Geography 5200: Cartography and Map Design

The Ohio State University

Autumn 2015

Lecture: Monday and Wednesday, 12:40 - 1:35 PM Lab: Friday 11:30 AM - 12:25 PM Location: 0140 Derby Hall Course URL: http://carmen.osu.edu

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This course introduces the science, technology, and art of map making. Lectures will cover the principles of cartography including projections, digital data processing, design, and symbolization. A series of hands-on exercises are designed to help understand the cartographic theories discussed in the lectures. Students will use a suite of software packages (e.g., ArcGIS and Illustrator) to design and produce thematic maps.

Texts

We use the textbook by T.A. Slocum, R.B. McMaster, F.C. Kessler, and H.H. Howard (<u>Thematic</u> <u>Cartography and Geovisualization</u>. 3rd Ed., Prentice Hall) for lecture. I have also specified a recommended text, <u>Perthes World Atlas</u> (McGraw-Hill/Klett International, 2006), that includes many useful maps for discussions and future references. Additional materials will be either handed out during the class or made available on the course web site in digital forms. Instructions for lab exercises will be made available before each lab session.

Credit Hours

This is a 3 credit hour class.

Evaluation

Overall, the workload of this class includes eight lab assignments, three exams, a final project, and class participation. Student performance is assessed using the following four components:

- 1. Examinations (30%). There will be three exams.
 - The first is a regular midterm exam that covers the content of the first six weeks. This is

worth 10% of the final grade.

- The second midterm is specifically designed for map projections. Student who earned more than 2/3 of the credit pass the exam. Those who do not pass the exam will not receive higher than C in the final grade. Each student has two shots to pass the exam. Students who did not pass the first time will have a second chance at the end of the semester.
- The final examination will be comprehensive with an emphasis given to the materials taught after the second midterm. This is worth 20% of the final grade.
- Labs (30%). Assignments will be given during each lab session. The assignments should be completed individually. Late submission will result in a deduction of points (see lab policies for detail), unless a good and acceptable reason is presented prior to the deadline of the assignment.
- Individual project (30%). Each student must complete a cartographic project. Students will carefully choose a topic (theme), collect sufficient data, and use appropriate mapping techniques to produce a map for a real area on earth surface. Each student must submit a one-page proposal and a one-page design plan. Projects will be presented in the last week of class. More detailed instructions are linked through the course schedule page. Only the best map(s) will receive an A grade.
- 4. <u>Participation (10%</u>). There are three aspects in this category.
 - First, students are expected to attend all lecture and lab sessions. Throughout the semester, a number of worksheets will be handed out during class and students are expected to complete them in class.
 - Second, each student must compile at least four of his or her best maps as a portfolio. At the end of the semester, I will hold a cartographic clinic session with each student and discuss over the maps in the portfolio. This is a mandatory and intense one-on-one session designed to help students strengthen their map making skills.
 - Third, I will also provide a list of cartographic products (most of them are maps) and each student will sign up to discuss one of these products. The sign-up sheet with the dates and topics will be handed out on the first day of class. The discussion will be typically held at the beginning or end of the lecture sessions.

All the work must be returned on time. There will be no late submissions or make-up exams unless a good reason is presented prior to the due date.

Schedule

The course is divided into a few major topics:

Weeks 1-3: Symbolization and map elements Week 4: Color Weeks 5-6: Design Weeks 7-9: Projections Weeks 10-13: Mapping Weeks 14-16: Projects

The detailed schedule can be found at the **course schedule** on Carmen. Students should check this page frequently as it will be updated whenever new materials are made available.

Student with Disabilities

I would like to hear from anyone who has a disability that may require some modification of seating,

testing, or other class requirements so that appropriate arrangements may be made. Please talk with me after class or during my office hours. If you need more information about disabilities and accommodations, contact the Office of Disability Services.

Policy on Plagiarism and Academic Misconduct

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)
- Eight Cardinal Rules of Academic Integrity (www.northwestern.edu/uacc/8cards.html)