

SYLLABUS: GRADTDA 5626 SEMINAR IN RESEARCH METHODS SPRING 2024

Updated 1/9/24 to correct a typo. Change noted in green.

Course overview

Instructor

Instructor: Dr. Elly Kaizar

Email address: kaizar.1@osu.edu

Phone number: (614) 247-2585

Office hours: Virtual Hours via Carmen Zoom: Tuesdays 5-6pm and by appointment.

Prerequisites

Prerequisites: GRADTDA 5401 and 5625

Corequisite: GRADTDA 5402

Course description

This course will provide a high-level overview of general research methods that are common across many disciplines. Topics covered will range from formulating a research question to conducting specific analytical methodologies to writing/presenting results. Course enrollment restricted to graduate students enrolled in the MTDA program.

Course expected learning outcomes

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

- Be aware of ethical challenges that may arise during the research process and understand how to resolve such challenges.
- Formulate a research question and conduct a literature review to understand the current knowledge base.
- Understand quantitative approaches to research, including design, sampling, data collection, and analysis.
- Be able to summarize research results in writing and via visualizations, and then present results to an informed audience.
- Understand how to protect intellectual property.

How this online course works

Mode of delivery: This course is 100% online. There is a required synchronous (real-time) session in CarmenZoom approximately once per month on Wednesdays from 7:15-8:10pm. The rest of your work is found in Carmen and can be completed around your own schedule during the week.

Pace of delivery: The course will use a mix of **synchronous** and **asynchronous** activities, organized into two-week modules.

Required **synchronous** activities will take place live over CarmenZoom during a subset of scheduled meeting times, as noted in the tentative schedule below. Students are expected to attend and participate in these live, online class meetings.

Required **asynchronous** activities will typically be posted to the course Carmen site each Monday (reading assignments) and Wednesday (video recordings). Deadlines will be explicitly noted on the Carmen website. Module activities may include:

- Reading assignments
- Videos and similar short activities
- Quizzes that must be completed on Carmen and assess comprehension of reading and asynchronous video content
- Homework assignments

Students are encouraged to attend the instructor's weekly office hours via CarmenZoom as listed on the course Carmen site. These office hours will be conducted in a community format, where many students may join the videoconference at the same time. Students wishing to discuss a private matter should contact me to schedule a separate time to meet.

Credit hours and work expectations: This is a 1 credit-hour course. According to Ohio State policy (go.osu.edu/credithours), students should expect to spend around 3 hours per week total on work related to this course to receive a C grade.

Attendance and participation: Because this is a distance-education course, your attendance is based on your online activity and participation. The following is a summary of everyone's expected participation:

- **Attending online, synchronous class meetings: USUALLY ONCE PER MONTH**
Students are expected to attend and participate in the online, synchronous **Wednesday** class meetings.
- **Logging in: AT LEAST ONCE PER WEEK**
Be sure you are logging in to the course in Carmen each week, including weeks with holidays. You will need to log in to Carmen to complete quizzes, view video content and

upload homework assignments. (During most weeks you will probably log in many times.) If you have a situation that might cause you to miss an entire week of class, discuss it with me *as soon as possible*.

- **Office hours and discussion forums: OPTIONAL OR FLEXIBLE**
Attending office hours and participating in discussion forums are encouraged, but optional. Individual office hour appointments outside of regularly scheduled times should be made at least 24 hours in advance whenever possible.

Course materials and technology

Required materials

Selected readings posted to the course website or available for free download via the University Libraries.

Optional textbook

Introduction to Research Methods: A Hands-On Approach by Bora Pajo. SAGE Publications, Inc. 2018. ISBN: 9781483386959

Course technology

Technology support

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours>, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** <https://it.osu.edu/help>
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

Baseline technical skills necessary for online courses

- Basic computer and web-browsing skills
- Navigating Carmen

Technology skills necessary for this specific course

- CarmenZoom
- Recording a slide presentation with audio narration
- Recording, editing, and uploading video

Necessary equipment

- Computer: current Mac (OS X) or PC (Windows 10+) with high-speed internet connection

- Webcam: built-in or external webcam, fully installed
- Microphone: built-in laptop or tablet mic or external microphone

Necessary software

- This class requires you to use the statistical software package called R (The R Project for Statistical Computing; <http://www.r-project.org/>). This software package is available as Free Software.
 - You can download R for Windows, Mac, and Linux, from the CRAN archive at <https://cran.r-project.org>.
 - An in-depth introduction to R is available at <http://cran.r-project.org/doc/manuals/R-intro.pdf>
 - Hands-on tutorials are available in the Swirl system, which you can learn about at <http://swirlstats.com/>. In particular, “R Programming: The basics of programming in R” is an appropriate first tutorial for students who have never used R.
- An easier to use interface to R is available in the software package RStudio. This package is available for Windows, Mac, and Linux and can be downloaded for free from <https://posit.co/downloads/>. **Note that RStudio requires R to be installed.**
- [Microsoft Office 365 ProPlus](#) All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft’s Student Advantage program. Each student can install Office on five PCs or Macs, five tablets (Windows, iPad® and Android™) and five phones.
 - Students are able to access Word, Excel, PowerPoint, Outlook and other programs, depending on platform. Users will also receive 1 TB of OneDrive for Business storage.
 - Office 365 is installed within your BuckeyeMail account. Full instructions for downloading and installation can be found <https://ocio.osu.edu/kb04733>.

