Title: Applied GIS Applications in Natural (Water Resources)

Instructors: Dr. Katherine Clancy

Office: TNR 244 (this semester office hours are online or in the computer lab TNR 322)

This course is on canvas. You need to watch the orientation and proceed through the canvas material. Contact Dr. Clancy immediately if you have difficulties.

Questions about quizzes or grading all should go to Dr. Clancy at E-mail: kclancy@uwsp.edu

Office Hours (you can see any instructor/TA/tutor about GIS issues)

Monday 12-2: Amanda Griswold (Thursday Lab Instructor), office TNR 371, agriswol@uwsp.edu

Tuesday 10-11: Dr. Clancy (course instructor), office TNR 244

Wednesday 2:15-3:15: Dr. Clancy (course instructor) virtual only: https://wisconsin-edu.zoom.us/my/kclancy Links to an external site.

Thursday 11-1 Amanda Griswold (Thursday Lab Instructor), office TNR 371, agriswol@uwsp.edu

Additional Support

Undergraduate Tutor: Alexis Sonneman

Time By Appointment (asonn296@uwsp.edu)

Teaching Assistant: Ryan Michalesko (graduate student)

Time: By Appointment (mich299@uwsp.edu)

Virtual Only: https://wisconsin-edu.zoom.us/my/ryanmichalesko

Expectations: Understand basics of how to use a spreadsheet (i.e. excel) and college algebra, NRES 251

Objectives: After completing the reading assignments and laboratories in this course you should be able to do the following: Make a professional map in the correct projection; Edit raster and vector data; Obtain and interpret spatial data; Describe how spatial data are used in natural resources; and Develop skill visualizing spatial data using symbology, maps, and charts.

Textbook: There is no textbook for this course.

SCHEDULE

It is rare, but occasionally there needs to be a change in the syllabus schedule. The weeks have companion dates in the canvas calendar. Please check the canvas syllabus for more details including due dates.

| | Week | | | |
|------|--------------|-------------------------------------------------------|-----------------------------|--|
| | Start | | | |
| Week | Day | Lecture Topic | Graded Item | |
| | 23- | | orientation Quiz, Activity, | |
| 1 | Jan | Maps as Stories | Discussion, weekly quiz | |
| | 30- | Introduction to Feature Classes, Introduction to | | |
| 2 | Jan | Climatology (Climate Scales) | weekly quiz, lab | |
| | | Coordinate Systems and Projection, Adding XY | | |
| 3 | 3-Feb | Data | weekly quiz, lab | |
| | 13- | | | |
| 4 | Feb | Raster Models, Land Cover, and Clean Water Act | weekly quiz, lab | |
| _ | 20- | | | |
| 5 | Feb | Bear Home Range Estimation, NLCD | weekly quiz, lab | |
| | 27- | Declaration Discound History and FCDVs History Atlant | | |
| 6 | Feb | Reclassify Bins and Histograms, ESRI's Living Atlas | weekly quiz, lab | |
| 7 | 6-Mar | Discussion: GIS in Your Field (no lab) | discussion | |
| | 13- | | | |
| 8 | Mar | Midterm (no lab) | midterm (online) | |
| | 20- | corring brook | enring brook | |
| | Mar 27- | spring break | spring break | |
| 9 | Mar | DEMs and Slope | weekly quiz, lab | |
| 10 | 3-Apr | Contour Mapping, HUCs and he Driftless Region | weekly quiz, lab | |
| 10 | 3-Apr 10- | Contour Mapping, Hocs and he Driftless Region | | |
| 11 | Apr | Soils , RUSLE, Soil Erosion and Forest Types | weekly quiz, lab | |
| 12 | 7.01 | | | |
| and | 17- | | | |
| 13 | Apr | Land Cover Change Trends | weekly guiz, lab | |
| 12 | | | | |
| and | 24- | | | |
| 13 | Apr | | | |
| 14 | 1-May | Map Stories No Lab | weekly quiz, lab | |
| 15 | 8-May | Final Review | | |
| | 15- | | | |
| | May | finals week | online final | |

IV. Grade Distribution:

Orientation Quiz 5 pts

Weekly Quizzes: 10pts each with 11 quizzes for a total of 110 points

Discussions: 10 and 20 points for a total of 30 pts

Two exams midterm (40 points) and final (60 points) for a total of 100 points

Labs 9 labs, 20 points each for a total of 180 points

Professionalism (timely submission of materials, attendance where applicable, respect towards other students and your professors, following class

and university rules during class time) 20 points

Please note that habitually late labs, disruptive behavior may incur an additional penalty of at least 10%.

Total 445 points

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

C+75-79%

Assignments (discussion, labs, quizzes, exams, projects) which are turned in after the due date will be penalized. Assignments will not be accepted after the closing date (please see the canvas orientation video for details)

VI. Quizzes

Quizzes are online, open notes and open book. 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 guizzes will time out after a while, and this will count as a guiz 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.