

**From:** [Smith, Randy](#)  
**To:** [Clark, Jill](#); [Greenbaum, Rob](#); [Adams, Christopher](#)  
**Cc:** [Sutherland, Sue](#); [Herrmann, Samantha](#); [Smith, Randy](#); [Griffiths, Rob](#); [Reed, Katie](#); [Duffy, Lisa](#); [Hunt, Ryan](#); [Brown, Trevor](#)  
**Subject:** Proposal to establish a Micro Credential Certificate in Public Workforce Skills: Advanced Research  
**Date:** Wednesday, January 14, 2026 5:33:40 PM  
**Attachments:** [image001.png](#)

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Jill, Rob and Chris,

The proposal from the John Glenn College of Public Affairs to establish a Micro Credential Certificate in Public Workforce Skills: Advanced Research was approved by the Council on Academic Affairs at its meeting on January 14, 2026. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal review/approval is necessary. This action will be included in the Council's next [Annual Activities Report](#) to the University Senate (July 2026).

The Office of the University Registrar will work you with any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Sue Sutherland (.43), or me.

I wish you success with this important program development.

Randy



**W. Randy Smith, Ph.D.**

Vice Provost for Academic Programs

**Office of Academic Affairs**

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**Assisted by:**

**Katie Reed**

Executive Assistant

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# THE OHIO STATE UNIVERSITY

JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

To: Katie Reed

From: Rob Greenbaum, Associate Dean for Curriculum

Subject: Proposal to establish micro-credential certificates

Date: January 13, 2026

cc: Jill Clark and Chris Adams

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The following are initial responses (not in bold) to your questions (**in bold**) regarding the proposal to establish micro-credential:

1. **Can you speak to any opportunities to assess career advancement for the Data Analytics credential? A major goal rationale for both micro credentials is potential employers looking for these skills and the subcommittee is interested in how you might look at post-graduate outcomes. I see there is some assessment for the Advanced Research credential, will you be using the graduating student survey to collect these data?**
  - a. **Also, I don't see learning outcomes for the credentials, only for the courses in the syllabi. Can you send the outcomes for the micro-credentials?**

We consider these micro-credentials to be about workforce readiness, rather than career advancement. Most of our audience of undergraduate students are not yet engaged in careers. We are basing the needs for these skills on employer demand and student interest. A 2024 survey by the National Association of Colleges and Employers found that 73.2% of employers are looking at recent graduate resumes for technical skills. The same survey shows that nearly 65% of employers utilize skills-based hiring. Indeed, a major public sector employer, the State of Ohio, has moved to skill-based hiring (Executive Order 23-10D). One of our main academic societies, the Association for Public Policy and Analysis and Management (APPAM) conducted a survey of non-academic employee members that asked future employers what type of skills they consider important for new hires to have. The results show that the skills in this set of micro-credentials are considered very important when hiring: data visualization (42%), basic quantitative analysis (75%), basic research skills (75%), and Excel (100%) (APPAM, 2020). A survey of Glenn College undergraduate students was conducted in the Spring of 2024.<sup>1</sup> Students were asked which skills courses they most wanted to have offered. We based our micro-credential both on their responses and a survey of non-academic employers conducted by the Association for Public Policy Analysis and Management.<sup>2</sup> For several years of surveys, undergraduate students have requested more skills courses to be offered in their college.

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<sup>1</sup> The response rate was 24%.

<sup>2</sup> One hundred percent of the employers surveyed indicated that they expected their hires to use Excel frequently (the next highest software was at only 50% of employers). Further, 42% of employers indicated that data

Here are learning objectives for both micro-credentials:

ELOs Certificate in Public Workforce Skills: Data Analytics and Technology

1. Analyze datasets using Microsoft Excel to answer applied questions in public policy and related fields.
2. Apply Excel's analytical tools (including functions, formulas, charts, and PivotTables) to manage, manipulate, and interpret data.
3. Connect data management and data presentation practices to real-world policy issues, demonstrating the ability to translate analysis into applied insights.

ELOs Certificate in Public Workforce Skills: Advanced Research.

1. Demonstrate competency in at least one qualitative or quantitative research method.
2. Apply research skills in an experiential setting (such as a thesis, non-thesis research project, applied research course, or public-sector internship) by conducting data collection, analysis, and interpretation appropriate to the problem context.
3. Communicate research findings effectively through written and/or oral formats that meet professional expectations in public affairs.

**2. Is the Data Analytics and Technology micro credential a prerequisite for the Research credential, or could students potentially do the Research credential on its own?**

No. While students would benefit from “stacking” the Research credential on the Data Analytics and Technology micro credential, The Data Analytics and Technology micro-credential is not a prerequisite for the Research credential.

**3. I have concerns about calling these micro credentials “Certificates.” I worry that students may be misled into thinking they will receive the same level of credentials they would get with an academic certificate. Has your team considered this and, if so, can you comment on it?**

We have considered this concern. We had similar internal discussions when we launched our first graduate certificates, as we had already been offering shorter professional development certificates at the time and were concerned about potential confusion among potential students.

We are open to changing the name of this micro credential to something other than “certificate.” However, we are not as concerned that students will be misled given the marketing we plan to do for the new credential. This is primarily how we addressed offering different types of certificates at the graduate level, and it has also been an opportunity to discuss with potential students the best option for them.

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visualization skills were *very important* for new masters-level research positions, and 50% indicated that those skills were *somewhat important*. Employers were not asked specifically about undergraduate hires.

Likewise, because Glenn College students are the primary audience for these credentials, our advisors and faculty will have ample opportunity to talk with students about what makes these programs similar to and different from other academic certificates at the university. That said, if the committee feels strongly that we should not call these credentials “certificates” we are happy to entertain different naming options.

**4. The advanced research proposal states that PUBAFRS 5517 is one of the options for research methods, but is this a typo? The syllabus is for PUBAFRS 7571.**

At the time of writing the proposal, converting PUBAFRS 7571 to PUBAFRS 5571 had not been approved. It is now approved.

**5. Most of the syllabi in the proposals have some language that has probably been removed in the last year, including land acknowledgments and diversity statements. It also looks like they are missing current standard language. Can you send in updated syllabi to me and Katie?**

Yes. Language has been removed from our syllabus template. We are working to update these individual courses and will forward the syllabi as soon as possible.



Robert T. Greenbaum  
Associate Dean for Curriculum

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October 29, 2025

Vice Provost W. Randy Smith  
Council on Academic Affairs  
Office of Academic Affairs

Dear Randy:

Please find enclosed proposals for two new Glenn College undergraduate micro credentials designed to better prepare our students for the workforce (**Certificate in Public Workforce Skills: Data Analytics and Technology**) and to engage in research (**Certificate in Public Workforce Skills: Advanced Research**).

These micro credentials, built on existing courses, represent an attempt to incentivize students to build workforce development skills around data analytics and advanced research. Students also have the option to stack the research credential on top of the data analytics credential.

Both were approved by the College's undergraduate curriculum committee on April 4, 2025.

We look forward to your review of the proposals.

Sincerely,

Robert T. Greenbaum  
Professor

## Proposal Overview

### Working name of the micro-credential:

Certificate in Public Workforce Skills: Advanced Research

### Type of micro-credential:

This proposed micro-credential, “Certificate in public workforce skills: Advanced Research,” is a stackable credential. Students may stack this micro-credential on the proposed 3-credit “Certificate in public workforce skills: Data Analytics and Technology.”

For credit and non-credit: Completion of 3-7 credits, with half of those credits focused on research methods and half on research experiences with a “C-” or better.

Students take at least one of the following courses (3 credits):<sup>1</sup>

- PUBAFRS 4040: Public Sector Data Sciences and Management (3 credits)
- PUBAFRS 5573: Qualitative Methods in Public Affairs Practice (3 credits)
- PUBAFRS 5571: Multivariate Regression Analysis<sup>2</sup> (3 credits)

Students take one of the following courses or engage in the Ohio Education Research Center Public Sector Data Science (0-4 credits):

- PUBAFRS 4998: Non-thesis research (at 3 credits)
- PUBAFRS 4999.01: Thesis I (at 3 credits)
- PUBAFRS 5620: Rapid Innovation for Public Impact (4 credits)
- Ohio Education Research Center [Public Sector Data Science Internship Program](#) – A summer program in which students engage in a combination of lab training, self-study and work with agency partners. (non-credit bearing internship)

### Mode(s) of delivery for micro-credential:

- In-person

### Anticipated first enrollment term and year:

- First academic term after approval.

### Rationale for Development

- A priority of the John Glenn College of Public Affairs (JGCPA) Undergraduate Curriculum Committee (UGCC) is to increase students’ skills and experiential

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<sup>1</sup> Students can petition to take courses outside of our college with approval by the Undergraduate Curriculum Committee, for example: GEOG 5210: Fundamentals of GIS.

<sup>2</sup> Recently renumbered from PUBAFRS 7571.

learning, contributing to workforce development by creating easy pathways to attain skills and embedding experiential learning in core courses.

- The chair of the JCPA UGCC and the Associate Dean of Faculty and Research received an Ohio State Research Access Innovation Seed Grant to create an “Undergraduate Research Pathway” (URP). Over the course of 18 months, extensive research was conducted by the Associate Dean, UGCC chair, and a team of undergraduate students. The team found that students want pathways to attain research skills and experiential learning and they want a way to communicate their accomplishments. Findings also influence the courses and opportunities offered in this proposal.
- National research on competitor degree programs offering micro-credentials indicate that this would set OSU’s JGCPA BA and BS degrees apart from competitors.

**Who is the intended audience and what value will the micro-credential bring them?**

Include in the description specific competencies or skills gained at completion.

This certificate is designed for Public Affairs students who have already earned the “Certificate in public workforce skills: Data Analytics and Technology,” taken a foundation of public affairs courses, and wish to advance their research skills and gain experience.

The value is that skills are packaged to communicate easily with future employers and future higher education institutions if students continue to conduct research.

Students will be competent in at least one quantitative or qualitative research method. Further, students will have practical experience conducting research.

**Explain the evidence of need for the micro-credential based on market assessment and related data, including any collaboration with employers.**

A 2024 survey by the National Association of Colleges and Employers found that 73.2% of employers are looking at recent graduate resumes for technical skills. The same survey shows that nearly 65% of employers employ skills-based hiring. Indeed, a major public sector employer, the State of Ohio has moved to skill-based hiring (Executive Order 23-10D). The Association for Public Policy and Analysis and Management (one of our main academic societies) conducted a survey of non-academic employee members which asked future employers what type of skills they consider important for new hires to have. The results show that the skills in this set of micro-credentials are considered very important when hiring: data visualization (42%), basic quantitative analysis (75%), basic research skills (75%), and Excel (100%) (APPAM, 2020).

**What other institutions (academic or otherwise) offer similar programs?**

During the research process, the team documented all peer/competitor institutions and their undergraduate research offerings. In the review of 29 public administration and public policy degree programs, only four institutions offer undergraduate research pathways: University of Southern California, American University, Arizona State University, and Carnegie Mellon University.

These programs include mentorship, funding, and coursework. Our proposal is a combination of mentorship (through the research experience) and coursework. What makes our proposal stand out is the credentialing. Therefore, while a few competitors offer research programming, none of these programs credential students in this way.

## **Assessment Plan**

**Describe how the learning outcomes will be assessed.**

To determine whether students are competent in a quantitative or qualitative research method, they must pass 70% of a methods course to earn an “S” passing grade. Because the course learning outcomes and assignments are tightly aligned with the learning outcomes for this credential, successful participation in a thesis, non-thesis research paper, 5620 end report, or adequate participation in an OERC internship experience will determine whether students gain “practical research experience.”

**Describe how the learning outcomes information will be used.**

The college will track the first-employment outcomes of those earning the micro-credential to determine whether skills learned through the credential are represented in post-graduation employment. Additionally, the undergraduate studies committee will examine any cases where a student did not complete the micro-credential was *not* successfully attained to analyze which competencies students failed to attain. This information will be used for future course improvement.

**Provide a timeline for implementing the assessment plan.**

This assessment plan will be implemented beginning in SP2027 after the first group of students has had time to complete the micro credential and gain employment.

## **Contact Information**

**First Name:** Chris

**Last Name:** Adams

**Ohio State Username (name.#):** adams.615

**Unit name:** JGCPA

## **Additional Resources**

**Proposal**



- [CAA proposal resources](#) [CAA member access and key microcredential pilot stakeholders access only]
- [EHE and PCE proposal development resources](#) [Ohio State log-in access expires June 30, 2025]

### **University Context**

- [Ohio State's Strategic Plan Framework](#)
- [Ohio State's Alternative Credential Framework](#) [2022]
  - [CAA proposal seeking endorsement of Alternative Credential Framework](#) [2022]

### **Ohio State's Workforce Development Evolution**

- Workforce Development Committee Originating Documents
  - [Framing and Defining Workforce Development at Ohio State](#) [2020]
  - [Workforce Development Implement Plan Framework for Ohio State](#) [2020]
  - [Workforce Development Credit and Non-Credit Categories](#) [2021]
  - [CAA Workforce Development progress update](#) [2024]

### **Initial Proforma Development Considerations**

This new program draws exclusively on existing courses that are required or elective for existing degrees and minors. This means the marginal cost for instruction is zero.

# Revised Syllabi



THE OHIO STATE UNIVERSITY

JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

# Public Sector Data Sciences & Mgmt Syllabus

PUBAFRS 4040 Spring 2025

## Course Information

### Class Schedule and Delivery Mode

**Course times and location:** Tuesdays and Thursdays, 4:10pm – 5:30pm in Mendenhall Lab 174

**Credit hours:** 3

**Mode of delivery:** In Person

### Instructor

Lilly D. Tesfai, MPA, Lecturer, John Glenn College of Public Affairs

**Email:** [tesfai.9@osu.edu](mailto:tesfai.9@osu.edu)

**Preferred modes of communication:** My preferred method for questions is **email**. Class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check [notification preferences](https://go.osu.edu/canvas-notifications) ([go.osu.edu/canvas-notifications](https://go.osu.edu/canvas-notifications)) to be sure you receive these messages.

**Office hours for student questions and support:** Wednesdays, 10am-11am via Zoom, or Tuesdays and Thursdays, 3pm-4pm in person (by request), Page Hall

## Course Description

PUBAFRS 4040 provides an orientation to the use of data for decision-making in the public sector. We will cover key concepts in data science, analytics, and visualization in the unique contexts of the public (and sometimes nonprofit) sector. What happens when we do data well? What happens when we do data poorly? How do we get over the technical and methodological challenges that stand in the way of data-informed decision making? What does AI have to do with it? Students will also complete programming and visualization exercises using Python and Tableau, providing an introductory toolkit with which to complete the final project – an exploration of a policy or procedural issue consisting of analysis, written report, and presentation.

## Course Prerequisites

You will get the most out of this class if you have already completed at least one introductory course of statistics with some kind of programming.

## Learning Outcomes

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

- Explain key concepts in the fields of data analytics and data science
- Conduct analysis to address policy and procedural problems, acknowledging its limitations

- Understand the political, social, and economic implications of emerging technology
- Locate and work with public data
- Bring data-informed perspective to decision-makers

## Course Materials, Fees, and Technologies

### Required Materials

- **Textbook (The textbook has a free online version):**
- Foster, I., Ghani, R., Jarmin, R. S., Kreuter, F., & Lane, J. (Eds.). (2020). Big data and social science: data science methods and tools for research and practice. CRC Press. <https://textbook.coleridgeinitiative.org/>
- Other Materials will be posted on the CarmenCanvas site.

### Required Software

- **Microsoft Office 365:** All Ohio State students are now eligible for free Microsoft Office 365. Full instructions for downloading and installation can be found at <http://go.osu.edu/office365help>.
- **Python 3** (install the full Anaconda Suite with Jupyter Notebook):
- Windows: <https://docs.anaconda.com/free/anaconda/install/windows/>
- MacOS: <https://docs.anaconda.com/free/anaconda/install/mac-os/>
- Google Colab (as a last resort): <https://colab.research.google.com/>
- **Tableau** (free, one-year student license): <https://www.tableau.com/academic/students>

### Technology

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at [go.osu.edu/student-tech-access](https://go.osu.edu/student-tech-access).


- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- **BuckeyePass:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week:

<https://it.osu.edu/students>

## Grading and Evaluation

### How Your Grade is Calculated

Assignment Category	Points/Weight	Assignment Type	
Memos	30%		Independent work



Technical Exercises	20%		Independent work
Class Participation & Discussions	10%		Collaboration required
Final Project & Checkpoints	40%		Independent work

## Descriptions of Major Course Assignments

### Memos

**Description:** Memos are brief writing assignments exploring a student's understanding and thoughts on a topic from course readings and lectures. These assignments are an opportunity to develop ideas; little to no outside research is required, but any citations should be in APA style. Memos should be approximately one page long, single-spaced.

**Independent work:** Memos should consist of independent thought and independent writing.

### Technical Exercises

**Description:** Students will build a technical skillset through this course with the basics of Python for data analysis, Tableau, and SQL. These assignments are designed to support the development of the final project and to prepare students for internship-level work in the public sector.

**Independent work:** Students are welcome to use online, campus-based, and peer resources to support their mastery of the introductory programming skills needed for this course, but each student should submit their own independent work.

### Final Project & Checkpoints

**Description:** Students will complete a data analytics project by the end of the course, selecting a relevant policy topic to investigate. The project will be graded on completion of the following components: written & verbal project proposal, checkpoints (4) within Canvas, final presentation, and final paper & code. Checkpoints are designed to ensure that students are making progress and identify needed support as soon as possible. Final projects may be turned in as PowerPoint, Tableau Workbook, or Jupyter Notebook, depending on the student's preference. Presentations will take place in the last week of class. All citations should be made in APA style. The complete rubric will be available on Canvas.

**Independent work:** Peer feedback and online programming resources (StackExchange, W3, YouTube, etc.) are fine to use to help students complete final projects. Campus-based support is also available via the Statistical Consulting Service ([www.scs.osu.edu/](http://www.scs.osu.edu/)), the Writing Center (<https://cstw.osu.edu/writing-center>), or from the Glenn College's dedicated librarian at OSU Libraries, Kay Clopton ([clopton.1@osu.edu](mailto:clopton.1@osu.edu)), who can help provide research assistance. For more information and links to some common public affairs resources, see <http://go.osu.edu/8gx>. Beyond these resources, students should complete this project independently – developing their own ideas and presenting their own work.

### Grading Scale

93–100: A  
90–92.9: A-

87–89.9: B+  
83–86.9: B

80–82.9: B-  
77–79.9: C+



73–76.9: C  
70–72.9: C–

67–69.9: D+  
60–66.9: D

Below 60: E

## Course Schedule

Refer to the [CarmenCanvas](#) course for up-to-date information.

Week	Topics & Assignments
1	What is Data Science?   Technical Exercise 1
2	Data in the Public Sector   Memo 1
3	Data in Research & Practice
4	Data Gone Wrong: Error, Quality, & Inference   Checkpoint 1
5	Intro to Machine Learning & Artificial Intelligence   Memo 2
6	Modern Issues of Data Ethics   Technical Exercise 2 & Checkpoint 2
7	Critical AI   Memo 3
8	Program Evaluation & Performance Measurement   Project Proposal
9	Databases & the 'Modern Data Stack'   Technical Exercise 3
10	SPRING BREAK
11	Principles of Data Visualization   Memo 4
12	Spatial Data Analysis   Technical Exercise 4 & Checkpoint 3
13	Organizational Data Strategy   Memo 5
14	Data Science Simulations: Government & Nonprofit   Technical Exercise 5
15	Final Presentations
Final	Project Due: Monday, April 21, 11:59PM

## Course Policies



## Attendance and Participation Expectations

Class is held in-person, twice per week. Attendance is expected: it affects the participation grade, the learning community, and the student's grasp of course topics. In the event of sickness or other emergency, please email the instructor at [tesfai.9@osu.edu](mailto:tesfai.9@osu.edu) as soon as possible so that accommodations can be made. Students should bring their personal computer to class.

## Academic Misconduct

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the [Committee on Academic Misconduct](#) (COAM) expect that all students have read and understand the University's [Code of Student Conduct](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct ([Section 3335-23-04](#)) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so please review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If an instructor suspects that a student has committed academic misconduct in this course, the instructor is obligated by University Rules to report those suspicions to the Committee on Academic Misconduct. If COAM determines that a student violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University.

If students have questions about the above policy or what constitutes academic misconduct in this course, they should contact the instructor.

## Artificial Intelligence (AI) and Academic Integrity

There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite, and others. These tools will help shape the future of work, research and technology, but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use unauthorized assistance in the laboratory, on field work, in scholarship, or on a course assignment unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

**[Insert course-specific AI usage policy]**

## Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement **and** the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Civil Rights Compliance Office](#).

Policy: [Religious Holidays, Holy Days and Observances](#)

## Disability Statement (with Accommodations for Illness)

The University strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If students anticipate or experience academic barriers based on a disability (including mental health and medical conditions, whether chronic or temporary), they should let their instructor know immediately so that they can privately discuss options. Students do not need to disclose specific information about a disability to faculty. To establish reasonable accommodations, students may be asked to register with **Student Life Disability Services (SLDS)**. After registration, students should make arrangements with their instructors as soon as possible to discuss your accommodations so that accommodations may be implemented in a timely fashion.

If students are ill and need to miss class, including if they are staying



home and away from others while experiencing symptoms of viral infection or fever, they should let their instructor know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations.

## SLDS Contact Information (Columbus)

- **Email:** [SLDS@osu.edu](mailto:SLDS@osu.edu)
- **Phone:** [\(614\) 292-3307](tel:(614)292-3307)
- [Student Life Disability Services Website](#)
- **SLDS Office:** 098 Baker Hall, 113 West 12th Avenue

## Intellectual Diversity

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

## Grievances and Solving Problems

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson, college dean or associate dean, and to the provost, in that order. Specific procedures are outlined in [Faculty Rule 3335-8-23](#). Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

## Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a welcoming community. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the University community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the **Civil Rights Compliance Office (CRCO)**:

- [Online Reporting Form](#)
- **Email:** [CivilRights@osu.edu](mailto:CivilRights@osu.edu)
- **Phone:** [\(614\) 247-5838](tel:(614)247-5838)

The University is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All University employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the University can take appropriate action:

- All University employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information:
  1. Any human resource professional (HRP)
  2. Anyone who supervises faculty, staff, students, or volunteers
  3. Chair/director
  4. Faculty member

## Late Assignments and Making Up Work

Please refer to CarmenCanvas for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments. Assignments submitted late will be subject to a one-point deduction per day. Assignments will close one week after their due date and submissions will no longer be accepted. If accommodations are needed in case of emergency, please reach out to the instructor at [tesfai.9@osu.edu](mailto:tesfai.9@osu.edu) as soon as possible.