Carmen access

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions (go.osu.edu/add-device).
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.

- Download the Duo Mobile application (go.osu.edu/install-duo) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

Grading and instructor response

How your grade is calculated

Assignment or category	Percentage
Homework	80%
Quizzes	20%
Total	100%

See course schedule, below, for due dates

Assignment information

Quizzes will be administered weekly online, through Carmen. These short quizzes are meant to motivate you to complete the assigned activities and keep up with the asynchronous content. The quizzes are open book / open notes but should be completed without any external help or communication. Quizzes may be attempted twice, where the highest score is recorded.

Homework will be assigned for each module. Students should follow specific homework instructions, and upload work to the course Carmen site. You are encouraged to work together on understanding homework; however, each student must produce their own assignment to be handed in. Do not copy any part of another student's homework.

Late assignments

Assignments are provided in advance of the due date. Students should plan ahead, pay attention to planned outages, prepare for internet slowness, and be sure to leave extra time to upload files. Grades for assignments submitted late will be automatically deducted 5% per hour they are late, with a minimum grade of 0%. If you experience an emergency or other unplanned circumstance that prevents your submitting an assignment on time, please contact the instructor as soon as possible.

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

Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

Grading and feedback

For large weekly assignments, you can generally expect feedback within **7 days**.

E-mail

I will reply to e-mails within **48 hours on school days**. Specific questions about the course material that require significant back-and-forth communication are not well suited for e-mail; while I will do my best to answer such questions, I may ask that you attend virtual office hours (either scheduled or by appointment) if your question isn't easily answerable over email.

Discussion board

I will check and reply to messages in the discussion boards every **48 hours on school days**.

Attendance, participation, and discussions

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style:** While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling,

and punctuation. Informality (including an occasional emoticon) is fine for non-academic topics.

- **Tone and civility:** Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.
- **Citing your sources:** When we have academic discussions, please cite your sources to back up what you say. (For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.)
- **Backing up your work:** Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

Other course policies

Health and safety

Students are expected to maintain familiarity with and follow all current University guidelines and policies regarding health and safety, including COVID-19 related guidance posted on the Safe and Healthy Buckeyes website (<https://safeandhealthy.osu.edu/>). Please contact me *as soon as possible* if health and safety concerns may impact your course participation.

Student academic services

Student academic services offered on the OSU main campus
<http://advising.osu.edu/welcome.shtml>.

Student support services

Student support services offered on the OSU main campus <http://ssc.osu.edu>.

Academic integrity policy

Policies for this online course

- **Quizzes:** Quizzes are open book / open notes. However, you must complete the quizzes yourself, without any external help or communication.
- **Written assignments:** Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should follow a standard research style to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.

- **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with me.
- **Falsifying research or results:** All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- **Collaboration and informal peer-review:** The course includes many opportunities for collaboration with your classmates. While study groups and peer-review of homework and project assignments is encouraged, remember that comparing answers on a quiz is not permitted. If you're unsure about a particular situation, please feel free just to ask ahead of time.

Ohio State's academic integrity policy

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

Copyright disclaimer

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.

Statement on title IX (Recommended)

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu> or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at titleix@osu.edu

Accessibility accommodations for students with disabilities

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; 614-292-3307; <http://slds.osu.edu>; 098 Baker Hall, 113 W. 12th Avenue.

Accessibility of course technology

This online course requires use of Carmen (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 with your instructor.

- [Carmen \(Canvas\) accessibility](#)
- Streaming audio and video
- Synchronous course tools

Your mental health

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 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 National Suicide Prevention Hotline at 1-800-273- TALK or at [suicidepreventionlifeline.org](https://www.suicidepreventionlifeline.org)

Disclaimer

This syllabus should be taken as a fairly reliable guide for the course content. However, you cannot claim any rights from it and in particular we reserve the right to change due dates or the methods of grading and/or assessment if necessary. Any changes will be communicated to you through official course announcements.

Course schedule (tentative)

The following tentative course schedule is subject to change.

Module	Week	Dates	Topics	Synch. Meetings
1	1	1/8-1/14	Research Process	1/17
	2	1/15-1/21	Research purpose, ethics and integrity	
2	3	1/22-1/28	Research Context	none
	4	1/29-2/4	Forming research questions, conducting a literature review	
3	5	2/5-2/11	Quantitative Methods	2/14
	6	2/12-2/18	Quantitative designs, measurement error, reliability, validity	
4	7	2/19-2/25	Quantitative Data Collection and Analysis	none
	8	2/26-3/3	Sampling and data collection, quantitative data analysis	
5	9	3/4-3/10	Data Interpretation	3/20
		3/11-3/17 (break)	Interpreting results, visual representations of results	
	10	3/18-3/24		
6	11	3/25-3/31	Writing a Research Report	none
	12	4/1-4/7		
7	13	4/8-4/14	Presenting Research	4/17
	14	4/15-4/22	Protecting intellectual property, presenting your findings (telling your research story), publishing process	