

Laboratory Syllabus: GEO SCI 100 *Introduction to the Earth, Spring 2008*

Department of Geosciences, University of Wisconsin-Milwaukee

Teaching Assistant for Lab Section _____:

Name: _____ Office: _____ Phone: _____

e-mail: _____

Office hours: _____

Manager of Laboratory Instruction:

Name: Rob Graziano Office: Lapham 342 Phone: 229-3648

e-mail: graziano@uwm.edu

Office hours: By appointment

LOCATION All lab sessions meet in **Lapham 241**, unless directed otherwise.

WHAT YOU MUST BRING TO LAB CLASS EVERY WEEK

- 1. Required lab text:** *Zumberge, et al, 2007, Physical Geology*, 13th Edition. Failure to bring your lab text to class may result in reduction of points from lab lessons, at the discretion of the TA or the lab coordinator.
- 2. Required lab supplies:** Pencil(s), ruler, and scientific calculator. (Note: The ruler should be 12 inches in length and have both metric and English units. An adequate scientific calculator need not have any graphing or programming capabilities, but should have basic arithmetic and trigonometric [e.g., sin, cos, tan] functions. This type of calculator costs as little as \$15.) Cell phones are not to be used as your calculator.
- 3. Enthusiasm and willingness to participate within a group setting:** Nearly all lab lessons will be conducted in a “cooperative” or “group learning” format, so your participation within your group is essential to your success and your colleagues’ success.

ATTENDANCE

YOUR ATTENDANCE AT EACH LAB SESSION IS MANDATORY; YOU MUST ATTEND THE LAB SECTION IN WHICH YOU ARE REGISTERED; AND THERE ARE NO MAKE-UP LABS.

LAB LESSONS

Most laboratory lessons will be conducted in a ‘group learning’ format, whereby your ‘success’ in class depends largely on the success of your randomly chosen group. Completed lab assignments must be turned in during class (along with your other group member’s assignments). Each lab lesson will count for 10 pts. that can only be earned by participation during your lab class. Your participation (or lack there-of), within your group will affect your group’s learning success and subsequent grade. Your lowest lab lesson grade will be dropped.

QUIZZES

Beginning of lab quizzes: There will be four 10-point quizzes administered at the start of lab class on random weeks at the discretion of your TA. Beginning-of-lab quizzes (or ‘Pre-lab quizzes’) will cover the assigned reading material as listed in the previous week’s Lab prep assignment. Pre-lab quizzes will be distributed within the first five minutes of the start of class and collected no more than ten minutes thereafter. If you arrive to class late (i. e., after the quizzes have been distributed) you will not be allowed the opportunity to take the quiz. Your lowest pre-lab quiz score will be dropped

End of lab quizzes: There will be six 10-point quizzes administered at the end of the lab class on random weeks at the discretion of your TA. End-of-lab quizzes (or ‘Post-lab quizzes’) will cover material completed during that day’s lab. Post-lab quizzes will be administered after the lab lesson is completed and turned in, and each group has had a few minutes to preview and discuss a sample post-lab quiz. Since post-lab quizzes will be assessing each group’s mastery of that day’s lesson, each group will be given a few minutes to discuss a sample post-lab quiz prior to taking the actual quiz individually. Post-lab quiz scores will be “group graded” using a formula that will factor in 75% of your quiz score and 25% of your group’s average quiz score. Your lowest post-lab quiz score will be dropped.