## Instructor Feedback and Response Time

Visiting office hours to discuss final project components is highly recommended. Simple questions about assignments or other course materials can be sent to the instructor via email. Students should expect responses to email within 24 hours in most cases. Feedback and grades on formally submitted assignments can be expected within 7 days of submission.

## Copyright

The materials used in connection with this course, including those created by the instructor or classmates, may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## University Academic Policies

Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following

- **Accessibility:** Arrange for accommodations if you anticipate barriers to your learning based on a disability
- **Academic integrity:** Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- **Safe learning environment:** Know the university's commitments to an environment free from discrimination or harassment and find resources for reporting or finding support.



## Counseling and Consultation Services / Mental Health Statement

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS):

- [CCS Website](#)
- **CCS Phone & On-Call Counselor:** [\(614\) 292-5766](#)
- **CCS Office:** Younkin Success Center (4th Floor), 1640 Neil Avenue
- **24/7 Suicide and Crisis Lifeline:** 988

## Lyft Ride Smart

Lyft Ride at Ohio State offers eligible students discounted rides, inside the University-designated service area (opens in new window) and has expanded service to the Short North area along High Street. Service runs from 7 p.m. to 7 a.m. Prices may be impacted by distance, traffic, time of day, special events and prime time surcharges. More information about the service and the Lyft App, and a link to get started using the Lyft Ride Smart services can be found at Transportation and Traffic Management's [Lyft Ride Smart page](#).

## Accessibility of Course Technology

This course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- [CarmenCanvas accessibility](https://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- [CarmenZoom accessibility](https://go.osu.edu/zoom-accessibility) (go.osu.edu/zoom-accessibility)

## Weather or other short-term closing

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via Announcements in CarmenCanvas.

## Military-Connect Students

The [Military and Veterans Services \(MVS\) Office](#) offers a wide range of resources for military-connected students. Whether using educational benefits or not, all military-connected students are encouraged to learn more about how the University supports military-connected students (i.e., information about tutoring, transition services, access to the veteran's lounge, etc.). For service members, should you receive military orders during the semester or know of classes that will be missed due to service commitments, please speak with your instructor as soon as possible on possible accommodations.

- [MVS Website](#)
- **Email:** [milvets@osu.edu](mailto:milvets@osu.edu)
- **Phone:** [614-247-VETS](#)
- **MVS Office:** 185 Student Academic Services Building, 281 W. Lane Avenue.



## Resources for Food-Insecure Students

The Ohio State University is committed to ensuring that all students have access to adequate and healthy food. **Any undergraduate or graduate student with a BuckID may confidentially use the Buckeye Food Alliance food pantries. No proof of need is required.** The Student Food Pantry is in the [Monda Student Resource Center](#) at the Younkin Success Center:

### Student Food Pantry

- **Office:** 1640 Neil Avenue, Columbus, OH 43202
- **Email:** [SL-MSRC@osu.edu](mailto:SL-MSRC@osu.edu)
- **Phone:** [\(614\) 688-2508](tel:(614)688-2508)

To learn more, visit the [Buckeye Food Alliance website](#).





THE OHIO STATE UNIVERSITY

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JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

# Qualitative Methods in Public Affairs Practice Syllabus

Public Affairs 5573  
SP 2023

## Course Information

### Class Schedule and Delivery Mode

**Course times and location:** TuTh 12:45PM - 2:05PM; Pomerene Hall 150

**Credit hours:** 3

**Mode of delivery:** In Person

### Instructor

**Dr. Jill Clark, Associate Professor, John Glenn College of Public Affairs**

**Contact information:** [clark.1099@osu.edu](mailto:clark.1099@osu.edu), 614-688-5984 (Office)

**Preferred modes of communication:** My preferred method for questions is **email**. My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](#) ([go.osu.edu/canvas-notifications](https://go.osu.edu/canvas-notifications)) to be sure you receive these messages.

**Office hours for student questions and support:** TBD, 310C Page Hall or Zoom

## Course Description

This three-credit hour course is designed to introduce students to the philosophy of social science, and a variety of strategies for qualitative research design, data collection, and data analysis. The course has two main goals. First, to familiarize students with various strategies employed in conducting qualitative research. Additionally, we will use examples of different types of qualitative research designs, data collection strategies, and data analysis to gain a better understanding of these various approaches and their practical relevance in public affairs. Second, to provide students with the basic skills and techniques researchers use to gather and analyze qualitative data and evaluate qualitative analysis. Furthermore, students will learn to apply these skills and techniques to design, conduct, and evaluate qualitative studies.

## Course Prerequisites

None.

## Learning Outcomes

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

- Possess a greater understanding of qualitative research;
- Design a qualitative study within an established tradition of inquiry;
- Conduct all phases of a qualitative study, including entry into the site or setting, data collection (e.g., interviews, observations), recording of data, data analysis, and data reporting;
- Present the results of their empirical research in a cogent and trustworthy manner; and,
- Demonstrate competence in evaluating qualitative research studies.

## Course Materials, Fees, and Technologies

### Required Materials

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish*. 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc. (ISBN 978-1-46251-797-8)
- Saldana, Johnny. 2016. *The Coding Manual for Qualitative Researchers*. 3<sup>rd</sup> Edition. Thousand Oaks, CA: Sage Publications, Inc. (ISBN 978-1-84787-548-8)

### Recommended Materials


- Creswell, John W. 2018. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. 4th Edition. Thousand Oaks, CA: Sage Publications, Inc. (ISBN 978-1-5063-3020-4)
- Yin, Robert. K. 2009. *Case Study Research: Design and Methods*. 4th Edition. Thousand Oaks: Sage Publications, Inc. (ISBN 978-1-4129-6099-1)
- SAGE qualitative research methods [electronic resource]. (2010). Edited by Paul Atkinson and Sara Delamont: <https://library.ohio-state.edu/record=b8200577>









For library course materials and additional optional materials, refer to the CarmenCanvas course.

Students can access textbook information via the Barnes & Noble bookstore website: [www.shopOhioState.com](http://www.shopOhioState.com) as well as from their BuckeyeLink Student Center. This information is disseminated by B&N to all area bookstores. You may buy from a store of your choice and/or shop for books (always use ISBN# for searches) online.

## Grading and Evaluation

### How Your Grade is Calculated

Assignment Category	Points/Weight	Assignment Type	
Class Participation	10%		Independent work

IRB Certification (due Week 3)	5%		Independent work
Reflection (due Week 4)	5%		Independent work
Annotated bibliography (due Week 7)	5%		Independent work
Interview (due Week 8)	15%		Independent work
Final project topic/format (due Week 10)	N/A		Independent work
Transcription (due Week 10)	10%		Independent work
Data Analysis Study (due Week 14)	25%		Collaboration required
Presentation (due Week 15)	10%		Collaboration required
Final Project (due Exam week)	15%		Independent work

NOTE: This course is designed for upper-level undergraduates and graduate students. This is an introductory course with no pre-requisites. Therefore, there is no distinction between the readings and assignments for undergraduates and graduate students. However, for the group assignment, undergraduate students will be grouped together and graduate students will be grouped together. For all assignments, while only one rubrics will be used, graduate students will be graded to a more rigorous standard.

## Descriptions of Major Course Assignments

### Class Participation

**Description:** This course is designed as half discussion and half lab, or application of material. While I will prepare remarks for each meeting, we will spend most of the first half of the class time discussing the assigned readings. Hence, you are expected to come to class prepared to critically discuss the readings and how they relate to your substantive interests. In addition, on the first day of class, you will be assigned to lead one of the weekly discussions. This will entail bringing a set of thought-provoking discussion questions and facilitating a discussion. Questions should address key aspects of the assigned readings or anything that you find confusing, controversial, or that you would like to know how others think about it. You may draw on the weekly reflections, below. The second half of the class will often focus on an application of the material.

### Independent work

### Institutional Review Board (IRB) training

**Description:** All students are required to complete the on-line IRB training before the class in which it is covered and turn in the Certificate of Completion, which will serve as proof that you completed the training. You must

complete all required modules in the Basic Human Research Course.

### Independent work

#### Reflection

**Description:** The first portion of this course is introducing you to qualitative inquiry as a philosophy, not just a method. Write a two-page, double-spaced reflection on the readings, class discussions, and other materials from Weeks 1-3. Consider the following questions: What were your preconceptions of qualitative research? What do you understand qualitative research to be now? What has surprised you? What do you still find confusing? How does qualitative research apply to your everyday life? See the detailed rubric embedded in the assignment on Carmen.

### Independent work

#### Annotated Bibliography

**Description:** Given our class's research question, find three pertinent pieces of research. Create an entry for each piece of research. Include an APA citation followed by 150ish words that describe the study (ex. sample or population, location, method) and its relevance to our research question. A google doc will be started for class so that you do not replicate a study that someone else is doing. Finally, please see the detailed rubric embedded in the assignment on Carmen.

**Independent work (but with consultation with the class to ensure everyone is annotating different articles)**

#### Interview<sup>1</sup>

**Description:** Students are required to complete a fieldwork study, specifically an interview, as part of their class requirements. Finally, please see the detailed rubric embedded in the assignment on Carmen.

Interviews are a vehicle for learning about the meaning that participants give to their lives and to events and interactions in their world and environment. As a class, we will determine a mutual area of interest for interviews, develop research questions, and select a population to interview regarding that area of interest. In class, we will co-develop a semi-structured interview protocol. You will identify an interviewee and conduct the interview. When you are finished interviewing, write a brief (1-2 single-spaced pages) narrative account, reflecting on the questions below. Your field notes should be included as an Appendix.

Write a reflective memo on the interview process, responding to the questions below.

- What do you know about how the interviewee knows what s/he knows?
- What dilemmas, if any, did you experience in trying to gain consent from him/her for the interview and for taping the interview?
- If you were to carry out such an interview again, how would you change the structure, format, and questions, if at all?
- How was this conversation different from or similar to an ordinary conversation between two people?
- What strategies did you use to place checks on yourself so that you would refrain from asking leading questions and be open to information that ran counter to your working assumptions? Describe one or two incidents during the interview in which you heard something from your interviewee that ran counter to your expectations? How did you handle these surprises and what did you learn from this?
- What else surprised you? What puzzles need follow-up? How does what you learned in this interview confirm or disconfirm other opinions/data you may have collected?
- Upon reflection, how would you characterize your unique interviewing style? What do you know your communication skills and liabilities to be? How might you capitalize on your strengths and minimize your liabilities in your future qualitative research work?
- What are the main findings of your interview?

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<sup>1</sup> This exercise was adapted, with permission, from Dr. Donna Haig Friedman's Spring 2014 course PPOLGL609/GER609L



## Independent work

### Transcription

**Description:** Each of you will be required to transcribe your interview. Refer to the assignment and protocol in Carmen.

## Independent work

### Data Analysis Study

**Description:** For this assignment, students will be randomly assigned to teams and required to complete a data analysis of the transcribed interview completed in the previous assignment. You will be required to (1) individually develop a coding scheme of the data provided; (2) discuss the coding rubric with your team members and reach a consensus with regard to the coding rubric that should be employed in analyzing the data; (3) code the data using the coding rubric approved by the team; (4) discuss the results with the team members and solve any disagreements in the coding of the data; (5) write a short report that presents the research question, methods, results, limitations, and conclusions. Keep in mind, your report should be complete, fair (would others see what you see in the data after reading your report?), empirically accurate (does your data give you this), value-added (do you make a contribution), and credible (would peers accept your interpretation). Expected length is about 8-10 pages, single-spaced. You can include appendices. Finally, please see the detailed rubric embedded in the assignment on Carmen.

## Collaboration required

### Presentation

**Description:** Students are required to make a presentation on their data analysis during the last week of classes. Each group will have assigned max. 20 minutes for the presentation including the questions and answers session following the presentation. The actual presentation should be no less than 15 min. and no longer than 20 min. The order of the presentations will be established in class through random selection. Presentations shorter or longer than the allotted time will be penalized. See the detailed rubric embedded in the assignment on Carmen.

## Collaboration required

### Final Project

**Description:** All students are required to prepare a final project that aligns with their interests and degree curriculum. This could be in the form of a mini-proposal for a qualitative research study for a government agency or a non-profit; an analysis of existing qualitative data; a systematic literature review; or other project that furthers your academic and/or professional goals. You should start thinking about this assignment earlier in the semester as the final project is a complex and time-consuming process.

Topics/format must be pre-approved by me. See the assignment calendar.

## Independent work

### Grading Scale

93–100: A	80–82.9: B-	67–69.9: D+
90–92.9: A-	77–79.9: C+	60–66.9: D
87–89.9: B+	73–76.9: C	Below 60: E
83–86.9: B	70–72.9: C-	

## Course Schedule

### Week 1. Introduction to Qualitative Research

Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapter 1). 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc.



*Suggested Readings:*

- Ford, Tiffany N. & Goger, Annelies (2021). The value of qualitative data for advancing equity in policy. Brookings. Available at: <https://www.brookings.edu/research/value-of-qualitative-data-for-advancing-equity-in-policy/>
- Freedman, David. "On Types of Scientific Inquiry: The Role of Qualitative Reasoning." (Available at <http://www.stat.berkeley.edu/~census/anomaly.pdf>).
- Lin, Ann Chih (1998). "Bridging Positivist and Interpretivist Approaches to Qualitative Methods." *Policy Studies Journal*. 26.1: 162-180
- Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political Analysis*, 14(3), 227-249.

Lab: Biography; Your worldview

## Week 2. Getting Started, Asking Questions, and Ethical Concerns

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapter 2). 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc.
- Roberts, L. D. (2015). Ethical issues in conducting qualitative research in online communities. *Qualitative Research in Psychology*, 12(3), 314-325.

*Suggested:*

- Creswell, John W. 2013. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. 3<sup>rd</sup> Edition (pp. 42-68). Thousand Oaks, CA: Sage Publications, Inc.
- Jane Agee (2009) Developing qualitative research questions: a reflective process, *International Journal of Qualitative Studies in Education*, 22:4, 431-447, DOI: 10.1080/09518390902736512
- Sieber, Joan E. 1998. "Planning Ethically Responsible Research." In Leonard Bickman and Debra J. Rog (Eds), *Handbook of Applied Social Research Methods* (pp. 127-156). Thousand Oaks: Sage Publications, Inc.
- Wood, Elizabeth Jean. 2006. "The Ethical Challenges of Field Research in Conflict Zones." *Qualitative Sociology* 29 (June 20): 373-386.

Lab: Ethics; Asking questions

## Week 3. Research Design

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapter 3 and 4). 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc.

*Suggested:*

- Patton, Michael Quinn. 2002. Chapter 5: Designing Qualitative Studies in *Qualitative Research and Evaluation Methods*. Thousand Oaks: Sage Publications.
- Schwartz-Shea, P., & Yanow, D. (2013). *Interpretive research design: Concepts and processes* (Chapter 1). Routledge.

Lab: Diagnosing design; Asking qualitative research questions

**\*IRB Assignment due by class time.**



#### Week 4. Types of Applied Research Studies (e.g., needs assessment, policy analysis, program evaluation)

- Natow, R. S. 2021. *How do policymakers perceive qualitative research?* Available at <https://evidenceandpolicyblog.co.uk/2021/04/07/how-do-policymakers-perceive-qualitative-research/>
- [E]<sup>2</sup> Garner et al. 2020. Country Fresh Stops: Facilitating Local, Healthy Food Access in Appalachian Ohio Interim Evaluation Report. School of Health and Rehabilitation Sciences, Ohio State University
- [E] Krzyzanowski Guerra, K., Hanks, A. S., Plakias, Z. T., Huser, S., Redfern, T., & Garner, J. A. (2021). Local Value Chain Models of Healthy Food Access: A Qualitative Study of Two Approaches. *Nutrients*, 13(11), 4145.
- [E] Louisville Metro Government. (2017). Jail and Substance Abuse: Exploring the Linked Challenges of Drugs and Incarceration in Louisville, KY. [http://publicpolicylab.org/wp-content/uploads/2017/06/PPL\\_JailSubstanceAbuse\\_ForWebsite.pdf](http://publicpolicylab.org/wp-content/uploads/2017/06/PPL_JailSubstanceAbuse_ForWebsite.pdf)
- [E] Spencer, R. A., Lemon, E. D., Komro, K. A., Livingston, M. D., & Woods-Jaeger, B. (2022). Women's Lived Experiences with Temporary Assistance for Needy Families (TANF): How TANF Can Better Support Women's Wellbeing and Reduce Intimate Partner Violence. *International Journal of Environmental Research and Public Health*, 19(3), 1170.

#### Suggested Readings:

- Maxwell, J. A. 2020. The value of qualitative inquiry for public policy. *Qualitative Inquiry*, 26(2), 177-186.
- Rist, Ray. 1994. Influencing the Policy Process with Qualitative Research. In eds. Norman Denzin and Yvonna Lincon, *Handbook of Qualitative Research*, London: Sage. Pp 1001-1017.
- Beebe, James. 2001. Rapid Assessment Process: An Introduction. Walnut Creek: Altamira Press. Chapter 1.

Lab: Decision-making

#### \*Reflection due by class time.

#### Week 5. Participatory Research and Case Study Approaches

- Israel, Barbara A., et al. "Review of community-based research: assessing partnership approaches to improve public health." *Annual review of public health* 19.1 (1998): 173-202.
- Yin, Robert. K. 2009. *Case Study Research: Design and Methods*. 4<sup>th</sup> Edition (Chapter 1). Thousand Oaks: Sage Publications, Inc.
- Clark, Jill K., Kaiser, Michelle, K., Reece, J., & Schmiesing, R. 2021. *University research in the neighborhood: The perspective of community members*. Ohio State University. Available at: <https://engage.osu.edu/university-research-neighborhood>
- [E] Designing for Social Systems (DSS) (2021). *Lummi Tribal Health Center Tackles Opioid Overdoses*. Stanford University.
- [E] Modeling the Future of Food in Your Neighborhood Collaborative. (November 2020). Menu of Actions for Community Driven Food Systems Change. Mary Ann Swetland Center for Environmental Health, Case Western Reserve University, Cleveland, OH.

#### Suggested Readings:

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<sup>2</sup> [E] denotes an example. These readings are not for you to learn the minutiae of the reading, but rather to engage with a class concept via seeing its application.



- Ospina, Sonia M., Burns, Danny, & Howard, J. (2021). Introduction to the Handbook in Burns, D., Howard, J., & Ospina, S. M. (Eds.). (2021). *The SAGE handbook of participatory research and inquiry*. SAGE.
- Yin, Robert K. 2018. *Case Study Research and Application*. (Remainder of book). Thousand Oaks: Sage Publications, Inc.

Lab: Community voices

## Week 6. Reviewing the Literature and Getting Ready for the Field

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapters 5 and 7). New York, NY: Guilford Publications, Inc.
- Wood, Elisabeth. 2009. "Field Research." In C. Boix & S. Stokes (Eds.), *The Oxford Handbook of Comparative Politics* (pp. 1-29).
- [E; skim the literature review] Clarke, Brownyn (2019). "The Evidence Decision-Makers Want Literature Review," Center for the Study of Social Policy.
- [E; skim the field memo] Example Field Memo

### Suggested Readings:

- Barrett, Christopher B., & Cason, Jeffrey W. 1997. The Logistics of Fieldwork, In *Overseas Research: A Practical Guide* (pp. 67-89). Baltimore: Johns Hopkins University Press.
- Emerson, Robert, Fretz, Rachel, & Shaw, Linda. 1995. Processing Fieldnotes: Coding and Memoing. In *Writing Ethnographic Fieldnotes* (pp. 142-168). Chicago: University of Chicago Press.

Lab: Group literature review + Field work

## Week 7. Conducting Interviews

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (pp. 137-150). New York, NY: Guilford Publications, Inc.
- Herbert J. Rubin and Irene S. Rubin. 2011. *Qualitative Interviewing: The Art of Hearing Data*, 3<sup>rd</sup> Edition (pp. 1-12 & 115-148). Thousand Oaks, CA: Sage Publications, Inc
- Feldman, Martha S., Bell, Jeanine, & Berger, Michelle Tracy. 2003. Gaining Access for Interviewing. (Chapter 7) In *Gaining Access*. New York: Altamira Press.
- McLellan, E., McQueen, K., & Neidig, J. 2003. "Beyond the Qualitative Interview: Data Preparation and Transcription." *Field Methods* 15(1), pp. 63-84.
- [E] Franklin County Suicide Prevention Coalition. (2020). Strengthening and Sustaining Ohio's Suicide Prevention Coalitions Initiative: Community readiness assessment report Franklin County.

Lab: Writing interview questions and practice interviewing; Sampling

## Week 8. Focus Groups

- Short, S. 2006. Focus Group Interviews. In E. Perecman and S. Curran, Eds., *A Handbook for Social Science Field Research*. Thousand Oaks: Sage Publications.
- Bloomberg. 2012. "Mad Men and the Odd Power of Focus Groups."
- [E; skim for research design] Heikkila, T., & Isett, K. R. (2007). Citizen involvement and performance management in special-purpose governments. *Public Administration Review*, 67(2), 238-248.
- [E] Silva, J. M., Sawhill, I. V., Welch, M., & Ford, T. N. (2020). A Qualitative Study of the Hopes and



Anxieties of the American Middle Class Before and During the COVID-19 Pandemic. Brookings.

Lab: No Class on October 12<sup>th</sup>! Happy Fall Break

**\*Interview due by class time.**

## Week 9. Focus Groups

Lab: Running Focus Groups

## Week 10. Observations and Archives

Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (pp. 150-158; Chapter 7). New York, NY: Guilford Publications, Inc.

Feldman, Martha S., Bell, Jeanine, & Berger, Michelle Tracy. 2003. "Gaining Access for Extended Observation." (Chapter 9). In *Gaining Access*. New York: Altamira Press.

[E] Examples of Observation

*Suggested:*

Tjora, A. 2006. "Writing Small Discoveries: An Exploration of Fresh Observers' Observations." *Qualitative Research*, 6(4), pp. 429-451.

Fincham, B., Scourfield, J., & Langer, S. 2008. "The Impact of Working with Disturbing Secondary Data: Reading Suicide Files in a Coroner's Office." *Qualitative Health Research* 18(6), pp.853-862.

