THE OHIO STATE UNIVERSITY

# SYLLABUS
# GEOG5212
## GEOSPATIAL DATABASES FOR GIS
## SPRING 2022 – HYBRID

# Course overview

## Instructor and Teaching Assistant (TA)

**Instructor:** Dr. Emily S. Castellucci
**Email**: castellucci.5@osu.edu (Please do not email me @buckeyemail.osu.edu.)
**Office Hours (virtual)**: By appointment via Zoom. Please sign up here:
https://bit.ly/DrEmilyCastellucci (Google Sheet). My Zoom link is
https://osu.zoom.us/j/5747586898?pwd=ZGZ0c2lvMHdUYkZPdlJMdWRqMHRpZz09.
**Office Hours (in-person)**: By appointment in Derby Hall 1168.

**Teaching Assistant (TA):** Rebecca Chapman
**Email**: chapman.751@osu.edu
**Office Hours (virtual)**: Tuesdays, 2:30-4:30pm via Zoom. My Zoom link is
https://osu.zoom.us/j/92471460945?pwd=dE5XaFNxelFLR2NVOGNkM2VhSWN5QT09 with
password "GIS" (no quotes).
**Office Hours (in-person)**: By appointment in Derby Hall.

## Course prerequisites

GEOG 5210 and CSE 1114, or consent of instructor.

## Course description

This course focuses on designing, implementing, querying, and managing geospatial
databases or persistent data stores where most entities have footprints in geographic space
and time.  This is critical for designing and implementing GIS for projects and
organizations.  It is also crucial for moving beyond GIS to the bigger world of geographic
information services.

In designing any GIS project, a fundamental decision is how to represent the world of
interest in the computer.  This is critical since no GIS or spatial analysis tools – no matter

how powerful – can extract more information than is designed in the database representation. The growing size of geospatial databases requires these databases to support efficient querying and searching. A well-designed spatial database can also evolve as the questions in the project or organization change over time. A poorly designed spatial database is difficult to rewind and fix.

Understanding spatial database design and management is not only essential for designing and implementing GIS, but also to support a much wider range of geographic information services such as Google Maps and location-based services such as the location apps on your smartphone. This is a much bigger market than the market for professional GIS service.

*Database technologies.* The most common spatial database management system (SDBMS) technology is a specialized object-relational database management system (ORDBMS). An ORDBMS supports objects within a relational (table-based) database and its associated query language, Structured Query Language (SQL). An ORDBMS is a SDBMS if it also supports spatial objects through spatial indexing and spatial (geometric) operations.

ORDBMS with spatial objects is the approach used by ESRI's Geodatabase as well as open-source software such as PostGreSQL/PostGIS. It is also supported by other major vendors such as IBM.

In this course, we will be working with ESRI's ArcGIS Geodatabase and PostGreSQL/PostGIS. There will be a series of assignments using these technologies. These will be provided via the course website and discussed in class.

## Course learning outcomes

By the end of this course, students should successfully be able to:
- Understand database design with spatial objects.
- Write spatial queries.
- Understand physical data storage and performance tuning.
- Understand spatio-temporal and moving objects data.
- Have practical GIS data skills.

## How This Course Works

### Mode of delivery

Your lectures will be online and your labs (recitations) will be in Derby Hall 0135.
- Please note that lectures in this course are *asynchronous*, meaning that *there are no required sessions when you must be logged in to Carmen at a scheduled time.* Lectures are pre-recorded, and you will be provided with a link to each lecture's YouTube playlist, which you can view anytime during the week that the lecture is assigned.

- Please note that *in-person attendance at labs is expected and strongly recommended*. However, due to the ongoing pandemic, lab attendance will not be explicitly required for grading purposes. In other words, absence from any lab meeting will not result in a grade penalty, e.g. loss of points toward an assignment.

## Pace of online activities

This course is divided into **weekly modules** that are released at least one week ahead of time. Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within that time frame.

*You should complete all items in the module in the order in which they are listed.* For example, if a lecture is listed above a lab, you should finish engaging with the lecture before you begin the lab. If you choose to begin the lab before engaging with the lecture, the system will allow you to do so, but you risk missing important information in the lecture that will affect your performance on the lab. This risk applies to all assignments: lectures, labs, exams, etc., so be sure to complete all items within each module in the order in which they are listed.

