin with a discussion of the fundamental and essential components of research in social sciences and humanities including such issues as theory, argument, model, and inference. In the second half of the semester, we will dedicate each week to exploring particular methodological techniques, reflecting on the strengths and weaknesses of each. In particular, we will spend two weeks in quantitative methods. This is a grossly insufficient amount of time for any level of quantitative methods and we do not aim at 'mastering' any. Instead, we focus on how we can better understand quantitative materials and incorporate them in our research in some meaningful ways. Those students who are interested in furthering their quantitative skills are advised to take such classes as ECON 637. In addition we will also spend two weeks in understanding how we can collect and interpret qualitative data. Again, two weeks are too short a time frame to master these methods and we instead focus on developing our ideas as to how these methods can better help us answer our research questions.

By the end of the course, students should be able to:

- Describe the epistemological foundations of different methodological techniques
- Reflect critically on different methodological approaches, signaling the strengths and weaknesses of each
- Prepare a research proposal
- Conduct preliminary empirical analyses

# COURSE REUQIREMENT

Participation(20%)

- active participation in class discussion is expected of EVERY student in this seminar.
- the evaluation on your participation rests upon my subjective assessment of the extent to which you contributed to our collective understanding of the class subject. In practical terms, both frequency and quality matter.
- what counts as 'participation' includes:
  - answering (my) questions (on a lot of things)
  - making points about the readings
  - asking questions about the readings
  - engaging in others's presentation

### Reading

This course, like any other graduate course, is not a unidirectional lecture (although there's a fair amount of lecture built in it). It is a collective, self-learning process where a great deal of freedom and flexibility is allowed to, and required of, students. You do not learn from me. Okay, you do learn from me, but you learn A LOT more from the readings. The class is the place where you bring up what you have already learned from readings and exchange ideas about them, thereby collectively teaching yourselves. Finishing readings before coming to class is that much important in this class.

- We have two textbooks.
  - Gerring, J. (2012). *Social Science Methodology: A Unified Framework*. Cambridge University Press, Cambridge, second edition. (referred to in Schedule as 'Gerring')
  - King, G., Keohane, R. O., and Verba, S. (1994). *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton University Press, Princeton (referred to in Schedule as 'KKV')
- We have quite a few articles and other kinds of readings too. These things are available either in Blackboard or in other webpages. We will talk about how to retrieve journal articles from the GMU Library Webpage in our first meeting.

### Writing Assignments (80%, total)

#### Critical Application $(10\% \times 2 = 20\%)$

- you will decide what research topic you are going to work on throughout the semester.
  - the topic is due 9/13 (in class): this is not graded as far as it is submitted on time (if late, one letter grade per day will be taken out from the final project).
  - you can change the topic later but only upon my written (email) consent.
  - In your topic submission, include
    - \* (tentative) title
    - \* (tentative) argument / conclusion
    - \* the reason why this is an important research project
- there are six opportunities to write a critical application paper and you will pick two.

- each paper is due 12 hours before our meeting (post it on Blackboard)
- you will also submit a hardcopy in class.
- each paper should not exceed 1000 words (there is no minimum).
- the paper should directly answer the question given in Schedule and engage the readings of the week.

Preliminary Literature Review (10%)

- Write a 'good' literature review based on what you learn from our discussion on the literature review (Week 2).
- This review will be revised and incorporated into your final Research Proposal.
- There is no page limit.
- There is no minimal number of literature you have to consult, but usually 10 to 15 are discussed in detail.
- You are asked to strictly adhere to one of the standard formal citation styles. Chicago or APA is preferred but basically anything that features author-year, parenthesis in-text citation is acceptable as far as it is used consistently. Please be advised NOT to use footenote-style citation, not because it is illegitimate, but to simply spare space (you can use footnote for notes, of course).
- This is due Week 6.

