

Instructor: Christine Koeller, GISP

Office location: Science Building, Room B329

Office hours: Tuesday 10:00am-11:00am, Thursday 11:00am to 12:00pm or by appointment

(e-mail for appointment)

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Class meets:

- Lecture (all) – Monday and Wednesday 12:00pm to 12:50pm in SCIB328
- Lab 1 - Tuesday 12:00pm to 1:50pm in SCIB308
- Lab 2 - Monday 2:00pm to 3:50pm in SCID326

Course Description: Develop, use and maintain a geographic-based spatial information system (GIS) for resource management. Acquire and assess spatial data. Compare raster and vector data models. Computer-based geographic data handling, analysis, interpretation, and display. Cartographic and spatial modeling. Available for graduate credit as GEOG 541. **Credits:** 3 **Prerequisites:** None

Learning Outcomes: Competencies addressed in this course are tied to the Geographic Information Science and Technology (GIS&T) Body of Knowledge and the Geospatial Technology Competency Model (United States Department of Labor Employment and Training Administration). After successful completion students will be able to:

- Define GIS and GIScience and identify examples of each. (CLO1)
- Acquire and interpret GIS data and metadata. (CLO2)
- Prepare GIS data by identifying: 1) measurement systems, 2) geographic representations, 3) GIS data models, and 4) GIS data collection methods. (CLO3)
- Plan, create, encode, and assess GIS data. (CLO4)
- Plan, conduct and assess GIS data queries and core spatial analysis techniques. (CLO5)
- Discuss various ethical and societal issues in GIS&T. (CLO6)

Required reading materials

- Geographic Information Systems and Science, Fourth Edition. Longley, P. A. Goodchild, M.F. Maguire, D.J. Rhind, D.W. John Wiley and Sons, Inc. 2015. **ISBN: 978-1-118-67695-0**
- Additional readings available on D2L.

Student Evaluation: The grade you earn in this course will be based on 1) participation, 2) examinations, 3) quizzes and assignments, 4) lab exercises, and Discussions.

Participation and Attendance:

- Student participation during class and lab is integral to this course; you will be evaluated based on your attendance and participation in class. Attendance during all classes and laboratory exercises is required and includes attending the **entire** lecture and the **entire** lab period. Lab attendance may be excused if your lab work is completed **and** turned in **before** your lab time begins **and** you have notified me **by email**. If you finish during your lab period, you must notify me before leaving that your remaining absence is excusable.



- Attendance will be recorded according to the [UWSP attendance policy](#). **More than two unexcused absences from either lecture or lab time will result in a 5% reduction in your participation grade** (i.e. a reduction of 0.25 percent of your entire course grade for each unexcused absence). Review the attendance policy below for more information regarding attendance, absences due to military service, and religious beliefs accommodation.

Excused absences

To request an excused absence, you must email your instructor **prior to the start of class** with a comprehensible explanation of your absence. The following reasons may be excused:

- Required attendance of field trips or other academic activities for other classes.
 - Academic or professional conference attendance.
 - Required travel or activities for athletic events, theatre, dance, or other university-related activities you participate in.
 - Serious or contagious illness (a doctor's note may be requested).
 - Death of a family member.
 - Excused lab attendance as stated prior.
 - Military service as stated below.
 - Other reasons discussed and approved in writing by your instructor.
- Be respectful to fellow students and your instructor. Disruption or other incivility during class or lab time will not be tolerated and will result in a reduction of your participation grade.
 - Attending class will likely be the single most important factor in determining your performance and grade in the course. The relationship between attendance and achievement in education has been extensively documented in peer-reviewed research. ***I am not able to re-teach the material to you in the event that you are absent, but you can ask a classmate to share notes.***
 - Attendance is 5% of your overall course grade.

Absences due to Military Service

- You will not be penalized for class absence due to unavoidable or legitimate required military obligations, or medical appointments at a VA facility, not to exceed two (2) weeks unless special permission is granted by the instructor. You are responsible for notifying faculty members of such circumstances as far in advance as possible and for providing documentation to the Office of the Dean of Students to verify the reason for the absence. The faculty member is responsible to provide reasonable accommodations or opportunities to make up exams or other course assignments that have an impact on the course grade. For absences due to being deployed for active duty, please refer to the Military Call-Up Instructions for Students.

