

Instructor: Dr. Keith Rice

Class Assistance: only by appointment (use e-mail for scheduling)

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This course is an in-depth examination of interactive, spatio-temporal, and cyber-cartographic techniques. A thorough examination of relevant computer software (and associated devices), as well as their applications to cartography will be explored. We will focus on the conceptual and developmental aspect of analytical cartography, animation, web presentation, and dynamic map design while learning pertinent multimedia, web and cartographic terms, concepts and syntax. Many commercial software packages and programming languages, including Surfer, CorelDRAW!, MapViewer, Google Map API, HTML5, Javascript, ArcGIS, ArcGIS Pro; and Adobe Illustrator, Animate & Dreamweaver, will be used to present students with diverse digital mapping situations. Although a seemingly inordinate amount of time will be spent in learning the syntax of many of the aforementioned software programs, you will also be presented with several computer-based cartographic production and design problems. Conceptual topics of interest will include: terrain mapping, three-dimensional visualization, web publication, dynamic & interactive map design, map animation techniques, cybercartography principles, and integration of sound with animated maps will be explored.

Lectures: Lecture sessions will be on Monday and Wednesday mornings, and will concentrate on the basic theoretical and applied techniques of computer-generated maps and associated databases that will lay the foundation for the lab assignments.

Laboratory: All labs will be conducted in an online environment. You will need to use the desktop computers in B-308 in-person or online through UWSP's Online Access Lab system. This is not the normal GIS Lab computer environment. In the Online Access system you will need to log on to one of the computers in B-308 or B-312. Please refer to your Remote Access - GEO Labs Online instructions. You can log on to one of these computer lab workstation from your home, residence hall room or anywhere on the campus wireless network. Our remote computer lab allows you access to software that is only available in computer labs.

There will be eight different lab projects that will be scheduled throughout the semester (refer to class outline for lab assignments). The majority of assignments will take 2-3 hours to complete, but a couple of the labs may take up to six hours. Each mapping assignment will count between 6 - 7 percent of your final grade, for a total of 50 percent of your total course grade. These projects should be completed and handed in by the due date indicated by the instructor. Similarly, reading assignments should be completed before the class sessions for which they are assigned.

Examinations: There will be two examinations, a **midterm** on October 28th, covering the first eight weeks of the course and a **online** comprehensive **final** exam (Canvas software) (Tuesday, *December 15th, 10:15am – 12:15pm*). The midterm will be composed almost exclusively of multiple-choice and matching questions, focusing not only on basic concepts, principles, and definitions, but also on the applications of this knowledge to pertinent cartographic problems. It will count 20 percent of your final grade. The final examination will also be worth 20 percent of your course grade, and will be of similar structure to the midterm.

Texts: **Thematic Cartography & GeoVisualization**, 3rd edition
 by Terry A. Slocum, Robert B. McMaster, Fritz C. Kessler and Hugh H. Howard,
 Prentice-Hall, 2009 [*Text Rental Book*]

Mapping in the Cloud, Michael Peterson, New York: The Guilford Press, 2014
 [*GIS Center Text Rental Book*]

Evaluation & Grading:

	<i>Maximum Points</i>
Laboratories (eight total, 6 -7 points apiece)	50 points
Midterm Exam	20
Abstracts	10
Final Exam	20
 Total	 100 points

Ranges of percentage scores, exam points, course points, and their approximate equivalent letter grades are shown below. By referring to this table you can determine your letter-grade standing at any point in the course.

<u>Percent</u>	<u>6 Pt Lab</u>	<u>7 Pt Lab</u>	<u>Abstracts</u>	<u>Course Pts.</u>	<u>Letter Grade</u>
93-100	5.6	6.5	9.3	93	A
90	5.4	6.3	9.0	90	A-
87	5.2	6.1	8.7	87	B+
83	5.0	5.8	8.3	83	B
80	4.8	5.6	8.0	80	B-
77	4.6	5.4	7.7	77	C+
73	4.4	5.1	7.3	73	C
70	4.2	4.9	7.0	70	C-
67	4.0	4.7	6.7	67	D+
63	3.8	4.4	6.3	63	D
<63	<3.8	<4.4	<6.3	<63	F

Readings: A separate handout will detail the reading assignments for the semester from the textbooks and selected readings from various compendium texts. Each article from the text below will be identified by its book editor and page numbers.

Selected Readings Analytical and Computer Cartography, 2nd edition Keith C. **Clarke**, Prentice-Hall, **1995**

from:

Multimedia Cartography, editors: William **Cartwright**, Michael Peterson, Georg Gartner, Springer, New York, **1999**

Cybercartography: Theory and Practice, edited by D.R. Fraser **Taylor**, Elsevier, Amsterdam, **2005**.

Online Maps with APIs and WebServices, edited by Michael P. **Peterson**, Springer, New York, **2012**

Journal Abstracts: Each student is required to read at least four journal articles or three journal articles and one technical article, and compose a 1-page (minimum), single spaced, synopsis of each article or review. Criteria for each summary or abstract is outlined on an accompanying handout. Articles should be chosen from either Cartography and Geographic Information Science, Cartographica, Cartographic Perspectives, the Cartographic Journal, the International Journal of Geographical Information Systems, Journal of Cartography, and GeoCarto International. The abstracts are worth **10 percent** of your final grade and are due on November 23th.

COVID-19 Safety Measures and Requirements:

We need to take extra precautions, as outlined in our the UWSP return-to-campus guidelines. Face coverings, physical distancing, hand-washing and daily symptom monitoring are essential for everyone. Extra cleaning, disinfecting, directional signage, reduced capacity in classes, labs and meeting rooms are the norm.

At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. They are mandatory based on the advice of medical professionals because, combined with physical distancing and other measures, they help protect both the health of others and the person wearing the face covering. By university policy, your instructor is not allowed to begin class unless everyone is wearing a face covering. Failure to adhere to this requirement could result in formal withdrawal from the course. If someone is not wearing a face covering (nose and mouth) they will be provided a covering (if one is available).

You are also required to maintain a minimum of 6 feet of physical distance from others whenever possible. Your instructor does not have normal 'office hours' since students cannot enter instructor's offices (due to social distancing space and ventilation issues). Please e-mail your instructor outside of class hours if help is needed in an assignment.

Attendance: Although class attendance records will not be kept for grading purposes, it is strongly urged that class sessions not be missed. Remember that the success of class discussions is directly related to the amount of verbal participation, and with a small class one person can make a significant difference in aiding a classmate's understanding of a topic. HOWEVER, if a student feels ill or you have been exposed to COVID-19 DO NOT come to class. Use the UWSP screening tool to check your well-being each day - email your instructor and contact Student Health Service (715-346-4646) if you meet any of these situations. As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.

Attendance will be taken on the 1st and 8th week of the semester in order to comply with federal financial aid Title IV legislation attendance. UWSP Financial Aid Office is required by Federal law to retract financial aid for students that do not complete at least 60% of the semester for which they were awarded financial assistance. The mandated retraction formula uses the last date of attendance as a factor in determining the percentage of financial aid that must be returned to the U.S. Department of Education (DOE).

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.

Student Recording and Sharing Class Lecture

Lecture materials and recordings for Geography 361 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] 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.