Course Syllabus for Sociology 30902 Research Methods in Sociology (Undergraduates) Fall 2024

Instructor Richard Williams

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Course Web Page: https://www3.nd.edu/~rwilliam/xsoc30902/index.html

Course Canvas Page: https://canvas.nd.edu/courses/102992

Time and Place Jenkins and Nanovic Hall B052, MW 02:00 PM-03:15 PM

Canvas/Web use We will make extensive use of both Canvas and the course web page in

this class. The web page will have most of the readings and homeworks. The Canvas page will include the most critical links for the course, e.g. announcements, assignments, Zoom links. You should check it regularly. All assignments should be submitted through Canvas unless you are told otherwise. You may understand Canvas better than I do, but if you need

help you can either click the help button in Canvas or check out https://community.canvaslms.com/t5/Student-Guide/tkb-p/student .

Office Hours MW 3:30-4:30 and by appointment, both in my office and via Zoom. I am

generally very accessible via phone, voicemail, email, Facebook video, and

Zoom – including on nights and weekends if necessary.

Course objectives

Sociology 30902 is designed to provide an overview of research methods in the social sciences. Topics covered include (1) hypothesis formulation and theory construction (2) the measurement of sociological variables (3) data collection techniques - experimental, survey, electronic, and observational.

Course Web Page/ Required Readings

Course Web Page (Check it often). Online readings, discussion questions and other links of interest will be available on the course web page. Canvas will also provide links to these pages.

http://www3.nd.edu/~rwilliam/xsoc30902/

Online Readings Packet and Discussion Questions for Sociology 30902. I have decided to go with an all-online packet this year. It will include required or optional links to textbooktype entries. Most of the other online readings are designed to illustrate the application of

research principles and strategies; hence, you should understand the major points contained in each reading, but you do not have to be concerned with memorizing every little detail.

Classroom Policies & Format

We will use a variety of learning styles in this class – I will lecture some but much of the class will be taught seminar style, including small-group discussions and end-of-year student presentations.

- Readings and classroom discussion are critical! If you stay on top of the readings, instead of
 just cramming for exams, the classroom experience will be much better for you and everyone
 else.
- Around 6 times a semester, usually on the last day we are discussing a topic, I will break you down into small groups to go over discussion questions based on the readings. I want everyone to be ready for these discussions; so, as noted below, you need to turn in your discussion notes beforehand.
- I will often do low cost cold-calling on people. I am not trying to embarrass anyone you can occasionally defer on a question but cold calling can be a good way to keep students involved and paying attention. If speaking in class is a major problem for you, please let me know as soon as possible.
- I discourage but do not ban the use of laptops during class (but I reserve the right to do so if laptops become a distraction or are being misused).
- Some material may be presented asynchronously, e.g. instead of having a regular class you will be asked to watch something on your own and discuss it later. This was very popular when the course was all-online so I may keep doing it.
- You are strongly encouraged (and sometimes required) to make contact with me outside of class, either in person or by phone or electronically. If necessary and mutually convenient, I am willing to have Zoom meetings on nights and weekends, especially when major assignments are soon due.
- Check your ND email regularly, preferably every day or so. You may not use email much but I do, and I frequently send messages about upcoming readings and discussion topics. The most critical announcements should also be available on Canvas.
- Do not lose your work use some sort of Cloud backup service.
- Any longer files you send me (e.g. exams, papers) should begin with your last name so I can easily alphabetize them, e.g. WilliamsExam1.docx. The document itself should include your name, so I do not have to dig through my email to figure out who sent something. Include page numbers on any document more than 2 pages!!! (It is a major source of irritation to me that some students repeatedly fail to do so!) I greatly prefer Word or PDF formats.

Assignments, Exams and Grading

There will be one take-home exam during the semester, two projects, and a take-home final. These are each worth 21% of your grade.

Exams. Both exams will consist of short answer problems and 2-3 essay questions. The final will emphasize material from the second half of the course but will also give you a chance to apply principles that were learned earlier in the semester.

One of the things that will be most important on the exams will be your ability to incorporate and apply material from the readings. The best exams will go beyond what was said in class and will cite specific facts, opinions, authors and articles. Citing sources and offering specific details and quotations from them will demonstrate that you really have done the readings, and will strengthen your answers and make them seem more authoritative. The best exams will further show your ability to apply general principles to specific research studies. They will be like short research papers, incorporating information from a variety of sources, except I have provided you with the readings in advance.

