

**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. We are here for you, but please note the following:**

1. Questions about quizzes or grading all should go to Dr. Clancy at E-mail: [kclancy@uwsp.edu](mailto:kclancy@uwsp.edu)
2. You can see any instructor/TA/tutor about GIS lab issues regarding this class.
3. It is your responsibility to know our office hour availability (updated times are listed in canvas).
4. Some office hours are in the instructor's office, in the computer lab TNR 322, or virtual. Make sure you check this detail.

**Who can Help? We have two instructors and one tutor for this class.**

#### **Lab Instructors:**

1. Dr. Katherine Clancy (course instructor, Tuesday 10-12 lab instructor), office TNR 244, [kclancy@uwsp.edu](mailto:kclancy@uwsp.edu) ,<https://wisconsin-edu.zoom.us/my/kclancy>
2. Ms. Amanda Griswold (Tuesday 12-2 in-person lab instructor), office TNR 371, [agriswol@uwsp.edu](mailto:agriswol@uwsp.edu)

#### **Additional Support**

Undergraduate Tutor: Alexis Sonneman, Time By Appointment ([asonn296@uwsp.edu](mailto:asonn296@uwsp.edu)) or see canvas for time and location details.

**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      | Week Start Day            | Lecture Topic  | Graded Item   |
|-----------|---------------------------|--|---|
| 1         | 5-Sept                    | Maps as Stories  | orientation Quiz, Activity, Discussion, weekly quiz |
| 2         | 11-Sept                   | Introduction to Feature Classes, Introduction to Climatology (Climate Scales)                      | weekly quiz, lab                                    |
| 3         | 18-Sept                   | Coordinate Systems and Projection, Adding XY Data  | weekly quiz, lab                                    |
| 4         | 25-Sept                   | Raster Models, Land Cover, and Clean Water Act   | weekly quiz, lab                                    |
| 5         | 2-Oct                     | Bear Home Range Estimation, NLCD   | weekly quiz, lab                                    |
| 6         | 9-Oct                     | Reclassify Bins and Histograms, ESRI's Living Atlas  | weekly quiz, lab                                    |
| 7         | 16-Oct                    | Discussion: GIS in Your Field (no lab)   | discussion  |
| 8         | 23-Oct                    | Midterm (no lab)   | midterm (online)                                    |
| 9         | 30-Oct                    | DEMs and Slope   | weekly quiz, lab                                    |
| 10        | 6-Nov                     | Contour Mapping, HUCs and the Driftless Region   | weekly quiz, lab                                    |
| 11        | 13-Nov                    | Soils, RUSLE, Soil Erosion and Forest Types  | weekly quiz, lab                                    |
| 12 and 13 | 20-Nov: Thanksgiving week | No labs (you can access the 12/13 week quiz and lab and get a head start if you want to get ahead) | no quiz/no lab                                      |
| 12 and 13 | 27-Nov                    | Land Cover Change Trends   | weekly quiz, lab                                    |
| 14        | 4-Dec                     | Map Stories, No Lab  | weekly quiz   |
| 15        | 11-Dec                    | Final Review   |   |
|           | 18-Dec                    | finals week (available December 11, must take by December 19 <sup>th</sup> )                       | online final  |

#### IV. Grade Distribution:

Orientation Quiz **5 pts**

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

Discussions: 10 (icebreaker) 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**

**Orientation Quiz: 5 pts**

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% | C     | 70-74%  |
| A-    | 90-93%  | C-    | 65-69%  |
| B+    | 87-89%  | D+    | 62-64%  |
| B     | 83-86%  | D     | 55-61%  |
| B-    | 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 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.