Title: Applied GIS Applications in Natural (Water Resources)

Instructors: Dr. Katherine Clancy (lecture and lab) Dr. Jen Brand (lab)

Days and Hours to seek help from either instructor

Monday 9:30 AM to 10:30 AM (Dr. Clancy office hours)* Join using the following link: https://uwsp.zoom.us/my/kclancy

Tuesdays 10:00 AM to 11:00 AM (Dr. Brand's office hours)* Join using the following link: <u>https://uwsp.zoom.us/my/jbrand</u>

Wednesday 9 AM to 10 AM (VIRTUAL LECTURE with Dr. Clancy)* (scheduled in canvas)

Wednesday 10 AM to 10:50 AM (VIRTUAL LAB with Dr. Clancy)* (scheduled in canvas)

Wednesday 1 PM to 1:50 PM (VIRTUAL LAB with Dr. Clancy)* (scheduled in canvas)

Thursdays from 9 AM to 10 AM (Dr. Clancy office hours)* Join using the following link: <u>https://uwsp.zoom.us/my/kclancy</u>

Thursdays from 10 AM to 12 PM (Dr. Brand's face to face lab) registered students only (this may change!)

Thursday 12 PM to 2 PM (Dr. Brand's face to face lab) registered students only (this may change!)

Fridays from 1:00 PM to 2:00 PM (Dr. Brand's office hours)* Join using the following link: https://uwsp.zoom.us/my/jbrand

E-mail: kclancy@uwsp.edu, jbrand@uwsp.edu

Expectations: Understand basics of how to use a spreadsheet (i.e. excel) and college algebra

Objectives: After completing the reading assignments and laboratories in this course you should be able to do the following:

- 1. Make a professional map in the correct projection
- 2. Edit raster and vector data
- 3. Obtain and interpret spatial water resource data
- 4. Describe how spatial data are used in natural resources
- 5. Develop spatial models

Textbook: There is no textbook for this course

SCHEDULE

The weeks have companion dates in the canvas calendar. Please check canvas for more details.

Week	Lecture Topic	Lab/Discussion (20 pts except midterm project and final project)	Quiz (10 pts except midterm and exam)
1	How to Start/Orientation	Discussion no lab	Yes

2	Maps as Narrative	Map Making	Yes
3	Data Types	Making Maps with Rasters	Yes
4	Wildlife Applications	GIS and Wildlife	Yes
5	Shapefiles and Databases	Shapefiles	Yes
6	Soil Applications of GIS	Advanced Raster	Yes
7	Watershed Delineation	Hydrology Toolbox	Yes
	Review and Practice Midterm		no
8	Project	Discussion no lab	
9	Multiple Choice Exam	No lab	40 pts
10	Midterm Project	Midterm project (60 pts)	no
	Joining Tables and Merging		yes
11	Shapefiles	Soil Lab part 1	
	Project, Reclassify, Raster	-	yes
12	Creation	Soil Lab Part 2	
13	Introduction to Weighted Overlay	Discussion no lab	yes
14	Weighted Overlay presentations	Weighted Overlay Project	yes
15	Synthesis and Review for Final	No lab	No quiz
Finals			40 pts
Week	Your scheduled final is 5/17/2021	Project (60 pts)	

POLICIES AND OTHER CONSIDERATIONS

I. UWSP Community Bill of Rights and Responsibilities

UWSP values a safe, honest, respectful, and inviting learning environment. In order to ensure that each student has the opportunity to succeed, a set of expectations have been developed for all students and instructors. This set of expectations is known as the Rights and Responsibilities document, and it is intended to help establish a positive living and learning environment at UWSP. For more information go to: http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilites.aspx.

The Rights and Responsibilities document also includes the policies regarding academic misconduct, which can be found in Chapter 14. A direct link can be found here: http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf.

II. Americans with Disabilities Act

The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations for students with disabilities. For more information about UWSP's policies, check here: http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/ADA/rightsADAPolicyinfo.pdf.

If you have a disability and require classroom and/or exam accommodations, please register with the Disability Services Office and then contact me at the beginning of the course. I am happy to help in any way I can. For more information, please visit the Disability Services Office, located on the 6th floor of the Learning Resource Center (the Library). You can also find more information here: <u>http://www4.uwsp.edu/special/disability/</u>.

III. Participation

Professional behavior is expected toward your classmates and instructor. It is highly unusual that there is a problem of this nature, but I will not tolerate such behavior. Slurs against a person's gender, race, religion, sexual

orientation, political affiliation or essentially attacks against a person are not tolerated in this class or on this campus (and in professional settings). This requirement does not restrict your freedom of speech associated with expressing your opinion. Learning how to express opposing opinions without becoming emotive or insulting is an excellent skill to acquire.

If the behavior is identified in the online class environment or via email and it is not corrected, then it may be followed by removal of your extra credit and/or a deduction of 10 percent of your final grade. Extreme measures can result in a discussion with the Dean of Students.

Zoom Meetings

Synchronous online session guidelines: I rarely have behavior problems with students. Many of these guidelines should not need to be stated, but I thought I would outline the expectations of our online meetings for the comfort of all. Unfortunately, it only takes one student to cause serious disruption to the class.

- 1. You must use your name (or the name you go by in the class).
- 2. Either add a "zoom background" or make sure your background is suitable for a work environment (i.e. devoid of provocative pictures).
- 3. You need to be dressed in attire you would wear to school (for the part of you that is visible) for zoom meetings.
- 4. Do not give out the password or link to other people outside the class.
- 5. Make sure the background sounds are kept to a minimal and turn on mute when you are not talking.
- 6. Do not spotlight yourself on the screen unless you are talking. (if you don't know what this means, then don't worry about it.)
- 7. All of the zoom meetings will be recorded, but the links will not necessarily be shared unless something is pertinent that I think would benefit the entire class.