Research Proposal/Design (40%)

- This is THE MOST important assignment in this class.
- We will talk about what makes a good research throughout the whole semester; so it should be clear to you what we mean by 'good' by the time you complete the proposal/design.
- The format might vary depending on the nature of your research topic, but it is very likely to look like:
  - 1. Introduction
  - 2. Literature Review
  - 3. Theory and/or Argument
  - 4. Research Design (This is the most important part, of course)
  - 5. Preliminary Empirical Analysis and Tentative Conclusion.
- Simply speaking, this should look very similar to most of the articles we read in class except for the 'empirical result/test/evidence' part which you will not have in the proposal.
- You can team up with your colleagues and make this a **team project** upon my written approval (if interested, talk to me by <u>Week 3</u>). Even if you opt for a team project, all the other assignments will be done individually.
- Another thing you can do, in case your project draws heavily upon quantitative methods, is replication analysis. I strongly believe in the value of replication; one can 'learn' the most by really 'doing' it. What you would do is simply 1) pick up an existing research that interests you (consult 'Dataverse'), 2) have some ideas as to how you would tweak it a little bit, and 3) consult me on this plan and getting my permission. If you choose to take this route, simply

turn in 'replication analysis' for research topic submission (Week 2) and get my permission by Week 4.

• This assignment is due 12/6.

#### Presentation (10%)

- the presentation includes your handling of your peers' reaction (e.g., answering questions)
  - be succinct in your presentation such that there is some room for your classmates to ask questions about your topic.
  - your presentation may not be longer than 10 minutes (no minimum required)
  - Take this presentation seriously.

# COURSE POLICY

#### Assignment Submission

All assignments are expected to be submitted in hard copy AND in Blackboard ('Assignment Submission' tab)

#### **Co-working Policy**

Publication is one of the most frequently cited indicators of scholarly excellence and therefore an integral part of any graduate education. As a graduate student, getting your work published in a journal, be it professional or academic, is challenging for a variety of reasons. Many students therefore opt for co-working on a manuscript with professors. Co-working policies may vary among professors, mine is simple; 1) the one who initiates (either a student(s) or myself) is responsible for providing reasonable evidence that the project is doable and appealing to the target audience and 2) the one who contributed most to the completion of the projects gets the first authorship.

#### Accommodations

If you have a documented learning disability or other condition that may affect academic performance you should: 1) Make sure this documentation is on file with the Office of Disability Services (SUB I, Rm. 222; 993-2474; www.gmu.edu/student/drc) to determine the accommodations you need; and 2) Talk with me to plan your accommodation needs.

### Academic Integrity

Mason is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. When you rely on someone else's work, you will give that source full credit, typically in the form of an in-text citation and bibliographic reference. If you are unaware of what counts as plagiarism see here:

http://mason.gmu.edu/~montecin/plagiarism.htm.

Students caught violating the Honor Code will receive a failing grade in this course and will be reported to the proper university authorities for further disciplinary action.

#### Grading Scale

>= 93.00	А	73.00 - 76.99	С
90.00 - 92.99	A-	70.00 - 72.99	C-
87.00 - 89.99	B+	67.00 - 69.99	D+
83.00 - 86.99	В	63.00 - 66.99	D
80.00 - 82.99	B-	60.00 - 62.99	D-
77.00 - 79.99	C+	<= 59.99	F
The class does not give 'I' (incomplete).			

#### Extra Credits

In line with GMU policies, the class does not offer students any extra activities to grant extra credits particularly at the end of the semester to 'bump up' the grade. The only extra credit available, <u>0.5%</u>, of the class grade, will be given to the student(s) who uses ETEX for his/her work. ETEX is a program language for high-quality type-setting. While it is widely used in sciences in lieu of MS Word, the number of people using it in social sciences (except economics and psychology) is fairly small (though explosively increasing!). But I am pretty sure this is the way everybody–I mean professionals and academics–will write their stuff in the near future and therefore learning it gives you some comparative advantage. We do not have time to learn this program, but you can easily teach yourself using some of the widely available webpages. You actually don't have to install the programs as services like Overleaf or Sharelatex are available for free. It didn't take too much time for me to completely transition from MS Word to ETEX in my late 30s. So you can do it much more easily actually. Again, this is completely optional and you can still keep using whatever word processor you've been using. There's absolutely no consequence.

