



SYLLABUS - GEOG 5210 Fundamentals of GIS

Spring 2023

3 Credit Hours, Hybrid

Lecture – online

Lab Sections: Derby Hall 0135, M or W 4:10 – 5:05 p.m.

Course overview

Instructor and Teaching Assistant (TA)

Primary instructor: Dr. Tammy E. Parece

Email: parece.1@osu.edu

Office: Derby Hall 1168

Open Office hours: Tuesday 1–2 p.m. & Friday 10–11 a.m. or by appointment

Course Communications: please use the email option in Canvas to send questions (be sure you are including the TAs on your emails). You can avoid email by posting questions in the appropriate Q&A in the course site. You can generally expect a reply to e-mails with 48 hours **on school days**.

TAs:

Abdirashid Dahir, dahir.39@buckeyemail.osu.edu

SM Ahsanullah, ahsanullah.1@buckeyemail.osu.edu

See Canvas for their office hours and locations

If you are ill or have symptoms, please do not visit us in our offices, please email us and we can set up a zoom link for your participation during our office hours. To request an appointment outside of the above times, please send both instructor and TA an email with your availability up to a week ahead.

Course description

This course introduces basic principles of geographic and land information systems and their use in spatial analysis and information management.

Course learning outcomes

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

- Communicate the applicability of GIS and spatial analysis in the present day
- Create geospatial data from scratch or from existing geospatial data sources.
- Work with geospatial data, including management and manipulation of spatial data
- Utilize spatial functions and operations in the manipulation of spatial data, as appropriate to various contexts
- Generate sharable outputs resulting from geospatial analyses, including in cartographic form using basic mapping principles.
- Connect class concepts to real world problems, workflows & solutions.

How This Course Works

Mode of delivery

Your lectures are pre-recorded and online.

Your labs (recitations) are in Derby Hall 0135.

- *In-person attendance at labs is expected and strongly recommended*
- *Attendance is taken for at least the first couple of weeks.*

Pace of online activities: This course is divided into weekly modules. 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.*

Credit hours and work expectations: This is a 3-credit-hour course. According to Ohio State policy, an average student 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 55 minutes, and it takes longer than 55 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.

Course materials

- Required Lab Book: Shellito, Bradley A. *Discovering GIS and ArcGIS Pro*, 3rd edition. Macmillan Publishers. You *cannot* use a prior edition.
- Optional Book: *GIS Fundamentals: A First Text on Geographic Information Systems, 6th Edition* by Paul Bolstad (2022). ISBN-13 is 9781593995522.
- Additional required reading materials/videos will be provided within Canvas.

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

Basic technical skills required

- Basic computer and web-browsing skills
- Navigating Carmen: see the [Canvas Student Guide](#).
- [CarmenZoom virtual meetings](#)

IMPORTANT: The next two sections indicate equipment and software that you must be able to access to complete lab assignments for this course. You have access to these items in Derby 0135, but if you install the software on your own computer, you will be able to finish lab assignments at home. You can bring to lab meetings a laptop with the software already installed; this will provide a consistent working environment.

Hardware

- Computer: current PC (Windows 7+). **ArcGIS Pro does not work on Apple operating systems.**
- USB Drive
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in laptop or tablet mic or external microphone
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Software

Please keep in mind that you are NOT required to purchase any software for this class. You will use a word processing program, a spreadsheet program, Adobe reader and GIS.

Carmen Access

You will need to use [BuckeyePass](#) multi-factor authentication to access your courses in Carmen. To ensure that you can 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.

If none of these options 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

Assignment or category	Percentage
Labs - 9	50
Final – 1	20
Weekly Quizzes - 13	20
Introduction - 1	01
E-board Discussions - 12	09
Total	100

Assignment information

Quizzes (20% of total grade)

There will be weekly quizzes. Each quiz will be ...

- *Due on by 9 a.m. on Monday* of the week after the topic is covered in lecture
- Late quizzes are not accepted.
- Timed 20 minutes. (If you are registered with SLDS for extended time accommodations, please confirm that time has been granted before you begin the exam.)
- Open-note. You can use the lecture slides, the handouts, your notes, the textbook, etc. But this does not mean you can get assistance from another student, the instructor, or the TAs.
- Collaboration with one or more other persons is considered academic misconduct.
- 13 quizzes (Weeks 1 – 13), your 2 lowest quiz grades will be dropped.

Final Project (20% of total grade)

You have a final project in lieu of a final exam. No late submissions. Watch due dates – there are 3 for the final project.

If you are an undergraduate student, you have the option of taking a final exam over completing a final project. You must notify Dr. Parece no later than March 26 if you choose this option.

