Syllabus for Geology 3000 – Geologic Maps
Spring 2016

Instructor: Jim Miller
Office Hours: Mon & Wed 1-2, or by appt.
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Class Meeting Time/Location:
Lecture: Monday - 8:00 - 8:50 AM
Labs: Tuesday and Thursday - 12:00-1:50 PM
Location: Chem 206

Computer/Internet Access: Room 108 Heller Hall (after hours, get key from Kirby Information Desk - between Kirby Bookstore and lower level of Heller Hall

Class Texts:
Required:
The Map that Changed the World: William Smith and the Birth of Modern Geology.
By: Simon Winchester, 2001, Harper Collins publishers

Recommended:

An Introduction to Geological Structures and Maps
By George Bennison and Keith Moseley, 2003, Hodder Education
All available from Amazon.com.

Class Website: www.d.umn.edu/~mille066/Teaching/geomaps16.html CHECK THIS SITE OFTEN! This site will be updated weekly as handouts, assignments, and related information are posted for downloading. Powerpoint lecture presentations given in class may be downloaded from the website.

Attendance/Participation: Since most information will be conveyed through lecture, discussion, and hands-on lab exercises rather than through a textbook, and because you will often work in groups, it is critical that you attend each and every class and that you actively participate. The material in this course also builds on itself day-to-day and week-to-week—it is critical that all students keep up all along the way. Material covered in lecture relates conceptually to the material covered in lab; concepts covered in each part of the course are critical to the other. Do yourself, and your classmates, a favor and do not fall behind, and please, ask questions all along the way. What you get out of the class will depend very much on what you, and your classmates, put into the class; investigative discussions are key.

Lecture and Lab Topics: A tentative list of lecture and lab topics is posted on the class website. Again, the website will be updated with reading assignments, notices, downloadable information, handouts, and powerpoint lectures as the course progresses – so check it often.

Equipment for Lab: Bring to every lab. Most of this can be purchased from the Kirby bookstore.
a) calculator with trig. and inverse trigonometric functions
b) metric ruler (15 cm minimum length, also divided in tenths)
c) 180° or 360° protractor (180° recommended)
or d) Ruler-protractor combination (can be substituted for b & c; clear is best; check for division in 10ths rather than 8ths)
e) drafting pencils (2H, 4H); 0.5mm mechanical pencils are good as they are always sharp
f) colored pencils (set of eight or more); Sanford Col-Erase work best and are available in the UMD store (art supply area)
Lab Exercises: Most lab sessions will involve hands-on work with geologic maps that can be completed in class. Toward the end of the term, weather permitting, we plan to do a mapping exercise lab or two outside. If more time is needed to complete a lab exercise, CHEM206 is accessible all week except 10-11:15 Mon and Wednesday. If you find the door locked, get a key from the Kirby Information Desk. Lab exercises will count for 50% of your grade.

Homework: Five homework assignments will be given out over the course and will count for 12.5% of your grade. **Homework assignments will be due one week from when they are assigned.** Late labs and homework assignments will be counted 15% off unless permission to turn it in late is requested and given in advance of the due date.

Lecture Quizzes: There will be two short (~20 min) quizzes given at the beginning of Tuesday labs that will count toward 12% of your grade. The quizzes will deal with material covered in the Monday morning lectures and will not be cumulative. There is no final exam in this class.

Book Report: A 3-5 page book report on the assigned text (The Map That Changed The World bt Simon Winchester) at about the midpoint of the course. This report and a class discussion about the book will count toward 5% of your grade.

Field Mapping Exercise: Over the final two weeks of the class, our focus will be directed toward conducting geologic field mapping of an area near Midway Road just west of Duluth. This final exercise will require two days of mapping (**Saturday and Sunday, April 16-17**), but will not require an overnight. Students are encouraged to revisit the field area on their own if they require more time to complete the mapping project. This mapping exercise will count for 15% of your final grade.

Grading: To summarize, final grades will be based on the following point and percentage breakdown:

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<thead>
<tr>
<th></th>
<th>Point Total</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Lab exercises</td>
<td>200</td>
<td>50%</td>
</tr>
<tr>
<td>Lecture Quizzes</td>
<td>50</td>
<td>12.5%</td>
</tr>
<tr>
<td>Homework Assignments</td>
<td>50</td>
<td>12.5%</td>
</tr>
<tr>
<td>Midterm Book Report</td>
<td>20</td>
<td>5%</td>
</tr>
<tr>
<td>Field Mapping Exercise</td>
<td>80</td>
<td>20%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>400</strong></td>
<td><strong>100%</strong></td>
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Extra Credit: Students may receive up to 20 points extra credit toward the 400 course total by two means:
1. Attending a Geology Department Seminar. Twelve 1-hour seminars are scheduled for Thursdays after class; see [www.d.umn.edu/geology/programs/schedule.html](http://www.d.umn.edu/geology/programs/schedule.html) for the spring seminar schedule. **(5 points for each seminar attended)**
2. Completing extra geopuzzle maps **(up to 10 pts each)**.

Students with Disabilities: Individuals who have any disability, either permanent or temporary, which might affect their ability to perform in this class are encouraged to inform the instructors at the beginning of the semester. Adaptations of methods, materials, or evaluations may be made as required to provide equitable participation.

*This syllabus is subject to change.*