

Syllabus

DCC5230: Research Methodology

GSIR, International University of Japan, Spring 2017

Time: Tuesday, 10:30–12:00 and 13:00–14:30

Room: 102

Office: 323

Office Hours: 10:00–12:00 on Wednesdays

(and by appointment)

Instructor : Yuki Yanai (矢内 勇生)

Email: yanai@iuj.ac.jp

Website: <http://yukiyanai.com>

Slack: @yanai

TAs: Myat Su Tin myatsu@iuj.ac.jp Slack: @myatsu
TBA

Overview and Class Goals

This course is to help you design your thesis projects by addressing the fundamentals of research designs and methods in social sciences. The course covers a variety of issues—the selection of research topic, the articulation of research questions, the development of theory, the derivation of empirically testable hypotheses, and the analysis of quantitative and qualitative data. The course exposes you to various research approaches in social sciences, especially in political science.

By completing this course, you will be able to:

- Conduct scientific research, which is reproducible by other researchers.
- Identify theories, hypotheses, and methods used in social science research.
- Choose a method and apply it to your own research in order to answer your research questions.
- Analyze data and communicate the results in an appropriate fashion.

Prerequisites: None

Class Format

The course will be based primarily on lectures. To engage in class discussions, you are expected to complete all the required readings before each class.

Grading

Grades will be based on:

- Class participation (10% of final grade).
- Two homework assignments (20% [10% each]).
- Three research proposals (60%)
 1. First proposal: 10%
 2. Second proposal: 20%
 3. Final proposal: 30%
- Presentation (10%).

Final grade:	
Letter	Percentage earned
A	96–100
A–	90–95
B+	80–89
B	70–79
B–	66–69
C	60–65
F	Less than 60

Because this is a core course for some students, some might receive RD (report delayed) before their final grades. Refer to the Curriculum Handbook about RD.

Assignments

1. Readings

See the **Schedule** section below.

2. Two Homework Assignments

Details about homework assignments will be announced in class.

- (a) Assignment 1: Experimental Design
- (b) Assignment 2: Large-N Design and/or Survey Methods

3. Presentation

Details about presentation will be provided in class after we know the number of students because the presentation format depends on the class size.

4. Three Research Proposals

You have to write and submit the proposal for your thesis three times in this course.

- (a) First Proposal: Research Topic and Question
 - i. Length: 1–2 pages
 - ii. Description: As the first proposal, you write a short paper describing your proposed thesis topic, in which you discuss:
 - A. Research question (puzzle)—what question are you trying to answer?
 - B. Significance—why should we care about your research?
You don't have to write your answer at this point. You will revise the proposal as you learn research designs and methods in this course.
- (b) Second Proposal: Literature Review and Research Design
 - i. Length: 3–4 pages
 - ii. Description: As the second proposal, you must write:
 - A. Overview: Write a paragraph or two to overview your thesis project.
 - B. Literature Review: Identify and discuss the previous studies relevant to your research. You should not merely enumerate others' findings related to your research topic. Rather, you should carefully select works that are related to your *question* and highlight the differences from your own research.
 - C. Research Design: Explain the method(s) (and data) you will use to answer your research question. How do you justify your choice? Discuss the strengths and weaknesses of your design.
- (c) Final Proposal: Thesis Proposal
 - i. Length: As long as required (max. 10 pages)
 - ii. Description: You should revise the second proposal and complete the thesis proposal. You should write a proposal based on which you can write your master's thesis.

5. Notes:

- (a) **Do not** discuss your homework assignments with your classmates. You are allowed to ask questions to the instructor and TAs.
- (b) You are allowed, or even encouraged, to discuss your proposals with your supervisor and your friends before you submit them to the instructor.
- (c) Submit your homework, proposals, or presentation slide by sending a **Slack's Direct Message** to the instructor by the deadline.
- (d) Please name you files sensibly so that I can easily manage your files. A file name should be like `rm-proposal1-YourName.pdf` or `rm-assignment1-YourName.pdf`.
- (e) Submit your homework, proposals, and presentation slides in **PDF** format. I do *not* accept MS Word files (.docx or .doc) or PowerPoint files (.ppt or .pptx), because I do not use Microsoft software.
- (f) *No late submission will be accepted.*

Important Dates

Assignment	Due	Week
First Research Proposal	10am on Friday, April 14	Week 2
Second Research Proposal	10am on Monday, May 8	Week 6
Problem Set 1	10am on Monday, May 15	Week 7
Problem Set 2	10am on Monday, May 29	Week 9
Final Research Proposal	10am on Saturday, June 10	Week 10
Presentation Slides	9pm on Monday, June 12	Week 10

Course Materials

Course materials are distributed through Slack.

