

Course Instructor: Jacob Callister, jcallister@lcog.org

COURSE OVERVIEW

The Urban GIS class (PPPM434/534) is designed for students who are newcomers to GIS. Through online activities, tutorial book exercises, and lab assignments this course helps students gain working knowledge of the Geographic Information Systems, and trains them to apply ArcGIS in urban studies and planning analyses. Examples of GIS applications introduced in this class include those in areas of public service provision, environment studies, and transportation planning.

By completing this course, students will:

- Gain a practical understanding of basic cartographic principles and ArcGIS Desktop methods of spatial data visualization and analyses, as well as introductory exposure to ArcGIS Online and ArcGIS Pro.
- Develop spatial and quantitative analysis skills of using ArcGIS to analyze planning-relevant issues, and
- Gain an understanding of the limitation of GIS and its social implications.

REQUIRED TEXTBOOKS AND COURSE MATERIALS

- **[E-GIS]** Campbell, J. and M. Shin. Essentials to Geographic Information System (2011), Saylor Foundation. ISBN: 978-1-4533219-6-6. Available at: <https://open.umn.edu/opentextbooks/textbooks/67>
- **[GTKArcGIS]** Law, M. and A. Collins. 2018 Getting to know ArcGIS for Desktop Environmental Systems Research Institute (ESRI) Press. 5th Edition. (available on Canvas). You can purchase or rent this book at Amazon.com too.
- **ArcGIS Program (recommended versions: 10.5 – 10.7)**
 1. As a UO student, you can use the program via UO's Virtual computer lab. For information about how to access the virtual computer lab, please visit <https://ssil.uoregon.edu/ssil/vm/>. The ArcGIS programs are available in the High-Performance Lab. **This is the recommended venue for this class when you are not in the McKenzie lab.**
 2. You can download the ArcGIS desktop program from UO's software center at: <https://software.uoregon.edu/software-center>. You can install this program on a PC only.
- **Class Data and GIS Resources**
 1. Data for the GTKArcGIS Tutorial Book.
 - a. On a virtual lab computer: C:\EsriPress\GTKArcGIS\GTKArcGIS
 - b. Install the data on your own PC, download from the ESRI website: <https://esripress.esri.com/bookResources/index.cfm?event=catalog.book&id=46>
 2. Data for lab assignments

- a. All lab data is available on SSIL server. Follow the instructions here to connect to SSIL remotely. <https://ssil.uoregon.edu/ssil/ssil-network-drives-and-connecting-remotely/>

COURSE FORMAT

1. Self-Paced Learning – Weekly, asynchronous online
 - Complete weekly readings
 - Complete and submit maps following assigned weekly exercises from the GTKArcGIS tutorial book before due time.
2. Lab Sessions – Fridays, synchronous attendance in-person
 - At the beginning of each week, a lab assignment is given out and its associated supporting materials are made available. These materials include detailed lab instructions, pre-recorded demonstration, and GTKArcGIS tutorial book chapters. Please be aware that each lab assignment has its own due date due to their length and difficulty level. Make sure you complete a lab assignment on time to avoid point deductions.
 - Each lab has a pre-recorded Panopto video. I highly recommend that you complete as much of the lab as possible through the pre-recorded video. The advantage of this can be summarized in two words “pause” and “rewind.” You should start working on a lab assignment as soon as you can so that you are prepared to get the needed help during the Friday’ lab session. I will not be going over the full lab in class but will focus instead on key steps and principles. Lab sessions are your main opportunity to ask and receive questions and get other assistance from me.
 - Please note that a lab quiz will be given out during the lab session in Week 5 and 10, respective. Unlike typical lab assignments, the quizzes will not have instructions and demonstrations. The two lab quizzes are open-book and open-source, meaning students can bring in any materials that they consider helpful to the quiz. These lab quizzes intend to evaluate your proficiency levels in applying the ArcGIS program according to the class’ learning objectives. They entail you making map(s) and answering questions. Students are expected to complete the quiz during the lab session and can take the quiz remote or in person.

GRADING SCHEME

Your grade is determined by the total points you will earn through completing the assignments and participating in class sessions. There will be no weighting or curving involved in how the final grade is computed. Typical point ranges for different letter grades are shown below:

C’s (C-, C, C+) (<80 points); B’s (B-, B, B+) (80-90 points); A’s (A-, A) (>90 points)

Points Distribution

1. Weekly GTK Tutorial Exercises = (Total 10 Points)

- a. Weekly map submission from completing assigned tutorial book exercises (10 points) - Each week students are expected to finish several chapters from the Getting to Know ArcGIS book (GTKArcGIS). To gain the points for tutorial book exercises, all required maps must be submitted in a pdf format. **Maps submitted as a .mxd file will not be counted and thus no points will be given.**

Note: there are different deadlines for these weekly activities. Any submissions made after that time will be considered late and receive penalties.

2. Lab Assignments (Total 70 points)

- Lab 1 – 15 points
- Lab 2 – 10 points
- Lab 3 – 15 points
- Lab 4 – 15 points
- Lab 5 – 15 points

*Note: Each lab assignment includes a detailed description about the deliverables that include maps, answers to questions, or evidence of work performed for each assignment. Please make sure you read **the deliverable description** carefully.*

Graduate students' lab assignment submission will also include a Memo that describes methods used to produce the maps and discusses how the maps can inform policies.