Religious Beliefs Accommodation

- It is UW System policy to reasonably accommodate your sincerely held religious beliefs with respect to all examinations and other academic requirements. You will be permitted to make up an exam or other academic requirement at another time or by an alternative method, without any prejudicial effect, if:
 - There is a scheduling conflict between your sincerely held religious beliefs and taking the exam or meeting the academic requirements; and
 - You have notified your instructor within the first three weeks of the beginning of classes

(first week of summer or interim courses) of the specific days or dates that you will request relief from an examination or academic requirement.

- Your instructor will accept the sincerity of your religious beliefs at face value and keep your request confidential.
- Your instructor will schedule a make-up exam or requirement before or after the regularly scheduled exam or requirement.
- You may file any complaints regarding compliance with this policy in the Equity and Affirmative Action Office.

Discussions:

- There will be required discussion topics assigned through the D2L discussions board. Be sure to read through the entire discussion description and follow the instructions for posting. **Late discussion posts will not be accepted;** make sure you complete your posts on time in order to receive credit.
- Discussions are worth 5% of your overall course grade.

Examinations: There will be one midterm and one final, comprehensive examination in this course. If you miss the exam without prior coordination with the instructor, you will be assigned zero points. Any exam administered through Desire 2 Learn (D2L) still requires in person attendance during the exam time and location; you must sign an exam attendance sheet verifying your presence. Failure to be present at the exam time and location will result in a score of zero. The midterm exam and final exam will each count towards 15% of your overall course grade (a combined 30% of your total grade for the course).

Quizzes: There will be required quizzes that cover the required readings and class topics. Quizzes are typically administered through D2L over a multiple day window; you will be notified in class and through D2L when quizzes are assigned, available and due. It is your responsibility to regularly check D2L for available quizzes and due dates. You are expected to complete quizzes independently, you are not allowed to copy or share quiz questions or responses for yourself or other students. **Quizzes not completed before the due date and time will be given a score of zero, extensions are not allowed.** Quizzes count towards 15% of your overall course grade.

Lab Exercises: The lab component of this course includes hands-on GIS lab exercises that account for 45% of your overall course grade. You will incorporate what you learn in lectures and readings to lab.

Accessing Lab Exercise Data and Saving your Work

Lab exercises are primarily conducted on a campus server referred to as the **Z: drive**. Each student is assigned a folder on the Z: drive. You will find instructions for accessing lab materials and instructions in D2L.

All lab exercises and lab progress should be saved in your student folder on the Z: drive unless otherwise specified. Most labs also require materials to be uploaded to a D2L Dropbox for grading. **Review lab deliverables in the lab instructions for detailed information about what to turn in.**

Lab Expectations:

- Lab exercises vary in length. In general, lab exercises take 2-6 hours to complete which will require time outside of class.
- Lab computers are to be used for the assignments or approved resources. No other software is permitted to be used during lab exercises including instant messaging, chat, texting, email, Facebook, or any other software not directly related to the exercises.
- You are highly encouraged to seek instructor support during normal lab times and office hours. Alternative arrangements can be made by appointment. Lab instructor assistance is not available during weekends and evenings; plan accordingly! **Questions sent after 3:00pm Friday will not be addressed until the following Monday or non-holiday.**

Lab Exercise Due Dates: Lab due dates are specified on D2L and in the course schedule. Please note that lab exercises are typically due at 11:30pm **the night prior** to your subsequent scheduled lab. Instructor assistance is not available during weekends and evenings; plan accordingly.

Penalty for late Lab Exercises: I do accept late lab work as follows. Late lab exercises will receive a **10%** grade reduction per day that they are turned in after the posted due date. Late lab exercises **must** be turned in to the D2L Dropbox if required in the lab instructions. Late lab exercises will not be graded until you notify the instructor that you have completed the exercise and it is ready for grading. I will *only* accept late labs for up to one week past the scheduled due date.