Slack

To facilitate communication outside class, we use [Slack](#). The Slack group of this course is

<https://iuj-rm.slack.com/>.

Visit [Getting Started | Slack](#) to learn the basic usage of Slack.

You are expected to post questions regarding class to *an appropriate channel* in Slack; you may create a new channel if you cannot find one.

You should not only ask questions but also answer other students' questions if possible. Your answers do not have to be complete or perfect. If you find an answer to your own question after you post the question, please post the answer to share it with your colleagues. If nobody posts an answer to a question, the instructor or TA will provide an answer or discuss the problem in the following class.

You can join the slack team by clicking the following link:

<https://iuj-rm.slack.com/signup>

To sign up, **you need to use your IUJ email address ending with @iuj.ac.jp**. If you would like to use another email address, please send me an email with the subject "Slack for Research Methodology," and I will send you an invitation.

Once you join the group, please use Direct Message on Slack when you need to contact me. I strongly prefer Slack messages to emails (I do not frequently check emails).

Required Books

- Baglione, Lisa A. 2016. *Writing a Research Paper in Political Science: A Practical Guide to Inquiry, Structure, and Methods, Third Edition*. Los Angeles, CA: SAGE.
- Toshkov, Dimitar. 2016. *Research Design in Political Science*. London: Palgrave Macmillan.

Reference Books

You do not have to buy the following books. Because there are many different methods, different people need to read different books depending on their research questions. You should be able to find most of them at the library.

- Angrist, Joshua, and Jörn-Steffen Pischke. 2014. *Mastering 'Metrics: The Path from Cause to Effect*. Princeton, NJ: Princeton UP.
- Box-Steffensmeier, Janet M., and Henry E. Brady, and David Collier, eds. 2008. *The Oxford Handbook of Political Methodology*. New York: Oxford UP.
- Brady, Henry E., and David Collier, eds. 2010. *Rethinking Social Inquiry: Diverse Tools, Shared Standards, Second Edition*. Lanham, MD: Rowman & Littlefield Publishers.
- Engeli, Isabelle, and Christine Rothmayr Allison, eds. 2014. *Comparative Policy Studies: Conceptual and Methodological Challenges*. London: Palgrave Macmillan.
- Fowler, Floyd J., Jr. 2014. *Survey Research Methods, Fifth Edition*. Los Angeles, CA: SAGE.
- Geddes, Barbara. 2003. *Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics*. Ann Arbor, MI: University of Michigan Press.
- George, Alexander L., and Andrew Bennett. 2004. *Case Studies and Theory Development in the Social Sciences*. Cambridge, MA: MIT Press.
- Gerring, John. 2012. *Social Science Methodology: A Unified Framework, Second Edition*. New York: Cambridge UP.
- Imai, Kosuke. 2017. *Quantitative Social Science: An Introduction*. Princeton, NJ: Princeton UP.
- Hernán, Miguel A., and James M. Robins. Forthcoming. *Causal Inference*. Boca Raton, FL: Chapman & Hall/CRC Press.
- Imbens, Guido W., and Donald B. Rubin. 2015. *Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction*. New York: Cambridge UP.
- Kapiszewski, Diana, Lauren M. MacLean, and Benjamin L. Read. 2015. *Field Research in Political Science: Practices and Principles*. Cambridge: Cambridge UP.
- Karlan, Dean, and Jacob Appel. 2016. *Failing in the Field: What We Can Learn When Field Research Goes Wrong*. Princeton, NJ: Princeton UP.
- King, Gary, Robert O. Keohane, and Sidney Verba. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*. Princeton, NJ: Princeton UP.
- Morgan, Stephen L., and Christopher Winship. 2015. *Counterfactuals and Causal Inference: Methods and Principles for Social Research, Second Edition*. New York: Cambridge UP.
- Parsons, Craig. 2007. *How to Map Arguments in Political Science*. New York: Oxford University Press.
- Silverman, David. 2013. *Doing Qualitative Research, Fourth Edition*. Los Angeles, CA: SAGE.

