

Title: Applied GIS Applications in Natural (Water Resources)

Instructor(s):

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The course is "housed" in the [Canvas course software](#). Office hours, assignment due dates, details, etc. are in Canvas. Tutor information is also located in Canvas.

Expectations: Understand basics of how to use a spreadsheet (i.e. excel) and college algebra. Access to ArcGIS Pro software and hardware to support this software (if off campus).

Requirements: Your spatial data and projects are located in a course network file called the s drive (S drive address: \\uwsp.edu\files\GIS\GISCourses). Within that drive, you will have a personal folder. Information on how to access this folder is on Canvas. To receive credit in this class for your work, you are expected to save your projects in the network course folder (s drive) in your personal folder. The course network file benefits you because it provides a backup location for your projects (campus C drives will be periodically wiped, and ArcGIS Pro projects are not compatible with onedrive). It also allows your instructors to resolve issues in your projects remotely. Finally, the network folder serves as a place to document that the work you submit is your own.

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.

Schedule: It is rare, but occasionally there needs to be a change in the syllabus schedule. The days have companion dates in the canvas calendar. Please check the canvas syllabus for more details including due dates. Your course assignments/quizzes are in canvas. The due dates and assignment details are in Canvas. Information about where your course data and project are located is in Canvas and the orientation email.

Week	Lecture/Lab Topic(s)	Assignment(s)	Assignment Date
1	Maps and Course Expectations	Orientation Discussion, Course Orientation Quiz (no face-to-face labs)	Jan 22
2	Introduction to Feature Classes,	Activity 1 Quiz: (Week 1 and 2)	Jan 29
3	Introduction to Climatology (Climate Scales)	Feature Class Lab Quiz (Week 2 and 3)	Feb 5*
4	Coordinate Systems and Projection, Adding XY Data	Adding XY Points Quiz (Week 4)	Feb 12
5	Bear Home Range Estimation, NLCD	Bear Home Range Estimation	Feb 19

		Quiz (Week 5)	
6	Bear landcover: Reclassify Bins and Histograms, ESRI's Living Atlas	Bear Land Cover, Quiz (Week 4 and 5)	Feb 26*
7	Exam 1 (Weeks 1-6)	Exam 1 (no face-to-face labs)	March 4
8	Current Events (week before spring break)	Current Events Discussion (no face-to-face labs)	March 11
9	Storm water, Random Sampling and Impervious Area, IDF	Stormwater Woes Lab Week 9 Quiz	March 25 th (Ramadan starts March 23 rd)
10	DEMs and Slope (week after spring break)	Two Watersheds Slope and Histograms, Week 5 and 10 Quiz	April 1 st (day after Easter)
11	Contour Mapping, HUCs and the Driftless Region	Two Watersheds Contour Maps and Subwatersheds, Week 11 Quiz	April 8th
12	Soils, RUSLE, Soil Erosion and Forest Types	Resample with Soils and Forest Layers, Week 12 Quiz	April 15th
13	Land Cover Change Trends	Land Cover Change Lab, Week 13 Quiz	April 22 nd (Passover begins)
14	Exam 2 (Weeks 9-13)	Exam 2 No face-to-face labs	April 29th
15	Forestry and remote detection of forest disturbance	Week 15 Quiz (no face-to-face labs)	May 6 th
Exams	Final exam (comprehensive)	Final exam (Due May 15 th)	(Exam will open to all May 10th)

I. Professionalism

It is highly unusual that there is a problem of this nature. If unprofessional behavior is identified in the classroom, online class environment, or via email (or other interactions), 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. The software we use in this class can be VERY frustrating. Regardless, **combative behavior towards other students or instructors/tutors will result in a further reduction of your final grade by 10-15%.** This includes harassing the grader. If you have grade questions, contact Dr. Clancy. Dr. Clancy is happy to review your assignment, discuss it with you, and strategize ways to improve.

Extreme measures can result in a discussion with the Dean of Students.

II. Grade Calculations

Water 391

Grade Distribution:

Week quizzes (11 each, 5 pts each)
Exams: 2, 30-point quizzes for a total of 60 points pts
Orientation discussion 10 points
Orientation Quiz, 10 pts
Final Exam, 60 pts
One discussion/current events 20 points
Labs 9 labs, 20 points each for a total of 180 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. Late penalties are automatically assigned in canvas (10% of total points per day). Assignments will not be accepted after the closing date (please see the canvas orientation video for details)

III. Quizzes

Quizzes are online, open notes and open "book (online materials are okay)." 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.

For most students, 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 the allocated time, and this will count as a quiz trial.

IV. Labs

You may collaborate with other students currently taking the course, but the work you submit must be your own. For lab credit, projects must be saved in the course folder (s drive) and must reflect your efforts. Folders and projects are checked periodically.