TESTS

There will be two 50-point laboratory tests, as per the *Schedule* below. Tests will be practical, “hands-on” tests where students will be asked to either move around the room to different stations or share resources (e. g., maps, models, etc). **YOU MUST ATTEND YOUR SCHEDULED LAB TEST.**

GEO SCI 100 LAB CLASS SCHEDULE

<u>Date</u>	<u>Lab Lessons or Exams</u>
Jan. 28-Feb 1	L1: Introductions, Scientific Method, Gen’l Science Refresher
Feb. 4-8	L2: Plate Tectonics (w/ Geowall demo), Earthquakes
Feb. 11-15	L3: Minerals
Feb. 18-22	L4: Igneous Rocks
Feb. 25-29	L5: Sedimentary Rocks
Mar. 3-7	L6: Metamorphic Rocks
Mar. 10-14	LAB TEST 1 (covers L1, L3-L6)
Mar. 17-21	NO LAB CLASSES (SPRING BREAK)
Mar. 24-28	L7: Topographic Maps, w/ Geowall™ Demo
Mar. 31-Apr. 4	L8: Geologic Time
Apr. 7-11	L9: Streams, w/ Flume Demo
Apr. 14-18	L10: Wisconsin Geology
Apr 19 (Saturday)	Optional Baraboo/Devil’s Lake Field Trip
Apr. 21-25	L11: Groundwater/Glacial Geology
Apr. 28-May 2	LAB TEST 2 (covers L2, L7-L11)
May 5-8	NO LAB CLASSES

LAB PREP ASSIGNMENTS

It is essential that you come to lab prepared each week. The best way to be prepared for lab class (based on polling of previous Geo Sci 100 students) is to read the assigned reading material AND complete a weekly 'lab prep' assignment. Your TA will distribute a 'Lab Prep' assignment weekly for the following week's lab lesson. These assignments will specify the assigned reading from the lab book and include a series of basic questions or exercises, typically taken directly from the reading. Your TA will collect and grade these assignments on five random weeks. If collecting the assignments for grading, your TA will ask for them at the start of class.

HOMEWORK ASSIGNMENTS

There will be three lab homework assignments as shown below. Late policy for these three assignments for partial credit will be established by your TA.

GEO SCI 100 Lab Homework Assignment Schedule

<i>Geo Sci Website</i> Assignment	10 pts	Assigned: Feb 11-15	Due: Feb 25-29
<i>Rocks & Minerals</i> Assignment	30 pts	Assigned: Feb 25-29	Due: Mar 24-28
' <i>Geologic Problem</i> ' Assignment	30 pts	Assigned: Mar 31-Apr 4	Due: Apr 21-25

The *Rocks & Minerals* assignment will require you to visit the Greene Geological Gallery (LAP 168) at some point during the assigned time period. Hours that the Greene Gallery will be open will be announced by Feb. 4. Students unable to attend the Greene Gallery during *open hours* will need to set an appt. with your TA or Rob Graziano. THE GREENE GALLERY WILL NOT BE OPEN DURING SPRING BREAK.

LAB GRADING

Lab is worth 40% of your total course grade, so failure to participate in the lab portion of the course will allow you a maximum of 60% for the entire course (so, essentially an 'F' for the course). Your lab grade is comprised of 400 possible points, where every 10 points = 1% of your total course grade. The 400 possible points for lab are distributed as follows:

• In-class completed lab lessons	100 pts.
• Quizzes	80 pts.
• Lab prep assignments	50 pts.
• Homework assignments	70 pts.
• Lab exams	<u>100 pts.</u>
Total	400 points

EXTRA CREDIT

Up to 3% extra credit for the course can be earned through completion of two extra credit options. The two primary extra credit options offered for this course are: (1) an all-day class field trip to Devil's Lake and Baraboo on April 19th, 2008; and (2) a self-guided tour and homework assignment to be completed at the Milwaukee Public Museum anytime prior to your TA's deadline. Qualifying extra credit earnings will be added to your total course grade (lecture+lab) at the end of the semester.

- Field trip* earns you 2%: Students will earn 2% extra credit for the field trip option if they: (A) pay the \$20 fee; (B) sign the *University Liability Waiver* and *Conditions Agreement* forms; (C) attend the field trip, on University-provided transportation (i. e., bus) [*Sorry, you can't take your own car or meet us out there!*]; (D) successfully complete the field trip assignment distributed at the beginning of the trip; and (E) turn in the assignment at the end of the trip.