Schedule

The readings with **M** (Mandatory) should be **completed prior to the lecture** for which they are listed. You should at least skim readings with **R** (Recommended) either before or after the lecture. Although you do not have to read them, readings with **O** (Optional) should enrich your understanding of the topics.

The readings with hyperlinks can be obtained on the internet through the IUJ network. The readings with * are available in the course folder:

IUJ-home/IR materials/Yanai/ResearchMethodology/Readings/

This schedule is subject to change.

Week 1 (Apr. 4) 1. Introduction; 2. Scientific Research in Social Sciences

M Baglione (2016), chapter 1.

M *Karlan and Appel (2016), Introduction, “Why Failures?” (pp. 1–15).

M *King, Keohane, and Verba (1994), chapter 1.

M Toshkov (2016), chapters 1 and 12 (pp. 335–344).

M Beck, Nathaniel. 2014. “[Research Replication in Social Science](#).” *OUPblog*. 24 August 2014.

R King, Gary. 1995. “[Replication, Replication](#).” *PS: Political Science & Politics* 28: 444–452.

O Gandrud, Christopher. 2015. *Reproducible Research with R and RStudio*, 2nd ed. Boca Raton: CRC Press.

O Xie, Yihui. 2013. *Dynamic Documents with R and knitr*. Boca Raton: CRC Press.

Week 2 (Apr. 11) **No Class**: Instructor is out of town.

Finish the mandatory readings for Week 1 if you have not yet done.

Week 3 (Apr. 18) 3. Research Question; 4. Theory

M Baglione (2016), chapters 2 and 4.

M *Geddes (2003), chapter 2.

M Toshkov (2016), chapters 2–3.

R George and Bennett (2004), chapter 1.

R Gerring (2012), chapters 2–3.

Week 4 (Apr. 25) 5. Concepts and Operationalization; 6. Measurement and Description

M Baglione (2016), chapter 5.

M Toshkov (2016), chapters 4–5.

M Adcock, Robert, and David Collier. 2001. “[Measurement Validity: A Shared Standard for Qualitative and Quantitative Research](#).” *American Political Science Review* 95(3): 529–546.

R Howlett, Michael, and Ben Cashore. 2014. “Conceptualizing Public Policy.” In Engeli and Allison (2014), chapter 2.

R Gerring (2012), chapters 4–7.

R Sartori, Giovanni. 1970. “[Concept Misinformation in Comparative Politics](#).” *American Political Science Review* 64(4): 1033–1053.

R King, Keohane, and Verba (1994), chapters 2, 4, and 5.

O Imai (2017), chapter 3.

Week 5 (May 2) 7. Explanation and Causality; 8. Counterfactuals and Causal Inference

M Toshkov (2016), chapter 6.

M Fearon, James D. 1991. “[Counterfactuals and Hypothesis Testing in Political Science](#).” *World Politics* 43(2): 169–195.

M Winship, Christopher, and Stephen L. Morgan. 1999. “[The Estimation of Causal Effects from Observational Data](#).” *Annual Review of Sociology* 25: 659–706.

R Gerring (2012), chapters 8–9.

R Heckman, James J. 2005. “[The Scientific Model of Causality](#).” *Sociological Methodology* 35(1): 1–98.

R Imai (2017), chapter 2.

R King, Keohane, and Verba (1994), chapters 3.

R Rubin, Donald B. 2005. “[Causal Inference Using Potential Outcomes](#).” *Journal of the American Statistical Association* 100(469): 322–331.

O Hernán and Robins (Forthcoming).

O Imbens and Rubin (2015).

O Morgan and Winship (2015).