To access each subsequent module, you must complete all items in the previous module. Each item is marked with "view" or "submit" to indicate what you need to do to complete it, and once you have completed the task, a green checkmark will appear next to the item.

Q: I am having trouble making the green checkmarks appear. What can I do?
A: There are several things that you can try:

- Try using a web browser to access module items, instead of the Canvas Student app.

- Try clicking on the item link directly, rather than opening in a new tab or new window.

- Try downloading the content (e.g. lab instructions, lab data, etc.).

- Try navigating through the module using the "Next" buttons as demonstrated in this YouTube video: https://youtu.be/zeqduf_XdSs.

Please note that the instructor/TA is unable to make these green checkmarks appear for you and is unable to unlock the next module for you. (The Carmen Canvas system only allows the instructor/TA to make changes the affect the entire class; the system does not allow us to unlock modules for individual students.)

## Credit hours and work expectations

This is a **3-credit-hour course**. According to Ohio State policy, students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average.

Important: Do not expect to complete entire lab assignments during the scheduled lab time. Lab sessions are 80 minutes, and it takes longer than 80 minutes to complete a lab. Therefore, you will need to either 1) finish the lab using software installed on your own computer or 2) return to the computer lab when it is not being used for other classes. To find the room schedule, you can

access the Room Matrix at https://delegated.osu.edu/psp/csosuda_1/EMPLOYEE/CAMP/c/ OSR_CUSTOM_MENU.OSR_ROOM_MATRIX.GBL.  Here is how you use it:

- Enter DB0135 for Derby 135.
- Select the date under "Show Week of".
- Click "Refresh Calendar".

# Course materials

Excerpts from the following texts are provided in digital (PDF) format:
- **B**: Bolstad, P. (2019). *GIS Fundamentals*, 6th edition.
- **CM**: Coronel, C. & Morris, S. (2016). *Database Systems: Design, Implementation, and Management*, 12th edition.
- **EN**: Elmasri, R. & Navathe, S. (2016). *Fundamentals of Database Systems*, 7th edition.
- **N**: Nasser, H. (2014). *Learning ArcGIS Geodatabases*.
- **OH**: Obe, R. & Hsu, L. (2015). *PostGIS in Action,* 2nd edition.
- **R+**: Rigaux, P., Scholl, M., & Voisard, A. (2002). *Spatial Databases with Application to GIS*.
- **RG**: Ramakrishnan, R. & Gehrke, J. (1999) *Database Management Systems*, 2nd edition.
- **SC**: Shekhar, S. & Chawla, S. (2003) *Spatial Databases: A Tour*.
- **WD**: Worboys, M. & Duckham, M. (2004) *GIS: A Computing Perspective*, 2nd edition.
- **Z**: Zeiler, M. (2010) *Modeling Our World: The ESRI Guide to Geodatabase Concepts*, 2nd edition.

# Course technology

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, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** http://ocio.osu.edu/selfservice
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

**Baseline technical skills**

- Basic computer and web-browsing skills
- Navigating Carmen: for questions about specific functionality, see the Canvas Student Guide.
- CarmenZoom virtual meetings

*IMPORTANT: The next two sections indicate equipment and software that you must be able to access in order to complete lab assignments for this course. You have access to these items in Derby 0135, but it is still STRONGLY RECOMMENDED that you install the software on your own computer, if you have one. This will allow you to finish lab assignments at home, rather than returning to Derby 0135. Also, if you can bring to lab meetings a laptop with the software already installed, you will have a consistent working environment. Finally, please note that you will need both ArcGIS Pro and QGIS (not just one or the other).*

## Hardware

- Computer: current PC (Windows 7+) or Mac (OS X) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed
- Microphone: built-in or external microphone, fully installed

## Software

Please keep in mind that you are NOT required to purchase any software for this class. The following list should help you access the software free-of-cost to you as a student in this class.

