ESCI 299

Syllabus: Intro to Web GIS

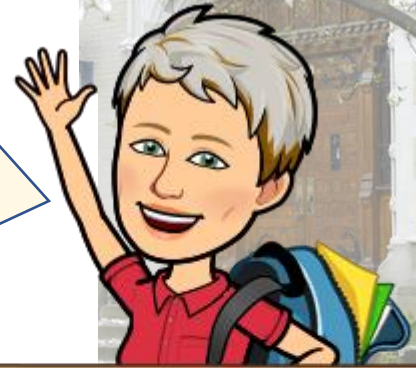Text version of Syllabus on Moodle.

TOGETHER, WE LEARN

I want you to succeed in this course. I will help you do this by creating a learning environment where you feel comfortable – one that is equitable and fair to every student. We all learn differently, because we build knowledge differently. If there are situations that affect your ability to perform, then please let me know as soon as possible. We will talk to successfully develop strategies for completing a great semester together.

My end goal: I want you to learn some awesome GIS skills good for the rest of your life. While doing so in my class, you should know that I care about you as a person.

WELCOME!!

MY CONTACT INFO

Dr. Shelley Judge

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🖥 Office hours this semester will be on Microsoft Teams. Days / times will be announced soon.

GIS is such a cool class to teach because its skills can be used by everyone to tackle local, regional, and global problems.

WHAT IS INTRODUCTION TO GIS?

COURSE DESCRIPTION

ESCI 299 is an activity-intensive introduction to the basic concepts in Web GIS. The course is designed to provide interested students a hands-on approach to spatial design and analysis through platforms that enact cloud-only deployment.

Students will depict and evaluate spatial data, produce cartographic results, solve problems, and communicate results. Students in all majors are welcome, as weekly examples span many disciplines and societal challenges on local, regional, and global scales.

The primary platforms used in the course will be ESRI SaaS (software as a service) tools such as Survey123, ArcGIS Online, and Story Maps, in addition to Microsoft Word and Excel. The techniques learned in this course are applicable to other software packages.

MATERIALS NEEDED

- Weekly readings/videos and GIS exercises are PDFs posted to Moodle.
- Come with energy, enthusiasm, and your brain. Those three things will get you far in GIS.

LEARNING OBJECTIVES

By the conclusion of this course, you will be able to use GIS as a tool to analyze, synthesize, interpret, and communicate data in your respective fields. Students in Web GIS will be able to:

1. demonstrate the GIS techniques needed for professional cartographic map design
2. identify sources of basemaps and data available for GIS importing and use.
3. construct an introductory understanding of spatial analysis in a variety of disciplines.
4. integrate visualization/communication techniques and map reading skills.
5. apply GIS technology to analyze real-world problems in a discipline of the student's interest.
6. evaluate possible GIS careers in their discipline.

WHAT WILL WE BE DOING THIS SEMESTER?

COURSE OUTLINE

A detailed Course Schedule is attached to this Syllabus as a separate document. It outlines each day of class: topics covered, assigned readings, exercises to complete, and assignments due.

Unit 1
- GIS: A Common Language
- Mapping is for Everyone

Unit 2
- Tell your Story, Story Maps
- Great Maps need Great Data

Unit 3
- The Power of Where
- Mapping the 3rd Dimension

Unit 4
- The Power of Apps
- Imagery is Visible Intel

Unit 5
- Mapping the Internet of Things
- GIS is about Community

SOFTWARE PLATFORMS

ESRI's ArcGIS Online is PC- or Mac-compatible. We only need a solid internet browser. All students will have access to Survey123 and Story Maps. Everyone will need an ESRI ArcGIS Online account through the College in order to upload maps.

Office 365

ArcGIS Online esri

Story maps

ESRI

WEEKLY ROUTINE

Tuesdays are GIS lectures on vocabulary and concepts (theory).

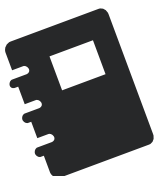This is a GIS problem to challenge your new skills that week.
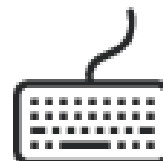
A+

Lecture → **Tutorial** → **Challenge Problem** → **Quiz**

This is the hands-on (lab) part of the class. You will learn new skills weekly.

By the end of the week, you should take the open book quiz on Moodle.

HOW WILL YOU EARN YOUR GRADE IN GIS?

GRADING STANDARDS

I know that you will work hard to earn a good grade in GIS. That's why I will work hard, too, when I make your assignments and then grade them!!