Week 6 (May 9) 9 & 10. Experimental and Quasi-Experimental Designs

M Toshkov (2016), chapter 7.

M *Angrist and Pischke (2015), chapter 1.

M *Druckman, James N., Donal P. Green, James H. Kuklinski, and Arthur Lupia. 2011. “Experiments: An Introduction to Core Concepts.” In Druckman, Green, Kuklinski, and Lupia, eds. *Cambridge Handbook of Experimental Political Science*. New York: Cambridge UP: 15–26.

R Gerring (2012), chapter 10.

R Imai, Kosuke, Gary King, and Elizabeth A. Stuart. 2008. “[Misunderstandings about Causal Inference Observationalists and Experimentalists](#).” *Journal of the Royal Statistical Society, Series A* 171(2): 481–502.

R Morton, Rebecca B., and Kenneth C. Williams. 2010. *Experimental Political Science and the Study of Causality: From Nature to the Lab*. New York: Cambridge UP.

O Banerjee, Abhijit V., and Esther Duflo. 2011. *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*. New York: PublicAffairs.

O Dunning, Thad. 2012. *Natural Experiments in the Social Sciences: A Design-Based Approach*. New York: Cambridge UP.

O Gneezy, Uri, and John A. List. 2013. *The Why Axis: Hidden Motives and the Undiscovered Economics of Everyday Life*. New York: PublicAffairs.

Week 7 (May 16) 11 & 12. Large-N Designs.

- M Toshkov (2016), chapter 8.
- M *Gerring (2012), chapter 11.
- R Achen, Christopher. 2005. “[Let’s Put Garbage-Can Regression and Garbage-Can Probits Where They Belong.](#)” *Conflict Management and Peace Science* 22(4): 327–323.
- R Dunning, Thad. 2010. “Design-Based Inference: Beyond the Pitfalls of Regression Analysis?” In Brady and Collier (2010), chapter 14.
- R Glynn, Adam N., and John Gerring. 2013. “[Strategies of Research Design with Counfounding: A Graphical Description.](#)” Unpublished Manuscript.
- R Breunig, Christian, and John S. Ahlquist. 2014. “Quantitative Methodologies in Public Policy.” In Engeli and Allison (2014), chapter 6.
- R Mosteller, Frederick, and John W. Tukey. 1977. *Data Analysis and Regression: A Second Course in Statistics*. Reading, MA: Addison-Wesley, chapter 13.
- R Ross, Michael. 2006. “[Is Democracy Good for the Poor.](#)” *American Journal of Political Science* 50(4): 860–874.
- R Seawright, Jason. 2010. “Regression-Based Inference: A Case Study in Failed Causal Assessment.” In Brady and Collier (2010), chapter 13.
- R Imai (2017), chapter 4.
- O Aronow, Peter M., and Cyrus Samii. 2016. “[Does Regression Produce Representative Estimates of Causal Effects?](#)” *American Political Science Review* 60(1): 250–267.
- O Gelman, Andrew, and Jennifer Hill. 2007. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. New York: Cambridge UP.

Week 8 (May 23) 13 & 14. Survey Methods.

- M *Fowler (2014), chapters 1–7.
- M Gaines, Brian J., and James H. Kuklinski, and Paul J. Quirk. 2007. “[The Logic of the Survey Experiment Reexamined.](#)” *Political Analysis* 15(1): 1–20.
- R Fowler (2014), chapters 8–13.
- R Groves, Robert M., Floyd J. Fowler, Jr., Mick P. Couper, James M. Lepkowski, Eleanor Singer, and Roger Tourangeau. 2009. *Survey Methodology, Second Edition*. Hoboken, NJ: Wiley.
- R Mutz, Diana C. 2011. *Population-Based Survey Experiments*. Princeton, NJ: Princeton UP.
- O Callegaro, Mario, Katja Lozar Manfreda, and Vasja Vehovar. 2015. *Web Survey Methodology*. Los Angeles, CA: SAGE.
- O Toepoel, Vera. 2016. *Doing Surveys Online*. Los Angeles, CA: SAGE.
- O Weisberg, Herbert F. 2005. *Total Survey Error Approach: A Guide to the New Science of Survey Research*. Chicago, IL: University of Chicago Press.