- [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 at [https://ocio.osu.edu/kb04733](https://ocio.osu.edu/kb04733).
- ArcGIS Pro
    - ArcGIS Pro is provided free-of-cost to OSU students, staff, and faculty for educational and research purposes under the ESRI Education Site License Program. You may review ESRI's privacy policies at [Esri Privacy](#).
    - Full instructions for downloading and installing can be found at [https://buckeyemailosu.sharepoint.com/:b:/s/OSUESRISupport786/EcsdtTGF-RRIh8A-HEB6u64BAUeuyi_k8I4c0rkWKpcotg?e=Los1EH](#). ***DO NOT attempt to download and install this software using any other method.*** Otherwise, you might end up with the wrong software, the wrong version of the software, or a paywall when you should have free and unlimited access while a student.
    - For information about accessibility, visit [Accessibility in ArcGIS Pro](#).
    - Note for Mac users: ArcGIS Pro requires a Windows operating system. If you can install Windows on your Mac using Parallels, Boot Camp, VMWare Fusion, or a similar program, then you should be to install ArcGIS Pro.
    - **TECHNICAL SUPPORT:**

- For assistance with VPN and Duo authentication (i.e. "Second Password"), email the OSU IT Service Desk at 8help@osu.edu or call (614) 688-8743.
- For ArcGIS Pro technical support, email esri-support@osu.edu.

- QGIS
  - This is the leading open source desktop GIS software that is available free-of-cost. You can download the software from here: https://qgis.org/en/site/forusers/download.html.
  - Q: What version of QGIS should I have?
    A: I recommend the "Long term release repository (most stable)" and "QGIS Standalone Installer". Specifically, I'll be using version 3.16 this semester. Other versions should work just fine, but you may notice differences between the lab instructions and what you see on your screen.
  - **TECHNICAL SUPPORT:** Successful download and installation of QGIS is ultimately the student's responsibility. You may contact your instructor/TA with installation-related questions, but we cannot guarantee that we'll be able to resolve all issues.

- PostgreSQL, PostGIS, and pgAdmin
  - PostgreSQL, also known as Postgres, is a free and open-source relational database management system emphasizing extensibility and SQL compliance. PostGIS is an open source software program that adds support for geographic objects to the PostgreSQL object-relational database. pgAdmin is a management tool for PostgreSQL.
  - You can download the installer for PostgreSQL from this site: https://www.postgresql.org/download.
    - The installation of PostgreSQL includes pgAdmin, and it is during the final step of installing PostgreSQL that you have the option to install additional packages as well. You want to do this, because this is when you'll have the opportunity to select PostGIS, which will then be installed.
    - Additionally, remember to record the passwords that you create during the installation process. You'll need this information.
  - **TECHNICAL SUPPORT:** Successful download and installation of PostgreSQL, PostGIS, and pgAdmin is ultimately the student's responsibility. You may contact your instructor/TA with installation-related questions, but we cannot guarantee that we'll be able to resolve all issues.

*Question regarding software installation?*

**Post your questions in the Software Installation Q&A discussion board BEFORE reaching out to the other technical support resources provided.** There are many installation-related questions that we *are* able to answer because they are common. We may have heard them in past semesters and already know how to respond. However, if we are unable to help, we'll let you know that, and we'll confirm which technical support contact is most appropriate for your

problem.  Be sure to include us on your email communication with technical support so that we can better understand your problem and help others experiencing the same. Thank you!

**Carmen Access**

You will need to use BuckeyePass 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.
- 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 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 faculty response

## Grades

| Assignment or category | Percentage |
|---|---|
| **Labs (12)** | **60** |
| **Exams (6)** | **40** |
| **Total** | **100** |

*See course schedule, on the last page, for due dates.*

## Assignment information

**Exams**

There will be 6 short, noncumulative exams. Each exam will be…

- *Available early.* You may take the exam any day during the week before it is due, or you may take the exam on the day that is it due. If you submit the exam after its due date, the standard late penalty will apply.

- *Timed*. Exams will be 40 minutes. (If you are registered with SLDS for extended time accommodations, please confirm that extended time has been granted before you begin the exam.)
- *Open-note*. This means that you can use the lecture slides, the handouts, your notes, the textbook, etc. This does NOT mean that you do not need to prepare. You will not have time to look up every answer, so you should study as if the exam were closed-note, only referencing course materials when absolutely necessary.
- *Completed independently*. You should complete the exam by yourself. Collaboration with one or more other persons will be considered academic misconduct.
- *Allowed only one attempt*. Be sure that you are ready to complete the exam in one sitting before you begin.
- *Graded immediately*. Your grade should be visible as soon as you click Submit; if it is not, please notify your instructor. However, correct answers will not be available immediately; please check back after a week to review the correct answers.
- *Password protected*. You'll find the password (also known as "access code") in the quiz instructions, so make sure you read the instructions before you click Take the Quiz.