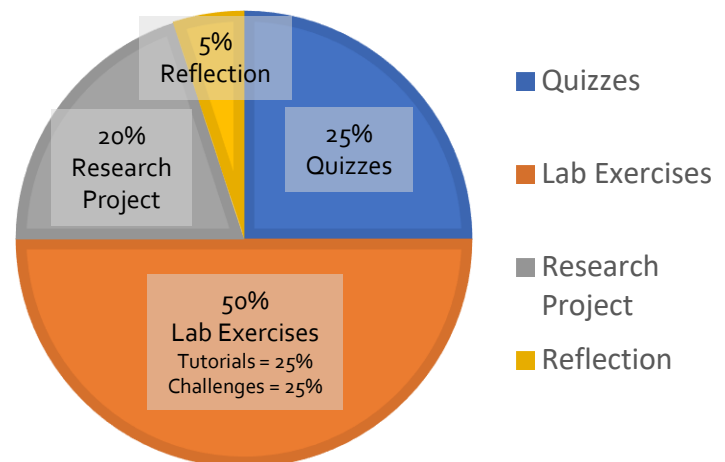Grading is a complex process that I take very seriously and put much thought into each semester.

I put hours into grading student work, always with the goal of "getting it right" – of being fair to each student in the course.

I understand that most people don't like to be critiqued. I get that. But please – never equate your self worth to one grade in a course. You are not your grade (whether it is a great grade or a not-so-great grade). Remember to talk with your professors about your grades. Start that habit early in the semester.

GRADING SCALE

Grade	Score	Grade	Score
A	93-100	C+	77-79
A-	90-92	C	73-76
B+	87-89	C-	70-72
B	83-86	D	60-69
B-	80-82	F	59 ↓

GRADE DISTRIBUTION

5% Reflection

20% Research Project

25% Quizzes

50% Lab Exercises
Tutorials = 25%
Challenges = 25%

- Quizzes
- Lab Exercises
- Research Project
- Reflection

Grading in ESCI 250 addresses several aspects of a course: evaluation, communication, motivation, organization, and faculty/student reflection (Walvoord and Anderson 2010).

If you believe that you have received a wrong grade on an assignment, please discuss your position with me as soon as the situation arises. You should state formally in writing why you think that you received a wrong grade. (However, if I have done something minor, such as accidentally added your points incorrectly, then come and speak with me immediately because there is no need to write me in this situation.)

A DETAILED LOOK AT TYPES OF ASSESSMENT

Type of Assignment	Bloom's Taxonomy	How will it be graded?
Highest-Order Critical Thinking Assignments (i.e., higher stakes): Your Research Project	*create, design, investigate, evaluate, support, critique*	Research Projects will have "contract grades" (you select the maximum grade you want to earn) then hand-graded by me.
Higher-Order Critical Thinking Assignments (i.e., medium stakes): Lab Tutorials / Challenges	*analyze, organize, examine, test, apply, execute, implement, solve, use,*	After you upload your Lab Exercise to Moodle, I will hand-grade it against the preferred answer.
Lower-Order Critical Thinking Assignments (i.e., lower stakes): Weekly Quizzes	*understand, classify, identify explain, remember*	Weekly Quizzes are graded immediately against a set criterion (i.e., the preferred answer rubric).

Everyone does the weekly quizzes on Moodle. You get 2 attempts. Your % grade in Moodle is the average of these 2 attempts. Everyone also does the final course GIS Reflection.
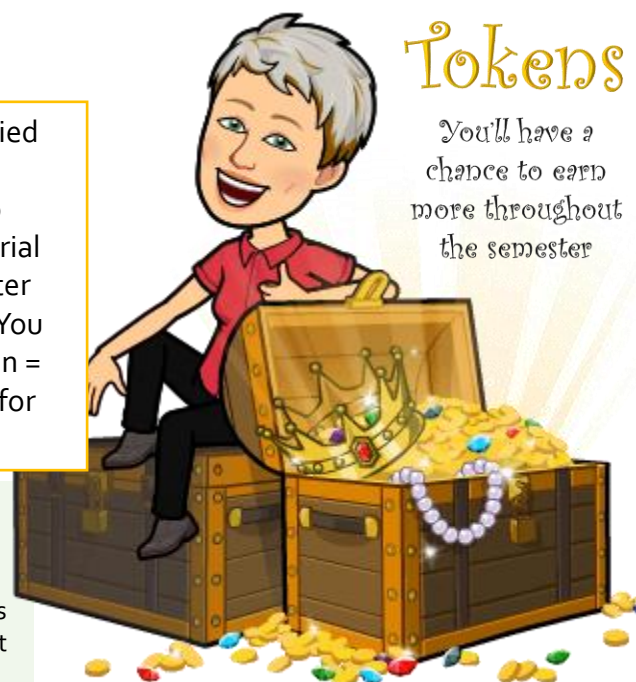
Everyone does the Chapter Tutorials. You decide your grade for the Challenge Assignments: For an "A": you do 9 out of 10 (grade of 70% or greater); for a "B": 6 out of 10; for a "C": 3 out of 10.

Everyone does the Research Project at the end of the semester. I will provide you with a detailed sheet explaining it. You get to select the grade you are going for – A, B, or C by the GIS work you want to do.

WHAT ABOUT LATE WORK? WHAT CAN YOU DO?