Lab: Document analysis

**\*Transcription due by class time.**

## Week 11. Data Analysis: Coding

Saldana, Johnny. 2009. *The Coding Manual for Qualitative Researchers* (pp. 1-21, SKIM 32-191). Thousand Oaks, CA: Sage Publications, Inc.

Scully, M., Rothenberg, S., Beaton, E. E., & Tang, Z. (2017). Mobilizing the wealthy: Doing "privilege work" and challenging the roots of inequality. *Business & Society*, 0007650317698941.

[E; Skim article and review the code book in supplemental material] Beaton, E. E., LePere-Schloop, M., & Smith, R. (2021). A review of sexual harassment prevention practices: Toward a nonprofit research agenda. *Nonprofit and Voluntary Sector Quarterly*, 08997640211008979.

*Suggested:*

King, N., Brooks, J., & Tabari, S. (2018). Template analysis in business and management research. In *Qualitative methodologies in organization studies* (pp. 179-206). Palgrave Macmillan, Cham.

Charmaz, Kathy. 2006. "Coding in Grounded Theory." In *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis* (pp. 42-71).

Owen, G. T. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *The Qualitative Report*, 19(52), 1-19. Retrieved from <http://www.nova.edu/ssss/QR/QR19/owen52.pdf>

Lab: Observations and field notes



## Week 12. Data Analysis: Disassembling, Reassembling, and Interpreting Data

Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapters 8 and 9). New York, NY: Guilford Publications, Inc.

Lab: Coding

November 7 lecture is asynchronous online to allow students to vote and/or work the polls.

## Week 13. Reliability & Validity in Qualitative Research

Lincoln, Yvonna, & Guba, Egon. 1985. "Establishing Trustworthiness." In *Naturalistic Inquiry* (pp. 289-331). Thousand Oaks, CA: Sage Publications, Inc.

Shaw, K. 1997. "Remedial Education as Ideological Battleground," *Educational Evaluation and Policy Analysis*. 19(3): 284-296.

[Skim] Nowell, B., & Albrecht, K. (2018). A reviewer's guide to qualitative rigor. *Journal of Public Administration Research and Theory*.

### *Suggested Reading:*

Ospina, S. M., Esteve, M., & Lee, S. (2018). Assessing qualitative studies in public administration research. *Public Administration Review*, 78(4), 593-605.

Seale, Clive. 1999. "Quality in Qualitative Research." *Qualitative Inquiry* 5(4), pp. 465-478.

Lab: Critiquing Shaw

## Week 14. Writing and Presenting a Qualitative Study

Yin, Robert K..2016. *Qualitative Research from Start to Finish* (Chapters 10 and 11). New York, NY: Guilford Publications, Inc.

Skim all previous [E] readings for presentation of results.

Lab: Presenting qualitative data

NO CLASS on November 23 – Thanksgiving Break

**\* Data Analysis Study due by class time.**

## Week 15. Group Work and Class Presentations

**\* Presentations due in class**

## Week 16. Class Presentations

**\* Presentations due in class**

## Exam Week

**\* Final Projects due on 12/12 @ 2 PM**



Week	Dates	Class Session	Due
1	8/22 & 24	Introduction to Qualitative Research	
2	8/29 & 31	Getting Started, Asking Questions, and Ethical Concerns	
3	9/5 & 7	Research Design	IRB
4	9/12 & 14	Types of Studies	Reflection
5	9/19 & 21	Participatory Research and Case Study Approaches	
6	9/26 & 28	Reviewing the Literature and Getting Ready for the Field	
7	10/3 & 5	Interviews	Annotated bibliography
8	10/10 & 12*	Focus Groups	Interview
9	10/17 & 19	Focus Groups	
10	10/24 & 26	Observations and Archives	Transcription; Final project topic/format
11	10/31 & 11/2	Data Analysis: Coding	
12	11/7* & 9	Data Analysis: Disassembling, Reassembling, & Interpreting	
13	11/14 & 16	Reliability & Validity in Qualitative Research	
14	11/21 & 23*	Writing and Presenting a Qualitative Study	Data analysis
15	11/28 & 11/30	Group Work and Presentations	Presentation
16	12/5	Presentations and Final Project Check-in	Presentation
Exam	12/12 @ 2 PM	Scheduled Exam Time = Deadline for Final Projects	Final project

\* No in-person class

## Course Policies

### Attendance and Participation Expectations

While I expect you to attend class regularly, I will not take daily attendance. One of the purposes of this class is to help you build the stamina necessary to stick with a project day-in, day-out even as your interest in it naturally waxes and wanes. It is very, very unlikely that a student who misses class regularly will do well. More importantly, much of the important nuance of the readings is brought out during classroom discussion. As such, regular attendance is strongly encouraged. Students can reschedule without penalty examinations and additional required class work that may fall on religious holidays. You must notify the instructor in advance.

### Late Assignments and Making Up Work

Please refer to CarmenCanvas for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments. Late assignments will be penalized one-half letter grade per day.

### Instructor Feedback and Response Time

For assignments submitted before the due date, I will try to provide feedback and grades within **seven days**. Assignments submitted after the due date may have reduced feedback, and grades may take longer to be posted.

### Digital Devices

Lap-tops, tablets and phones are not required for the majority of this class. Therefore, these devices may only be used when engaging in an exercise that requires them. Research demonstrates that you may benefit from writing notes long-hand. For a briefing on a recent study, listen to the following podcast:  
<http://www.npr.org/2016/04/17/474525392/attention-students-put-your-laptops-away>. If you need accommodation given a documented disability, let the instructor know.





## Copyright

The materials used in connection with this course, including those created by the instructor or classmates, may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## University Academic Policies

Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following

- **Accessibility:** Arrange for accommodations if you anticipate barriers to your learning based on a disability
- **Academic integrity:** Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- **Safe learning environment:** Know the university's commitments to an environment free from discrimination or harassment, and find resources for reporting or finding support.

## Academic Misconduct

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the [Committee on Academic Misconduct](#) (COAM) expect that all students have read and understand the University's [Code of Student Conduct](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct ([Section 3335-23-04](#)) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so please review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If an instructor suspects that a student has committed academic misconduct in this course, the instructor is obligated by University Rules to report those suspicions to the Committee on Academic Misconduct. If COAM determines that a student violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University.

If students have questions about the above policy or what constitutes academic misconduct in this course, they should contact the instructor.

## Artificial Intelligence (AI) and Academic Integrity

There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite, and others. These tools will help shape the future of work, research and technology, but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use unauthorized assistance in the laboratory, on field work, in scholarship, or on a course assignment unless



such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

## Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement **and** the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Civil Rights Compliance Office](#).

Policy: [Religious Holidays, Holy Days and Observances](#)

## Disability Statement (with Accommodations for Illness)

The University strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If students anticipate or experience academic barriers based on a disability (including mental health and medical conditions, whether chronic or temporary), they should let their instructor know immediately so that they can privately discuss options. Students do not need to disclose specific information about a disability to faculty. To establish

reasonable accommodations, students may be asked to register with **Student Life Disability Services (SLDS)**. After registration, students should make arrangements with their instructors as soon as possible to discuss your accommodations so that accommodations may be implemented in a timely fashion.

If students are ill and need to miss class, including if they are staying home and away from others while experiencing symptoms of viral infection or fever, they should let their instructor know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations.

### **SLDS Contact Information (Columbus)**

- **Email:** [SLDS@osu.edu](mailto:SLDS@osu.edu)
- **Phone:** [\(614\) 292-3307](tel:(614)292-3307)
- [Student Life Disability Services Website](#)
- **SLDS Office:** 098 Baker Hall, 113 West 12th Avenue

### **Intellectual Diversity**

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

### **Grievances and Solving Problems**

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson, college dean or associate dean, and to the provost, in that order. Specific procedures are outlined in [Faculty Rule 3335-8-23](#). Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

## Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a welcoming community. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the University community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the **Civil Rights Compliance Office (CRCO)**:

- [Online Reporting Form](#)
- **Email:** [CivilRights@osu.edu](mailto:CivilRights@osu.edu)
- **Phone:** [\(614\) 247-5838](tel:(614)247-5838)

The University is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All University employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the University can take appropriate action:

- All University employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information:
  1. Any human resource professional (HRP)
  2. Anyone who supervises faculty, staff, students, or volunteers
  3. Chair/director
  4. Faculty member

## Counseling and Consultation Services / Mental Health Statement

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS):

- [CCS Website](#)
- **CCS Phone & On-Call Counselor:** [\(614\) 292-5766](tel:(614)292-5766)
- **CCS Office:** Younkin Success Center (4th Floor), 1640 Neil Avenue
- **24/7 Suicide and Crisis Lifeline:** 988

## FERPA and Privacy in CarmenZoom

Video and audio recordings of class lectures will be part of the classroom activity. The video and audio recording is used for educational use/purposes and may be made available to all students presently enrolled in the course. Please note that you are not allowed to share these recordings. This is to protect your FERPA rights and those of your fellow students.

## Other Resources

### Writing Consulting

Students wishing to have additional help with the writing of their papers can meet with a consultant at the Writing Center (<https://cstw.osu.edu/writing-center>).

### Library Assistance

The Glenn College has a dedicated librarian at OSU Libraries, Carly Dearborn ([dearborn.8@osu.edu](mailto:dearborn.8@osu.edu)), who can help provide research assistance. For more information and links to some common public affairs resources, see - <http://go.osu.edu/8gx>.

### Military-Connected Students

The [Military and Veterans Services \(MVS\) Office](#) offers a wide range of resources for military-connected students. Whether using educational benefits or not, all military-connected students are encouraged to learn more about how the University supports military-connected students (i.e., information about tutoring, transition services, access to the veteran's lounge, etc.). For service members, should you receive military orders during the semester or know of classes that will be missed due to service commitments, please speak with your instructor as soon as possible on possible accommodations.

- [MVS Website](#)
- **Email:** [milvets@osu.edu](mailto:milvets@osu.edu)
- **Phone:** [614-247-VETS](tel:614-247-VETS)
- **MVS Office:** 185 Student Academic Services Building, 281 W. Lane Avenue.

### Food-insecure students

## Resources for Food-Insecure Students

The Ohio State University is committed to ensuring that all students have access to adequate and healthy food. **Any undergraduate or graduate student with a BuckID may confidentially use the Buckeye Food Alliance food pantries. No proof of need is required.** The Student Food Pantry is in the [Monda Student Resource Center](#) at the Younkin Success Center:

### [Student Food Pantry](#)

- **Office:** 1640 Neil Avenue, Columbus, OH 43202
- **Email:** [SL-MSRC@osu.edu](mailto:SL-MSRC@osu.edu)
- **Phone:** [\(614\) 688-2508](tel:(614)688-2508)

To learn more, visit the [Buckeye Food Alliance website](#).



## **Fall 2024 Syllabus: Rapid Innovation for Public Impact**

**PUBAFRS 5620** Part of the *Science and Engineering in the Public Interest* program

### **INSTRUCTOR:**

#### **Heather Tsavaris**

Instructor, OSU Battelle Ctr. For Science,  
Engineering & Public Policy

[Tsavaris.2@osu.edu](mailto:Tsavaris.2@osu.edu)

#### **Ethan Rivera**

Student Programming Lead, Ohio  
State Battelle Center

[rivera.154@osu.edu](mailto:rivera.154@osu.edu)

#### **Office hours:**

Mondays 11-1

(team choice)

**In-person Class Fridays 12:00-3:00 p.m. + Mandatory Office Hour (Zoom or in-person) 4 credits**

## **Course Description**

The *Rapid Innovation for Public Impact* course is a multi-disciplinary capstone or hands-on applications course in which student teams tackle real, contemporary, complex problems sponsored by government or non-profit agencies.

Its goal is to produce solutions that are technically feasible, desirable from stakeholders' perspectives, and viable for adoption and integration. Following a systematic methodology, student teams develop minimum viable products (MVP) or proofs-of-concept through intensive customer discovery and agile design, development, and testing with customers and stakeholders. Students acquire an in-depth understanding of and experience in systematic innovation, refining problem-statements, engaging customers and stakeholders, navigating public and private sector organizations, budgeting, and management issues.

Since the course delivery is designed to simulate the uncertainty and dynamism of the 'real world', students practice foundational professional skills throughout the semester such as: systems-thinking/understanding in the context of complex problems; applied critical thinking; creativity; collaboration; communication; cultural competence; conflict resolution; and other leadership fundamentals. Teams invest significant time: interacting with professionals outside the classroom; engaging weekly with instructors, sponsors, and mentors; preparing written status-reports; and presenting weekly briefings to the teaching team, sponsors, mentors, peers, and guests for critiques which are designed to emulate briefings to management or investors. Students acquire not only tools and leadership skills but an innovation mindset and exposure to a vast array of careers in the public sector.

All upper-level undergraduate and graduate students in any major or college are welcome because complex problem-solving requires interdisciplinary approaches. There are no prerequisites to register.

As a project-focused, team-based experiential learning opportunity, student success in the course depends greatly on commitment to individual growth, consistent service to team, and perseverance.

## Learning Outcomes

**The class is an intense professional experience for 4 credits. Students should expect to spend up to 12 hours/week cumulative *during class time and outside of class time*.** This course is designed to provide students with hands-on experience understanding and working with federal, state, and local public sector agencies or nonprofits on real, current problems. In so doing, the students help organizations better address their missions and emerging threats, challenges, and opportunities. The course provides students with human-centered design and innovation tools to solve complex problems and grow as professionals.

Our goal, within the constraints of a course and a limited amount of time during a semester, is to provide a framework for testing students' hypotheses in order to design solutions, while emulating the pressures and demands of the real world in early-stage innovation. The intent is for urgency and good-enough decision-making to become ingrained. Students learn how to work and collaborate on a team, handle uncertain and chaotic environments, and turn a creative idea into a solution for a real-world complex problem that is challenging a government or nonprofit agency. Students learn how to interview a wide range of stakeholders (customer discovery), practice evidence-based innovation (human-centered design and agile development), and use a business model tool to validate the solution's viability. Students 'get out of the classroom' to see whether anyone other than them would want or use the solution.

At the conclusion of this course, students will possess a deep understanding of complex problems in the public sector. Specifically, students will demonstrate:

1. An understanding of the public sector and its dynamics
2. A profound understanding of the assigned sponsor's and beneficiary's needs, problem, and workflow, and an ability to clarify the problem-statement
3. Rapid iteration or agile development of products or solutions that are technically feasible, desirable, and viable in an economic and organizational sense.
4. An understanding of all relevant customers, stakeholders, deployment issues, costs, resources, and ultimate value of the minimum viable solution.
5. A facility with complex problem-solving methodology, innovation tools, and fundamental leadership skills, valuable throughout a professional career.
6. [GE] Engaged Citizenship & Intercultural Competency: Students consider public health, safety, and welfare, as well as global, cultural, social environmental, and economic factors in applying engineering design to produce solutions meeting specified needs.
7. [GE] Personal and Professional Development: Students individually assess and pursue personal and professional growth in concert with project requirements and personal career goals.
8. [GE] Cultivate Engineering Mindset: Students develop an engineering mindset that demonstrates constant curiosity, makes connections between disparate bodies of information, and seeks opportunities to create value

Participating public sector agencies or other groups *may* after the course's end provide follow-on funding to student teams to refine preliminary solutions further, but this course is not a product incubator nor an entrepreneurship, venture-creation, or business planning course.

## Course Requirements



**Rigorous class preparation includes students investing consistently some amount of time on *an almost daily basis*, like professionals do. Taking written notes during class, office hours, interviews, and other feedback sessions is highly recommended.** A course handout details the suggested time-budget for a typical week in order to keep the workload reasonable and in-line with the number of course credit-hours. Student responsibilities include:

1. Reviewing any assigned videos or readings listed in the course website.
2. Interviewing (either individually or as a team) several stakeholders/week in order to test hypotheses about the problem and potential solutions.
3. Participating in one weekly *mandatory* consultation (office hour) to review progress and identify obstacles.
4. Preparing and presenting a 10-minute team briefing typically every other Friday that covers the solution's evolving design and other topics specified in the course website.
5. Delivering a brief written status report on the Fridays without team presentations that summarizes the week's hypothesis-testing and progress.
6. Attending ALL classes, briefing the team presentation, providing critical peer-feedback to other teams, and formulating hypotheses and interview strategy for the coming week.

By the semester's end:

- Each team conducts dozens of quality stakeholder interviews.
- Each team delivers a solution, final video (not to exceed 2 minutes), presentation (not to exceed 10 minutes), and written report (no fewer than 3 pages and no more than 5 pages, excluding cover page, references, and appendices) concerning the solution developed to meet the sponsor's needs.
- Graduate students deliver individually a brief, additional personal reflections paper.

## Student Assessment

**This course is interdisciplinary and team-based, therefore 70% of a student's final grade will come from the team's performance.** Teammates will help assess individual contributions. **Graduate students will be graded to a more rigorous standard and will have an additional two-page written assignment to be delivered before end of semester.** The grading policy appears on page 8. Stoplight Assessments (ungraded) will be given 3 times during the semester so that students understand their performance leading up to the final deliverables.

**30% Team's Weekly Performance** evident in:

- **In-class Oral Presentation quality**, demonstrating critical thinking, communication skills, learning, and creativity.
- **Written Status Report quality**, demonstrating information-synthesis, critical thinking, and communication skills.
- **Achieving the assigned number of interviews**, a reflection of effort to 'get out of the building' for customer discovery or validation, demonstrating customer-focus, curiosity, hypothesis-formulation and -testing, and applied critical thinking.

**30% Individual's Engagement** reflected in:

- **Class Participation** demonstrating completion of assignments, active listening and attentiveness, commitment to team, and perseverance.
- **Teammates' peer evaluation** of individual's contributions, reflecting trustworthiness and collaboration skills

**40% Team's 4 FINAL products: the solution, video, oral presentation, and written report**

**Required Texts:** Students can access textbook information via the Barnes & Noble (B&N) bookstore website: <https://ohiostate.bncollege.com> as well as from their BuckeyeLink Student Center. This information is disseminated by B&N to all area bookstores. You may download free resources where indicated or buy from a store of your choice (always use ISBN# for searches).

- IDEO, *The Field Guide to Human-Centered Design*, 1<sup>st</sup> edition 2015. Free digital download at: [http://www.designkit.org/resources/1?utm\\_medium=ApproachPage&utm\\_source=www.ideo.org&utm\\_campaign=FGButton](http://www.designkit.org/resources/1?utm_medium=ApproachPage&utm_source=www.ideo.org&utm_campaign=FGButton)
- Constable & Rimalovski, *Talking to Humans – Success Starts With Understanding Your Customers*. Free digital download for non-profits/schools at: <https://www.talkingtohumans.com/download.html> or Paperback: 88 pages  
Publisher: Giff Constable (September 23, 2014) ISBN-13: 978-0990800927
- Osterwalder and Pigneur, *Value Proposition Design – How to Create Products and Services Customers Want*  
Paperback: Publisher: Wiley ISBN-13: 978-1118968055



**Course Schedule Overview** *Read left-to-right, then down. See detailed instructions & deadlines in CarmenCanvas.*

Class	Date	Friday CLASS			Saturday following Class, through the next Thursday
		Hour 1	Hour 2	Hour 3	ASSIGNMENTS
<b>I. Phase: Discovery</b>					
1	Fri. Aug. 23 To Thurs. Aug. 29	<b>Instructors:</b> Orientation	<i>Meet with Sponsor during Class for Sponsor Discovery</i>	<b>Teams:</b> Initial Discovery Presentation (5min)  Team Scheduling	<ul style="list-style-type: none"> <li>- Find &amp; read 3 sources <i>per student</i> about the problem and sponsor and post summary 'bottom lines' in team Slack channel</li> <li>- Interview Mentors, Tech Advisors</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
2	Fri. Aug 30 To Thurs. Sept. 5	<b>ALL Teams:</b> Sponsor & Problem Discovery Presentation  (8min; 2m q&a)	<b>Showcase</b> past MVPs  <b>Workshop:</b> Professionalism & Team Dynamics	<b>Instructors:</b> Systems-thinking & Solving Complex Problems	<ul style="list-style-type: none"> <li>- Find &amp; read 5 additional sources <i>per student</i> about the problem and sponsor and post summary 'bottom lines' in team Slack channel</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
3	Fri. Sept 6 To Thurs. Sept. 12	<b>ALL Teams:</b> End-User Discovery Presentation  (10min; 10m q&a)	<b>Instructors:</b> Innovation Process & Mindset	<b>Workshop:</b> Interviewing & Hypothesis- formulation	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>

Class	Date	Friday CLASS			Saturday following Class, through the next Thursday
		Hour 1	Hour 2	Hour 3	ASSIGNMENTS
<b>II. Phase: Concept Development</b>					
4	Fri. Sept 13 To Thurs. Sept. 19	<b>Group A Teams:</b> Solution Update  (8min; 5m q&a)	<b>Instructors:</b> Innovation's Desirability	<b>Workshop:</b> Ideation I -- Empathy- mapping & Information Synthesis	<b>- Review Instructors' Stoplight Assessment + Adjust Work</b> <ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
5	Fri. Sept 20 To Thurs. Sept. 26	<b>Group B Teams:</b> Solution Update Presentation  (8min; 5m q&a)	<b>Instructors:</b> Conflict Resolution – having difficult conversations	<b>Workshop:</b> Ideation II -- Concept- Development & Story-boarding	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
6	Fri. Sept 27 To Thurs. Oct. 3	<b>Group A Teams:</b> Solution Update	<b>Instructors:</b> Course Deliverables & their Intended Audiences	<b>Workshop:</b> Story-boarding and Workflow to understand Solution Adoption	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
7	Fri. Oct. 4 To Thurs. Oct. 10	<b>Group B Teams:</b> Solution Update Presentation	<b>Instructors:</b> Innovation's Feasibility	<b>Workshop:</b> Iterative Design / Feature Development	<b>- Turn in Mid-point Survey</b> <ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
8	Fri. Oct. 11 To Thurs. Oct. 17	<b>No Class. FALL BREAK</b> <b>Consider Field Trips and Off-Campus Exploration</b>			<b>- Review Instructors' Stoplight Assessment + Adjust Work</b> <ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>

<i>Class</i>	<i>Date</i>	<i>Friday CLASS</i>			<i>Saturday following Class, through the next Thursday</i>
		<i>Hour 1</i>	<i>Hour 2</i>	<i>Hour 3</i>	<i>ASSIGNMENTS</i>
<b>III. Phase: Prototyping</b>					
9	Fri. Oct. 18 To Thurs. Oct. 24	<b>Group A Teams:</b> Solution Update	<b>Instructors:</b> Use Cases and Value Propositions	<b>Workshop:</b> Prototyping	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
10	Fri. Oct. 25 To Thurs. Oct 31	<b>Group B Teams:</b> Solution Update Presentation	<b>Instructors:</b> Innovation's Viability	<b>Workshop:</b> Assessing Unintended Consequences	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
11	Fri. Nov. 1 To Thurs. Nov. 7	<b>Group A Teams:</b> Solution Update	<b>Workshop:</b> Compelling Story- telling & Visual Story- making/Video Tips		<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
12	Fri. Nov. 8 To Thurs. Nov. 14	<b>Group B Teams:</b> Solution Update Presentation	<b>TBA</b>	<b>TBA</b>	<b>Workshop:</b> Compelling Story- telling & Visual Story-making/Video Tips

Class	Date	Friday CLASS			Saturday following Class, through the next Thursday
		Hour 1	Hour 2	Hour 3	ASSIGNMENTS
IV. Phase: Validation and Story-telling					
13	Fri. Nov. 15  To  Thurs. Nov. 21	ALL Teams:  Rehearsal 1 -- Present Draft Video & Presentation Storyboard	Workshop: Red-teaming (paired critiques)		<ul style="list-style-type: none"><li>- Share draft video &amp; presentation with assigned number of POCs for feedback</li><li>- Hold Team work session: Practice Presentations</li><li>- Attend mandatory Team Office Hour for Rehearsal 2 w. instructors</li></ul>
14	Fri. Nov 22 Last class! To  Thurs. Nov  28	ALL Teams: Present FINAL - Video and Oral Presentation to Sponsors and Public Audience  CELEBRATION immediately following Class			<ul style="list-style-type: none"><li>- Complete Peer Evaluations</li><li>- Wednesday: Update interview log with key take-aways &amp; attendees</li><li>- Finalize solution, video &amp; presentation &amp; pre-brief sponsor</li></ul>
15	Fri. Nov. 29  To  Thurs. Dec. 4	No Class. THANKSGIVING BREAK			<ul style="list-style-type: none"><li>- Share draft written report with instructors for feedback; then finalize</li><li>- Complete Peer Evaluations</li><li>- Graduate Students only: prepare and submit Reflections paper</li><li>- Wednesday: Update interview log with key take-aways &amp; attendees</li><li>- Finalize solution, video &amp; presentation &amp; pre-brief sponsor</li></ul>
Exam Week	Fri. Dec. 6	Teams: Submit: (1) FINAL Written Report; (2) Peer Evaluations; (3) Interview Log  Graduate students ONLY: submit Reflections paper			

**Your Mental Health matters to us.** As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Whether or not you are engaged in distance learning, the Office of Student Life has numerous resources and services available to you at no charge to help you address those concerns.

