CSDE 502: Responsible Conduct of Research
Center for Studies in Demography & Ecology
Spring 2025

Instructor: June Yang
When & Where: F 10:30am-12:10pm & Savery (SAV) 164
Office Hours: By appointment
Email: jyang32@uw.edu
Website: https://jyang32.github.io/CSDE502-Sp25/

Course Description

This class will occur once a week and will be primarily discussion based with brief lectures for most classes to help explain concepts and issues and occasional guest speakers. It is important that you complete the assigned readings prior to class and are prepared to discuss them with the class. It is also highly encouraged that you discuss these topics with your peers, mentors, and collaborators, not only during this quarter but as you go forward in your career. These issues are rarely discussed, but are foundational for doing ethical, equitable, and robust research.

Learning Objectives

By the end of the quarter, I hope you will:

1. Be knowledgeable about important ethical issues associated with research in general and demography and population research in particular.
2. Have the knowledge and tools to identify and make decisions regarding unethical issues in your own research experiences.

Class Conduct
Students are expected to follow the University of Washington's Student Code of Conduct (outlined here: https://www.washington.edu/cssc/for-students/student-code-of-conduct/).

Students with Disabilities
Please inform me as soon as possible if you need any accommodations for disabilities documented with DRS. I am happy to work with you to find the best options for your learning needs.

Religious Accommodations
Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at Faculty Syllabus Guidelines and Resources. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form available at https://registrar.washington.edu/students/religious-accommodations-request/. [directly copied from UW required syllabus language for religious accommodations]

Course Assignments

Discussion Participation & Facilitation
Participation–Students are expected to attend, and actively participate in class discussions. This means doing the readings beforehand, being prepared to participate in group discussions on the week's topic, and helping to maintain a supportive and respectful discussion environment (no hogs or logs).

Facilitation–Students will be required to co-lead one review of readings and the discussion. Responsibilities include:

1. Presentation (maximum 40 minutes): Provide a clear, concise overview of the assigned readings. The presentation should not simply summarize but should interpret the readings, highlight key arguments and tensions, and connect the material to broader course themes. Students are encouraged to be creative and interactive—use slides, media, or brief activities to engage with the classmates.

2. Discussion facilitation: Student leads are expected to lead a class discussion after the presentation. You may use small group work, debates, polls, or other formats to support the conversation.

Sign up here.

Attend Additional Seminars or Workshops
Students are expected to attend at least *1* of the extra seminars or workshops listed in the schedule on topics related to research ethics and open science.

One paragraph summary of each event you attend due May 30th via email by 5pm.

Collaborative Institutional Training Initiative (CITI) Human Subjects Research Course
In this 502 Spring seminar, we cover most of the ethical topics required for NIH grants including those used to fund our training program and Graduate Certificate in Demographic Methods. However, we do not go over the required topic of computational reproducibility *in practice* (being able to duplicate your study using the same data and procedures) because this topic is covered in CSDE 533. NIH also requires training in Human Subjects Research. You will complete CITI's online training program to fulfill that requirement.

Instructions for registering for the CITI course and completing the training will be circulated by April 4th. Due via email April 18th at 5pm.

Final Exam
The final exam will be in take home format, and will consist of a few short essay questions. The questions will require students to communicate the main takeaways from our readings and discussions.

The essay questions will be distributed by May 31st, and due June 6th via email by 5pm.

Readings & Suggested Texts

1. Adil E. Shamoo and David B. Resnik (2015) *Responsible Conduct of Research*, Third Edition, Oxford University Press. Print Book ISBN: 9780199376025. EBook ISBN 9780199376032.
   - E-Book: Login through UW library. Available for Online Reading but this can be slow. I recommend you download the assigned chapter. The book is also available for Full Download Check out for 14 days