3. Lab Quizzes (Total 10 points)

- Quiz 1 (week 5) – 10 points
- Quiz 2 (week 10) – 10 points

4. Overall course attendance and participation (10 points)

Note: based on attendance of mandatory synchronous lectures, peer-support, and general performance in the class.

COURSE COMMUNICATIONS

This class will communicate through our Canvas site.

- The class syllabus, announcements, some readings, and other materials will be posted on the Canvas. Please check the course website frequently for updates.
- Announcements and emails are archived there and automatically forwarded to your UO email and can even reach you by text. Check and adjust your settings under Account > Notifications.
- I will host a few remote Zoom check-in sessions every week – with a sign up on Canvas. Your primary opportunity for conference and assistance from me will be the Friday lab session.

Course Policies

Missed Class Policy

You are responsible for all content missed, including any assignments, knowledge or skills covered or assigned in missed class. If you miss any lectures, please consult with classmates for class notes or watch the recordings of synchronous lectures. You are allowed two unexcused absences in this course. For each additional unexcused absence beyond the two, students will lose 0.5 point off their final course grade. However, students have opportunities to make up for the unexcused absences by making contribution to the Class Discussion Board. Please see specific instructions described in the “Class Attendance and Participation” Section.

Late Assignment Policy

Students are expected to behave in a professional manner and to turn in all materials at the designated time. When applicable, assignments turned in late with no documentation will be marked down ten percent for every day (24-hour period) they are late. **Assignments submitted one minute past the deadline will be graded as late.**

Extensions will only be granted in severe hardship (death in immediate family, illness or injury requiring bed confinement) or extenuating circumstances (fire, earthquake, etc.). Competing pressures from other courses, job requirements, or problems with your computer do not qualify as extenuating circumstances. Extensions must be requested before the assignment is due. In all circumstances, students are responsible for providing the instructor with official documentation of explanation prior to accommodation.

As the university community adjusts to teaching and learning remotely in the context of the COVID-19 pandemic, course requirements, deadlines, and grading percentages are subject to change. I will be mindful of the many impacts the unfolding events related to COVID-19 may be having on you. During this unusual time, I encourage you to talk with me about what you are experiencing so we can work together to help you succeed in this course.

Academic Misconduct

The University Student Conduct Code defines academic misconduct, which includes unauthorized help on assignments and examinations and the use of sources without acknowledgment. Academic misconduct is prohibited at UO. I will report misconduct to the Office of Student Conduct and Community Standards—consequences can include failure of this course. I will ask you to certify that your exams/papers are your own work. Exams are administered in Canvas and untimed. I have designed them with the expectation that you will have access to course materials and the Internet when you take them—and that’s just fine. I will be looking to see evidence of critical thinking and your ability to put the concepts we’re working on into action in response to the exam prompts.

Plagiarism

Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas, data, analyses). If there is any reasonable question about whether an act constitutes academic misconduct, it is the student’s obligation to clarify the question with the instructor before committing or attempting to commit the act. Additional

information about a common form of academic misconduct, plagiarism, is available at: <http://library.uoregon.edu/guides/plagiarism/students/index.html>

Accessible Education Center: Documented Disability

The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. If you have a documented disability and anticipate needing accommodations in the course, please make the necessary arrangements. Also, please contact the instructor early in the term so that your learning needs are appropriately met.

You are also encouraged to contact the Accessible Education Center in 164 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu

Inclusion Statement

The College of Design is a community that values inclusion. We are committed to equal opportunities for all faculty, staff and students to develop individually, professionally, and academically regardless of ethnicity, heritage, gender, sexual orientation, ability, socio-economic standing, cultural beliefs and traditions. We are dedicated to an environment that is inclusive and fosters awareness, understanding, and respect for diversity. If you feel excluded or threatened, please contact your instructor and/or department head. The University Bias Response Team is also a resource that can assist you. Find more information at their website at <http://bias.uoregon.edu/index.html> or by phoning 541-346-2037.

Discrimination and Sexual Harassment

The UO is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic and dating violence and gender-based stalking. If you (or someone you know) has experienced or experiences gender-based violence (intimate partner violence, attempted or completed sexual assault, harassment, coercion, stalking, etc.), know that you are not alone. UO has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more. Please be aware that all UO employees are required reporters. This means that if you tell me about a situation, I may have to report the information to my supervisor or the Office of Affirmative Action and Equal Opportunity. Although I have to report the situation, you will still have options about how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need. If you wish to speak to someone confidentially, you can call 541-346-SAFE, UO's 24-hour hotline, to be connected to a confidential counselor to discuss your options. You can also visit the SAFE website at safe.uoregon.edu

Your Well-being

Life at college can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, struggle with relationships, or just need help navigating challenges in their life. If you're facing such challenges, you don't need to handle them on your own--there's help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know

the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do—for yourself and those you care about.

University Health Services help students cope with difficult emotions and life stressors. If you need general resources on coping with stress or want to talk with another student who has been in the same place as you, visit the Duck Nest (located in the EMU on the ground floor) and get help from one of the specially trained Peer Wellness Advocates. Find out more at health.uoregon.edu/ducknest.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number).

Basic Needs

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in the course is urged to contact the Dean of Students Office (346-3216, 164 Oregon Hall) for support. This UO webpage includes resources for food, housing, healthcare, childcare, transportation, technology, finances, and legal support: <https://blogs.uoregon.edu/basicneeds/food/>.