If you find yourself feeling isolated, anxious or overwhelmed, on-demand mental health resources ([go.osu.edu/ccsondemand](https://go.osu.edu/ccsondemand)) are available. You can reach an on-call counselor when CCS is closed at 614- 292-5766. 24-hour emergency help is available through the National Suicide Prevention Lifeline website ([suicidepreventionlifeline.org](https://suicidepreventionlifeline.org)) or by calling 1-800-273-8255(TALK). The Ohio State Wellness app ([go.osu.edu/wellnessapp](https://go.osu.edu/wellnessapp)) is also a great resource. For students in recovery or seeking recovery from substance use disorders, learn more about support on campus by visiting the Collegiate Recovery Community. For students facing food insecurity, learn more about the free on-campus food pantry by visiting the Buckeye Food Alliance. For students interested in speaking with a peer to learn more about campus resources, call the Buckeye Peer Access Line. For students interested in meeting with a peer and setting holistic wellness goals, learn more about Wellness Coaching.

**Your Ability to Access Sufficient, Healthy Food matters to us.** A lack of sufficient, healthy food can cause barriers to learning, such as an inability to focus or acquire, retain, and recall important information or to muster sufficient physical stamina to endure the learning environment. The Ohio State University is committed to ensuring that all students have access to adequate and healthy food. **Any undergraduate or graduate student with a BuckID may confidentially use the Buckeye Food Alliance food pantries. No proof of need is required.** There are two locations:

- West Campus: Lincoln Tower. Doors are locked - call 614-688-2508 upon arrival.
- North Campus: St. Stephens. Look for the Buckeye Food Alliance (BFA) sign on the southwest corner of the building.

To learn more, visit <https://www.buckeyefoodalliance.org/>

**Teamwork is required for the successful completion of the course, and team-assignment is a privilege.** This interdisciplinary course is a team-based learning experience designed to engage and leverage perspectives from multiple disciplines and lived-experiences. In keeping with our goal of promoting professional work standards, individuals' behavior and teamwork are monitored by the instructors and mentors. Instructors will intervene when conduct is deemed detrimental to a team's progress or damaging to another individual's learning or sense of belonging or value. Possible interventions include instructors' providing one-on-one coaching or group coaching, or an individual's losing the privilege to continue on a team. Loss of team-assignment will result in a failing grade in the course.

**Your Privacy matters to us.** Video and audio recordings of class lectures may be part of the course and made available to all enrolled students. Please note that you are not allowed to share these recordings, in order to protect your FERPA rights and those of your fellow students.

## Practicalities and Policy:

**Attendance and Participation are Required.** You are expected to attend *every* in-person class Fridays from 12:00pm – 3:00pm and *every* mandatory *Team* Office Hours, which may be in-person or by Zoom. If you have a situation that might cause you to miss class, please notify in writing and discuss with the Instructor or Course Coordinator immediately. Due to the nature of experiential and team-based learning, no accommodations are possible for late assignments or make-up work.

**Grading rubrics are distributed in advance of deadlines.** The criteria for earning grades are consistent with these standard guidelines:

93-100	A	80-82.9	B	67-69.9	D+
90-92.9	A-	77-79.9	C+	60-66.9	D
87-89.9	B+	73-76.9	C	< 60	E
83-86.9	B	70-72.9	C-		

## Academic Misconduct

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the [Committee on Academic Misconduct](#) (COAM) expect that all students have read and understand the University's [Code of Student Conduct](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct ([Section 3335-23-04](#)) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so please review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If an instructor suspects that a student has committed academic misconduct in this course, the instructor is obligated by University Rules to report those suspicions to the Committee on Academic Misconduct. If COAM determines that a student violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University.

If students have questions about the above policy or what constitutes academic misconduct in this course, they should contact the instructor.

## Artificial Intelligence (AI) and Academic Integrity

There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite, and others. These tools will help shape the future of work, research and technology, but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically,

students are not to use unauthorized assistance in the laboratory, on field work, in scholarship, or on a course assignment unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

In this course, students are welcome to explore innovative tools and technologies for graphics in a presentation or initial gathering of information, including generative artificial intelligence (GenAI). Students are permitted to use GenAI tools for most course assignments. GenAI tools cannot replace the experience of interviews with stakeholders and subject matter experts and information gathered should not be utilized in lieu of these conversations. Your written assignments, including the final report and any reflections, should be your own original work.

GenAI can be a helpful resource for drafting creative content, brainstorming ideas, creating a “reverse outline” from a rough draft, and enhancing productivity. Yet it is essential to approach its use thoughtfully and ethically. If you use GenAI in any of your assignments, please include the following statement with each assignment:

1. Application Used: Specify the GenAI application or tool you used (e.g., Copilot, ChatGPT, Claude AI, Gemini).
2. Intended Purpose: Describe the purpose for which you used GenAI (e.g., idea generation, content creation).
3. Quality of Initial GenAI Output: Evaluate the initial output generated by GenAI. For example, was it accurate, biased, coherent, and/or relevant?
4. Iteration and Refinement: Explain how you revised prompts or adjusted parameters to refine the GenAI output. Did you experiment with different input prompts to improve the output?
5. Incorporation in Completed Assignment: Reflect on how you incorporated the GenAI-generated content into your assignment. How did you edit, adapt, or combine it with other ideas?

While GenAI can be a valuable tool, remember that academic integrity remains paramount. You are responsible for developing and articulating your own ideas, so addressing how GenAI contributed to those ideas (as you would for any sources you use) is centrally important to your learning. Attribute GenAI-generated content with proper citations and avoid plagiarism. Additionally, consider the accuracy of information incorporated in your assignment and the ethical implications of using GenAI in educational contexts. You are responsible for ensuring that the information you submit based on a GenAI query does not contain misinformation, unethical content, or violate intellectual property laws. Submission of GenAI-generated content as your own work is considered a violation of Ohio State’s [Academic Integrity](#) policy and [Code of Student Conduct](#) because the work is not your own. The use of unauthorized GenAI tools will result in referral to the [Committee on Academic Misconduct](#). If I suspect that you have used GenAI inappropriately on an assignment for this course, I will ask you to communicate with me to explain your process for completing the assignment in question.



Privacy Considerations: Students should familiarize themselves with the Terms of Use for the GenAI service they use, as well as the service's expectations around data privacy and use. Students should not share private or sensitive information about themselves or others with GenAI services. As indicated in Ohio State's February 2024 Security and Privacy Statement on Artificial Intelligence, "[u]niversity community members should not enter any institutional data that is categorized above the S1 (public) level into generative AI tools, except when using the protected environment of Copilot, meaning that you logged in with your university credentials and see the green 'Protected' button in the upper right-hand corner. Even when using the protected version of Copilot, it is best practice to put only S1 or S2 (internal) institutional data into the tool. S3 (private) and S4 (restricted) data should not be entered into any AI platform."

Please contact me if you have questions regarding this course policy.

### Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement **and** the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Civil Rights Compliance Office](#).

Policy: [Religious Holidays, Holy Days and Observances](#)

### Disability Statement (with Accommodations for Illness)

The University strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If students anticipate



or experience academic barriers based on a disability (including mental health and medical conditions, whether chronic or temporary), they should let their instructor know immediately so that they can privately discuss options. Students do not need to disclose specific information about a disability to faculty. To establish reasonable accommodations, students may be asked to register with **Student Life Disability Services (SLDS)**. After registration, students should make arrangements with their instructors as soon as possible to discuss your accommodations so that accommodations may be implemented in a timely fashion.

If students are ill and need to miss class, including if they are staying home and away from others while experiencing symptoms of viral infection or fever, they should let their instructor know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations.

### **SLDS Contact Information (Columbus)**

- **Email:** [SLDS@osu.edu](mailto:SLDS@osu.edu)
- **Phone:** [\(614\) 292-3307](tel:(614)292-3307)
- [Student Life Disability Services Website](#)
- **SLDS Office:** 098 Baker Hall, 113 West 12th Avenue

### **Intellectual Diversity**

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

### **Grievances and Solving Problems**

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson, college dean or associate dean, and to the provost, in that order. Specific procedures are outlined in [Faculty Rule 3335-8-23](#). Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

## Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a welcoming community. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the University community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the **Civil Rights Compliance Office (CRCO)**:

- [Online Reporting Form](#)
- **Email:** [CivilRights@osu.edu](mailto:CivilRights@osu.edu)
- **Phone:** [\(614\) 247-5838](tel:(614)247-5838)

The University is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All University employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the University can take appropriate action:

- All University employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information:
  1. Any human resource professional (HRP)
  2. Anyone who supervises faculty, staff, students, or volunteers
  3. Chair/director
  4. Faculty member

**Technology Support.** This course requires a Computer (current Mac (MacOS) or PC (Windows 10) with high-speed internet connection, webcam, speakers, and microphone) and BuckeyePass on a mobile device (smartphone or tablet) to use for authentication. If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at [go.osu.edu/student-tech-access](http://go.osu.edu/student-tech-access). For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, 7 days a week: <https://it.osu.edu/students>.

**Deadlines may be Extended.** Extensions will be granted for family emergencies, religious observances, or unanticipated/unavoidable work-related contingencies, provided the instructors receive such requests by telephone or e-mail before the applicable deadline. Extensions will automatically be granted in the case of *force majeure* events including natural disasters or other Acts of God. However, in such cases, we will attempt to collaborate online using video conferencing or other tools and will adjust deliverables' deadlines as appropriate.

**Ohio State enforces its Academic Policies.** Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following:

- Accessibility: Arrange for accommodations if you anticipate barriers to your learning

based on a disability

- Academic integrity: Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- Safe learning environment: Know the university's commitments to an environment free from discrimination or harassment, and find resources for reporting or finding support.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- Committee on Academic Misconduct ([go.osu.edu/coam](http://go.osu.edu/coam))
- Ten Suggestions for Preserving Academic Integrity ([go.osu.edu/ten-suggestions](http://go.osu.edu/ten-suggestions))
- Eight Cardinal Rules of Academic Integrity ([go.osu.edu/cardinal-rules](http://go.osu.edu/cardinal-rules)).

### **Ohio State supports Military Connected Students.**

The [Military and Veterans Services \(MVS\) Office](#) offers a wide range of resources for military-connected students. Whether using educational benefits or not, all military-connected students are encouraged to learn more about how the University supports military-connected students (i.e., information about tutoring, transition services, access to the veteran's lounge, etc.). For service members, should you receive military orders during the semester or know of classes that will be missed due to service commitments, please speak with your instructor as soon as possible on possible accommodations.

- [MVS Website](#)
- **Email:** [milvets@osu.edu](mailto:milvets@osu.edu)
- **Phone:** [614-247-VETS](tel:614-247-VETS)
- **MVS Office:** 185 Student Academic Services Building, 281 W. Lane Avenue.



THE OHIO STATE UNIVERSITY

JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

# Multivariate Regression Analysis

PUBAFRS 7571 Autumn 2023

## Course Information

### Class Schedule and Delivery Mode

**Course times and location:** Mondays and Wednesdays, 3:55 – 5:15 p.m. in Page Hall 40

**Credit hours:** 3

**Mode of delivery:** In Person

### Instructor

**Dr. Katie Vinopal (she/her), John Glenn Public Affairs**

**Contact information:** [vinopal.4@osu.edu](mailto:vinopal.4@osu.edu)

**Preferred modes of communication:** My preferred method for questions is **email**. My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) ([go.osu.edu/canvas-notifications](https://go.osu.edu/canvas-notifications)) to be sure you receive these messages.

**Office hours for student questions and support:** by appointment (I am happy to set up appointments for in-person, Zoom, or phone call meetings).

## Course Overview

The course is for students who are interested in a career in government or the non-profit sector who need more advanced statistical skills or for students interested in research or academia who need to build a strong foundation in applied regression analysis. It provides students with knowledge about the Ordinary Least Squares model and introduces students to a wide range of additional models that can be applied to typical policy or management applications. The course is particularly useful for master's students who will write a capstone research paper or master's thesis and doctoral students who plan to conduct applied research.

The primary objective of this course is to provide an understanding of regression techniques, both from a “producer’s” and a “consumer’s” perspective. Regression, which is a statistical method used to study the relationships among two or more variables, is the most widely used statistical technique in public policy analysis. It is almost impossible to learn statistical concepts without lots of practice using statistical methods, so the course focuses on applying the theory through multiple hands-on exercises, both inside of class in a lab format and outside of class with homework assignments. These exercises will also give students practice in how to use data from external sources and report statistical results in a clear manner. By the end of the course, students should not only be intelligent consumers who can readily interpret regression analysis performed by others, but they will also be equipped to test research hypotheses involving relationships among multiple variables and to relay their results to relevant stakeholders. Students should also be able to identify the appropriate models to use based on the nature of their data.



# THE OHIO STATE UNIVERSITY

## JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

### Course Description

This is an applied course in regression analysis. Through hands-on exercises both inside and outside of class, students will use multiple regression to make predictions and test hypotheses to help inform policy analysis. Broad topics include model fitting, regression diagnostics, limited dependent variables, and some panel data. Emphasis is also placed on issues confronted when working with real data.

### Course Prerequisites

Students are expected to have completed PUBAFRS 6070 or equivalent graduate level introductory statistics course.

### Learning Outcomes

Upon completion of the course, students should understand

- Basic assumptions of the Ordinary Least Squares Model
- Violations of the assumptions of the Ordinary Least Squares Model
- Regression models with continuous, categorical, count, or limited dependent variables

Upon completion of the course, students should be able to

- Apply techniques of regression analysis to test research hypotheses
- Effectively communicate the results of conducting regression analysis
- Use the appropriate regression model given a particular dependent variable

### Program Learning Outcomes

The course contributes to Glenn College learning goals and objectives related to decision-making support in public affairs. In particular, the course focuses on the following objectives at an advanced level:

- Students can seek and identify patterns in data.
- Students can understand the logic of a statistical argument and be able to produce them for varied audiences and in multiple ways
- Students can support claims with statistically sound quantitative evidence.

## Course Materials, Fees, and Technologies

### Required Materials

#### Required Textbook:

- Damodar Gujarati (2014), *Econometrics by Example*, 2nd ed (ISBN 9781137375018)

### Optional Supplemental Text:

- Paul D. Allison (1998), *Multiple Regression: A Primer* (ISBN 9780761985334)
- For those who want more intuition regarding what regression is all about in “English”
- You can preview the first 32 pages in [Google books](#)

Additional supplemental materials will be linked to on CarmenCanvas.

## Technology

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at [go.osu.edu/student-tech-access](https://go.osu.edu/student-tech-access).

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection, webcam, and microphone
- **BuckeyePass:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week:

<https://it.osu.edu/students>

### Software:

- The course uses Stata. Stata/IC 15 is available on the computers in Page Hall 030 and 040 labs. There are also remote access options.
- No prior Stata knowledge is needed, and all commands that we will use will be introduced in the lectures and labs and in CarmenCanvas
- If you would like to purchase Stata for use on your own computer, pricing information is available at <http://www.stata.com/order/new/edu/gradplans/student-pricing/> (Stata/BE will be sufficient for this class)

## How This Course Works

**Mode of Delivery:** This is an in-person course that meets twice weekly in the classroom on Mondays and Wednesdays. In a typical week, Mondays will be lectures and Wednesdays will be the completion of the week’s lecture and a hands-on lab applying that week’s material. Occasionally, the instructor may choose to provide the Monday lecture asynchronously, and excuse students from coming to class. Except for textbook readings, and the exams, almost all course content and materials are accessible and administered through the CarmenCanvas course website.

**Pace of Activities:** The course is divided into weekly modules. Each weekly module contains the topics associated with the two class meetings for that week. The weekly modules and class meeting topics are specified in the Course Schedule below and the CarmenCanvas course website. Students must complete readings and other course materials assigned for a class meeting prior to the meeting time.





**Credit Hours and Work Expectations:** This is a 3 credit-hour course. For each credit hour, there should be about an hour of in class meeting time and 2 hours out of class work. For a three-credit class, you can expect an average of 6 hours of work outside of class completing readings, assignments and preparing for exams. This totals 9 hours per week for an average grade of C.



**Statistics Review:** This class assumes familiarity with basic statistics. Key relevant statistical concepts will be reviewed during week two.

## Grading and Evaluation

### How Your Grade is Calculated

Assignment Category	Points	Weight	Assignment Type	
Homework assignments (best 6 of 7)	150 (25/each)	25%		Independent work
Midterm Exam 1	100	25%		Independent work
Midterm Exam 2	100	25%		Independent work
Research paper	100	25%		Collaboration optional
<b>Total</b>	<b>450</b>	<b>100%</b>		

## Descriptions of Major Course Assignments

### Attendance

**Description:** Students are expected to attend each class. While you do not receive an explicit grade for class participation, in my past courses, I have found there to be a strong correlation between class participation and grades in the other course components. Further, if attendance becomes a problem (i.e. you begin chronically missing class), I reserve the right to deduct up to 25 points off your final grade.

### Independent work

### Homework

**Description:** The homework grade will be based upon the six highest homework grade scores. While students may collaborate on homework assignments, **each student must turn in a separate assignment with his or her own answers.** Assignments are due at the beginning of class, and late assignments will not be accepted.



For your homework assignments,

- Assignments will be posted and turned in on CarmenCanvas
- To receive full credit, show all work
- Feel free to use Stata as much as you can/want to
- When you use Stata to answer a problem
  - Provide the Stata commands and output as part of what you turn in (screen shots work best)
    - This is “showing your work” for Stata problems
    - Minimize the amount of output (and number of pages) if at all possible
  - Make sure that you also directly answer the question
    - For example, it is not enough to provide the Stata output that shows that a mean is 1234. You should also tell me that the mean is 1234, as is indicated in the Stata output.

### Independent work

## Exams

**Description:** The two mid-term exams will be in-class. Students are allowed to use one sheet of notes (more direction will be given in class). Collaboration on the exam is strictly forbidden (and unnecessary given the open notes policy). Make up exams will be given only if arrangements are made in advance.

### Independent work

## Research paper

**Description:** The paper is intended to help integrate the course material and provide students an opportunity to demonstrate that they can set up a testable research hypothesis, test the hypothesis, and correctly interpret the results. Students should also demonstrate an awareness of the limitations of their analysis. Detailed instructions for the research paper will be distributed separately and posted to CarmenCanvas. An intermediate deliverable for the paper will be integrated into one of the weekly homework assignments.

### Collaboration optional

## Labs

**Description:** The hands-on labs are designed to help you practice using the concepts from each class. They are also useful for completing assignments and for preparing for exams. They are ungraded, but I reserve the right to start grading them *without prior notice* if I find students are not participating.

### Collaboration optional

## Grading Scale

93–100: A	80–82.9: B-	67–69.9: D+
90–92.9: A-	77–79.9: C+	60–66.9: D
87–89.9: B+	73–76.9: C	Below 60: E
83–86.9: B	70–72.9: C-	





# Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates.