Q: What happens if I lose internet connection while taking the exam?

A: If you lose connection momentarily, you should be able to resume the exam. If you lose connection for longer than the exam is available, the exam will automatically submit with the time is up.

- *Tip 1:* If you have a smartphone with a web browser, you should be able to use your cellular network (even if the WiFi connection is unavailable) to log in to Carmen on your cell phone's web browser and resume the exam, as long as the time isn't up. It's not ideal since you probably won't be able to access any notes efficiently, but at least you can still access the exam and enter answers.
- *Tip 2:* To make your internet connection a little more stable, make sure nothing is streaming like video or online games. If you have roommates that are watching Netflix or gaming, you might want to ask them to take a break while you take your exam so that your WiFi access can be prioritized.

Do your best to ensure that you have a reliable internet connection and a reliable device (desktop, laptop, tablet, or phone) for accessing the exam *before* you get started. If you do completely lose access, cannot resume, and the exam submits before you can reestablish connection and submit answers, be sure to let me know. There may not be much that I can do, in the interest of fairness to all students, but I certainly want to hear about the situation to look into it, etc.

## Labs

There will be 12 labs. You will be provided with data and step-by-step instructions for each lab, but keep in mind that the process of completing any given lab may not go as smoothly as

planned.  Unexpected challenges may arise, so it is best to plan for this. Set a goal to submit each lab in advance of the deadline. That way, if unexpected challenges do arise, you have time to deal with them before the deadline passes.

Labs are submitted in a quiz-like format. You are given all the questions in advance, at the end of the lab instructions. When you are ready to submit your lab, you open the lab assignment, enter your  answers, upload any required files, and click Submit.

Some questions are graded automatically, and some questions require manual grading.

- For automatically graded questions, you'll be able to see the correct answers a week after the due date for that lab. (Note: Sometimes Carmen Canvas formatting makes it look like fill-in-the-blank responses have been incorrectly graded. For concerns about fill-in-the-blank questions, please wait until after correct answers are released to contact me with your concerns. Continue to contact me immediately with all other concerns.)
- For manually graded questions, our goal is to return feedback and grades in a week, but that timeline is influenced by a variety of factors, so your patience is appreciated.  Once grades are published, if you did not receive full credit, you should review the feedback so that you know how to improve. If you have any trouble finding the feedback, please let us know.

## Late assignments

- Assignments are accepted late until the last day of the next module. (The only exception is Week 15; assignments in Week 15 are not accepted late.)  The late penalty is 5% (of the total possible score) per day. The late penalty will not reduce grades to below 70% (of the total possible score).  Late penalties are managed by the course website and automatically applied.
- Extensions are NOT typically granted due to getting "stuck," encountering unexpected errors, software crashes, lost work, or other issues related to these. This is because these are realistic issues that you are likely to encounter when performing GIS work outside of this class, and you need to learn how to manage these issues. However, do keep in touch with your instructor/TA when issues arise so that we can provide support.

## Grading scale

92.5–100: A
89.5–92.49: A-
86.5–89.49: B+
82.5–86.49: B
79.5–82.49: B-
76.5–79.49: C+
72.5–76.49: C
69.5 –72.49: C-
66.5 –69.49: D+

59.5 –66.49: D
Below 59.5: E

## Instructor feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course.

### Grades and feedback

You can generally expect grades and feedback to be returned within **7-14 days** once the assignment's deadline has passed, depending on the complexity of the assignment.

### E-mail and discussion boards

You can generally expect a reply to urgent e-mails and discussion board posts within **24 hours on school days** and to non-urgent emails and discussion board posts within **7 days**. Email and discussion board activity usually occurs during normal work hours (8am-5pm), and although you might receive replies to emails and discussion board posts outside of those hours, please do not expect this. The determination of urgency is ultimately at the discretion of the instructor/TA, but you are encouraged to identify urgent issues as urgent so that we can make every effort to prioritize them.

### What should I call my instructor?

Use the proper title when addressing your instructors/TAs. Recommended resource: [What should I call my professor?](#) For example: Because Emily S. Castellucci has a Ph.D., it's always Dr. Castellucci, *never* Ms., Mrs., or Miss.