Failure to follow these guidelines may results in the following:

- 1. Removal from the zoom room to the waiting room.
- 2. Reductions in your grade
- 3. A required meeting with the dean of students.

Participation in Face to Face Labs

Covid-19 and Face Coverings:

• At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the <u>Disability and</u> <u>Assistive Technology Center</u> to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, <u>in-person classes cannot take place</u>. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.

Other Guidance:

• Please monitor your own health each day using <u>this screening tool</u>. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).

- As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.
- Please maintain these same healthy practices outside the classroom.

IV. Grade Calculations (Grade Distribution)

Grade Distribution: Weekly Quizzes: 10 pts each with 11 quizzes with 100 points (the lowest quiz is dropped) Labs and Discussion 20 pts with 11 labs and discussion for 200 pts (lowest discussion or lab is dropped) Two exams 100 points each (for a total of 200 points) **Total 500 points**

- Grade Percent Grade Percent 94-100% C А 70-74% A-90-93% C-65-69% 87-89% D+ B+ 62-64% В 83-86% D 55-61% 80-82% F < 55% B-
- C+ 75-79%

IV. Grade Calculations (Late Policy)

To balance the needs of students who require feedback on their labs and quizzes, we will be posted a summary video of the lab issues and answers to questions 1 week after the due date. You may not submit a lab after these videos have been posted. Quiz answers will be released one week after the due date. You may not take a quiz after this date. To deal with issues, such as illness, etc, we have the option to drop a quiz or lab/discussion. If you require special consideration due to unique circumstances, you need to contact us in a time manner.

After the due date, you may incur a 2-point penalty per day the lab is late. Late labs increase the burden to professors, slow down feedback to students, and introduce unnecessary chaos in a class. Finally, students who become increasingly behind in this class rarely can keep up. In the end, those students drop the class. We do not wish for that to happen to any student, as we know you work hard for the opportunities that college brings.

V. Exam/Test Policy

Tests are open notes. You may not work with another person. Your lowest test score is dropped (this includes the final). Failure to take a quiz or an exam will be recorded as a zero.

VI. Quizzes

Quizzes are online are open notes and open book, but you may not work with another person. Do not take a quiz while logged into another person's computer. Do not take quizzes side by side with another classmate. Do not involve yourself in behavior that gives the appearance of cheating.

The best place to take quizzes is on campus because of the fast internet connection. If this is not possible, then choose a location where you will not be disturbed. The quizzes will time out after a while, and this will count as a quiz trial. For example, I do not recommend that you take quizzes at work if you will be called away or disturbed for long periods of time. **If you need help finding a suitable location to take your online quiz, then let me know.**

VII. Discussions

Discussion are usually 2 parts. First, you are required to post something. Second, you are required to respond to at least two other posts. Please contact me if you are having serious difficulties (personal, health, family, etc.). Discussions are further graded on accuracy of content, grammar and spelling, and civility.

Thus far, incivility has never been a problem. Please remember that you do not have to agree with the person, but you may not insult other classmates. Slurs against a person's gender, race, religion, sexual orientation, political affiliation or essentially attacks against a person are not tolerated in this class or on this campus (and in professional settings). This requirement does not restrict your freedom of speech associated with expressing your opinion. Learning how to express opposing opinions without becoming emotive or insulting is an excellent skill to acquire.

VIII Course Structure

This course will be delivered entirely online through the course management system Canvas. You will use your UWSP account to login to the course from the <u>Canvas Login Page</u>. If you have not activated your UWSP account, please visit the <u>Manage Your Account</u> page to do so.

You have the option of participating in a synchronous weekly zoom meeting.

You have the option of participating in limited face to face labs.

Course Technology Requirements

- View this website to see <u>minimum recommended computer and internet configurations for Canvas</u>.
- You will also need access to the following tools to participate in this course.
 - o computer
 - o printer (recommended)
 - o a stable internet connection (don't rely on cellular)

UWSP Technology Support

- Visit with a <u>Student Technology Tutor</u>
- Seek assistance from the <u>IT Service Desk</u> (Formerly HELP Desk)
 - o IT Service Desk Phone: 715-346-4357 (HELP)
 - o IT Service Desk Email: <u>techhelp@uwsp.edu</u>

Canvas Support

In canvas, Click on the



button in the global (left) navigation menu and note the

options that appear:

Support Options	Explanations	
Ask Your Instructor a Question Submit a question to your instructor	Use Ask Your Instructor a Question sparingly; technical questions are best reserved for Canvas personnel and help as detailed below.	
Chat with Canvas Support (Student) Live Chat with Canvas Support 24x7!	Chat ting with Canvas Support (Student) will initiate a <i>text chat</i> with Canvas support. Response can be qualified with severity level.	
Contact Canvas Support via email Canvas support will email a response	Contact ing Canvas Support via email will allow you to explain in detail or even upload a screenshot to show your particular difficulty.	
Contact Canvas Support via phone Find the phone number for your institution	Calling the Canvas number will let Canvas know that you're from UWSP; phone option is available 24/7.	
Search the Canvas Guides Find answers to common questions	Searching the <u>Canvas guides</u> connects you to documents that are searchable by issue. You may also opt for <u>Canvas video guides</u> .	
Submit a Feature Idea Have an idea to improve Canvas?	If you have an idea for Canvas that might make instructions or navigation easier, feel free to offer your thoughts through this Submit a Feature Idea avenue.	

All options are available 24/7; however, if you opt to email your instructor, I may not be available immediately.

• Self-train on Canvas through the <u>Self-enrolling/paced Canvas training course</u>