Week	Date	Topics	Readings		Deliverables
			<i>Gujarati</i>	<i>Allison</i>	
1	W 21-Aug	A. Course introduction and Linear Regression Overview	G 1	A1-2,4-5	
2	M 26-Aug	A.Lab 1			
	W 28-Aug	B. Statistics Review	G Appendix 2		
3	M 2-Sep	No Class -- Labor Day			
	W 4-Sep	B. Lab 2			
4	M 9-Sep	C. Hypothesis Testing and Multiple Regression	G 1	A1-2,4-5	
	W 11-Sep	C. Lab 3			HW1
5	M 16-Sep	D. Regression Functional Forms	G 2	A 8	
	W 18-Sep	D. Lab 4			HW2
6	M 23-Sep	E. Dummy Variables	G 3		
	W 25-Sep	E. Lab 5			HW3
7	M 30-Sep	F. Multicollinearity	G 4	A 7	
		G. Heteroscedasticity	G 5	A 6	
	W 2-Oct	F&G. Lab 6			HW4
8	M 7-Oct	Exam Review			
	W 9-Oct	<b>Midterm 1</b>			
9	M 14-Oct	H. Autocorrelation	G 6		
	W 16-Oct	H. Lab 7			
10	M 21-Oct	I. Model Specification	G 7	A 3, 9.6	
	W 23-Oct	I. Lab 8			HW5
11	M 28-Oct	J. Logit (and Probit)	G 8	A 9.11	



	W	30-Oct	J. Lab 9		
12	M	4-Nov	K. Multinomial and Ordinal Regression	G 9-10	
	W	6-Nov	K. Lab 10		HW6
13	M	11-Nov	L. Limited dependent variables and count data	G 11-12	
			M. Forecasting	G 16	
	W	13-Nov	L&M. Lab 11		
14	M	18-Nov	O. Panel data models	G 17	
			P. Survival analysis	G 18	
	W	20-Nov	O&P. Lab 12		HW 7
15	M	25-Nov	N. Fun with Stata and Data		
	W	27-Nov	No Class -- Thanksgiving Break		
16	M	2-Dec	Lab to work on papers		
	W	4-Dec	Exam Review or Exam (Class Vote)		Term Paper

**Final Exam: Wednesday Dec 11, 6:00pm-7:45pm**

## Course Policies

### Instructor Feedback and Response Time

I will attempt to reply to emails within 48 hours on days when class is in session.

For weekly homework assignments, I will try to provide feedback and grades within one week. Assignment answer keys will be posted shortly after all assignments have been handed in.

### Academic Misconduct

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the [Committee on Academic Misconduct](#) (COAM) expect that all students have read and understand the University's [Code of Student Conduct](#), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct ([Section 3335-23-04](#)) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic

misconduct, so please review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If an instructor suspects that a student has committed academic misconduct in this course, the instructor is obligated by University Rules to report those suspicions to the Committee on Academic Misconduct. If COAM determines that a student violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in the course and suspension or dismissal from the University.

If students have questions about the above policy or what constitutes academic misconduct in this course, they should contact the instructor.

## Artificial Intelligence and Academic Integrity

There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite, and others. These tools will help shape the future of work, research and technology, but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use unauthorized assistance in the laboratory, on field work, in scholarship, or on a course assignment unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

Course specific: You may not use traditional artificial intelligence tools embedding in other tools (such as Grammarly) or generative artificial intelligence (AI) tools (such as Copilot or ChatGPT) to assist or produce work for this class EXCEPT on assignments specified in class. I will provide more information as appropriate. You may not, however, construe this limited use as permission to use these technologies in any other facet of this course. Submission of AI-generated content as your own work is considered a violation of Ohio State's [Academic Integrity](#) policy and [Code of Student Conduct](#) because the work is not your own. The use of unauthorized AI tools will result in referral to the [Committee on Academic Misconduct](#). Please contact me if you have questions regarding this course policy.

## Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam,

altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement **and** the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Civil Rights Compliance Office](#).

Policy: [Religious Holidays, Holy Days and Observances](#)

## Disability Statement (with Accommodations for Illness)

The University strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If students anticipate or experience academic barriers based on a disability (including mental health and medical conditions, whether chronic or temporary), they should let their instructor know immediately so that they can privately discuss options. Students do not need to disclose specific information about a disability to faculty. To establish reasonable accommodations, students may be asked to register with **Student Life Disability Services (SLDS)**. After registration, students should make arrangements with their instructors as soon as possible to discuss your accommodations so that accommodations may be implemented in a timely fashion.

If students are ill and need to miss class, including if they are staying home and away from others while experiencing symptoms of viral infection or fever, they should let their instructor know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations.

## SLDS Contact Information (Columbus)

- Email: [SLDS@osu.edu](mailto:SLDS@osu.edu)

- **Phone:** [\(614\) 292-3307](tel:6142923307)
- [Student Life Disability Services Website](#)
- **SLDS Office:** 098 Baker Hall, 113 West 12th Avenue

## Intellectual Diversity

Ohio State is committed to fostering a culture of open inquiry and intellectual diversity within the classroom. This course will cover a range of information and may include discussions or debates about controversial issues, beliefs, or policies. Any such discussions and debates are intended to support understanding of the approved curriculum and relevant course objectives rather than promote any specific point of view. Students will be assessed on principles applicable to the field of study and the content covered in the course. Preparing students for citizenship includes helping them develop critical thinking skills that will allow them to reach their own conclusions regarding complex or controversial matters.

## Grievances and Solving Problems

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson, college dean or associate dean, and to the provost, in that order. Specific procedures are outlined in [Faculty Rule 3335-8-23](#). Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

## Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a welcoming community. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the University community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the **Civil Rights Compliance Office (CRCO)**:

- [Online Reporting Form](#)
- **Email:** [CivilRights@osu.edu](mailto:CivilRights@osu.edu)
- **Phone:** [\(614\) 247-5838](tel:6142475838)

The University is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All University employees have reporting responsibilities to the Civil Rights Compliance Office to ensure the University can take appropriate action:

- All University employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.

- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information:
  1. Any human resource professional (HRP)
  2. Anyone who supervises faculty, staff, students, or volunteers
  3. Chair/director
  4. Faculty member

## Copyright

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## University Academic Policies

Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following

- **Accessibility:** Arrange for accommodations if you anticipate barriers to your learning based on a disability
- **Academic integrity:** Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- **Safe learning environment:** Know the university's commitments to an environment free from discrimination or harassment and find resources for reporting or finding support.
- 

## Counseling and Consultation Services / Mental Health Statement

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS):

- [CCS Website](#)
- **CCS Phone & On-Call Counselor:** [\(614\) 292-5766](#)
- **CCS Office:** Younkin Success Center (4th Floor), 1640 Neil Avenue
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## Lyft Ride Smart

Lyft Ride at Ohio State offers eligible students discounted rides, inside the University-designated service area (opens in new window) and has expanded service to the Short North area along High Street. Service runs from 7 p.m. to 7 a.m. Prices may be impacted by distance, traffic, time of day, special events and prime time surcharges. More information about the service and the Lyft App, and a link to get started using the Lyft Ride Smart services can be found at Transportation and Traffic Management's [Lyft Ride Smart page](#).

## Accessibility of Course Technology

This course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- [CarmenCanvas accessibility](https://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- [CarmenZoom accessibility](https://go.osu.edu/zoom-accessibility) (go.osu.edu/zoom-accessibility)

## Weather or other short-term closing

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via CarmenCanvas.



## Syllabi Appendix





THE OHIO STATE UNIVERSITY

JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

# Public Sector Data Sciences & Mgmt Syllabus

PUBAFRS 4040 Spring 2025

## Course Information

### Class Schedule and Delivery Mode

**Course times and location:** Tuesdays and Thursdays, 4:10pm – 5:30pm in Mendenhall Lab 174

**Credit hours:** 3

**Mode of delivery:** In Person

### Instructor

Lilly D. Tesfai, MPA, Lecturer, John Glenn College of Public Affairs

**Email:** [tesfai.9@osu.edu](mailto:tesfai.9@osu.edu)

**Preferred modes of communication:** My preferred method for questions is **email**. Class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check [notification preferences](https://go.osu.edu/canvas-notifications) ([go.osu.edu/canvas-notifications](https://go.osu.edu/canvas-notifications)) to be sure you receive these messages.

**Office hours for student questions and support:** Wednesdays, 10am-11am via Zoom, or Tuesdays and Thursdays, 3pm-4pm in person (by request), Page Hall

## Course Description

PUBAFRS 4040 provides an orientation to the use of data for decision-making in the public sector. We will cover key concepts in data science, analytics, and visualization in the unique contexts of the public (and sometimes nonprofit) sector. What happens when we do data well? What happens when we do data poorly? How do we get over the technical and methodological challenges that stand in the way of data-informed decision making? What does AI have to do with it? Students will also complete programming and visualization exercises using Python and Tableau, providing an introductory toolkit with which to complete the final project – an exploration of a policy or procedural issue consisting of analysis, written report, and presentation.

## Course Prerequisites

You will get the most out of this class if you have already completed at least one introductory course of statistics with some kind of programming.

## Learning Outcomes

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

- Explain key concepts in the fields of data analytics and data science
- Conduct analysis to address policy and procedural problems, acknowledging its limitations
- Understand the political, social, and economic implications of emerging technology
- Locate and work with public data
- Bring data-informed perspective to decision-makers

## Course Materials, Fees, and Technologies

### Required Materials

- **Textbook (The textbook has a free online version):**
- Foster, I., Ghani, R., Jarmin, R. S., Kreuter, F., & Lane, J. (Eds.). (2020). Big data and social science: data science methods and tools for research and practice. CRC Press. <https://textbook.coleridgeinitiative.org/>
- Other Materials will be posted on the CarmenCanvas site.

### Required Software

- **Microsoft Office 365:** All Ohio State students are now eligible for free Microsoft Office 365. Full instructions for downloading and installation can be found at <http://go.osu.edu/office365help>.
- **Python 3** (install the full Anaconda Suite with Jupyter Notebook):
- Windows: <https://docs.anaconda.com/free/anaconda/install/windows/>
- MacOS: <https://docs.anaconda.com/free/anaconda/install/mac-os/>
- Google Colab (as a last resort): <https://colab.research.google.com/>
- **Tableau** (free, one-year student license): <https://www.tableau.com/academic/students>

### Technology





If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at [go.osu.edu/student-tech-access](https://go.osu.edu/student-tech-access).

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- **BuckeyePass:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week: <https://it.osu.edu/students>

## Grading and Evaluation

### How Your Grade is Calculated

Assignment Category	Points/Weight	Assignment Type	
Memos	30%		Independent work
Technical Exercises	20%		Independent work
Class Participation & Discussions	10%		Collaboration required
Final Project & Checkpoints	40%		Independent work

### Descriptions of Major Course Assignments

#### Memos

**Description:** Memos are brief writing assignments exploring a student's understanding and thoughts on a topic from course readings and lectures. These assignments are an opportunity to develop ideas; little to no outside research is required, but any citations should be in APA style. Memos should be approximately one page long, single-spaced.

**Independent work:** Memos should consist of independent thought and independent writing.

#### Technical Exercises

**Description:** Students will build a technical skillset through this course with the basics of Python for data analysis, Tableau, and SQL. These assignments are designed to support the development of the final project and to prepare students for internship-level work in the public sector.

**Independent work:** Students are welcome to use online, campus-based, and peer resources to support their mastery of the introductory programming skills needed for this course, but each student should submit their own independent work.

#### Final Project & Checkpoints

**Description:** Students will complete a data analytics project by the end of the course, selecting a relevant policy topic to investigate. The project will be graded on completion of the following components: written & verbal project proposal, checkpoints (4) within Canvas, final presentation, and final paper & code. Checkpoints are designed to ensure that students are making progress and identify needed support as soon as possible. Final projects may be turned in as PowerPoint, Tableau Workbook, or Jupyter Notebook, depending on the student's preference. Presentations

will take place in the last week of class. All citations should be made in APA style. The complete rubric will be available on Canvas.

**Independent work:** Peer feedback and online programming resources (StackExchange, W3, YouTube, etc.) are fine to use to help students complete final projects. Campus-based support is also available via the Statistical Consulting Service ([www.scs.osu.edu/](http://www.scs.osu.edu/)), the Writing Center (<https://cstw.osu.edu/writing-center>), or from the Glenn College's dedicated librarian at OSU Libraries, Kay Clopton ([clopton.1@osu.edu](mailto:clopton.1@osu.edu)), who can help provide research assistance. For more information and links to some common public affairs resources, see <http://go.osu.edu/8gx>. Beyond these resources, students should complete this project independently – developing their own ideas and presenting their own work.

## Grading Scale

93–100: A	80–82.9: B-	67–69.9: D+
90–92.9: A-	77–79.9: C+	60–66.9: D
87–89.9: B+	73–76.9: C	Below 60: E
83–86.9: B	70–72.9: C-	

## Course Schedule

**Refer to the CarmenCanvas course for up-to-date information.**

Week	Topics & Assignments
1	What is Data Science?   Technical Exercise 1
2	Data in the Public Sector   Memo 1
3	Data in Research & Practice
4	Data Gone Wrong: Error, Quality, & Inference   Checkpoint 1
5	Intro to Machine Learning & Artificial Intelligence   Memo 2
6	Modern Issues of Data Ethics   Technical Exercise 2 & Checkpoint 2
7	Critical AI   Memo 3
8	Program Evaluation & Performance Measurement   Project Proposal
9	Databases & the 'Modern Data Stack'   Technical Exercise 3
10	SPRING BREAK



11	Principles of Data Visualization   Memo 4
12	Spatial Data Analysis   Technical Exercise 4 & Checkpoint 3
13	Organizational Data Strategy   Memo 5
14	Data Science Simulations: Government & Nonprofit   Technical Exercise 5
15	Final Presentations
Final	Project Due: Monday, April 21, 11:59PM

## Course Policies

### Attendance and Participation Expectations

Class is held in-person, twice per week. Attendance is expected: it affects the participation grade, the learning community, and the student's grasp of course topics. In the event of sickness or other emergency, please email the instructor at [tesfai.9@osu.edu](mailto:tesfai.9@osu.edu) as soon as possible so that accommodations can be made. Students should bring their personal computer to class.

### Academic Misconduct

*The Committee on Academic Misconduct (COAM) recommends that every faculty member, instructor, and graduate teaching associate who is teaching a course prepare and distribute (or make available) to all students a course syllabus that contains a statement concerning "academic misconduct" or "academic integrity". The Ohio State University does not have a standardized statement on academic misconduct that instructors can use in their syllabi. Thus, COAM has prepared the following statement, which course instructors are free to use (with or without modification) for their syllabi:*

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and



possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

## Artificial Intelligence and Academic Integrity

Students are permitted to use generative AI applications to help summarize text, organize thoughts into an outline, troubleshoot code, and revise or edit written assignments. However, appropriate citations for AI use are required. It is vital that the use of gen AI is an aid and not a barrier to learning. Students should avoid the use of AI when exploring any concept for the first time, learning new code libraries, or producing written work that should be original (such as memos and the final project). Being mindful of types of usage ensures that gen AI tools increase efficiency without defeating the learning objectives of assignments. As with any generative AI tool: be responsible with the input and be skeptical of the output. You are responsible for ensuring that the information you submit based on a GenAI query does not contain misinformation, unethical content, or violate intellectual property laws. Submission of GenAI-generated content as your own work is considered a violation of Ohio State's [Academic Integrity](#) policy and [Code of Student Conduct](#). Please ask the instructor during class or via email if there are questions regarding the applicability of this AI policy to individual assignments.

## Religious accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Office of Institutional Equity](#).

Policy: [Religious Holidays, Holy Days and Observances](#)

## Late Assignments and Making Up Work

Please refer to CarmenCanvas for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments. Assignments submitted late will be subject to a one-point deduction per day. Assignments will close one week after their due date and submissions will no longer be accepted. If accommodations are needed in case of emergency, please reach out to the instructor at [tesfai.9@osu.edu](mailto:tesfai.9@osu.edu) as soon as possible.

## Instructor Feedback and Response Time

Visiting office hours to discuss final project components is highly recommended. Simple questions about assignments or other course materials can be sent to the instructor via email. Students should expect responses to email within 24 hours in most cases. Feedback and grades on formally submitted assignments can be expected within 7 days of submission.

## Copyright

The materials used in connection with this course, including those created by the instructor or classmates, may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## University Academic Policies

Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following

- **Accessibility:** Arrange for accommodations if you anticipate barriers to your learning based on a disability
- **Academic integrity:** Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- **Safe learning environment:** Know the university's commitments to an environment free from discrimination or harassment and find resources for reporting or finding support.

## Mental Health and Well-Being

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting [ccs.osu.edu](https://ccs.osu.edu) or calling 614-292-5766. CCS is located on the 4th floor of the Younkin Success Center and 10th floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24-hour emergency help is also available through the 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline. Online students and students studying outside the state of Ohio should consult CCS's [resource page for distance learners](#).

## Diversity

The Ohio State University affirms the importance and value of diversity of people and ideas. We believe in creating equitable research opportunities for all students and to providing programs and curricula that allow our students to understand critical societal challenges from diverse perspectives and aspire to use research to promote sustainable solutions for all. We are committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among all members; and encourages each individual to strive to reach their own potential. The Ohio State University does not discriminate on the basis of age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

To learn more about diversity, equity, and inclusion and for opportunities to get involved, please visit:

<https://odi.osu.edu/>

<https://odi.osu.edu/racial-justice-resources>

<https://odi.osu.edu/focus-on-racial-justice>

<https://cbssc.osu.edu>

## Glenn College Diversity Values

The Glenn College is committed to nurturing a diverse and inclusive environment for our students, faculty, staff, and guests that celebrates the fundamental value and dignity of everyone by recognizing differences and supporting individuality. We are dedicated to creating a safe space and promoting civil discourse that acknowledges and embraces diverse perspectives on issues and challenges that affect our community.





## Lyft Ride Smart (Previously Safe Ride Program)

Lyft Ride at Ohio State offers eligible students discounted rides, inside the university-designated service area (opens in new window) and has expanded service to the Short North area along High Street. Service runs from 7 p.m. to 7 a.m. Prices may be impacted by distance, traffic, time of day, special events and prime time surcharges. More information about the service and the Lyft App, and a link to get started using the Lyft Ride Smart services can be found at:

<https://ttm.osu.edu/ride-smart>.

## Accessibility Accommodations for Students with Disabilities

### Requesting Accommodations

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the [Safe and Healthy Buckeyes site](#) for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations.

#### Disability Services Contact Information

- Phone: [614-292-3307](tel:614-292-3307)
- Website: [slds.osu.edu](http://slds.osu.edu)
- Email: [slds@osu.edu](mailto:slds@osu.edu)
- In person: [Baker Hall 098, 113 W. 12th Avenue](#)

### Accessibility of Course Technology

This course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- [CarmenCanvas accessibility](http://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- [CarmenZoom accessibility](http://go.osu.edu/zoom-accessibility) (go.osu.edu/zoom-accessibility)



## Land Acknowledgement

We would like to acknowledge the land that The Ohio State University occupies is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and Cherokee peoples. Specifically, the university resides on land ceded in the 1795 Treaty of Greeneville and the forced removal of tribes through the Indian Removal Act of 1830. As a land grant institution, we want to honor the resiliency of these tribal nations and recognize the historical contexts that has and continues to affect the Indigenous peoples of this land.

## Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

Online reporting form at [equity.osu.edu](https://equity.osu.edu),  
Call 614-247-5838 or TTY 614-688-8605,  
Or email [equity@osu.edu](mailto:equity@osu.edu)

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such

information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

## Weather or other short-term closing

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via Announcements in CarmenCanvas.

### **Military-Connected Students**

The Military and Veterans Services (MVS) Office offers a wide range of resources, for Military-Connected Students. Whether using benefits or not, all Military-Connected Students are encouraged to stop by the office to learn more about how MVS can be of support (i.e., information about tutoring, transition services, access to the veteran's lounge, etc.). For active duty personnel, should you receive orders during the semester or know of classes that will be missed due to service commitments, please speak with me as soon as possible so that we can make any necessary arrangements. **MVS contact information:** [milvets@osu.edu](mailto:milvets@osu.edu); 614-247-VETS; <http://veterans.osu.edu/>; 185 Student Academic Services Building, 281 W. Lane Avenue.

### **Statement about resources for food-insecure students:**

The Ohio State University is committed to ensuring that all students have access to adequate and healthy food. **Any undergraduate or graduate student with a BuckID may confidentially use the Buckeye Food Alliance food pantries. No proof of need is required.** There are two locations:

- West Campus: Lincoln Tower. Doors are locked - call 614-688-2508 upon arrival.
- North Campus: St. Stephens. Look for the Buckeye Food Alliance (BFA) sign on the southwest corner of the building.

To learn more, visit <https://www.buckeyefoodalliance.org/>





# THE OHIO STATE UNIVERSITY

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## JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

# Qualitative Methods in Public Affairs Practice Syllabus

Public Affairs 5573  
SP 2023

## Course Information

### Class Schedule and Delivery Mode

**Course times and location:** TuTh 12:45PM - 2:05PM; Pomerene Hall 150

**Credit hours:** 3

**Mode of delivery:** In Person

### Instructor

**Dr. Jill Clark, Associate Professor, John Glenn College of Public Affairs**

**Contact information:** [clark.1099@osu.edu](mailto:clark.1099@osu.edu), 614-688-5984 (Office)

**Preferred modes of communication:** My preferred method for questions is **email**. My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) ([go.osu.edu/canvas-notifications](https://go.osu.edu/canvas-notifications)) to be sure you receive these messages.

**Office hours for student questions and support:** TBD, 310C Page Hall or Zoom

## Course Description

This three-credit hour course is designed to introduce students to the philosophy of social science, and a variety of strategies for qualitative research design, data collection, and data analysis. The course has two main goals. First, to familiarize students with various strategies employed in conducting qualitative research. Additionally, we will use examples of different types of qualitative research designs, data collection strategies, and data analysis to gain a better understanding of these various approaches and their practical relevance in public affairs. Second, to provide students with the basic skills and techniques researchers use to gather and analyze qualitative data and evaluate qualitative analysis. Furthermore, students will learn to apply these skills and techniques to design, conduct, and evaluate qualitative studies.

## Course Prerequisites

None.

## Learning Outcomes

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

- Possess a greater understanding of qualitative research;
- Design a qualitative study within an established tradition of inquiry;
- Conduct all phases of a qualitative study, including entry into the site or setting, data collection (e.g., interviews, observations), recording of data, data analysis, and data reporting;
- Present the results of their empirical research in a cogent and trustworthy manner; and,
- Demonstrate competence in evaluating qualitative research studies.

## Course Materials, Fees, and Technologies

### Required Materials

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish*. 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc. (ISBN 978-1-46251-797-8)
- Saldana, Johnny. 2016. *The Coding Manual for Qualitative Researchers*. 3<sup>rd</sup> Edition. Thousand Oaks, CA: Sage Publications, Inc. (ISBN 978-1-84787-548-8)

### Recommended Materials


- Creswell, John W. 2018. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. 4th Edition. Thousand Oaks, CA: Sage Publications, Inc. (ISBN 978-1-5063-3020-4)
- Yin, Robert. K. 2009. *Case Study Research: Design and Methods*. 4th Edition. Thousand Oaks: Sage Publications, Inc. (ISBN 978-1-4129-6099-1)
- SAGE qualitative research methods [electronic resource]. (2010). Edited by Paul Atkinson and Sara Delamont: <https://library.ohio-state.edu/record=b8200577>










For library course materials and additional optional materials, refer to the CarmenCanvas course.