# Participation, discussions, and notifications

## Student participation requirements

The following is a summary of everyone's expected participation:

- **In-person attendance at lab meetings**: FLEXIBLE
  *In-person attendance at labs is expected and strongly recommended*.  However, due to the ongoing pandemic, lab attendance will not be explicitly required for grading purposes. In other words, absence from any lab meeting will not result in a grade penalty, e.g. loss of points toward an assignment.

- **Participating in discussion forums:** FLEXIBLE

  For every lecture, there is a discussion board (e.g. Lecture 1 Q&A), and for every lab, there is a discussion board (e.g. Lab 1 Q&A).  ***If you have questions about lectures or labs, you are required to post your questions in the appropriate discussion boards, rather than contacting your instructor/TA privately.***  If you attempt to contact your

instructor/TA privately with your question, you will be directed to post your question in the discussion board before it is answered.

***The only exceptions to this policy are questions that may indicate answers to graded assignments and questions in reference to your own grades. The former is an academic integrity concern, and the latter is a privacy concern.***

Using the discussion boards for Q&A is how your instructor/TA can answer questions most efficiently, and the discussion board becomes an excellent archive for making edits to course content in future semesters. Thank you for participating in the Q&A discussion boards!

- **Logging in**: **AT LEAST ONCE PER WEEK**
  Be sure you are logging in to the course in Carmen each week, including weeks with holidays or weeks with minimal online course activity. (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: OPTIONAL**
  Instructor office hours and TA office hours are optional.

# 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. (Note: Excessive grammar, spelling, or punctuation errors in discussions or any other assignment submissions may be penalized at the discretion of the instructor/TA.)  A more conversational tone 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.

# Managing notifications

You can tailor your notifications by going to Account > Notifications.  You can choose Email and/or Push notifications, and for Email notifications, you can choose the frequency (i.e. immediately, daily, or weekly). You can choose what types of activity that you want to follow.

If you are not receiving notifications of discussion board activity, you may need to subscribe to the discussion board itself. Open the discussion board and click Subscribe (near top right). Alternatively, make a reply, and you will be automatically subscribed. If you no longer want to receive discussion board notifications, you can unsubscribe.

If you want email notifications but you're not getting any at all, regardless of activating email notifications, then you may need to go Account > Settings and verify your email address.

# Other course policies

## Health and safety requirements

All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (https://safeandhealthy.osu.edu). Non-compliance will be warned first and disciplinary actions will be taken for repeated offenses.

## Academic integrity policy

### Ohio State's academic integrity policy

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.** (Note that "warnings" are not given due to an offense being one's first offense, due to ignorance of what constitutes academic misconduct, or due to any other circumstances.) 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.

Other sources of information on academic misconduct (integrity) to which you can refer include:
- The Committee on Academic Misconduct web pages (COAM Home)
- *Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)*
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

### Academic integrity information specific to this course

Collaboration for the purposes of troubleshooting is highly encouraged in this course, but everyone is expected to complete all assignment tasks themselves and submit their own unique work. With this in mind, here are some examples of acceptable and unacceptable behavior:
- Acceptable:
  - Asking a classmate how to resolve an unexpected error message, how to find a hidden setting in the software, or similar troubleshooting tasks.
  - Participating in a study group studying the course material.
  - Asking a trusted person to proofread (without revising or rewriting) your assignments before you turn them in.
- Unacceptable:
  - Using another student's work (in part or in full) as your own.
  - Sharing files and/or using shared files that contain intermediate or final results.
  - Submitting the same work (even if modified) from a past semester or from another course.
  - Comparing and/or sharing answers before submitting a graded assignment.
  - Forgetting to cite sources, including the course materials, websites visited, etc.

There are many other acceptable/unacceptable actions than those exemplified here, so if you have any questions or concerns about acceptable/unacceptable actions or what constitutes academic misconduct in this course, ask your instructor for clarification/permission.

# 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

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

## Statement on diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

## 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; 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.

- CarmenCanvas accessibility
- CarmenZoom accessibility

# 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.

# Disclaimer

This course syllabus provides a general plan for the course; deviations may be necessary. Such deviations may be made for individuals or for the entire class, as deemed appropriate by the instructor.  Any changes that affect the entire class will be announced by the instructor with as much advance notice as possible.

# Course schedule

You can find the schedule as a Google Doc at this link: Schedule.