Week 9 (May 30) 15 & 16. Comparative Designs.

- M Toshkov (2016), chapter 9.
- M Geddes, Barbara. 1990. “[How the Case You Choose Affect the Answers You Get: Selection Bias in Comparative Politics.](#)” *Political Analysis* 2: 131–150.

- M** *Keman, Hans. 2011. "Comparative Research Methods." In Daniel Caramani, ed. *Comparative Politics*. New York: Oxford UP, chapter 3.
- R** Engeli, Isabelle, Benoît Rihoux, and Christine Rothmayr Allison. 2014. "Intermediate-N Comparison: Configurational Comparative Methods." In Engeli and Allison (2014), chapter 5.
- R** Gerring (2012), chapter 12.
- R** van der Heijden, Jeroen. 2014. "Selecting Cases and Inferential Types in Comparative Public Policy Research." In Engeli and Allison (2014), chapter 3.
- R** Mahoney, James, and Kathleen Thelen, eds. 2015. *Advances in Comparative-Historical Analysis*. Cambridge: Cambridge UP.
- O** Goertz, Gary and James Mahoney. 2012. *A Tale of Two Cultures: Qualitative and Quantitative Research in Social Sciences*. Princeton, NJ: Princeton UP.
- O** Schneider, Carsten Q., and Claudius Wagemann. 2012. *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis*. New York: Cambridge UP.

Week 10 (June 6) 17. Single-Case Study Designs; 18. Communicating Research

- M** Toshkov, chapters 10 and 12 (pp. 328–335).
- M** Kastellec, Jonathan P., and Eduardo L. Leoni. 2007. "[Using Graphs Instead of Tables in Political Science](#)." *Perspectives on Politics* 5(4): 755–771.
- M** Silverman (2013), chapters 15–17.
- R** Bates, Robert H. 1997. "[Area Studies and Discipline: A Useful Controversy?](#)" *PS: Political Science and Politics* 30(2): 166–169.
- R** Blatter, Joachim, and Markus Haverland. 2014. "Case Studies and (Causal-)Process Tracing." In Engeli and Allison (2014), chapter 4.
- R** Geddes (2003), chapter 4.
- R** King, Keohane, and Verba, chapter 6.
- R** Tufte, Edward R. 2006. *Beautiful Evidence*. Cheshire, CT: Graphics Press.
- R** Yau, Nathan. 2011. *Visualize This: The FlowingData Guide to Design, Visualization, and Statistics*. Indianapolis, IN: Wiley.
- O** Silverman (2013).
- O** Silverman, David, ed. 2016. *Qualitative Research, Fourth Edition*. Los Angeles, CA: SAGE.

Week 11 (Makeup) (June 13) 19 & 20. Presentation

- R** Wallwork, Adrian. 2016. *English for Presentations at International Conferences, Second Edition*. New York: Springer.

Academic Integrity

All students are expected to act with civility, personal integrity, respect other students' dignity, rights and property; and help create and maintain an environment in which all can succeed through the fruits of their own efforts. An environment of academic integrity is requisite to respect for self and others and a civil community.

Academic integrity includes a commitment to not engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty include cheating or copying, plagiarizing, submitting another persons' work as one's own, using internet sources without citation, taking or having another student take your exam, tampering with the work of another student, facilitating other students' acts of academic dishonesty, etc. Unfortunately, incidents of academic dishonesty, especially plagiarism, have been observed at IUJ. Plagiarism is the act, intentional or unintentional, of using other people's words or ideas as your own. The university, GSIR, and I expect you to write your own papers and to provide full and accurate citations for any specific ideas or language—words, phrases, sentences—that you take from outside sources, including the internet.

Refer to [GSIR's Policy Statement on Plagiarism and Cheating](#), [IUJ Professional Ethics Committee Guideline](#), and the Curriculum Handbook. Following the university's policy, any act of academic dishonesty in this class will be reported to the faculty meeting and the Office of Academic Affairs (OAA) and may result receiving an F on the assignment, dismissal from class with a final grade of F, and even suspension or expulsion from the university, depending upon the severity of the violation.