Projects. The two projects (attached) give you the opportunity to apply the principles you have learned to real or hypothetical problems. In the first project you will design an experiment. In the second project you will do a demographic and qualitative profile of your home community and compare and contrast it with a very different area you are familiar with. I have found that students who talk with me outside of class are less likely to make major mistakes on their projects. (This seems to be especially true for the first project on experiments.) At the end of the semester you will give a 12 to 15 minute presentation on the project of your choice. Some sessions may be held outside of regular classtime. If you attend or present in such a session you will be allowed to miss one of our regular classes.

Short assignments/ class participation/ paper presentations/ attendance account for the other 16% of your grade. Do not underestimate the importance of these!!!

- This should be an easy 16 points for you. Come to class, keep up on the readings, hand in all the required short assignments and notes on the readings on time, and participate in discussions at least occasionally. In other words, do what you should be doing anyway. Unfortunately, missed classes and assignments sometimes lower final grades substantially. More critically, though, I think these will help you to understand the material better, produce better papers and exams, and improve the overall quality of the classroom experience.
- To make sure that everyone is familiar with the material and has something to contribute, I want you to jot down at least a dozen notes from the readings that you think are especially important, any thoughts of your own on the subject, and questions which you would like to see discussed. (It is a good idea to always do this but it is especially critical to do so on discussion days.) In general, you should be prepared to make at least a few points about *every* major discussion question asked. In your notes, I encourage you to keep track of the sources you are getting information from, as specific citations can strengthen your answers.
- In particular, you will be required to hand in discussion notes before class for each topic before the days we are breaking down into small groups, approximately 6 times this semester.
- Assignments handed in on time will be worth up to 2 points (12 to 16 pts total), late assignments can still earn 1 point for a few days, and after that they will get 0 points. I'm not super-picky when grading these so long as I see a good faith effort, but I do expect you to have enough to meaningfully contribute to discussion. In the past, some people have turned

- in about a page, others have turned in 10 pages. The better your notes are as we go along, the easier you may find the exams to be.
- Besides affecting your participation grade, these notes will be a great help on the exam, as the discussion questions I give you on the readings often bear a remarkable similarity to the exam questions. Canvas lets you know when the notes are due so make sure you stay on top of things.
- The due date for the discussion notes should NOT be interpreted as being the day you have to finally start the readings!!! I will let you know what readings you should have done before each class. Doing readings before class will make it easier for you to follow along.
- Regular attendance & punctuality are expected and factor into your participation grade (2 to 4 pts). You are allowed up to three absences for any reason. Attendance will be taken each class. If absences are excessive, University policy allows me to give you a D or F after providing written notice.

Honor Code

Entering Notre Dame you were required to study the on-line edition of the Academic Code of Honor, to pass a quiz on it, and to sign a pledge to abide by it. The full Code is available at https://honorcode.nd.edu/. I reserve the right to use University-approved mechanisms if I suspect plagiarism or cheating. Note: I am ok with students going to Notre Dame's Writing Center so long as they don't get help with the actual content of their work.

Reasonable Accommodations for Properly Documented Disabilities

It is the policy and practice of The University of Notre Dame to provide reasonable accommodations for students with properly documented disabilities. Students who have questions about Sara Bea Accessibility Services or who have, or think they may have, a disability are invited to contact Sara Bea Accessibility Services for a confidential discussion by emailing at sarabeacenter@nd.edu or by phone at 574-631-7157. Because the University's Academic Accommodations Processes generally require students to request accommodations well in advance of the dates when they are needed, students who believe they may need an accommodation for this course are encouraged to contact Sara Bea Accessibility Services at their earliest opportunity. Additional information about Sara Bea Accessibility Services and to learn more about the student process for requesting accommodations, please visits Accessibility Support. Note: While I can have a little flexibility on due dates for exams and papers, I do want discussion notes handed in on time. If you haven't done the notes you will not be able to get the full benefits of class discussion.