Policy on Lab Attendance: Lab attendance is mandatory. If you cannot attend your lab session, you may try to attend another lab session with permission from the instructor. There are no scheduled makeup labs. If you are unable to attend lab, it is your responsibility to obtain assistance to complete the work.

Lab Policies: B308 and D326 are available for you to work on lab exercises when another course is **not** in progress. You may check out building and room keys for the semester from the Geography Department Associate, in Science Building, room D332. Room D326 must remain closed and locked at all times. Room B308 must be closed and locked at all times after normal operating hours (typically 8:00am-5:00pm Monday through Friday, except holidays and school breaks). Failure to comply may result in loss of room keys and afterhours access.

Lab Group Work with Microsoft Office 365/OneDrive: Some lab exercises may include group activities that require collaboration and file-sharing; in this class we will use Microsoft Office 365. Microsoft Office 365 is a suite of software products and services with cloud-storage capabilities (OneDrive). You do not need a separate account to use Office 365 on campus, your UW-Stevens Point account is your Office 365 account.

- To start using Office 365/OneDrive, go to <https://office.uwsp.edu> and sign in with your UWSP credentials. When asked if you are using a Microsoft for Work account, select “Work”. To learn more about Office 365/OneDrive, visit our Help Resources at: <http://www.uwsp.edu/office/Pages/Help-Resources.aspx>.
- Group work: It is your responsibility to contribute adequately when working in groups. Failure to contribute or inadequately contribute will result in a lower lab grade.

Grading scheme: The course the grading scheme is based on the following:

Item	Percent of Grade
Midterm Exam	15%
Final Exam	15%
Quizzes	15%
Lab Exercises	45%
Participation	5%
Discussions	5%
Total	100%

<u>Letter Grade</u>	<u>Minimum Percentage Required</u>
A	93
A-	90
B+	87
B	83
B-	80
C+	77
C	73
C-	70
D+	67
D	63
F	<63

Tutoring: Tutoring for GEOG 341/541 is available through the Tutoring-Learning Center (TLC): <https://www.uwsp.edu/tlc/Pages/CA-tutoring.aspx>. Please contact the tutoring-learning center for more information on available tutoring.

Course Management: This course uses the Desire2Learn (D2L) for course management and administration. Course information, grades, lecture information, quizzes, exams, due dates and additional reading materials will be accessed and circulated via D2L. D2L should be your primary source for course administration, announcements and communication outside of class. Additionally, course announcements may be communicated via your UWSP email. You are expected to check your UWSP email daily during this course.

Lectures: Lecture materials concentrate on the basic theory and applications of Geographic Information Systems (GIS) by providing the foundation of information needed to understand and conduct GIS work. Most lecture slides are made available; however, the information on the slides is only an outline of material we will cover, and does **not** contain all the information you will need to learn and know. It is your responsibility to take notes during lecture. If you miss a lecture, it is your responsibility to obtain notes from another class member.

Classroom policies:

- Mute the sound on all cell phones and electronic devices during class.
- Classes start promptly at the assigned time, please show up on time.
- Be prepared: Review the course schedule and complete the required readings before class.
- Be respectful with your classmates and instructor at all times. Be responsible for your actions.

Academic Misconduct: [UW-Stevens Point Chapter 14](#)

There is no tolerance for [Academic Misconduct](#) in this course. I expect everyone to work independently to complete assignments, labs, quizzes, and examinations. Academic misconduct is subject to Disciplinary Sanctions as outlined in Chapter 14.04 of the student academic standards and disciplinary procedures:

<http://www.uwsp.edu/dos/Documents/CommunityRights.pdf#page=11>

UWSP 14.03 Academic Misconduct Subject to Disciplinary Action

(1) Academic misconduct is an act in which a student:

- (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;
- (e) Engages in conduct aimed at making false representation of a student's academic performance; or
- (f) Assists other students in any of these acts.

(2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Inclusivity Statement

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated.