This semester I'm making my late policy simple: **TOKENS** (modified after several education gurus: Kegley, Nilson, and Pilcher). Each student gets three (3) tokens to start the semester. You are free to exchange your tokens for an opportunity to revise a Chapter Tutorial or Challenge Assignment or to get a 24-hour extension on a Chapter Tutorial or Challenge Assignment. Remember, it is your currency. You control them. One token = one opportunity for revision. One token = one 24 hour extension. No questions asked. Tokens are not good for Moodle quizzes or for the Research Project.

Will some students need extensions? Absolutely. I'm hoping that we are all healthy. I'm hoping that our families are healthy. But things can be unpredictable. I know that due dates may need to be adjusted if you are isolated or quarantined, etc. So go head and ask for an extension. It never hurts to ask. But remember, you have tokens. I might say to use one. We'll figure out how to balance life and your success at Wooster.

Tokens

You'll have a chance to earn more throughout the semester

WHAT ARE THE STANDARDS THAT WE VALUE?

COLLEGE POLICIES

Wooster has several campus-wide policies. The full text of each of these can be found on my Moodle Administrative page. Additionally, some are also in The Scot's Key at https://www.wooster.edu/offices/dean-of-students/_files/scotskey.pdf.

ACADEMIC INTEGRITY. I will adhere to Wooster's policy on Academic Honesty and the Code of Academic Integrity. In short, don't be dishonest in your academic work: don't copy, plagiarize, lie, or cheat. Be a good campus academic citizen.

CLASS CONFLICTS. There is an official policy for conflicts with complementary programs. Students have the responsibility to inform faculty of potential conflicts and to discuss the situation with your faculty to find a solution.

USING WIRELESS TECHNOLOGIES AND RECORDING. College policy states that no student may record or tape or photograph any classroom activity without the express written consent of the faculty member. If you need to record/tape a class, then you need to contact the Office of the Secretary for permission.

COURSE VALUES

BE KIND (i.e., Show Civility and Respect). For all of us to learn effectively, we must show respect, kindness, and mindfulness toward one another. Our goal is a classroom environment free of feelings of bias or discrimination. Please be considerate of other's opinions and talents and communicate cordially, so we have a great semester together.

BRING YOUR ENERGY (i.e., Participation and Attendance). Active participation in this course will result in higher achievement. Being an active learner will keep you engaged in the classroom. Engaged students learn the material more efficiently. (I guarantee that this will help on Moodle quizzes!!) Ask or respond to a question or make a comment that positively contributes to our class environment.

DON'T SHARE EVERYTHING (i.e., Group Work in a Digital Class). You benefit from groupwork. The beauty of GIS is that it brings people together to solve problems. I encourage you to discuss steps with each other. But please do your own work and do not share digital files – even though it might be tempting at times if you are behind. We will follow our Academic Dishonesty Policy, so please no cheating or plagiarism.

LATE ASSIGNMENTS. Life happens. Unexpected events can prevent you from submitting your work on time. It happens to the best of us. That's why we have tokens (see previous page). No questions asked. However, I highly encourage you to fight against procrastination. You don't want to use your tokens in the first few weeks.

Can I help you?

Even though office hours are on Teams (or outdoors on campus), don't hesitate to reach out. It is better to talk about one of these policies before you find yourself in a bind.

WHAT CAN YOU DO TO FIND SUCCESS IN GIS?

I HAVE SEVERAL TIPS FOR SUCCESS…
CALL IT YOUR ACADEMIC ROADMAP

GO TO THE LONGBRAKE WELLNESS CENTER. They can help you with comprehensive health services. From physicians treating the Wooster crud to mental health counselors, there are doctors and nurses there to help you. This is especially important this semester, as we battle the pandemic. Don't be shy about consulting them.

GO TO THE LEARNING CENTER IN APEX. They can help you with academic support: time management, study skills, test-taking strategies, peer tutoring, etc. Schedule an appointment in APEX for 1:1 meetings available free to all.

EAT WELL. Eat a balanced diet. Remember your fruits and vegetables. **SLEEP REGULAR HOURS.** Don't go to bed at 3 AM every day. Get those 6-8 hours of sleep. **GET ENOUGH EXERCISE.** Regular exercise eases anxiety and dissipates stress while promoting overall health. It can also help you focus.

GO TO THE WRITING CENTER (ANDREWS LIBRARY). They are committed to helping you become a better writer through 1:1 consultations workshops and resources to help all disciplines. Scheduling an appointment online is recommended.

SUGGESTIONS FOR SUCCESS AT COLLEGE

- ✓ Practice positive thinking because it reduces stress.

- ✓ Stay current with course material. This includes regularly checking Moodle and your Wooster email.

- ✓ Learn to say "no" because it is the key to time management.

- ✓ Do not wait until the end of the semester to be suddenly concerned about your quiz-taking strategies, and ultimately, your grade in the course.

- ✓ Remember that I cannot read your mind during class. Please communicate with me because I am here to help you academically.

BE CERTAIN YOUR ENERGY TANK IS FULL

How do you have the energy to perform at your optimum level at Wooster? How do you get the most out of your 4 years here?