Artificial Intelligence (AI) Policy

According to the University, using generative AI tools like ChatGPT to bypass the challenges of coursework and personal engagement undermines the educational mission and constitutes academic dishonesty. I will now clarify how and why this applies in my course.

In this course, generative AI means using AI instead of doing your own reading and research—like asking it to write an essay for you instead of exploring the topic yourself. This is problematic for several reasons:

- You don't learn the material, or learn it only superficially. You will be a poor contributor to class discussions. In small group discussions, your classmates will suffer if you can't make meaningful, informed contributions.
- The quality of AI work is sometimes very poor, even terrible. Some of the worst essays I have ever seen were written by AI. For your own sake, don't rely on AI for creating content or for doing your readings and research. AI will "hallucinate," making up facts and citations that sound good to someone who knows nothing about the topic but which sound totally ludicrous to someone who does. Poor answers will always get low scores, but if it is obvious that you are just using material that AI made up, I will view this as cheating and add additional penalties.
- Also, my own experience is that even the best AI answers tend to be weak. AI is usually not familiar with the specific course readings, so even when it doesn't make blatant mistakes the answers it gives tend to be weak and superficial and lack supporting documentation. Anyone who wants a decent grade in the course would be foolish to rely on AI as a substitute for their own reading and research.

The University also says "Using a Gen AI tool to edit or polish your own written work is not recommended. The problem with doing this is that the amount of work done by a student and the AI can vary greatly, from a student carefully accepting or rejecting individual suggestions made by the AI on the one hand, to the AI doing so much editing that it is no longer the student's own voice or work on the other."

However, my own experience is that, once you have a draft, AI can be a useful tool for revising and clarifying your writing, similar to visiting the Writing Center. I have used it for such purposes myself, including when writing this statement. I don't object to using AI (which includes programs like Grammarly) to make modest editorial improvements, though it's worth noting that Notre Dame students have produced excellent essays for decades without AI.

For exams and essays, be transparent about any AI use – let me know if and how you used it.

For more on Notre Dame's AI Policies, see

https://honorcode.nd.edu/official-statement-regarding-generative-ai-may-2023/

https://honorcode.nd.edu/generative-ai-policy-for-students-august-2023/

https://honorcode.nd.edu/ai-recommendations-for-instructors/

Non-Discrimination/Inclusion Statement

The University of Notre Dame is dedicated to fostering social justice. I share this commitment and aim to create a positive learning environment grounded in open communication, mutual respect, and inclusivity. In this class, we will uphold these values and ensure that discrimination

based on race, sex, age, disability, veteran status, religion, sexual orientation, color, or national origin is not tolerated.

Your suggestions for enhancing our classroom environment are welcome and will be seriously considered. If you need any accommodations to participate fully, please let me know. We will collaborate with the Sara Bea Center for Student Accessibility Services to make the necessary arrangements.

Special thanks to Kevin Barry and ChatGPT for their assistance in crafting this statement.

Key Dates

September 30	First project due before midnight
Oct 10	Take home midterm exam due before midnight
Nov 15	Second Project due before midnight
Dec 2, 4	Class presentations. One or two extra sessions outside of regular
	classtime may also likely be scheduled. You will only have to
	attend two of the sessions.
Dec 11	Catch up; Review for final exam; Take home final handed out
Dec 19	Take home final exam due by 12:30 pm

TENTATIVE SCHEDULE

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NOTE: The Canvas Syllabus page will have modified dates if necessary.

Aug 28, Sep 2 - Introduction.

Readings Packet, "Introduction"

Sept 4, 9, 11, 16, 18, 23 (6 classes) – <u>Formulating Hypotheses</u>; <u>Threats to Causal Inference</u>; <u>Experimentation</u>. Advantages and disadvantages of experiments, threats to internal and external validity, Experimental design, Lab vs. field experiments, quasi-experiments, how to conduct an experiment. While experimentation is the first research technique we focus on, principles concerning causality that are presented here are applied throughout the semester.

Readings Packet, "Experimentation."

Sept 30 - First project due before midnight. You are required to meet with me about this project before you hand it in.

Sept 25, 30, Oct 2, Oct 7 - <u>Measurement</u>. Levels of measurement, validity, reliability, random vs. nonrandom error; Scaling, questionnaire construction; Sensitive topics.

Readings Packet, "Measurement."