Students can access textbook information via the Barnes & Noble bookstore website: [www.shopOhioState.com](http://www.shopOhioState.com) as well as from their BuckeyeLink Student Center. This information is disseminated by B&N to all area bookstores. You may buy from a store of your choice and/or shop for books (always use ISBN# for searches) online.

## Grading and Evaluation

### How Your Grade is Calculated

Assignment Category	Points/Weight	Assignment Type	
Class Participation	10%		Independent work

IRB Certification (due Week 3)	5%		Independent work
Reflection (due Week 4)	5%		Independent work
Annotated bibliography (due Week 7)	5%		Independent work
Interview (due Week 8)	15%		Independent work
Final project topic/format (due Week 10)	N/A		Independent work
Transcription (due Week 10)	10%		Independent work
Data Analysis Study (due Week 14)	25%		Collaboration required
Presentation (due Week 15)	10%		Collaboration required
Final Project (due Exam week)	15%		Independent work

NOTE: This course is designed for upper-level undergraduates and graduate students. This is an introductory course with no pre-requisites. Therefore, there is no distinction between the readings and assignments for undergraduates and graduate students. However, for the group assignment, undergraduate students will be grouped together and graduate students will be grouped together. For all assignments, while only one rubrics will be used, graduate students will be graded to a more rigorous standard.

## Descriptions of Major Course Assignments

### Class Participation

**Description:** This course is designed as half discussion and half lab, or application of material. While I will prepare remarks for each meeting, we will spend most of the first half of the class time discussing the assigned readings. Hence, you are expected to come to class prepared to critically discuss the readings and how they relate to your substantive interests. In addition, on the first day of class, you will be assigned to lead one of the weekly discussions. This will entail bringing a set of thought-provoking discussion questions and facilitating a discussion. Questions should address key aspects of the assigned readings or anything that you find confusing, controversial, or that you would like to know how others think about it. You may draw on the weekly reflections, below. The second half of the class will often focus on an application of the material.

#### Independent work



## Institutional Review Board (IRB) training

**Description:** All students are required to complete the on-line IRB training before the class in which it is covered and turn in the Certificate of Completion, which will serve as proof that you completed the training. You must complete all required modules in the Basic Human Research Course.

**Independent work**

## Reflection

**Description:** The first portion of this course is introducing you to qualitative inquiry as a philosophy, not just a method. Write a two-page, double-spaced reflection on the readings, class discussions, and other materials from Weeks 1-3. Consider the following questions: What were your preconceptions of qualitative research? What do you understand qualitative research to be now? What has surprised you? What do you still find confusing? How does qualitative research apply to your everyday life? See the detailed rubric embedded in the assignment on Carmen.

**Independent work**

## Annotated Bibliography

**Description:** Given our class's research question, find three pertinent pieces of research. Create an entry for each piece of research. Include an APA citation followed by 150ish words that describe the study (ex. sample or population, location, method) and its relevance to our research question. A google doc will be started for class so that you do not replicate a study that someone else is doing. Finally, please see the detailed rubric embedded in the assignment on Carmen.

**Independent work (but with consultation with the class to ensure everyone is annotating different articles)**

## Interview<sup>3</sup>

**Description:** Students are required to complete a fieldwork study, specifically an interview, as part of their class requirements. Finally, please see the detailed rubric embedded in the assignment on Carmen.

Interviews are a vehicle for learning about the meaning that participants give to their lives and to events and interactions in their world and environment. As a class, we will determine a mutual area of interest for interviews, develop research questions, and select a population to interview regarding that area of interest. In class, we will co-develop a semi-structured interview protocol. You will identify an interviewee and conduct the interview. When you are finished interviewing, write a brief (1-2 single-spaced pages) narrative account, reflecting on the questions below. Your field notes should be included as an Appendix.

Write a reflective memo on the interview process, responding to the questions below.

- What do you know about how the interviewee knows what s/he knows?
- What dilemmas, if any, did you experience in trying to gain consent from him/her for the interview and for taping the interview?
- If you were to carry out such an interview again, how would you change the structure, format, and questions, if at all?
- How was this conversation different from or similar to an ordinary conversation between two people?
- What strategies did you use to place checks on yourself so that you would refrain from asking leading questions and be open to information that ran counter to your working assumptions? Describe one or two incidents during the interview in which you heard something from your interviewee that ran counter to your expectations? How did you handle these surprises and what did you learn from this?
- What else surprised you? What puzzles need follow-up? How does what you learned in this interview confirm or disconfirm other opinions/data you may have collected?
- Upon reflection, how would you characterize your unique interviewing style? What do you know your communication skills and liabilities to be? How might you capitalize on your strengths and minimize your liabilities in your future qualitative research work?
- What are the main findings of your interview?

**Independent work**

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<sup>3</sup> This exercise was adapted, with permission, from Dr. Donna Haig Friedman's Spring 2014 course PPOLGL609/GER609L



## Transcription

**Description:** Each of you will be required to transcribe your interview. Refer to the assignment and protocol in Carmen.

**Independent work**

## Data Analysis Study

**Description:** For this assignment, students will be randomly assigned to teams and required to complete a data analysis of the transcribed interview completed in the previous assignment. You will be required to (1) individually develop a coding scheme of the data provided; (2) discuss the coding rubric with your team members and reach a consensus with regard to the coding rubric that should be employed in analyzing the data; (3) code the data using the coding rubric approved by the team; (4) discuss the results with the team members and solve any disagreements in the coding of the data; (5) write a short report that presents the research question, methods, results, limitations, and conclusions. Keep in mind, your report should be complete, fair (would others see what you see in the data after reading your report?), empirically accurate (does your data give you this), value-added (do you make a contribution), and credible (would peers accept your interpretation). Expected length is about 8-10 pages, single-spaced. You can include appendices. Finally, please see the detailed rubric embedded in the assignment on Carmen.

**Collaboration required**

## Presentation

**Description:** Students are required to make a presentation on their data analysis during the last week of classes. Each group will have assigned max. 20 minutes for the presentation including the questions and answers session following the presentation. The actual presentation should be no less than 15 min. and no longer than 20 min. The order of the presentations will be established in class through random selection. Presentations shorter or longer than the allotted time will be penalized. See the detailed rubric embedded in the assignment on Carmen.

**Collaboration required**

## Final Project

**Description:** All students are required to prepare a final project that aligns with their interests and degree curriculum. This could be in the form of a mini-proposal for a qualitative research study for a government agency or a non-profit; an analysis of existing qualitative data; a systematic literature review; or other project that furthers your academic and/or professional goals. You should start thinking about this assignment earlier in the semester as the final project is a complex and time-consuming process.

Topics/format must be pre-approved by me. See the assignment calendar.

**Independent work**

## Grading Scale

93–100: A	80–82.9: B-	67–69.9: D+
90–92.9: A-	77–79.9: C+	60–66.9: D
87–89.9: B+	73–76.9: C	Below 60: E
83–86.9: B	70–72.9: C-	

## Course Schedule

### Week 1. Introduction to Qualitative Research

Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapter 1). 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc.

*Suggested Readings:*





- Ford, Tiffany N. & Goger, Annelies (2021). The value of qualitative data for advancing equity in policy. Brookings. Available at: <https://www.brookings.edu/research/value-of-qualitative-data-for-advancing-equity-in-policy/>
- Freedman, David. "On Types of Scientific Inquiry: The Role of Qualitative Reasoning." (Available at <http://www.stat.berkeley.edu/~census/anomaly.pdf>).
- Lin, Ann Chih (1998). "Bridging Positivist and Interpretivist Approaches to Qualitative Methods." *Policy Studies Journal*. 26.1: 162-180
- Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political Analysis*, 14(3), 227-249.

Lab: Biography; Your worldview

## Week 2. Getting Started, Asking Questions, and Ethical Concerns

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapter 2). 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc.
- Roberts, L. D. (2015). Ethical issues in conducting qualitative research in online communities. *Qualitative Research in Psychology*, 12(3), 314-325.

### *Suggested:*

- Creswell, John W. 2013. *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. 3<sup>rd</sup> Edition (pp. 42-68). Thousand Oaks, CA: Sage Publications, Inc.
- Jane Agee (2009) Developing qualitative research questions: a reflective process, *International Journal of Qualitative Studies in Education*, 22:4, 431-447, DOI: 10.1080/09518390902736512
- Sieber, Joan E. 1998. "Planning Ethically Responsible Research." In Leonard Bickman and Debra J. Rog (Eds), *Handbook of Applied Social Research Methods* (pp. 127-156). Thousand Oaks: Sage Publications, Inc.
- Wood, Elizabeth Jean. 2006. "The Ethical Challenges of Field Research in Conflict Zones." *Qualitative Sociology* 29 (June 20): 373-386.

Lab: Ethics; Asking questions

## Week 3. Research Design

- Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapter 3 and 4). 2<sup>nd</sup> Edition. New York, NY: Guilford Publications, Inc.

### *Suggested:*

- Patton, Michael Quinn. 2002. Chapter 5: Designing Qualitative Studies in *Qualitative Research and Evaluation Methods*. Thousand Oaks: Sage Publications.
- Schwartz-Shea, P., & Yanow, D. (2013). *Interpretive research design: Concepts and processes* (Chapter 1). Routledge.

Lab: Diagnosing design; Asking qualitative research questions

**\*IRB Assignment due by class time.**

## Week 4. Types of Applied Research Studies (e.g., needs assessment, policy analysis, program evaluation)



- Natow, R. S. 2021. *How do policymakers perceive qualitative research?* Available at <https://evidenceandpolicyblog.co.uk/2021/04/07/how-do-policymakers-perceive-qualitative-research/>
- [E]<sup>4</sup> Garner et al. 2020. Country Fresh Stops: Facilitating Local, Healthy Food Access in Appalachian Ohio Interim Evaluation Report. School of Health and Rehabilitation Sciences, Ohio State University
- [E] Krzyzanowski Guerra, K., Hanks, A. S., Plakias, Z. T., Huser, S., Redfern, T., & Garner, J. A. (2021). Local Value Chain Models of Healthy Food Access: A Qualitative Study of Two Approaches. *Nutrients*, 13(11), 4145.
- [E] Louisville Metro Government. (2017). Jail and Substance Abuse: Exploring the Linked Challenges of Drugs and Incarceration in Louisville, KY. [http://publicpolicylab.org/wp-content/uploads/2017/06/PPL\\_JailSubstanceAbuse\\_ForWebsite.pdf](http://publicpolicylab.org/wp-content/uploads/2017/06/PPL_JailSubstanceAbuse_ForWebsite.pdf)
- [E] Spencer, R. A., Lemon, E. D., Komro, K. A., Livingston, M. D., & Woods-Jaeger, B. (2022). Women's Lived Experiences with Temporary Assistance for Needy Families (TANF): How TANF Can Better Support Women's Wellbeing and Reduce Intimate Partner Violence. *International Journal of Environmental Research and Public Health*, 19(3), 1170.

#### *Suggested Readings:*

- Maxwell, J. A. 2020. The value of qualitative inquiry for public policy. *Qualitative Inquiry*, 26(2), 177-186.
- Rist, Ray. 1994. Influencing the Policy Process with Qualitative Research. In eds. Norman Denzin and Yvonna Lincon, *Handbook of Qualitative Research*, London: Sage. Pp 1001-1017.
- Beebe, James. 2001. Rapid Assessment Process: An Introduction. Walnut Creek: Altamira Press. Chapter 1.

Lab: Decision-making

#### **\*Reflection due by class time.**

### **Week 5. Participatory Research and Case Study Approaches**

- Israel, Barbara A., et al. "Review of community-based research: assessing partnership approaches to improve public health." *Annual review of public health* 19.1 (1998): 173-202.
- Yin, Robert. K. 2009. *Case Study Research: Design and Methods*. 4<sup>th</sup> Edition (Chapter 1). Thousand Oaks: Sage Publications, Inc.
- Clark, Jill K., Kaiser, Michelle, K., Reece, J., & Schmiesing, R. 2021. *University research in the neighborhood: The perspective of community members*. Ohio State University. Available at: <https://engage.osu.edu/university-research-neighborhood>
- [E] Designing for Social Systems (DSS) (2021). *Lummi Tribal Health Center Tackles Opioid Overdoses*. Stanford University.
- [E] Modeling the Future of Food in Your Neighborhood Collaborative. (November 2020). Menu of Actions for Community Driven Food Systems Change. Mary Ann Swetland Center for Environmental Health, Case Western Reserve University, Cleveland, OH.

#### *Suggested Readings:*

- Ospina, Sonia M., Burns, Danny, & Howard, J. (2021). Introduction to the Handbook in Burns, D., Howard, J., & Ospina, S. M. (Eds.). (2021). *The SAGE handbook of participatory research and inquiry*. SAGE.

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<sup>4</sup> [E] denotes an example. These readings are not for you to learn the minutiae of the reading, but rather to engage with a class concept via seeing its application.



Yin, Robert K. 2018. *Case Study Research and Application*. (Remainder of book). Thousand Oaks: Sage Publications, Inc.

Lab: Community voices

### Week 6. Reviewing the Literature and Getting Ready for the Field

Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapters 5 and 7). New York, NY: Guilford Publications, Inc.

Wood, Elisabeth. 2009. "Field Research." In C. Boix & S. Stokes (Eds), *The Oxford Handbook of Comparative Politics* (pp. 1-29).

[E; skim the literature review] Clarke, Brownyn (2019). "The Evidence Decision-Makers Want Literature Review," Center for the Study of Social Policy.

[E; skim the field memo] Example Field Memo

#### *Suggested Readings:*

Barrett, Christopher B., & Cason, Jeffrey W. 1997. The Logistics of Fieldwork, In *Overseas Research: A Practical Guide* (pp. 67-89). Baltimore: Johns Hopkins University Press.

Emerson, Robert, Fretz, Rachel, & Shaw, Linda. 1995. Processing Fieldnotes: Coding and Memoing. In *Writing Ethnographic Fieldnotes* (pp. 142-168). Chicago: University of Chicago Press.

Lab: Group literature review + Field work

### Week 7. Conducting Interviews

Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (pp. 137-150). New York, NY: Guilford Publications, Inc.

Herbert J. Rubin and Irene S. Rubin. 2011. *Qualitative Interviewing: The Art of Hearing Data*, 3<sup>rd</sup> Edition (pp. 1-12 & 115-148). Thousand Oaks, CA: Sage Publications, Inc

Feldman, Martha S., Bell, Jeanine, & Berger, Michelle Tracy. 2003. Gaining Access for Interviewing. (Chapter 7) In *Gaining Access*. New York: Altamira Press.

McLellan, E., McQueen, K., & Neidig, J. 2003. "Beyond the Qualitative Interview: Data Preparation and Transcription." *Field Methods* 15(1), pp. 63-84.

[E] Franklin County Suicide Prevention Coalition. (2020). Strengthening and Sustaining Ohio's Suicide Prevention Coalitions Initiative: Community readiness assessment report Franklin County.

Lab: Writing interview questions and practice interviewing; Sampling

### Week 8. Focus Groups

Short, S. 2006. Focus Group Interviews. In E. Perecman and S. Curran, Eds., *A Handbook for Social Science Field Research*. Thousand Oaks: Sage Publications.

Bloomberg. 2012. "Mad Men and the Odd Power of Focus Groups."

[E; skim for research design] Heikkila, T., & Isett, K. R. (2007). Citizen involvement and performance management in special-purpose governments. *Public Administration Review*, 67(2), 238-248.

[E] Silva, J. M., Sawhill, I. V., Welch, M., & Ford, T. N. (2020). A Qualitative Study of the Hopes and Anxieties of the American Middle Class Before and During the COVID-19 Pandemic. Brookings.

Lab: No Class on October 12<sup>th</sup>! Happy Fall Break



**\*Interview due by class time.**

## **Week 9. Focus Groups**

Lab: Running Focus Groups

## **Week 10. Observations and Archives**

Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (pp. 150-158; Chapter 7). New York, NY: Guilford Publications, Inc.

Feldman, Martha S., Bell, Jeanine, & Berger, Michelle Tracy. 2003. "Gaining Access for Extended Observation." (Chapter 9). In *Gaining Access*. New York: Altamira Press.

[E] Examples of Observation

*Suggested:*

Tjora, A. 2006. "Writing Small Discoveries: An Exploration of Fresh Observers' Observations." *Qualitative Research*, 6(4), pp. 429-451.

Fincham, B., Scourfield, J., & Langer, S. 2008. "The Impact of Working with Disturbing Secondary Data: Reading Suicide Files in a Coroner's Office." *Qualitative Health Research* 18(6), pp.853-862.

Lab: Document analysis

**\*Transcription due by class time.**

## **Week 11. Data Analysis: Coding**

Saldana, Johnny. 2009. *The Coding Manual for Qualitative Researchers* (pp. 1-21, SKIM 32-191). Thousand Oaks, CA: Sage Publications, Inc.

Scully, M., Rothenberg, S., Beaton, E. E., & Tang, Z. (2017). Mobilizing the wealthy: Doing "privilege work" and challenging the roots of inequality. *Business & Society*, 0007650317698941.

[E; Skim article and review the code book in supplemental material] Beaton, E. E., LePere-Schloop, M., & Smith, R. (2021). A review of sexual harassment prevention practices: Toward a nonprofit research agenda. *Nonprofit and Voluntary Sector Quarterly*, 08997640211008979.

*Suggested:*

King, N., Brooks, J., & Tabari, S. (2018). Template analysis in business and management research.

In *Qualitative methodologies in organization studies* (pp. 179-206). Palgrave Macmillan, Cham.

Charmaz, Kathy. 2006. "Coding in Grounded Theory." In *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis* (pp. 42-71).

Owen, G. T. (2014). Qualitative methods in higher education policy analysis: Using interviews and document analysis. *The Qualitative Report*, 19(52), 1-19. Retrieved from

<http://www.nova.edu/ssss/QR/QR19/owen52.pdf>

Lab: Observations and field notes

## **Week 12. Data Analysis: Disassembling, Reassembling, and Interpreting Data**



Yin, Robert K. 2016. *Qualitative Research from Start to Finish* (Chapters 8 and 9). New York, NY: Guilford Publications, Inc.

Lab: Coding

November 7 lecture is asynchronous online to allow students to vote and/or work the polls.

### **Week 13. Reliability & Validity in Qualitative Research**

Lincoln, Yvonna, & Guba, Egon. 1985. "Establishing Trustworthiness." In *Naturalistic Inquiry* (pp. 289-331). Thousand Oaks, CA: Sage Publications, Inc.

Shaw, K. 1997. "Remedial Education as Ideological Battleground," *Educational Evaluation and Policy Analysis*. 19(3): 284-296.

[Skim] Nowell, B., & Albrecht, K. (2018). A reviewer's guide to qualitative rigor. *Journal of Public Administration Research and Theory*.

#### *Suggested Reading:*

Ospina, S. M., Esteve, M., & Lee, S. (2018). Assessing qualitative studies in public administration research. *Public Administration Review*, 78(4), 593-605.

Seale, Clive. 1999. "Quality in Qualitative Research." *Qualitative Inquiry* 5(4), pp. 465-478.

Lab: Critiquing Shaw

### **Week 14. Writing and Presenting a Qualitative Study**

Yin, Robert K..2016. *Qualitative Research from Start to Finish* (Chapters 10 and 11). New York, NY: Guilford Publications, Inc.

Skim all previous [E] readings for presentation of results.

Lab: Presenting qualitative data

NO CLASS on November 23 – Thanksgiving Break

**\* Data Analysis Study due by class time.**

### **Week 15. Group Work and Class Presentations**

**\* Presentations due in class**

### **Week 16. Class Presentations**

**\* Presentations due in class**

### **Exam Week**

**\* Final Projects due on 12/12 @ 2 PM**



Week	Dates	Class Session	Due
1	8/22 & 24	Introduction to Qualitative Research	
2	8/29 & 31	Getting Started, Asking Questions, and Ethical Concerns	
3	9/5 & 7	Research Design	IRB
4	9/12 & 14	Types of Studies	Reflection
5	9/19 & 21	Participatory Research and Case Study Approaches	
6	9/26 & 28	Reviewing the Literature and Getting Ready for the Field	
7	10/3 & 5	Interviews	Annotated bibliography
8	10/10 & 12*	Focus Groups	Interview
9	10/17 & 19	Focus Groups	
10	10/24 & 26	Observations and Archives	Transcription; Final project topic/format
11	10/31 & 11/2	Data Analysis: Coding	
12	11/7* & 9	Data Analysis: Disassembling, Reassembling, & Interpreting	
13	11/14 & 16	Reliability & Validity in Qualitative Research	
14	11/21 & 23*	Writing and Presenting a Qualitative Study	Data analysis
15	11/28 & 11/30	Group Work and Presentations	Presentation
16	12/5	Presentations and Final Project Check-in	Presentation
Exam	12/12 @ 2 PM	Scheduled Exam Time = Deadline for Final Projects	Final project

\* No in-person class

## Course Policies

### Attendance and Participation Expectations

While I expect you to attend class regularly, I will not take daily attendance. One of the purposes of this class is to help you build the stamina necessary to stick with a project day-in, day-out even as your interest in it naturally waxes and wanes. It is very, very unlikely that a student who misses class regularly will do well. More importantly, much of the important nuance of the readings is brought out during classroom discussion. As such, regular attendance is strongly encouraged. Students can reschedule without penalty examinations and additional required class work that may fall on religious holidays. You must notify the instructor in advance.

### Late Assignments and Making Up Work

Please refer to CarmenCanvas for due dates. Due dates are set to help you stay on pace and to allow timely feedback that will help you complete subsequent assignments. Late assignments will be penalized one-half letter grade per day.

### Instructor Feedback and Response Time

For assignments submitted before the due date, I will try to provide feedback and grades within **seven days**. Assignments submitted after the due date may have reduced feedback, and grades may take longer to be posted.

### Digital Devices

Lap-tops, tablets and phones are not required for the majority of this class. Therefore, these devices may only be used when engaging in an exercise that requires them. Research demonstrates that you may benefit from writing notes long-hand. For a briefing on a recent study, listen to the following podcast: <http://www.npr.org/2016/04/17/474525392/attention-students-put-your-laptops-away>. If you need accommodation given a documented disability, let the instructor know.



## Copyright

The materials used in connection with this course, including those created by the instructor or classmates, may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## University Academic Policies

Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following

- **Accessibility:** Arrange for accommodations if you anticipate barriers to your learning based on a disability
- **Academic integrity:** Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- **Safe learning environment:** Know the university's commitments to an environment free from discrimination or harassment, and find resources for reporting or finding support.