Disability Services:

UW-Stevens Point is committed to providing students with disabilities the academic accommodations and auxiliary aids necessary to ensure access to all university services, programs and activities. If you require classroom accommodations, you must notify me of your registration with the Disability and Assistive Technology Center within a reasonable timeframe and I will make every effort to accommodate you. See <http://www.uwsp.edu/disability/Pages/faculty/accomodations.aspx> for additional information.

The Disability and Assistive Technology Center is located in 609 Albertson Hall and can be contacted by phone at (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or via email at datctr@uwsp.edu.

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

UW-Stevens Point Emergency Procedures:

- *Medical Emergency:* In the event of a medical emergency call 9-1-1 or use Red Emergency Phone (if available). Offer assistance if trained and willing to do so. Guide emergency responders to victim.
- *Tornado Warning:* In the event of a tornado warning, proceed to the lowest level interior room without window exposure at [e.g. second floor hallways, SCI A224/225]. See www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans.aspx for floor plans showing severe weather shelters on campus. Avoid wide-span structures (gyms, pools or large classrooms).
- *Fire:* In the event of a fire alarm, evacuate the building in a calm manner. Meet at Parking Lot T. Notify instructor or emergency command personnel of any missing individuals. For more information on fire emergency procedures, review the following: <http://www.uwsp.edu/rmgt/Pages/em/procedures/grounds/fire-explosion.aspx>.
- *Active Shooter/Code React:* Run/Escape, Hide, Fight. If possible, your best option is to run away from the attacker to safety. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Call 9-1-1 when it is safe to do so. Follow instructions of emergency responders. If you are unable to escape, use your best judgment. Review the Active Shooter/CODE REACT procedures on campus at <http://www.uwsp.edu/rmgt/Pages/em/procedures/violence/active-shooter.aspx>.

See UW-Stevens Point Emergency Procedures at www.uwsp.edu/rmgt/Pages/em/procedures for details on all emergency response at UW-Stevens Point.

LAB USE REGULATIONS

Department of Geography and Geology

CARTOGRAPHIC/GIS/REMOTE SENSING COMPUTER LABS – Rooms B308/B312

COMPUTER GEOGRAPHICS LAB -- Room B346

SPATIAL INFORMATION ANALYSIS LAB (SIAL) -- Room D326

1. Geography and Geology computing labs are NOT public computing labs. Computing labs maintained by the Department of Geography and Geology are to be used **exclusively** by students enrolled in geography and geology classes requiring their use or when given special permission by a faculty member of the Department of Geography and Geology.
2. **AUTOMATIC SUSPENSION OF ROOM KEY PRIVILEGES.** The Department of Geography and Geology will monitor computer usage. Students who log on to department computers for friends who do not have permission to use Geography and Geology computing labs will automatically have their room key privileges suspended. Automatic suspension will also occur if students provide their user name and password to friends for the purpose of providing them with access to Geography and Geology computers when permission has not been given by the Department.
3. Doors to the lab rooms must always be shut and locked by the last student to leave the room. For security purposes no room should be left open or unlocked if it is not being occupied.
4. Computers needed for classroom instruction will have priority over individual use. Faculty permission is required for student use of computers during classroom instruction.
5. Students are not allowed to bring friends or guests along with them when using the labs.
6. No food, beverages, or tobacco are permitted in the labs.
7. Headphones are required for any audio applications. The Department does not supply headphones.
8. Students are not allowed to modify hardware and software configurations.
9. Students who break or damage equipment will be responsible for the repair or replacement of such equipment.
10. Courteous behavior is required at all times.
11. **Access to Geography and Geology labs and computer labs after hours is a privilege not a right.** Students checking out keys for the labs (and the Science Building) are responsible for their security. Keys must be checked out through the Geography and Geology Office only with the permission of the instructor. Students who do not return their keys at the end of the semester or academic year will have their grades withheld.
12. Failure to comply with any of these rules will result in suspension of a student's privilege to use the labs. First Violation – Warning Issued; Second Violation – Suspension of Room Key Privileges. Automatic suspension supersedes a first violation warning. A First Violation may result in an immediate suspensions/revocation depending upon the severity of the violation.