### **READING SCHEDULE**

- \* Unless familiar with quantitative methodologies, you will find some of the readings too 'mathheavy.' Granted, the purpose of this class is not to understand all the math line-by-line. Nonetheless, try to read beyond the numbers and bring questions to class.
- \* Unless specified as 'recommended', all the listed readings are required readings.

Week 1: 8/30. Introduction: What is a research method and why do we need it?

• Gerring Ch.1 (1-22)

Week 2: 9/6. Research Ethics / Literature Review / Citations

• Broockman, D. and Kalla, J. 2015. "We discovered one of the social science's biggest frauds.". Vox. (7-22-2015)

- Van Noorden, Richard. 2015. "Political science's problem with research ethics".
- Brookman, D. and Kalla, J. 2015. "Irregularities in LaCour(2014)". Unpublished research note. [Recommended].
- Bohannon, John. 2016. "For Real This Time"
- Guillemin, M. and Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research. *Qualitative Inquiry*, 10(2):261–280.
- Tijdink, J. K., Verbeke, R., and Smulders, Y. M. (2014). Publication pressure and scientific misconduct in medical scientists. *Journal of Empirical Research on Human Research Ethics*, 9(5):64–71
- National Committees for Research Ethics in Norway. "Guidelines for Research Ethics in the Social Sciences, Law and the Humanities".
- Knopf, J. W. (2006). Doing a literature review. *PS: Political Science & Politics*, 39(01):127–132.
- Style Guide.
- Online Citation Generator.

#### Week 3: 9/13. Getting the Basics Right (1): Measurement, Variables, Theories, and Models

- Research topic submission due.
- Gerring Ch. 2, 3, and 4.
- KKV Ch. 1
- Mueller, C. W. (2004). Conceptualization, operationalization, and measurement. In Lewis-Beck, M., Bryman, A., and Futing Liao, T., editors, *The SAGE Encyclopedia of Social Science Research Methods*, pages 162–165. SAGE Publications
- Week 4: 9/20. Getting the Basics Right (2): Descriptive vs. Causal Inference
  - Critical Application (1): Is your research (going to be) descriptive or causal? Why?
  - KKV ch. 2 and 3.
  - Gerring Ch. 6 and 12 (5, 9, 10, and 11 Strongly Recommended).
- Week 5: 9/27. (How not to do a bad) Case Study
  - Critical Application (2): Is case study (not) a good method for your study? Why?
  - KKV ch. 4 and 6.
  - Gerring ch. 12.
  - George, A. L. and Bennett, A. (2006). *Case Studies and Theory Development in the Social Sciences*. MIT Press, Cambridge. ch. 8, 9, and 10.
- Week 6: 10/4. Mid-term Progress Report / Short-presentation
  - Preliminary Literature Review due
  - Report progress to class
    - Prepare 5 min presentation of 1) what your research topic is, 2) what progress you have made so far, and 3) what your plan is

- A 2-3-minute QnA will ensue, so get ready for it too.
- This is not going to be graded; it's rather a good opportunity for a reality-check.
- Week 7: 10/11. No Class (Columbus Day Recess)
- Week 8: 10/18. Quantitative Analysis (1): descriptive statistics; uncertainty
  - We use Stata in this class for our statistical package. You don't need to buy this; it is freely available in GMU's Virtual Computing Lab. We will see how we can use it in class.
  - Descriptive Statistics, Introduction to Stata. UCLA Statistical Consulting Group.
  - Correlation, Introduction to Stata. UCLA Statistical Consulting Group.
  - Gerring Ch. 4 (re-read)
  - What is P-value. Statistical Help.

Week 9: 10/25. Quantitative Analysis (2): comparison of means;  $\chi^2$  test; simple regression

- <u>Critical Application (3): How would you (not) use quantitative methods for your</u> research?
- T-Test, Introduction to Stata. UCLA Statistical Consulting Group.
- Regression, Introduction to Stata. UCLA Statistical Consulting Group.
- Gibson, J. L. (2002). Truth, justice, and reconciliation: Judging the fairness of amnesty in south africa. *American Journal of Political Science*, 46(3):540–556.
- Licklider, R. (1995). The consequences of negotiated settlements in civil wars, 1945-1993. *American Political Science Review*, 89(3):681–690.