- Milw. Public Museum earns you 2%: Students will earn 2% extra credit for the museum option if they: (A) visit the museum; (B) provide proof of their museum admission by attaching their admission wristband to their completed assignment; (C) complete the MPM extra credit assignment handed out in lab class; (D) submit their own completed assignment and proof of admission to your TA by your TA's deadline and (E) receive a grade of 80% or better on the assignment.
- Both field trip & Milw. Public Museum earns you 3%: Students will earn a total of 3% extra credit if they complete all requirements for BOTH extra credit options.

Additional extra credit points will be available in lab through extra credit questions on quizzes or tests. Most extra credit questions will be posted for a week prior to class in the Geo Sci 100 display case outside Rm. 241 for you to research the answer and anticipate the question on the lab quiz or test.

*Additional Field Trip Details: You can learn more about the field trip on the Geo Sci 100 lab web page: <http://www.uwm.edu/Course/422-100/422-100.baraboo.html>. Field trip tickets will go on sale Monday, March 24th, 2008, and are available from your TA or from Rob Graziano. You must register for the field trip by Wednesday, April 16th. The field trip spaces are limited and are granted on a first-come, first-served basis. Sign up early! When possible, arrangements can be made to make the field trip accessible to students who need accommodations due to a physical disability; however, the student must make these arrangements in conjunction with the lecture instructor at least one week prior to the field trip.

OTHER RULES, RESOURCES, AND RECOMMENDATIONS

- Turn off your phones and MP3 players when you enter lab class!! **TEXT MESSAGING, PHONE CONVERSATIONS, BROWSING, DOWNLOADING, ETC ARE NOT ALLOWED DURING CLASS.** Students using their phones during class will be asked to leave and receive a ZERO for the remainder of class.
- Students are strongly encouraged to utilize the abundant resources and references available on the course website at www.uwm.edu/course/422-100/, esp. for homework assignments.
- Students are strongly encouraged to monitor postings in the glass display cabinet at the entrance of the lab classroom, Lapham 241. All lab course announcements, assignments and even some extra credit questions will be periodically posted in this cabinet.
- Students are encouraged to learn their TA's name! (*Some TAs have to learn up to 72 names!*)
- Labeled study specimens are available in the Greene Geological Gallery and in the display cabinet around the corner from the lab classroom (across from Lap 236). Photos of labeled specimens are available on the hard drive of in-lab MAC computers or on the Greene Geological Gallery link on the Geosciences Dept. website.
- This course is conducted under the conventional honor code: work you hand in for credit must be entirely your own. Any student suspected of unethical practices will receive a course grade of F, and be referred to University administration for disciplinary action in accordance with University policy and codes.
- Students have a responsibility to treat lab resources with care and respect. Any student who damages, defaces or destroys a laboratory resource (map, specimen, model, computer, or other instrument, etc.) may be ejected from that lab session, assigned a grade of ZERO for that lab, and held financially responsible for replacing the damaged resource.
- If you know in advance that you will not be able to attend a regularly scheduled lab class, you must contact your TA or the manager of lab instruction as far in advance as possible, to be eligible to make-up the lab lessons, quizzes or exams. You must then provide written documentation of your medical illness or emergency, family or military leave, or other verifiable extraneous circumstance to explain your absence from lab. Upon consideration of the verifiable reason for your planned absence and review of written supporting documentation, your TA may (based on your individual circumstances) make alternate arrangements with you to attend another one of their labs, OR make-up the missed lab lesson, quiz, or exam at another mutually agreeable time within one week of the regularly scheduled lab class. **NOTE THAT IF YOU MISS A LAB CLASS WITHOUT PRIOR NOTIFICATION TO YOUR TA OR THE MANAGER OF LAB INSTRUCTION, YOU WILL NOT BE ELIGIBLE TO MAKE-UP THE LAB LESSON, SUBSEQUENTLY EARNING A GRADE OF ZERO FOR THE MISSED LAB LESSON, QUIZZES, OR EXAM.**