2. National Academies of Sciences, Engineering, and Medicine. *2017. Fostering Integrity in Research. Washington, DC: The National Academies Press. https://doi.org/10.17226/21896 or* https://www.nap.edu/catalog/21896/fostering-integrity-in-research .
   - This book is drawn from the questions and responses given at the 2017 meeting for the National Academy of Sciences Committee on Responsible Science. You may watch this discussion here: https://vimeo.com/212964172
3. Additional required readings are posted on the course website: https://jyang32.github.io/CSDE502-Sp25/
4. Other Resources
   - The NIH Office of Intramural Research Sourcebook's section on Ethical Conduct (https://oir.nih.gov/sourcebook/ethical-conduct)
   - The Office of Research Integrity (http://ori.hhs.gov/) has resources for the responsible conduct of research.
   - Committee on Publication Ethics, https://publicationethics.org/

Week	Topic	Readings + Assignments
Week 1	**Seminar**	April 3rd, FOIA and Find Out: Tools and Techniques of Immigration Research Simpson Center for the Humanities. Website and registration.
April 4	**Lecture:** Ethics & Norms	● The NIH's Subject Matter guidelines for Responsible Conduct of Research Training ● Anderson MS, Ronning EA, Devries R, Martinson BC. Extending the Mertonian Norms: Scientists' Subscription to Norms of Research. J Higher Educ. 2010 May 1;81(3):366-393. ● Thinking Ethically ● *Fostering Integrity, Ch.2:* Foundations of Integrity in Research: Core Values and Guiding Norms

Week	Topic	Readings + Assignments
		● [Scharff DP, Mathews KJ, Jackson P, Hoffsuemmer J, Martin E, Edwards D. More than Tuskegee: understanding mistrust about research participation. J Health Care Poor Underserved. 2010 Aug;21(3):879-97.](#)
Week 2 **April 11**	**No Class – PAA** **Assignment**	 Complete online CITI Training for Human Subjects Research.
Week 3 **April 18**	**Workshop** **Lecture:** Research with Human Subjects	April 14th, Workshop in Training Large Language Models (LLMs) for Academic and Creative Applications. Simpson Center for the Humanities. [Website and registration](#). April 16th, Introduction to Data Visualization, UW Libraries Open Scholarship Commons. [Website and registration](#). ● *Responsible Conduct of Research, Ch. 11:* The Protection of Human Subjects in Research ● [Sabati, S. (2019). Upholding "Colonial Unknowing" Through the IRB: Reframing Institutional Research Ethics. Qualitative Inquiry, 25(9–10), 1056–1064.](#) ● [Land-grab universities, High Country News.](#) ● [Lett, E., Adekunle, D., McMurray, P. et al. Health Equity Tourism: Ravaging the Justice Landscape. J Med Syst 46, 17 (2022). https://doi.org/10.1007/s10916-022-01803-5](#) ● [Johnson, J. (2018). Protecting the Community: Lessons from the Montana Flyer Project. PS: Political Science & Politics, 51(3), 615-619. doi:10.1017/S1049096518000021](#) ● [Abaluck, J. (2021) Impact of community masking on COVID-19: A cluster-randomized trial in Bangladesh. Science, 375(160).](#)
Week 4 **April 25**	**Lecture:** Data Management Principles	 ● [Wilkinson, M. D.,et al (2016). The FAIR Guiding Principles for scientific data management and stewardship. Scientific data, 3(1), 1-9.](#) ● [Carroll, S. R., Rodriguez-Lonebear, D., & Martinez, A. (2019). Indigenous data governance: strategies from United States native nations. Data Science Journal, 18.](#) ● [Carroll, S. R., et al (2020). The CARE principles for indigenous data governance.](#) ● [Suchikova, Yana, and Serhii Nazarovets. 2025. "Extending the CARE Principles: Managing Data for Vulnerable Communities in Wartime and Humanitarian Crises." Scientific Data 12(1):420.](#)