Oct 7 – Take home exam handed out

Oct 9 – Review for Exam 1 (Attendance is optional but highly recommended)

Oct 10 - Take Home Exam due before midnight

Oct 14, 16, 28, 30, Nov 4 — <u>Survey Research</u>. Reasons for surveys, types of surveys, sample vs. population, types of samples, probability vs. nonprobability sampling, examples of surveys, longitudinal designs, methods for administering surveys. The readings packet includes a study I did that may help you with project 2.

Readings Packet, "Surveys."

Nov 6, 11, 13 – <u>Qualitative Methods</u>; <u>Case study research</u>; <u>Unobtrusive research</u>. Introduction to case study research, qualitative methods, Oral history analysis, Content analysis, unobtrusive measures, secondary analysis.

Readings Packet, "Content Analysis & Oral Histories"

Nov 15 - Second project due by Midnight. Meeting with me beforehand to discuss the project is recommended but not required.

Nov 18, 20, 25 - Observational research. Participant observation, field studies.

Readings Packet, "Observational Research."

Dec 2, 4 –<u>In-class presentations of projects</u>. If all goes according to plan, there will be 2 paper sessions during regular classtime and (depending on enrollment) 1 or 2 special sessions outside of regular classtime, probably via Zoom. You only have to participate in 2 sessions total, the one you present in and one other. This worked very well in past years and I hope it can again. Smaller groups allow a more casual atmosphere and discussion of each other's work. If for some reason we can't work out special sessions I will revise the rest of the class schedule.

Dec 9, 11 - <u>Research ethics</u>. Finish any remaining presentations. Small group discussions on ethics.

Readings Packet, "Ethics."

Dec 11 – Take home final passed out

Dec 19 Take Home Final due by 12:30 pm. You do not need to show up in class. I am not allowed to give incompletes and I only have a few days to get my grades in, so make sure you are done on time.

FIRST PROJECT: EXPERIMENTS Sociology 30902 Due September 30, 2024

In this project, you will formulate a hypothesis and design a lab or a field experiment to test it.

- (1) Develop a hypothesis on a topic that is interesting to you. Briefly explain why you think it would be important and worthwhile to test your hypothesis. Also explain why you think your hypothesis is plausible. For example, you might note how your hypothesis can be inferred from some sociological theory, how the hypothesis is consistent with your own personal observations, etc. Try to show that you have given some thought to the problem before blindly going out to investigate it.
- (2) Design either a lab or a field experiment to test your hypothesis. Ideally, the experiment will be something that could reasonably be conducted by a researcher with a small grant (or even by a student such as yourself).
 - (3) Discuss the following:
- (a) How would you set the stage? What "cover story" (if any) would you use? That is, if your experiment uses deception, how would you keep subjects from becoming suspicious of the true nature of the experiment? Also, be sure to note just who your subjects would be (e.g., college students, riders on a subway, etc.), and where the experiment would take place.
- (b) Explain how you would construct the treatment and manipulate the independent variables. Explain why you feel your variables have *measurement validity*, i.e. they really are good ways of measuring the concepts you are interested in. Be very explicit as to what the treatment would be, and explain why you think the treatment is appropriate given your hypothesis. Also explain how you would go about controlling for extraneous influences for example, would you use random assignment to groups? If you didn't (or couldn't) use random assignment, what would you do to safeguard against threats to internal validity?
- (c) Discuss how you would measure the dependent variable. Again, be very explicit as to what the dependent variable is, and why you think it is appropriate. Note whether you would rely on the respondent's own reports, or whether you would rely on observations of his/her actions.
- (4) Critique your experiment. Note how well or how poorly it deals with threats to internal and external validity. Be sure to note the advantages and disadvantages of the type of setting you have chosen. Point out any problems you think you may encounter. Most research is not perfect, and good researchers recognize and acknowledge the limitations of their work.
- (5) Not including tables or figures, the paper should be typed, double-spaced, and approximately 5 to 8 pages long.

