

Syllabus Spring 2024

Instructor: Douglas Miskowiak, GISP. GIS Instructional Administrator

Office: Science B307 (Third Floor, Eastern Most Wing)

Office Hours: Virtual. Schedule office hours by appointment (OR) F2F 10-11 AM Thurs

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Class Schedule: Section 1. Lecture. Online.

Section 1. Lab. Online. Science B-308 available during open hours

Course Description: Intermediate and advanced GIS techniques; integrate medium and large-scale databases, use rectified aerial and satellite geographic base data. Principles and development of complex environmental and cultural spatial modeling, GIS programming concepts and applications. 2hrs lec, 2hrs lab per wk. Available for graduate credit as GEOG 543. Prerequisites: GEOG 341. 3 cr.

Course Overview: This is an intermediate to advanced level, computer-based course that explores the latent abilities of geographic information systems. The complexity of spatial data bases, resolution & scale issues, differential global positioning systems (DGPS), LIDAR modeling and data handling, applied cartographic modeling, geodemographics, object-relational spatial data formats, rudimentary three-dimensional modeling, visualization, online database publication, and programming issues will all be explored regarding a GIS. The class will concentrate on the integration of data from different sources and their applications within a large-scale GIS. Both land management systems data (e.g., street networks) and natural resource land management data (e.g. land use, habitat cover) will be examined. Students will use GIS pc-workstations along with ESRI-GIS software (ArcGIS Pro and Extensions, ArcGIS Online).

Course Format: This course is taught online, asynchronously, but set to a schedule (note due dates and exam schedule). Class materials will be delivered in online formats. Most course materials and content are disseminated using Canvas. Lectures, reading materials, lab assignments, examinations, and other learning resources are available via Canvas. *Contact your instructor if you need assistance using Canvas*. The course consists of:

- 1. Attendance
- 2. Lectures
- 3. Online Learning Resources
- 4. GIS Lab Assignments & Lab Quizzes
- 5. Topical Exams
- 1. **Attendance:** Online attendance is **encouraged**. The number one indicator of student success is showing up. Do your best to consume the recommended course materials in a timely way.



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Attendance Conduct: While the course is online, engage with your instructor via email or Canvas to allow positive interventions on your behalf. Learning is greatly enhanced when students actively engage with their peers and instructor.

2. Lectures: Lectures concentrate on both the basic theoretical and applied techniques of a Geographic Information System. Lectures share the foundational body of knowledge of a GIS professional, including the common language used in the profession. Lectures provide the contextual information necessary to understand lab exercises. Lectures will be delivered online using Canvas. Some lectures will be made available as videos.

Lecture Expectations

- Take your own personal notes to supplement the presentation
- Ask your instructor questions when you don't understand a topic
- Engage with your instructor and your peers should you not understand the topic
- Student understanding of lectures are assessed using examinations
- 3. **Online Learning Resources:** Readings and other learning resources are made available to students via Canvas. These resources will be organized by lecture topic. No book purchase or rental is required for this course.

Online Learning Resources Expectations

- Read or complete the resources associated with each module topic
- Take your own personal notes to summarize the learning resource
- Student understanding of online resources is assessed using examinations
- 4. **GIS Lab Assignments:** GIS Lab Assignments are assigned that require students to learn and practice various GIS competencies. Students will use ArcGIS Pro and other geospatial software/equipment to complete hands-on exercises. Some exercises may be accompanied by a graded quiz available via Canvas. There are 17 lab assignments in the course. Lab assignments are worth 25 50 points each, for a total of 625 course points. The lowest 25-point lab assignment grade will be tossed for a total of 600 lab assignment points.

All students have a class folder made available on UWSP servers, often referred to as the S drive. Students will access data and projects and save their work to their project folders. Your instructor will provide instructions about how to access the student folder.

GIS Lab Assignment Expectations

- Lab instructions are provided that guide the student through the exercise. Some assignments require that students know how to apply skills previously taught.
- Grading rubrics describe how students earn points for their work.



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- Each lab assignment is associated with a graded quiz available via Canvas
- GIS Lab Assignments are worth a total of 600 course points
- Individual assignments vary from 25 to 50 points each
- Assignments are graded from work submitted to your student folder, Canvas quizzes, and Canvas submissions.
- Depending upon student skill, each assignment takes 1 to 4 hours to complete
- Late assignments are not assessed, and quizzes will not be reopened, unless you contact your instructor prior to the due date. Note due dates!
- 5. **Topical Exams:** There are two topical examinations, a *mid-term*, covering the first half of the course, and a *final comprehensive exam*. The exams test your understanding of GIS concepts and application of GIS concepts. Expect exams to contain a combination of multiple-choice, multiple-selection, true/false, matching, and short answer questions. Topical exams are conducted via Canvas. Topical exams are worth 200 points toward your final grade, 100 points each.

Topical Exam Expectations

- Exams are available on Canvas. The exam is timed. You have 60 minutes to complete topical exams. Once you begin the exam, you must finish it through to completion.
- Exams are open book and open note.
- You are not allowed to receive assistance from or give assistance to others in taking the exams. This is considered cheating and UWSP Chapter 14 policies will be pursued.
- 6. Graduate (543) Level Requirement: Students enrolled in the graduate level version of this course, Geog 543, are required to complete additional coursework. Normally, each student is asked to complete a separate GIS project of their own choosing (in consultation and agreement with the instructor). Graduate students shall present their coursework to the Geog 343/543 class.
 Note: The graduate level requirement is worth 20 percent of the graduate students' course grade. Eighty percent of the course grade is derived from 343 requirements.

Evaluation and Grading: 800 total points are possible in this course. Students are graded based upon attendance, GIS lab exercises and lab quizzes, and topical exams.

Attendance	= 0 Points
GIS Lab Exercises and Quizzes	= 600 Points (25 – 50 Points each)
Midterm Topical Exam	= 100 Points
Final Topical Exam	= 100 Points
Total	= 800 Points



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Student Rights and Responsibilities: Please make note of the following web-based pdf documents, that explains your responsibilities and rights within the UWSP campus community, including required behavior by students and faculty within the classroom environment:

https://www.uwsp.edu/dos/Documents/UWSP14-Final2019.pdf

https://www.uwsp.edu/dos/Documents/2015 Aug AcademicIntegrityBrochure.pdf

https://www.uwsp.edu/dos/Documents/CH17-UWSP-Updated2019.pdf

Accommodations for Students with Disabilities: UWSP is committed to providing reasonable and appropriate accommodations to students with disabilities and temporary impairments. If you have a disability or acquire a condition during the semester where you need assistance, please contact the Disability and Assistive Technology Center on the 6th floor of Albertson Hall (library) as soon as possible. DATC can be reached at 715-346-3365 or DATC@uwsp.edu.

Recordings and Sharing Class Lecture/Lab Materials: Lecture and lab materials and associated recordings for Geography 343/543 are protected intellectual property at UW-Stevens Point. Students in this course may use the provided materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.