E-Board Discussions (10% of total grade)

You will participate in e-board discussions. Week 1, we start with introductions of ourselves. As part of this requirement, you need to respond to each other's post and have conversations finding something in common or maybe something interesting or intriguing to you about the other person (3 reply posts are required). Introductions are required for all students. **(1% of total grade)**

The rest of the semester, we will have an e-board discussion each week (12 total). In many weeks, I will be posting a question that you will need to research and answer. In some instances, it will be an open forum where you can post questions about the week's topics or interesting

comments, perhaps you have had experience with that topic and would like to share your experience with the rest of the class. Graded Discussions are marked as graded. There will be 12 weeks of discussion opportunities, you must participate in 9. Posts are due no later than Wednesday of the week following the topic. **(9% of total grade)**.

Labs (50% of total grade)

There will be 9 labs, 8 from the Shellito lab book. These Modules are not completed in numerical order, so read the document titled Lab # to understand what you will turn into Canvas. In some instances, you will follow the instructions in Shellito exactly. All answers/documents are submitted in Canvas.

Keep in mind that the process of completing any given lab may not go as smoothly as planned, unexpected challenges will arise. Set a goal to submit each lab in advance of the due date, so if unexpected challenges do arise, you have time to deal with them. Some questions are graded automatically & some require manual grading. There is a question and answer area in Canvas for questions about Lab assignments. Posting comments about the labs in the required e-board discussions will not count towards your discussion grade.

Late Assignments

Late submissions for any assignments are not accepted in this course. In case of personal and family emergencies, please notify us as soon as possible so that we can work out a submission timeline. Such extensions may or may not be granted, it is decided on a case-by-case basis. Extensions are not granted after the fact, e.g., you can't ask for an extension on an assignment that was due two weeks before or wait until the end of the semester to submit assignments you missed.

You do have **1** opportunity to extend your due date **for 1 day** during the semester, applied to any **lab** of your choice. No advanced permission is required. Use this opportunity wisely, you can only do it once.

Grading scale

92.5–100: A	80.0–82.49: B-	66.5 –69.99: D+
90.0–92.49: A-	76.5–79.99: C+	60.0 –66.49: D
86.5–89.99: B+	72.5–76.49: C	Below 59.99: F
82.5–86.49: B	70.0 –72.49: C-	

Note – I do not round up. An 89.99 does not round up to a 90%. If you want an A/A-, then you must achieve 90% or better.

Course Academic Integrity Policy

Turnitin is enabled for all written assignments. Watch your Turnitin score. At 40%, I will give you a zero for the assignment. If your assignment rises to the level of Academic Misconduct, I will report the conduct to the University and you will get a Zero for the entire semester.

Instructor feedback and response time

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.

Discussion boards

You can generally expect a reply to Q&A posts within **48 hours on school days**. Although you might receive replies 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.

Participation, discussions, and notifications

Student participation requirements

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

- In-person attendance at lab meetings: *In-person attendance at labs is expected and strongly recommended.*
- Participating in discussion forums: For every lecture, there is a discussion board (e.g., Week 1 Graded Discussions), 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.* Using the discussion boards for Q&A is how your instructor/TA can answer questions most efficiently. Other students who might have the same questions can see the responses.
- Logging in: 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*.
- Confidential Questions: Don't post questions online that may indicate answers to graded assignments and questions regarding your own grades. The former is an academic integrity concern, and the latter is a privacy concern.

Discussion and communication guidelines

The following are expectations for how we should communicate as a class. 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 will be penalized at the discretion of the instructor/TA.) A more conversational tone is fine for non-academic topics.
- **Tone and civility:** Maintain a supportive learning community where everyone feels safe and 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

How can I manage notifications about course activity?

You can tailor your notifications by going to Account > Notifications. You can choose Email and/or Push notifications. You can choose what types of activity 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 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/University 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.

Absence related to COVID-19

Continuous engagement with this course is essential to learning the material. Students are expected to attend class and engage with assignments and discussion prompts for every scheduled meeting. Students who need to miss class or who are not able to participate due to illness (COVID-19 or other illnesses), exposure to COVID-19, care for family members exposed to COVID-19 or other reasons are expected to contact the instructors as soon as possible to arrange for accommodation. Students in special situations or those requiring specific, long-term or other accommodation should seek support from appropriate university offices including but not limited to [Student Advocacy](#), [Student Life Disability Services](#) and [the Office of Institutional Equity](#).

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>), which includes optional wearing of a face mask in any indoor space and maintaining a safe physical distance at all times. If you make an appointment to meet with me in my office, I do request that you wear a facemask.

Academic integrity policy

See **Descriptions of major course assignments**, above, for my specific guidelines about collaboration and academic integrity in the context of this class. Cheating or plagiarism of any kind is not tolerated.

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/>.

Disability Services

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, please 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.

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) 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.

Sexual Misconduct/Relationship Violence

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 at titleix@osu.edu

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.

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.