## Mental Health and Well-Being

If you find yourself feeling isolated, anxious or overwhelmed, on-demand mental health resources ([go.osu.edu/ccsondemand](http://go.osu.edu/ccsondemand)) are available from Ohio State University's Student Life Counseling and Consultation Service (CCS). You can reach an on-call counselor when CCS is closed at 614- 292-5766. 24-hour emergency help is available through the National Suicide Prevention Lifeline website ([suicidepreventionlifeline.org](http://suicidepreventionlifeline.org)) or calling 1-800-273-8255(TALK). The Ohio State Wellness app ([go.osu.edu/wellnessapp](http://go.osu.edu/wellnessapp)) is also a great resource.

## Glenn College Diversity Values

The Glenn College is committed to nurturing a diverse and inclusive environment for our students, faculty, staff, and guests that celebrates the fundamental value and dignity of everyone by recognizing differences and supporting individuality. We are dedicated to creating a safe space and promoting civil discourse that acknowledges and embraces diverse perspectives on issues and challenges that affect our community."

## Disability Services Statement

### Accommodation Policy

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be





implemented in a timely fashion. **SLDS contact information:**  
[slds@osu.edu](mailto:slds@osu.edu); 614-292-3307; [slds.osu.edu](http://slds.osu.edu); 098 Baker Hall, 113 W.  
 12<sup>th</sup> Avenue

## FERPA & Privacy

Any video and audio recordings of class lectures are to be used for educational use/purposes. Please note that you are not allowed to share any recordings. This is to protect your FERPA rights and those of your fellow students.

## COVID Process SLDS Statement

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: [slds@osu.edu](mailto:slds@osu.edu); 614-292- 3307; [slds.osu.edu](http://slds.osu.edu); 098 Baker Hall, 113 W. 12th Avenue.

## Other Resources

### Writing Consulting

Students wishing to have additional help with the writing of their papers can meet with a consultant at the Writing Center (<https://cstw.osu.edu/writing-center>).

### Library Assistance

The Glenn College has a dedicated librarian at OSU Libraries, Carly Dearborn ([dearborn.8@osu.edu](mailto:dearborn.8@osu.edu)), who can help provide research assistance. For more information and links to some common public affairs resources, see - <http://go.osu.edu/8gx>.

### Military-Connected Students

The Military and Veterans Services (MVS) Office offers a wide range of resources, for Military-Connected Students. Whether using benefits or not, all Military-Connected Students are encouraged to stop by the office to learn more about how MVS can be of support (ie. information about tutoring, transition services, access to the veteran's lounge, etc.). For active duty personnel, should you receive orders during the semester or know of classes that will be missed due to service commitments, please speak with me as soon as possible so that we can make any necessary arrangements. **MVS contact information:** [milvets@osu.edu](mailto:milvets@osu.edu); 614-247-VETS; <http://veterans.osu.edu/>; 185 Student Academic Services Building, 281 W. Lane Avenue.

### Food-insecure students

The Ohio State University is committed to ensuring that all students have access to adequate and healthy food. **Any undergraduate or graduate student with a BuckID may confidentially use the Buckeye Food Alliance food pantries. No proof of need is required.** There are two locations:

- West Campus: Lincoln Tower. Doors are locked - call 614-688-2508 upon arrival.
- North Campus: St. Stephens. Look for the Buckeye Food Alliance (BFA) sign on the southwest corner of the building.

To learn more, visit <https://www.buckeyefoodalliance.org/>





## **Fall 2024 Syllabus: Rapid Innovation for Public Impact**

**PUBAFRS 5620** Part of the *Science and Engineering in the Public Interest* program

### **INSTRUCTOR:**

#### **Heather Tsavaris**

Instructor, OSU Battelle Ctr. For Science,  
Engineering & Public Policy  
[Tsavaris.2@osu.edu](mailto:Tsavaris.2@osu.edu)

#### **Ethan Rivera**

Student Programming Lead,  
Ohio State Battelle Center  
[rivera.154@osu.edu](mailto:rivera.154@osu.edu)

#### **Office hours:**

Mondays 11-1  
(team choice)

**In-person Class Fridays 12:00-3:00 p.m. + Mandatory Office Hour (Zoom or in-person) 4 credits**

## **Course Description**

The *Rapid Innovation for Public Impact* course is a multi-disciplinary capstone or hands-on applications course in which student teams tackle real, contemporary, complex problems sponsored by government or non-profit agencies.

Its goal is to produce solutions that are technically feasible, desirable from stakeholders' perspectives, and viable for adoption and integration. Following a systematic methodology, student teams develop minimum viable products (MVP) or proofs-of-concept through intensive customer discovery and agile design, development, and testing with customers and stakeholders. Students acquire an in-depth understanding of and experience in systematic innovation, refining problem-statements, engaging customers and stakeholders, navigating public and private sector organizations, budgeting, and management issues.

Since the course delivery is designed to simulate the uncertainty and dynamism of the 'real world', students practice foundational professional skills throughout the semester such as: systems-thinking/understanding in the context of complex problems; applied critical thinking; creativity; collaboration; communication; cultural competence; conflict resolution; and other leadership fundamentals. Teams invest significant time: interacting with professionals outside the classroom; engaging weekly with instructors, sponsors, and mentors; preparing written status-reports; and presenting weekly briefings to the teaching team, sponsors, mentors, peers, and guests for critiques which are designed to emulate briefings to management or investors. Students acquire not only tools and leadership skills but an innovation mindset and exposure to a vast array of careers in the public sector.

All upper-level undergraduate and graduate students in any major or college are welcome because complex problem-solving requires interdisciplinary approaches. There are no prerequisites to register.

As a project-focused, team-based experiential learning opportunity, student success in the course depends greatly on commitment to individual growth, consistent service to team, and perseverance.

## Learning Outcomes

**The class is an intense professional experience for 4 credits. Students should expect to spend up to 12 hours/week cumulative *during class time and outside of class time*.** This course is designed to provide students with hands-on experience understanding and working with federal, state, and local public sector agencies or nonprofits on real, current problems. In so doing, the students help organizations better address their missions and emerging threats, challenges, and opportunities. The course provides students with human-centered design and innovation tools to solve complex problems and grow as professionals.

Our goal, within the constraints of a course and a limited amount of time during a semester, is to provide a framework for testing students' hypotheses in order to design solutions, while emulating the pressures and demands of the real world in early-stage innovation. The intent is for urgency and good-enough decision-making to become ingrained. Students learn how to work and collaborate on a team, handle uncertain and chaotic environments, and turn a creative idea into a solution for a real-world complex problem that is challenging a government or nonprofit agency. Students learn how to interview a wide range of stakeholders (customer discovery), practice evidence-based innovation (human-centered design and agile development), and use a business model tool to validate the solution's viability. Students 'get out of the classroom' to see whether anyone other than them would want or use the solution.

At the conclusion of this course, students will possess a deep understanding of complex problems in the public sector. Specifically, students will demonstrate:

1. An understanding of the public sector and its dynamics
2. A profound understanding of the assigned sponsor's and beneficiary's needs, problem, and workflow, and an ability to clarify the problem-statement
3. Rapid iteration or agile development of products or solutions that are technically feasible, desirable, and viable in an economic and organizational sense.
4. An understanding of all relevant customers, stakeholders, deployment issues, costs, resources, and ultimate value of the minimum viable solution.
5. A facility with complex problem-solving methodology, innovation tools, and fundamental leadership skills, valuable throughout a professional career.
6. [GE] Engaged Citizenship & Intercultural Competency: Students consider public health, safety, and welfare, as well as global, cultural, social environmental, and economic factors in applying engineering design to produce solutions meeting specified needs.
7. [GE] Personal and Professional Development: Students individually assess and pursue personal and professional growth in concert with project requirements and personal career goals.
8. [GE] Cultivate Engineering Mindset: Students develop an engineering mindset that demonstrates constant curiosity, makes connections between disparate bodies of information, and seeks opportunities to create value

Participating public sector agencies or other groups *may* after the course's end provide follow-on funding to student teams to refine preliminary solutions further, but this course is not a product incubator nor an entrepreneurship, venture-creation, or business planning course.



## Course Requirements

**Rigorous class preparation includes students investing consistently some amount of time on an almost daily basis, like professionals do. Taking written notes during class, office hours, interviews, and other feedback sessions is highly recommended.** A course handout details the suggested time-budget for a typical week in order to keep the workload reasonable and in-line with the number of course credit-hours. Student responsibilities include:

1. Reviewing any assigned videos or readings listed in the course website.
2. Interviewing (either individually or as a team) several stakeholders/week in order to test hypotheses about the problem and potential solutions.
3. Participating in one weekly *mandatory* consultation (office hour) to review progress and identify obstacles.
4. Preparing and presenting a 10-minute team briefing typically every other Friday that covers the solution's evolving design and other topics specified in the course website.
5. Delivering a brief written status report on the Fridays without team presentations that summarizes the week's hypothesis-testing and progress.
6. Attending ALL classes, briefing the team presentation, providing critical peer-feedback to other teams, and formulating hypotheses and interview strategy for the coming week.

By the semester's end:

- Each team conducts dozens of quality stakeholder interviews.
- Each team delivers a solution, final video (not to exceed 2 minutes), presentation (not to exceed 10 minutes), and written report (no fewer than 3 pages and no more than 5 pages, excluding cover page, references, and appendices) concerning the solution developed to meet the sponsor's needs.
- Graduate students deliver individually a brief, additional personal reflections paper.

## Student Assessment

**This course is interdisciplinary and team-based, therefore 70% of a student's final grade will come from the team's performance.** Teammates will help assess individual contributions. **Graduate students will be graded to a more rigorous standard and will have an additional two-page written assignment to be delivered before end of semester.** The grading policy appears on page 8. Stoplight Assessments (ungraded) will be given 3 times during the semester so that students understand their performance leading up to the final deliverables.

**30% Team's Weekly Performance** evident in:

- **In-class Oral Presentation quality**, demonstrating critical thinking, communication skills, learning, and creativity.
- **Written Status Report quality**, demonstrating information-synthesis, critical thinking, and communication skills.
- **Achieving the assigned number of interviews**, a reflection of effort to 'get out of the building' for customer discovery or validation, demonstrating customer-focus, curiosity, hypothesis-formulation and -testing, and applied critical thinking.

**30% Individual's Engagement** reflected in:

- **Class Participation** demonstrating completion of assignments, active listening and

attentiveness, commitment to team, and perseverance.

- **Teammates' peer evaluation** of individual's contributions, reflecting trustworthiness and collaboration skills

**40% Team's 4 FINAL products: the solution, video, oral presentation, and written report**

**Required Texts:** Students can access textbook information via the Barnes & Noble (B&N) bookstore website: <https://ohiostate.bncollege.com> as well as from their BuckeyeLink Student Center. This information is disseminated by B&N to all area bookstores. You may download free resources where indicated or buy from a store of your choice (always use ISBN# for searches).

- IDEO, *The Field Guide to Human-Centered Design*, 1<sup>st</sup> edition 2015. Free digital download at: [http://www.designkit.org/resources/1?utm\\_medium=ApproachPage&utm\\_source=www.ideo.org&utm\\_campaign=FGButton](http://www.designkit.org/resources/1?utm_medium=ApproachPage&utm_source=www.ideo.org&utm_campaign=FGButton)
- Constable & Rimalovski, *Talking to Humans – Success Starts With Understanding Your Customers*. Free digital download for non-profits/schools at: <https://www.talkingtohumans.com/download.html> or Paperback: 88 pages  
Publisher: Giff Constable (September 23, 2014) ISBN-13: 978-0990800927
- Osterwalder and Pigneur, *Value Proposition Design – How to Create Products and Services Customers Want*  
Paperback: Publisher: Wiley ISBN-13: 978-1118968055

**Course Schedule Overview** *Read left-to-right, then down. See detailed instructions & deadlines in CarmenCanvas.*

Class	Date	Friday CLASS			Saturday following Class, through the next Thursday
		Hour 1	Hour 2	Hour 3	ASSIGNMENTS
<b>I. Phase: Discovery</b>					
1	Fri. Aug. 23 To Thurs. Aug. 29	<b>Instructors:</b> Orientation	<i>Meet with Sponsor during Class for Sponsor Discovery</i>	<b>Teams:</b> Initial Discovery Presentation (5min)  Team Scheduling	<ul style="list-style-type: none"> <li>- Find &amp; read 3 sources <i>per student</i> about the problem and sponsor and post summary 'bottom lines' in team Slack channel</li> <li>- Interview Mentors, Tech Advisors</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
2	Fri. Aug 30 To Thurs. Sept. 5	<b>ALL Teams:</b> Sponsor & Problem Discovery Presentation  (8min; 2m q&a)	<b>Showcase</b> past MVPs  <b>Workshop:</b> Professionalism & Team Dynamics	<b>Instructors:</b> Systems-thinking & Solving Complex Problems	<ul style="list-style-type: none"> <li>- Find &amp; read 5 additional sources <i>per student</i> about the problem and sponsor and post summary 'bottom lines' in team Slack channel</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
3	Fri. Sept 6 To Thurs. Sept. 12	<b>ALL Teams:</b> End-User Discovery Presentation  (10min; 10m q&a)	<b>Instructors:</b> Innovation Process & Mindset	<b>Workshop:</b> Interviewing & Hypothesis- formulation	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>

Class	Date	Friday CLASS			Saturday following Class, through the next Thursday
		Hour 1	Hour 2	Hour 3	ASSIGNMENTS
<b>II. Phase: Concept Development</b>					
4	Fri. Sept 13 To Thurs. Sept. 19	<b>Group A Teams:</b> Solution Update  (8min; 5m q&a)	<b>Instructors:</b> Innovation's Desirability	<b>Workshop:</b> Ideation I -- Empathy- mapping & Information Synthesis	<b>- Review Instructors' Stoplight Assessment + Adjust Work</b> <ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend <i>mandatory</i> Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
5	Fri. Sept 20 To Thurs. Sept. 26	<b>Group B Teams:</b> Solution Update Presentation  (8min; 5m q&a)	<b>Instructors:</b> Conflict Resolution – having difficult conversations	<b>Workshop:</b> Ideation II -- Concept- Development & Story-boarding	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
6	Fri. Sept 27 To Thurs. Oct. 3	<b>Group A Teams:</b> Solution Update	<b>Instructors:</b> Course Deliverables & their Intended Audiences	<b>Workshop:</b> Story-boarding and Workflow to understand Solution Adoption	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
7	Fri. Oct. 4 To Thurs. Oct. 10	<b>Group B Teams:</b> Solution Update Presentation	<b>Instructors:</b> Innovation's Feasibility	<b>Workshop:</b> Iterative Design / Feature Development	<b>- Turn in Mid-point Survey</b> <ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
8	Fri. Oct. 11 To Thurs. Oct. 17	<b>No Class. FALL BREAK</b> <b>Consider Field Trips and Off-Campus Exploration</b>			<b>- Review Instructors' Stoplight Assessment + Adjust Work</b> <ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>

<i>Class</i>	<i>Date</i>	<i>Friday CLASS</i>			<i>Saturday following Class, through the next Thursday</i>
		<i>Hour 1</i>	<i>Hour 2</i>	<i>Hour 3</i>	<i>ASSIGNMENTS</i>
<b>III. Phase: Prototyping</b>					
9	Fri. Oct. 18 To Thurs. Oct. 24	<b>Group A Teams:</b> Solution Update	<b>Instructors:</b> Use Cases and Value Propositions	<b>Workshop:</b> Prototyping	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
10	Fri. Oct. 25 To Thurs. Oct 31	<b>Group B Teams:</b> Solution Update Presentation	<b>Instructors:</b> Innovation's Viability	<b>Workshop:</b> Assessing Unintended Consequences	<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- Develop Fri. presentation &amp; pre-brief sponsor</li> </ul>
11	Fri. Nov. 1 To Thurs. Nov. 7	<b>Group A Teams:</b> Solution Update	<b>Workshop:</b> Compelling Story- telling & Visual Story- making/Video Tips		<ul style="list-style-type: none"> <li>- Read / watch Assignments</li> <li>- Interview assigned number of POCs to test hypotheses</li> <li>- Hold Team work session: Synthesis</li> <li>- <b>Wednesday:</b> attend mandatory Team Office Hour</li> <li>- <b>Wednesday:</b> Update interview log with key take-aways &amp; attendees</li> <li>- <b>Thursday:</b> post status report by 5pm</li> <li>- Update sponsor</li> </ul>
12	Fri. Nov. 8 To Thurs. Nov. 14	<b>Group B Teams:</b> Solution Update Presentation	<b>TBA</b>	<b>TBA</b>	<b>Workshop:</b> Compelling Story- telling & Visual Story-making/Video Tips

Class	Date	Friday CLASS			Saturday following Class, through the next Thursday
		Hour 1	Hour 2	Hour 3	ASSIGNMENTS
IV. Phase: Validation and Story-telling					
13	Fri. Nov. 15  To  Thurs. Nov. 21	ALL Teams:  Rehearsal 1 -- Present Draft Video & Presentation Storyboard	Workshop: Red-teaming (paired critiques)		<ul style="list-style-type: none"><li>- Share draft video &amp; presentation with assigned number of POCs for feedback</li><li>- Hold Team work session: Practice Presentations</li><li>- Attend mandatory Team Office Hour for Rehearsal 2 w. instructors</li></ul>
14	Fri. Nov 22 Last class! To  Thurs. Nov  28	ALL Teams: Present FINAL - Video and Oral Presentation to Sponsors and Public Audience  CELEBRATION immediately following Class			<ul style="list-style-type: none"><li>- Complete Peer Evaluations</li><li>- Wednesday: Update interview log with key take-aways &amp; attendees</li><li>- Finalize solution, video &amp; presentation &amp; pre-brief sponsor</li></ul>
15	Fri. Nov. 29  To  Thurs. Dec. 4	No Class. THANKSGIVING BREAK			<ul style="list-style-type: none"><li>- Share draft written report with instructors for feedback; then finalize</li><li>- Complete Peer Evaluations</li><li>- Graduate Students only: prepare and submit Reflections paper</li><li>- Wednesday: Update interview log with key take-aways &amp; attendees</li><li>- Finalize solution, video &amp; presentation &amp; pre-brief sponsor</li></ul>
Exam Week	Fri. Dec. 6	Teams: Submit: (1) FINAL Written Report; (2) Peer Evaluations; (3) Interview Log  Graduate students ONLY: submit Reflections paper			



**Your Mental Health matters to us.** As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Whether or not you are engaged in distance learning, the Office of Student Life has numerous resources and services available to you at no charge to help you address those concerns.

If you find yourself feeling isolated, anxious or overwhelmed, on-demand mental health resources ([go.osu.edu/ccsondemand](https://go.osu.edu/ccsondemand)) are available. You can reach an on-call counselor when CCS is closed at 614- 292-5766. 24-hour emergency help is available through the National Suicide Prevention Lifeline website ([suicidepreventionlifeline.org](https://suicidepreventionlifeline.org)) or by calling 1-800-273-8255(TALK). The Ohio State Wellness app ([go.osu.edu/wellnessapp](https://go.osu.edu/wellnessapp)) is also a great resource. For students in recovery or seeking recovery from substance use disorders, learn more about support on campus by visiting the Collegiate Recovery Community. For students facing food insecurity, learn more about the free on-campus food pantry by visiting the Buckeye Food Alliance. For students interested in speaking with a peer to learn more about campus resources, call the Buckeye Peer Access Line. For students interested in meeting with a peer and setting holistic wellness goals, learn more about Wellness Coaching.

**Your Ability to Access Sufficient, Healthy Food matters to us.** A lack of sufficient, healthy food can cause barriers to learning, such as an inability to focus or acquire, retain, and recall important information or to muster sufficient physical stamina to endure the learning environment. The Ohio State University is committed to ensuring that all students have access to adequate and healthy food. **Any undergraduate or graduate student with a BuckID may confidentially use the Buckeye Food Alliance food pantries. No proof of need is required.** There are two locations:

- West Campus: Lincoln Tower. Doors are locked - call 614-688-2508 upon arrival.
- North Campus: St. Stephens. Look for the Buckeye Food Alliance (BFA) sign on the southwest corner of the building.

To learn more, visit <https://www.buckeyefoodalliance.org/>

**Teamwork is required for the successful completion of the course, and team-assignment is a privilege.** This interdisciplinary course is a team-based learning experience designed to engage and leverage perspectives from multiple disciplines and lived-experiences. In keeping with our goal of promoting professional work standards, individuals' behavior and teamwork are monitored by the instructors and mentors. Instructors will intervene when conduct is deemed detrimental to a team's progress or damaging to another individual's learning or sense of belonging or value. Possible interventions include instructors' providing one-on-one coaching or group coaching, or an individual's losing the privilege to continue on a team. Loss of team-assignment will result in a failing grade in the course.

**Your Privacy matters to us.** Video and audio recordings of class lectures may be part of the course and made available to all enrolled students. Please note that you are not allowed to share these recordings, in order to protect your FERPA rights and those of your fellow students.

## Practicalities and Policy:

**Attendance and Participation are Required.** You are expected to attend *every* in-person class Fridays from 12:00pm – 3:00pm and *every* mandatory *Team* Office Hours, which may be in-person or by Zoom. If you have a situation that might cause you to miss class, please notify in writing and discuss with the Instructor or Course Coordinator immediately. Due to the nature of experiential and team-based learning, no accommodations are possible for late assignments or make-up work.

**Grading rubrics are distributed in advance of deadlines.** The criteria for earning grades are consistent with these standard guidelines:

93-100	A	80-82.9	B	67-69.9	D+
90-92.9	A-	77-79.9	C+	60-66.9	D
87-89.9	B+	73-76.9	C	< 60	E
83-86.9	B	70-72.9	C-		

**Academic Misconduct:** The Committee on Academic Misconduct (COAM) recommends that every faculty member, instructor, and graduate teaching associate who is teaching a course prepare and distribute (or make available) to all students a course syllabus that contains a statement concerning "academic misconduct" or "academic integrity". The Ohio State University does not have a standardized statement on academic misconduct that instructors can use in their syllabi. Thus, COAM has prepared the following statement, which course instructors are free to use (with or without modification) for their syllabi:

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute Academic Misconduct.