Week 10: 11/1. Collecting Qualitative Data: Interviews and Focus Groups

- <u>Critical Application (4)</u>: How would you (not) incorporate Interview (or focus group) methods into your research?
- Leech, B. L. (2002). Asking questions: Techniques for semistructured interviews. *PS: Political Science & Politics*, 35(4):665–668.
- Fujii, L. A. (2008). The power of local ties: Popular participation in the rwandan genocide. *Security Studies*, 17(3):568–597.
- Jensen, N. (2008). Political risk, domestic institutions, and foreign direct investment. *Journal of Politics*, 70(4):1040–1052.
- Morgan, D. L. (1995). Why things (sometimes) go wrong in focus groups. *Qualitative Health Research*, 5(4):516–523.

Week 11: 11/8. Ethnography and Participatory Observation (Guest Lecture: TBA)

- <u>Critical Application (5): How would you (not) incorporate ethnography (or partic-</u> ipatory observation) methods into your research?
- Singleton, R. A. and Straits, B. C. (2005). *Approaches to Social Research*. Oxford University Press, New York, 4th edition ch. 10.

- Gupta, A. and Ferguson, J. (1997). Discipline and practice: 'the field' as site, method, and location in anthropology. In Gupta, A. and Ferguson, J., editors, *Anthropological Locations: Boundaries and Grounds of a Field Science*, pages 1–46. University of California Press, Berkeley
- Marcus, G. E. (1995). Ethnography in/of the world system: the emergence of multisited ethnography. *Annual Review of Anthropology*, 24:95–117
- Fassin, D. (2005). Compassion and repression: The moral economy of immigration policies in france. *Cutural Anthropology*, 20(3):362–387
- Dahl, B. (2014). 'too fat to be an orphan': Tyhe moral semiotics of food aid in botswana. *Cutural Anthropology*, 29(4):626–647

Week 12: 11/15. Cool New things: Experiments, Network Analysis, and Big Data

- <u>Critical Application (6): If you have big data available to you, does that change your</u> research? Why (not)?
- McEntire, K. J., Leiby, M., and Krain, M. (2015). Human rights organizations as agents of change: An experimental examination of framing and micromobilization. *American Political Science Review*, 109(3):407–426.
- Murdie, A. (2014). The ties that bind: A network analysis of human rights international nongovernmental organizations. *British Journal of Political Science*, 44(01):1–27.
- Nagler, J. and Tucker, J. A. (2015). Drawing inferences and testing theories with big data. *PS: Political Science & Politics*, 48:84–88.
- Bloom, P. B.-N., Arikan, G., and Courtemanche, M. (2015). Religious social identity, religious belief, and anti-immigration sentiment. *American Political Science Review*, 109(02):203–221. [Recommended]
- Ward, M. D., Stovel, K., and Sacks, A. (2011). Network analysis and political science. *Annual Review of Political Science*, 14:245–64. [Recommended]
- Patty, J. W. and Penn, E. M. (2015). Analyzing big data: Social choice and measurement. *PS: Political Science & Politics*, 48:95–101. [Recommended]

Week 13: 11/22. Presentation (1)

Week 14: 11/29. Presentation (2)

Week 15: 12/6. Evaluation.

• Final Research Proposal Due

### Data Sources

- Democracy Barometer: provides links to data for democracy, transparency, human rights, freedom of press, rule of law and a number of over-time, cross-country survey data.
- Penn World Table: most reliable macroeconomic data for most of the countries in the world for the period 1960-2012.
- World Governance Indicator: Quality of governance and corruption around the world.

- OECD Statistics: a surprisingly long list of topics covered.
- Dataverse: Replication data archive for almost all top-notch social science research
- Interuniversity Consortium for Political and Social Research: the most comprehensive coverage