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		● Pittaway, E., Bartolomei, L., & Hugman, R. (2010). 'Stop stealing our stories': The ethics of research with vulnerable groups. Journal of human rights practice, 2(2), 229-251. ● Seltzer, W., & Anderson, M. (2001). The dark side of numbers: The role of population data systems in human rights abuses. Social Research, 481-513.
Week 5 **May 2**	**Seminar** **Lecture:** Demographic & Global Health Research in LMICs	April 30th. Propaganda is Already Influencing Large Language Models. CSSS. Website and registration. ● Steinert JI, Atika Nyarige D, Jacobi M, et alA systematic review on ethical challenges of 'field' research in low-income and middle-income countries: respect, justice and beneficence for research staff?BMJ Global Health 2021;6:e005380 ● Gautier, L., Sieleunou, I. & Kalolo, A. Deconstructing the notion of "global health research partnerships" across Northern and African contexts. BMC Med Ethics 19 (Suppl 1), 49 (2018). ● DeCamp M, Matandika L, Chinula L, Cañari-Casaño JL, Davis CH, Anderson E, McClellan M, Chi BH, Paz-Soldan VA. Decolonizing Global Health Research: Perspectives from US and International Global Health Trainees. Ann Glob Health. 2023 Feb 6;89(1):9. doi: 10.5334/aogh.3961. PMID: 36819967; PMCID: PMC9912860. ● Hinga AN, Molyneux S, Marsh VTowards an appropriate ethics framework for Health and Demographic Surveillance Systems (HDSS): learning from issues faced in diverse HDSS in sub-Saharan AfricaBMJ Global Health 2021;6:e004008..
Week 6 **May 9**	**Workshop** **Lecture:** Algorithms & Prediction	May 5th, Accessibility & Data Visualization, UW Libraries Open Scholarship Commons. Website and registration. ● Roberts, D. E., & Rollins, O. (2020). Why sociology matters to race and biosocial science. Annual Review of Sociology, 46, 195-214. ● Bianchi, F., Kalluri, P., Durmus, E., et al. (2023) Easily Accessible Text-to-Image Generation Amplifies Demographic Stereotypes at Large Scale. In Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT '23). 1493–1504. https://doi.org/10.1145/3593013.3594095

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		● Mitchell, S., et al. (2021). Algorithmic fairness: Choices, assumptions, and definitions. Annual Review of Statistics and Its Application, 8, 141-163. ● Machine Bias, ProPublica ● FILM: Coded Bias ● Buolamwini, Joy. (2023) *Unmasking AI*, Ch 6: Facial Recognition Technologies
Week 7 **May 16**	**Lecture:** Reproducibility, Replicability, & Statistical Inference	● *Responsible Conduct of Research, Ch. 3:* Data Acquisition and Management ● Munafò, M. R., et al. (2017). A manifesto for reproducible science. Nature human behaviour, 1(1), 1-9. ● Freese, J., & Peterson, D. (2017). Replication in social science. Annual Review of Sociology, 43, 147-165. ● Ronald L. Wasserstein & Nicole A. Lazar (2016) The ASA Statement on p-Values: Context, Process, and Purpose, The American Statistician, 70:2, 129-133, ● Greenland, S., et al (2016). Statistical tests, P values, confidence intervals, and power: a guide to misinterpretations. European journal of epidemiology, 31, 337-350.
Week 8 **May 23**	**Workshop** **Lecture:** The Workplace	May 22nd, Misleading data visualizations (and how to avoid them). UW Libraries Open Scholarship Commons. Website and registration. ● Smaldino, P. E. "Why isn't science better? Look at career incentives." The Conversation (2016). ● A New Force in American Labor: Academe, The Chronicle of Higher Education ● No New Job for Sabatini, Inside HigherEd
Week 9 **May 30**	**Lecture:** Solutions	● Ortega, A. A. C. (2023). Toward critical demography 2.0. Human Geography, 16(3), 343-354. https://doi.org/10.1177/19427786231176787 ● The Truth Project Podcast ● Buolamwini, Joy. (2023) Unmasking AI, Ch 21: Costs of Inclusion and Exclusion ● Buolamwini, Joy. (2023) Unmasking AI, Ch 23: Cups of Hope ● Caplan AL. Regaining Trust in Public Health and Biomedical Science following Covid: The Role of

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		[Scientists. Hastings Cent Rep. 2023 Sep;53 Suppl 2:S105-S109. doi: 10.1002/hast.1531. PMID: 37963043.](#)
Week 10 **June 5**	**Workshop**	CSDE Professional Development Workshop – Academic Publishing. Web page [link](#).
June 6	**Guest Lecture**	
	Assignment	Final Exam – Take home essay questions & reading from The Boneyard.