TIPS:

- (1) When looking for inspiration for your hypothesis, you may find it helpful to refer to coursework you have had in sociology or other fields. Doing a little bit of research on the topic could be tremendously helpful, e.g. you could refer to related work or briefly go over some relevant theory. This might help you to develop your ideas better and make them seem more credible.
- (2) It is permissible to use one of the course readings as a source of inspiration for your hypothesis. However, your experiment(s) should be radically different, i.e. don't just make one or two little changes.
- (3) When grading, I will be primarily interested in how well the paper illustrates your understanding of lab and field experiments and your appreciation for threats to internal and external validity. Beyond that, I will consider such things as how innovative and original the experiment is, the complexity of the experiment, how well you have thought out the issues you wish to address, how feasible it would be to actually conduct the experiment, and your appreciation for problems researchers are likely to encounter.
- (4) People often make serious mistakes on this project mistakes that could have been avoided if they had talked to me for 15 minutes or so first. For example, their proposal may not really be an experiment, but the basic idea could be reworked so it was an experiment. Or, some part of the proposal comes across as highly implausible, but with some brainstorming it could be fixed. Hence, with this project it is required that you meet with me and run your ideas by me first.
- (5) A lot of otherwise-good projects have been hurt by a poor critique of internal and external validity (Part 4). One good strategy may be to look at a list of the threats to internal and external validity, and then explicitly discuss (by name, e.g. history, maturation) how the threat is or is not a potential problem in this case. Perhaps the threat is unlikely to occur in the first place, or if it does occur random assignment will neutralize its effects. A related weakness is that people sometimes say something is a threat, but then fail to discuss how the experimental design (e.g. the use of random assignment) does or does not take care of it.

Sociology 30902 Second project: Surveys and Measurement Due November 15, 2024

Using Census Data (including the American Community Survey) or other statistical information available on the web or elsewhere, do a statistical profile of your home town or community, and compare and contrast it with one or more other areas (e.g. the entire US; a very different community that you are very familiar with) and/or look at changes within your community across time. (In practice, you may want to examine the county or MSA you are from – but if you want, you could even examine the census tract your family lives in.) Some of the topics your profile could include (but you are welcome to choose others) are

- 1. The racial composition of your community compared to the entire U.S. or to some other community you are looking at.
- 2. How your community compares economically to the U.S. Is your home town relatively poorer or richer? Is there relatively more poverty where you live, or less? You may also want to consider related variables, such as education, occupation, female-headed families, age distribution, or anything else you think is relevant.
- 3. How did the racial and economic composition of your community change across time, e.g. between 2000 or 2010 and today?
- 4. Based on what you know about the area you are from, offer any insights you may have about why it differs from the United States as a whole, e.g. what are some of the historical and economic factors that have made your community what it is? You can also discuss the possible causes of any changes, e.g. were there factors that attracted many immigrants to your area, were there changes in schools or industry that attracted or drove people away? Anybody could do a demographic profile of your area, but you have a lot of personal knowledge that won't be obvious from the data, and you should try to share those insights.
- 5. Whatever you focus on, begin by telling a little bit about your community. Where is it located? Is it a small town out in the middle of nowhere? A rich suburb of a large city? Or what?
- 6. Don't just attach pages and pages of computer output and expect the reader to make sense out of it. Good tables and figures can help to convey information effectively.

Not including tables or figures, the paper should be typed, double-spaced, and approximately 5 to 8 pages long. Charts and figures will usually help. They can be hand-drawn, but this would be a great time to learn how to use Excel or some other program for such a purpose if you don't know how already.

Resources. The course web page or other material I give you will include links to several useful Census (and other) web sites. The best strategy, I think, is just to play around with these sites a bit and find out what information they have to offer. In general, you can usually find fairly detailed information, right down to the census tract level. The readings packet includes a paper I did several years ago examining one of South Bend's neighborhoods which may give you some ideas. There may be web pages on your community that can give you additional information, e.g. your town or neighborhood association may have their own webpages, and even Wikipedia may have useful historical and background information to offer.

Options for Foreign Students. Foreign students are welcome to choose the neighborhood they live in now or lived in in the past for Project 2. However, they are also welcome to compare, say, their country with the US, or some other country, or the entire world. You could, for example, compare countries on literacy rates, educational attainment, women in the labor force and other gender-related variables, birth rates, population growth, use of contraception, health and mortality, income. Actually, there are a lot of interesting variables in international data sets that you do not find in the US Census. I will suggest good resources for foreign students too.