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: Any activity that tends to compromise the academic integrity of the University or subvert the educational process. Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

**Artificial Intelligence Policy.** In this course, students are welcome to explore innovative tools and technologies for graphics in a presentation or initial gathering of information, including generative artificial intelligence (GenAI). Students are permitted to use GenAI tools for most course assignments. GenAI tools cannot replace the experience of interviews with stakeholders and subject matter experts and information gathered should not be utilized in lieu of these conversations. Your written assignments, including the final report and any reflections, should be your own original work.

GenAI can be a helpful resource for drafting creative content, brainstorming ideas, creating a “reverse outline” from a rough draft, and enhancing productivity. Yet it is essential to approach its use thoughtfully and ethically. If you use GenAI in any of your assignments, please include the following statement with each assignment:

1. Application Used: Specify the GenAI application or tool you used (e.g., Copilot, ChatGPT, Claude AI, Gemini).
2. Intended Purpose: Describe the purpose for which you used GenAI (e.g., idea generation, content creation).
3. Quality of Initial GenAI Output: Evaluate the initial output generated by GenAI. For example, was it accurate, biased, coherent, and/or relevant?
4. Iteration and Refinement: Explain how you revised prompts or adjusted parameters to refine the GenAI output. Did you experiment with different input prompts to improve the output?
5. Incorporation in Completed Assignment: Reflect on how you incorporated the GenAI-generated content into your assignment. How did you edit, adapt, or combine it with other ideas?

While GenAI can be a valuable tool, remember that academic integrity remains paramount. You are responsible for developing and articulating your own ideas, so addressing how GenAI contributed to those ideas (as you would for any sources you use) is centrally important to your learning. Attribute GenAI-generated content with proper citations and avoid plagiarism. Additionally, consider the accuracy of information incorporated in your assignment and the ethical implications of using GenAI in educational contexts. You are responsible for ensuring that the information you submit based on a GenAI query does not contain misinformation, unethical content, or violate intellectual property laws. Submission of GenAI-generated content as your own work is considered a violation of Ohio State’s [Academic Integrity](#) policy and [Code of Student Conduct](#) because the work is not your own. The use of unauthorized GenAI tools will result in referral to the [Committee on Academic Misconduct](#). If I suspect that you have used GenAI inappropriately on an assignment for this course, I will ask you to communicate with me to explain your process for completing the assignment in question.

**Privacy Considerations:** Students should familiarize themselves with the Terms of Use for the GenAI service they use, as well as the service’s expectations around data privacy and use. Students should not share private or sensitive information about themselves or others with GenAI services. As indicated in Ohio State’s February 2024 Security and Privacy Statement on Artificial Intelligence, “[u]niversity community members should not enter any institutional data that is categorized above the S1 (public) level into generative AI tools, except when using the protected environment of Copilot, meaning that you logged in with your university credentials and see the green ‘Protected’ button in the upper right-hand corner. Even when using the protected version of Copilot, it is best practice to put only S1 or S2 (internal) institutional data into the tool. S3 (private) and S4 (restricted) data should not be entered into any AI platform.”

Please contact me if you have questions regarding this course policy.

**Technology Support.** This course requires a Computer (current Mac (MacOS) or PC (Windows 10) with high-speed internet connection, webcam, speakers, and microphone) and BuckeyePass on a mobile device (smartphone or tablet) to use for authentication. If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at [go.osu.edu/student-tech-access](https://go.osu.edu/student-tech-access). For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, 7 days a week: <https://it.osu.edu/students>.

**Accessibility Accommodations can be provided.** The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: [slds@osu.edu](mailto:slds@osu.edu); 614-292- 3307; [slds.osu.edu](https://slds.osu.edu); 098 Baker Hall, 113 W. 12th Avenue.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the [Safe and Healthy Buckeyes site](#) for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations.

**Deadlines may be Extended.** Extensions will be granted for family emergencies, religious observances, or unanticipated/unavoidable work-related contingencies, provided the instructors receive such requests by telephone or e-mail before the applicable deadline. Extensions will automatically be granted in the case of *force majeure* events including natural disasters or other Acts of God. However, in such cases, we will attempt to collaborate online using video conferencing or other tools and will adjust deliverables' deadlines as appropriate.

**Ohio State and the Glenn College value Diversity.** Ohio State and the Glenn College is committed to nurturing a diverse and inclusive environment for our students, faculty, staff, and guests that celebrates the fundamental value and dignity of everyone by recognizing differences and supporting individuality. We are dedicated to creating a safe environment which promotes civil discourse and acknowledges and embraces diverse perspectives on issues and challenges that affect our community.

**Religious Accommodations.** Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Office of Institutional Equity](#).

**Ohio State will have an environment free from Harassment, Discrimination, and Sexual Misconduct.** The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation. To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity at: the online reporting form at [equity.osu.edu](https://equity.osu.edu); or call 614-247-5838 or TTY 614-688-8605; or email [equity@osu.edu](mailto:equity@osu.edu).

**Ohio State enforces its Academic Policies.** Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following:

- Accessibility: Arrange for accommodations if you anticipate barriers to your learning based on a disability
- Academic integrity: Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- Safe learning environment: Know the university's commitments to an environment free from discrimination or harassment, and find resources for reporting or finding support.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- Committee on Academic Misconduct ([go.osu.edu/coam](http://go.osu.edu/coam))
- Ten Suggestions for Preserving Academic Integrity ([go.osu.edu/ten-suggestions](http://go.osu.edu/ten-suggestions))
- Eight Cardinal Rules of Academic Integrity ([go.osu.edu/cardinal-rules](http://go.osu.edu/cardinal-rules)).

**Ohio State supports Military Connected Students.** The Military and Veterans Services (MVS) Office offers a wide range of resources. Whether using benefits or not, all Military-Connected Students are encouraged to stop by the office to learn more about how MVS can be of support (i.e., information about tutoring, transition services, access to the veteran's lounge, etc.). For active-duty personnel, should you receive orders during the semester or know of classes that will be missed due to service commitments, please speak with me as soon as possible so that we can make any necessary arrangements. MVS contact information: [milvets@osu.edu](mailto:milvets@osu.edu); 614-247-VETS; <http://veterans.osu.edu/>; 185 Student Academic Services Building, 281 W. Lane.

**Ohio State, as a land grant institution, honors the resilience of tribal nations and recognizes the historical contexts that has and continues to affect the Indigenous peoples of this land.** The university occupies land that is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and Cherokee peoples. Specifically, the university resides on land ceded in the 1795 Treaty of Greeneville and during the forced removal of tribes through the Indian Removal Act of 1830.





THE OHIO STATE UNIVERSITY

JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

# Multivariate Regression Analysis

PUBAFRS 7571 Autumn 2023

## Course Information

### Class Schedule and Delivery Mode

**Course times and location:** Mondays and Wednesdays, 3:55 – 5:15 p.m. in Page Hall 40

**Credit hours:** 3

**Mode of delivery:** In Person

### Instructor

**Dr. Katie Vinopal (she/her), John Glenn Public Affairs**

**Contact information:** [vinopal.4@osu.edu](mailto:vinopal.4@osu.edu)

**Preferred modes of communication:** My preferred method for questions is **email**. My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) ([go.osu.edu/canvas-notifications](https://go.osu.edu/canvas-notifications)) to be sure you receive these messages.

**Office hours for student questions and support:** by appointment (I am happy to set up appointments for in-person, Zoom, or phone call meetings).

### Course Overview

The course is for students who are interested in a career in government or the non-profit sector who need more advanced statistical skills or for students interested in research or academia who need to build a strong foundation in applied regression analysis. It provides students with knowledge about the Ordinary Least Squares model and introduces students to a wide range of additional models that can be applied to typical policy or management applications. The course is particularly useful for master's students who will write a capstone research paper or master's thesis and doctoral students who plan to conduct applied research.

The primary objective of this course is to provide an understanding of regression techniques, both from a "producer's" and a "consumer's" perspective. Regression, which is a statistical method used to study the relationships among two or more variables, is the most widely used statistical technique in public policy analysis. It is almost impossible to learn statistical concepts without lots of practice using statistical methods, so the course focuses on applying the theory through multiple hands-on exercises, both inside of class in a lab format and outside of class with homework assignments.

These exercises will also give students practice in how to use data from external sources and report statistical results in a clear manner. By the end of the course, students should not only be intelligent consumers who can readily interpret regression analysis performed by others, but they will also be equipped to test research hypotheses involving relationships among multiple variables and to relay their results to relevant stakeholders. Students should also be able to identify the appropriate models to use based on the nature of their data.



# THE OHIO STATE UNIVERSITY

## JOHN GLENN COLLEGE OF PUBLIC AFFAIRS

### Course Description

This is an applied course in regression analysis. Through hands-on exercises both inside and outside of class, students will use multiple regression to make predictions and test hypotheses to help inform policy analysis. Broad topics include model fitting, regression diagnostics, limited dependent variables, and some panel data. Emphasis is also placed on issues confronted when working with real data.

### Course Prerequisites

Students are expected to have completed PUBAFRS 6070 or equivalent graduate level introductory statistics course.

### Learning Outcomes

Upon completion of the course, students should understand

- Basic assumptions of the Ordinary Least Squares Model
- Violations of the assumptions of the Ordinary Least Squares Model
- Regression models with continuous, categorical, count, or limited dependent variables

Upon completion of the course, students should be able to

- Apply techniques of regression analysis to test research hypotheses
- Effectively communicate the results of conducting regression analysis
- Use the appropriate regression model given a particular dependent variable

### Program Learning Outcomes

The course contributes to Glenn College learning goals and objectives related to decision-making support in public affairs. In particular, the course focuses on the following objectives at an advanced level:

- Students can seek and identify patterns in data.
- Students can understand the logic of a statistical argument and be able to produce them for varied audiences and in multiple ways
- Students can support claims with statistically sound quantitative evidence.

## Course Materials, Fees, and Technologies

### Required Materials

#### Required Textbook:

- Damodar Gujarati (2014), *Econometrics by Example*, 2nd ed (ISBN 9781137375018)

#### Optional Supplemental Text:

- Paul D. Allison (1998), *Multiple Regression: A Primer* (ISBN 9780761985334)
- For those who want more intuition regarding what regression is all about in “English”



- You can preview the first 32 pages in [Google books](#)

Additional supplemental materials will be linked to on CarmenCanvas.

## Technology

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at [go.osu.edu/student-tech-access](http://go.osu.edu/student-tech-access).

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection, webcam, and microphone
- **BuckeyePass:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week: <https://it.osu.edu/students>

### Software:

- The course uses Stata. Stata/IC 15 is available on the computers in Page Hall 030 and 040 labs. There are also remote access options.
- No prior Stata knowledge is needed, and all commands that we will use will be introduced in the lectures and labs and in CarmenCanvas
- If you would like to purchase Stata for use on your own computer, pricing information is available at <http://www.stata.com/order/new/edu/gradplans/student-pricing/> (Stata/BE will be sufficient for this class)

## How This Course Works

**Mode of Delivery:** This is an in-person course that meets twice weekly in the classroom on Mondays and Wednesdays. In a typical week, Mondays will be lectures and Wednesdays will be the completion of the week's lecture and a hands-on lab applying that week's material. Occasionally, the instructor may choose to provide the Monday lecture asynchronously, and excuse students from coming to class. Except for textbook readings, and the exams, almost all course content and materials are accessible and administered through the CarmenCanvas course website.

**Pace of Activities:** The course is divided into weekly modules. Each weekly module contains the topics associated with the two class meetings for that week. The weekly modules and class meeting topics are specified in the Course Schedule below and the CarmenCanvas course website. Students must complete readings and other course materials assigned for a class meeting prior to the meeting time.





**Credit Hours and Work Expectations:** This is a 3 credit-hour course. For each credit hour, there should be about an hour of in class meeting time and 2 hours out of class work. For a three-credit class, you can expect an average of 6 hours of work outside of class completing readings, assignments and preparing for exams. This totals 9 hours per week for an average grade of C.

**Statistics Review:** This class assumes familiarity with basic statistics. Key relevant statistical concepts will be reviewed during week two.



## Grading and Evaluation

### How Your Grade is Calculated

Assignment Category	Points	Weight	Assignment Type	
Homework assignments (best 6 of 7)	150 (25/each)	25%		Independent work
Midterm Exam 1	100	25%		Independent work
Midterm Exam 2	100	25%		Independent work
Research paper	100	25%		Collaboration optional
<b>Total</b>	<b>450</b>	<b>100%</b>		

### Descriptions of Major Course Assignments

#### Attendance

**Description:** Students are expected to attend each class. While you do not receive an explicit grade for class participation, in my past courses, I have found there to be a strong correlation between class participation and grades in the other course components. Further, if attendance becomes a problem (i.e. you begin chronically missing class), I reserve the right to deduct up to 25 points off your final grade.

#### Independent work

#### Homework

**Description:** The homework grade will be based upon the six highest homework grade scores. While students may collaborate on homework assignments, **each student must turn in a separate assignment with his or her own answers**. Assignments are due at the beginning of class, and late assignments will not be accepted.

For your homework assignments,

- Assignments will be posted and turned in on CarmenCanvas
- To receive full credit, show all work
- Feel free to use Stata as much as you can/want to
- When you use Stata to answer a problem
  - Provide the Stata commands and output as part of what you turn in (screen shots work best)
    - This is “showing your work” for Stata problems
    - Minimize the amount of output (and number of pages) if at all possible
  - Make sure that you also directly answer the question



- For example, it is not enough to provide the Stata output that shows that a mean is 1234. You should also tell me that the mean is 1234, as is indicated in the Stata output.

### Independent work

## Exams

**Description:** The two mid-term exams will be in-class. Students are allowed to use one sheet of notes (more direction will be given in class). Collaboration on the exam is strictly forbidden (and unnecessary given the open notes policy). Make up exams will be given only if arrangements are made in advance.

### Independent work

## Research paper

**Description:** The paper is intended to help integrate the course material and provide students an opportunity to demonstrate that they can set up a testable research hypothesis, test the hypothesis, and correctly interpret the results. Students should also demonstrate an awareness of the limitations of their analysis. Detailed instructions for the research paper will be distributed separately and posted to CarmenCanvas. An intermediate deliverable for the paper will be integrated into one of the weekly homework assignments.

### Collaboration optional

## Labs

**Description:** The hands-on labs are designed to help you practice using the concepts from each class. They are also useful for completing assignments and for preparing for exams. They are ungraded, but I reserve the right to start grading them *without prior notice* if I find students are not participating.

### Collaboration optional

## Grading Scale

93–100: A	80–82.9: B-	67–69.9: D+
90–92.9: A-	77–79.9: C+	60–66.9: D
87–89.9: B+	73–76.9: C	Below 60: E
83–86.9: B	70–72.9: C-	

## Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates.

Week		Date	Topics	Readings		Deliverables
				<i>Gujarati</i>	<i>Allison</i>	
1	W	21-Aug	A. Course introduction and Linear Regression Overview	G 1	A1-2,4-5	
2	M	26-Aug	A.Lab 1			



	W	28-Aug	B. Statistics Review	G Appendix 2	
3	M	2-Sep	No Class -- Labor Day		
	W	4-Sep	B. Lab 2		
4	M	9-Sep	C. Hypothesis Testing and Multiple Regression	G 1	A1-2,4-5
	W	11-Sep	C. Lab 3		HW1
5	M	16-Sep	D. Regression Functional Forms	G 2	A 8
	W	18-Sep	D. Lab 4		HW2
6	M	23-Sep	E. Dummy Variables	G 3	
	W	25-Sep	E. Lab 5		HW3
7	M	30-Sep	F. Multicollinearity	G 4	A 7
			G. Heteroscedasticity	G 5	A 6
	W	2-Oct	F&G. Lab 6		HW4
8	M	7-Oct	Exam Review		
	W	9-Oct	<b>Midterm 1</b>		
9	M	14-Oct	H. Autocorrelation	G 6	
	W	16-Oct	H. Lab 7		
10	M	21-Oct	I. Model Specification	G 7	A 3, 9.6
	W	23-Oct	I. Lab 8		HW5
11	M	28-Oct	J. Logit (and Probit)	G 8	A 9.11
	W	30-Oct	J. Lab 9		
12	M	4-Nov	K. Multinomial and Ordinal Regression	G 9-10	
	W	6-Nov	K. Lab 10		HW6
13	M	11-Nov	L. Limited dependent variables and count data	G 11-12	
			M. Forecasting	G 16	
	W	13-Nov	L&M. Lab 11		
14	M	18-Nov	O. Panel data models	G 17	



			P. Survival analysis	G 18	
	W	20-Nov	O&P. Lab 12		HW 7
15	M	25-Nov	N. Fun with Stata and Data		
	W	27-Nov	No Class -- Thanksgiving Break		
16	M	2-Dec	Lab to work on papers		
	W	4-Dec	Exam Review or Exam (Class Vote)		Term Paper

**Final Exam: Wednesday Dec 11, 6:00pm-7:45pm**

## Course Policies

### Instructor Feedback and Response Time

I will attempt to reply to emails within 48 hours on days when class is in session.  
For weekly homework assignments, I will try to provide feedback and grades within one week.  
Assignment answer keys will be posted shortly after all assignments have been handed in.

### Academic Misconduct

*The Committee on Academic Misconduct (COAM) recommends that every faculty member, instructor, and graduate teaching associate who is teaching a course prepare and distribute (or make available) to all students a course syllabus that contains a statement concerning "academic misconduct" or "academic integrity". The Ohio State University does not have a standardized statement on academic misconduct that instructors can use in their syllabi. Thus, COAM has prepared the following statement, which course instructors are free to use (with or without modification) for their syllabi:*

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that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

## Artificial Intelligence and Academic Integrity

Course specific: You may not use traditional artificial intelligence tools embedding in other tools (such as Grammarly) or generative artificial intelligence (AI) tools (such as Copilot or ChatGPT) to assist or produce work for this class EXCEPT on assignments specified in class. I will provide more information as appropriate. You may not, however, construe this limited use as permission to use these technologies in any other facet of this course. Submission of AI-generated content as your own work is considered a violation of Ohio State's [Academic Integrity](#) policy and [Code of Student Conduct](#) because the work is not your own. The use of unauthorized AI tools will result in referral to the [Committee on Academic Misconduct](#). Please contact me if you have questions regarding this course policy.

General statement: There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite and others. These tools will help shape the future of work, research and technology but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the [Code of Student Conduct](#) to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use unauthorized assistance in the laboratory, on field work, in scholarship or on a course assignment unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing of writing, ideas or other work that is not your own. These requirements apply to all students undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

[RESOURCES FROM THE DRAKE INSTITUTE FOR TEACHING AND LEARNING](#)  
[RESOURCES FROM THE TEACHING AND LEARNING RESOURCE CENTER](#)  
[COMMITTEE ON ACADEMIC MISCONDUCT \(COAM\)](#)



## Religious accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Office of Institutional Equity](#).

Policy: [Religious Holidays, Holy Days and Observances](#)

## Copyright

The materials used in connection with this course, including those created by the instructor or classmates, may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

## University Academic Policies

Refer to <https://oaa.osu.edu/academic-policies> for academic policies, including student rights and responsibilities related to the following

- **Accessibility:** Arrange for accommodations if you anticipate barriers to your learning based on a disability
- **Academic integrity:** Understand your rights and responsibilities related to academic integrity and review the university's processes for addressing claims of academic misconduct
- **Safe learning environment:** Know the university's commitments to an environment free from discrimination or

harassment and find resources for reporting or finding support.

## Mental Health and Well-Being

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing.

If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting [ccs.osu.edu](https://ccs.osu.edu) or calling 614-292-5766. CCS is located on the 4th floor of the Younkin Success Center and 10th floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24-hour emergency help is also available through the 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

## Diversity

The Ohio State University affirms the importance and value of diversity of people and ideas. We believe in creating equitable research opportunities for all students and to providing programs and curricula that allow our students to understand critical societal challenges from diverse perspectives and aspire to use research to promote sustainable solutions for all. We are committed to maintaining an inclusive community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among all members; and encourages each individual to strive to reach their own potential. The Ohio State University does not discriminate on the basis of age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment.

To learn more about diversity, equity, and inclusion and for opportunities to get involved, please visit:

<https://odi.osu.edu/>  
<https://odi.osu.edu/racial-justice-resources>  
<https://odi.osu.edu/focus-on-racial-justice>  
<https://cbssc.osu.edu>

## Glenn College Diversity Values

The Glenn College is committed to nurturing a diverse and inclusive environment for our students, faculty, staff, and guests that celebrates the fundamental value and dignity of everyone by recognizing differences and supporting individuality. We are dedicated to creating a safe space and promoting civil discourse that acknowledges and embraces diverse perspectives on issues and challenges that affect our community.



## Lyft Ride Smart (Previously Safe Ride Program)

Lyft Ride at Ohio State offers eligible students discounted rides, inside the university-designated service area (opens in new window) and has expanded service to the Short North area along High Street. Service runs from 7 p.m. to 7 a.m. Prices may be impacted by distance, traffic, time of day, special events and prime time surcharges. More information about the service and the Lyft App, and a link to get started using the Lyft Ride Smart services can be found at:

<https://ttm.osu.edu/ride-smart>.

## Accessibility Accommodations for Students with Disabilities

### Requesting Accommodations

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the [Safe and Healthy Buckeyes site](#) for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations.

### Disability Services Contact Information

- Phone: [614-292-3307](tel:614-292-3307)
- Website: [slds.osu.edu](http://slds.osu.edu)
- Email: [slds@osu.edu](mailto:slds@osu.edu)



- In person: [Baker Hall 098, 113 W. 12th Avenue](#)

## Accessibility of Course Technology

This course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- [CarmenCanvas accessibility](https://go.osu.edu/canvas-accessibility) ([go.osu.edu/canvas-accessibility](https://go.osu.edu/canvas-accessibility))
- Streaming audio and video
- [CarmenZoom accessibility](https://go.osu.edu/zoom-accessibility) ([go.osu.edu/zoom-accessibility](https://go.osu.edu/zoom-accessibility))

## Land Acknowledgement

We would like to acknowledge the land that The Ohio State University occupies is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and Cherokee peoples. Specifically, the university resides on land ceded in the 1795 Treaty of Greeneville and the forced removal of tribes through the Indian Removal Act of 1830. As a land grant institution, we want to honor the resiliency of these tribal nations and recognize the historical contexts that has and continues to affect the Indigenous peoples of this land.

## Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

Online reporting form at [equity.osu.edu](https://equity.osu.edu),  
Call 614-247-5838 or TTY 614-688-8605,  
Or email [equity@osu.edu](mailto:equity@osu.edu)



The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

## Weather or other short-term closing

Should in-person classes be canceled, I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via CarmenCanvas.

