

GEOGRAPHY 2200
Spring 2016 (3 credit semester hours)

Mapping our World
Tu. (lectures) & Th. (labs): 9:35am-10:55pm, Derby Hall 140

	Instructor	GTA
	Dr. Daniel Sui	Yuxi Zhao
Office Location	1110 Derby	1145 Derby
Office Hours	Tu./Th.: 11am-12:30pm	MW: 4-5:30pm
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COURSE OBJECTIVES

This course is an introduction to the science, art, and techniques of making maps. This class covers the principles of thematic map compilation and design, history of thematic mapping; map projections, data management and symbolization; common types and styles of thematic maps. This course will combine lectures with laboratory exercises. The lecture will cover basic cartographic concepts and design principles. Laboratory exercises will give students hands-on experiences in using computers for map design and production.

Provided that students fulfill the course requirements, they should expect the following at the end of this semester: (1) to understand the basic principles of thematic cartography; (2) to gain

experience in using microcomputers for map production and design; (3) to appreciate the importance of mapping in science and society; (4) develop keen interests in GIS and GIScience.

MAJOR REFERENCE TEXTS

Clarke, Keith C., 2014. *Maps & Web Mapping* [Print Replica] Kindle Edition. Prentice Hall.

Kimerling, A. J., Buckley, A. R., Muehrcke, P. C., & Muehrcke, J. O. (2011). *Map Use: Reading and Analysis*. 7th Ed., Esri Press

Shellito, B. A., 2013. *Introduction to Geospatial Technologies* (Second Edition Edition). W.H. Freeman

Law, M., & Collins, A. (2013). *Getting to Know ArcGIS for Desktop*. ESRI Press, 3rd Edition.

Dent, Borden D., 1998. *Cartography: Thematic Map Design*. 5th edition. Dubuque, IA.: Wm C. Brown Publishers.

Additional References:

Slocum, T. A., R.B. McMaster, F.C. Kessler, and H.H. Howard, 2005. *Thematic Cartography and Visualization*. Upper Saddle River, NJ: Prentice Hall.

Brewer, C. A., 2005. *Designing Better MAPS: A guide for GIS users*. Redlands, CA.: ESRI Press.

Krygier, J. and D. Wood, 2005. *Making Maps: A visual guide to map design for GIS*. New York: The Guilford Press.

Robinson, A.H., J.L. Morrison, P.C. Muehrcke, A.J. Kimmerling, S.C. Guphill, 1995. *Elements of Cartography* (6th edition). New York, NY.: John Wiley & Sons.

COURSE REQUIREMENTS POLICIES

1. ATTENDANCE: Class attendance is mandatory for this course. Each student is required to attend (in both body and mind) all the lectures and labs.

Students are expected to refrain from eating, drinking, talking, and reading material that is unrelated to the course while the class and the lab are in session. Eating and drinking in the lab are strictly prohibited. Violators may risk being

stripping off the privileges of using the lab.

2. EXAMS: All students are required to take two close-book exams. *No make-up exams will be given unless under extreme (verified) circumstances.*

3. LABS: The lab instructor will have additional requirements. All students are expected to fulfill those requirements.

4. BOOK REVIEW: You also need to write a critical book review for a book related to cartography.

5. MAP CRITIQUE:
Instructions to be given in class later this semester.

Both book review and map critique reports are due on the last day of class.

EVALUATION AND GRADING POLICY

Your course grade will be assigned according to the following scheme:

Distribution of Points

Mid-term	20%
Final Exam:	30%
Labs:	30%
Book Review	10%
Map Critique	10%
Total:	100%

Students with Disabilities

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located

in 150 Pomerene Hall, 1760 Neil Avenue;
telephone 292-3307, TDD 292-0901;
<http://www.ods.ohio-state.edu/>

Plagiarism and Academic Dishonesty

Plagiarism, as commonly defined, consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that

person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. As instructor I am required to report all instances of alleged academic misconduct to the Committee on Academic Misconduct (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/info_for_students/csc.asp).

GEOG 2200, Tentative Class Schedule and Topics, SP 2016

WEEK	LECTURE TOPICS	LAB/EXERCISE TOPICS	IMPORTANT DATES
Week 1 (1/12, 1/14)	Course Overview What is a map and why spatial is special?	Setting up your accounts & ArcGIS Tutorial & Lab 1	
Week 2 (1/19, 1/21)	Introduction to cartography and History of Cartography	Lab 1	
Week 3 (1/26, 1/28)	Map Scale, Coordinates, and Projections	Lab 2	
Week 4 (2/2, 2/4)	Spatial observations Visual variables	Lab 2	
Week 5 (2/9, 2/11)	Processing and Graphing of Geographical Data Statistical vs. spatial analysis	Lab 3	
Week 6 (2/16, 2/18)	Map Design and Organization Choropleth Maps	Lab 3	
Week 7 (2/23, 2/25)	Dot Maps Proportional Circle Maps	Mid-term Exam	Mid-term Exam, 2/25 (Thurs.)
Week 8 (3/1, 3/3)	Isarithmic Maps	Lab 4	
Week 9 (3/8, 3/10)	Cartograms and Flows	Lab 4	
Week 10 (3/22, 3/24)	Overview of GIS, Spatial pattern/association Analysis	Lab 5	
Week 11 (3/29, 3/31)	Cartographic data and accuracy Remote sensing and image maps	Lab 5	AAG week
Week 12 (4/5, 4/7)	Maps and Society: carto-controversy	Lab 6	

Week 13 (4/12, 4/14)	Volunteered geographic information (VGI) and the new wiki cartography	Lab 6	
Week 14 (4/19, 4/21)	The future of maps and maps of the future: Telling a better map story Careers in cartography	Discussion of Map Critique	
Week 15 (4/26, 4/28)	Last Day of Class (4/25)	Final Exam, May 3 (Tu.): 8-9:45am	

Spring Break: March 14-18, 2016; AAG Annual Meeting: March 28 – April 2, 2016