GEL 120 – PHYSICAL GEOLOGY LABORATORY FALL SEMESTER 2011

NATURAL SCIENCES/HEALTH & PE DEPARTMENT MATHEMATICS AND SCIENCES DIVISION WAKE TECHNICAL COMMUNITY COLLEGE

SECTION 4136 Lab: Tuesday 3:00-4:50

Instructor: Ms. Gretchen Miller

Office: TE 240B (Main Campus) Telephone: 866-5598 Email: glmiller@waketech.edu

Office Hours: Tuesday & Thursday 9:30-11:00, and by appointment

Online (via email) Office Hours: Wednesday 2:00-4:00

Required Text: Geology 120 - Physical Geology Laboratory Manual, Eighth Edition, Wake

Technical Community College.

Prerequisites: Students who have not met the prerequisites may not remain registered for this

course. Prerequisites: ENG 090, MAT 070, RED 090, Corequisites: NONE

Semester Hours Credit: 4.0 credits upon successful completion of GEL 120. Separate credits are

not given for lecture and laboratory components.

Course Description: Please refer to your GEL120 lecture syllabus. The GEL 120 Laboratory is designed to complement and provide hands-on experience with many topics discussed in GEL 120 lecture.

Course Goals and Objectives: Refer to your GEL120 lecture syllabus.

Natural Sciences/Health & PE Department Policies: Refer to your GEL120 lecture syllabus.

Grade Evaluation

Your laboratory grade represents **25% of your final course grade** and will be determined from the following:

Mineral and Rock Test = 5% Laboratory Final Exam = 5% Weekly laboratory assignments = 15%

GEL 120 Laboratory Policies

- 1. Attendance will be taken at the beginning of each lab. You are required to attend the lab section for which you are registered. You are expected to be in attendance **at least 90%** of all scheduled course hours [Maximum of 2 lab absences]. If your absences exceed 10%, your instructor may withdraw you from the class unless satisfactory justification can be given. See Departmental Policy Pages for more information regarding the Attendance/Withdraw Policy.
- 2. Laboratory begins promptly on the hour. Introductory material for the lab will be presented at the beginning of lab. The information will not be repeated for those who are late. Arrive on time, with lab book, pencil, and paper in hand. If you arrive within 40 minutes late to lab, you will be marked 'tardy.' If you leave within 40 minutes early from lab, you will also be marked 'tardy.' Two instances of tardiness will count as one absence.
- 3. If you arrive more than 40 minutes late or leave more than 40 minutes early, you will be marked 'absent' for that lab. In addition, the lab exercise or test for that day will count as your one allowed makeup lab, and any further absences will result in a grade of 'zero' for those labs.
- 4. Unless there are extenuating circumstances, only one laboratory exercise OR test may be made up during the semester; you must have the instructor's prior approval to make up the lab, and the lab must be made up within one week of the original lab session. Any additional missed laboratory exercises will count as a 'zero' when computing your final grade.

- 5. If you are late for lab and missed a quiz that was given at the beginning of the lab, under no circumstances will you be able to make up the quiz.
- 6. You are expected to complete each laboratory exercise before leaving each day, and you are only allowed to leave early if your exercise is complete and turned in. If additional time is needed to complete an exercise, you must have been present during the entire lab period and it must be completed by the next scheduled laboratory session. Laboratory exercises will not be accepted for a grade after this time unless there are extenuating circumstances and you have the instructor's prior approval. If you leave early from a lab and do not turn in your assignment before you leave, you will get a 'zero' for that assignment.
- 7. Use your lab time wisely. It is your 1 hour and 50 minutes. Don't rush to finish labs and then run out. Use the time to review material and feel free to ask me questions concerning the lecture when you are finished with the lab. Once you leave the lab room, I assume you have no additional questions on the current exercise and expect you to have it completed in the allowed time. I will not answer questions about previous exercises if it disrupts the current exercise; if you have questions about a previous exercise you are free to see me in my office hours or schedule an appointment.
- 8. The lab allows for students to work in pairs, however, each student must turn in his/her own lab report. Please remember that at test time the work will not be group exercises, so do not rely on your lab partner to give you the answers. If I see that each person in a group is only doing part of an exercise and copying the rest from other group members, you will each only be graded on the work that you actually completed yourself. Under no circumstances are there to be groups with more than three students.
- 9. You are required to purchase a lab manual. At the end of each laboratory period, you will tear the appropriate pages from your lab manual and turn them in for grading. You may not write your answers on another piece of paper to turn in unless you have permission from the instructor.
- 10. You are expected to read through the laboratory material prior to coming to class, and always bring your laboratory manual to class.
- 11. If you do not purchase your textbook or lab manual before the first assignments are due, you are still responsible for the assignments. Not having your books is NOT an excuse for not completing your work and you will NOT be given additional time to complete assignments for this reason.
- 12. You are expected to put away your laboratory materials and clean up after yourself. This includes putting chairs back and shutting down computers, if applicable. Failure to put away your supplies will drop your daily lab grade 10 percentage points for that day.
- Cell phones must always be turned off during labs and tests. If your cell phone rings during a test, I
 may deduct points from your test.
- 14. You may NOT leave the room while taking a lecture or laboratory test unless you have an emergency or other urgent issue, and then you may only leave with permission from the test proctor. If you leave the room without permission during a test, your test paper will be collected immediately and graded as is.
- 15. 'The Math You Need, When You Need It (TMYN)' provides web modules to help students succeed with mathematics in introductory geoscience classes. We will be utilizing some of these modules to prepare for lecture and laboratory topics in this course. Some of the quizzes will be graded, and specific instructions will be handed out before each of these assignments is due. Refer to the schedule on the next page for TMYN module due dates. No TMYN quizzes will be accepted after the due date and time.

<u>Date</u> <u>TOPIC</u>

August 23 Introduction & TMYN Pre-test

Homework due by 9:00 am on August 30:

- TMYN Rates

- TMYN Unit Conversions (through "Rate Problems" on Practice Problems page)

August 30 Lab 2: Plate Tectonics

Homework due by 9:00 am on September 6:

- TMYN Unit Conversions ("Density Conversions" on Practice Problems page)

- TMYN Calculating Density

September 6 Minerals and Igneous Rocks – Part 1

September 13 Minerals and Igneous Rocks – Part 2

September 20 Minerals and Sedimentary Rocks – Part 1

September 27 Minerals and Sedimentary Rocks – Part 2

October 4 Minerals and Metamorphic Rocks – Part 1

(October 6-11, Fall Break)

October 18 Minerals and Metamorphic Rocks – Part 2

October 25 Mineral and Rock Test

(October 28, Last date to withdraw without penalty)

Homework due by 9:00 am on November 1:

- TMYN Graphing: Reading a Point From a Curve

November 1 Lab 11: Geologic Time

November 8 Lab 14: Online Earthquake Exercise

Homework due by 9:00 am on November 15:

- TMYN Unit Conversions ("Scaling Problems" on Practice Problems page)

- TMYN Slope and Topographic Maps

November 15 Lab 12: Topographic Maps #1

Homework due by 9:00 am on November 22:

- TMYN Graphing: Plotting Points & Constructing a Best Fit Line

November 22 Lab 15: Online Stream Exercise

Lab 16: Flood Frequency Exercise

(November 23-25, Thanksgiving Holiday)

November 29 Lab 19: North Carolina Geology Exercise #2 & TMYN Post-test

December 6 Lab Final Exam

^{**}The above schedule is subject to change at the discretion of the instructor!