

**GEOS 101X: " THE DYNAMIC EARTH"  
PHILOSOPHY, GOALS, POLICIES  
Spring 2012 (TR 9:45-11:15) Reichardt 201B**

**INSTRUCTORS:**

Elisabeth Nadin, Nat Sci (Reic) 334 enadin@alaska.edu office (474-5181)  
Office hours MW 1–3 pm or drop by or make an appointment

**TEACHING ASSISTANTS:**

As this manual went to press, TA assignments were not yet firm. Please revise names and contact info as needed below.

Section F01: Wednesday 6:00 – 9:00 PM: TA: Alec Rizzo (ajrizzo@alaska.edu)  
Section F02: Wednesday 1:00 – 4:00 PM: TA: Colby Wright (tcwright2@alaska.edu)  
Section F03: Tuesday 6:00 – 9:00 PM: TA: Gabrielle Vance (gtvance@alaska.edu)  
Section F04: Tuesday 2:00 – 5:00 PM: TA: Alec Rizzo (ajrizzo@alaska.edu)

**GEOS 101X "THE DYNAMIC EARTH"** is the 1st part of the Geology Department's core science offering. In this course we (the teaching assistants and instructors) will try to acquaint you with **WHAT SCIENCE IS ALL ABOUT** and our current understanding of **HOW THE EARTH WORKS**. This will require memorizing a few names (rocks, minerals, structures, major time periods), but mostly we will emphasize how we know what we know. This class is part of the Baccalaureate science core. Students must have a background of at least high school algebra (qualified to enroll in MATH 105) and English (qualified to enroll in ENGL 111).

**TEXTBOOKS AND MANUALS:**

The lab manual is one that we have put together and is simply identified as 'GEOS 101 Lab Manual'. **BRING YOUR LAB MANUAL TO EACH CLASS (LECTURE)!!!!!!!**  
The textbook is: *The Essential Earth* by Tom Jordan and John Grotzinger. This book is available in the bookstore or you can order it used online or even buy the e-book for \$43 from: <http://ebooks.bfwpub.com/essentialearth1e.php>. You can use another Intro Geo textbook, and read the appropriate corresponding chapter.  
Readings are from both Jordan & Grotzinger and the Lab Manual

**TEACHING (and—hopefully—LEARNING) STRATEGY**

Our focus is on 'teaching by doing' lab and homework exercises. In lecture, we will present information related to doing the pre-lab exercise and being prepared for a given laboratory exercise. The advantage of attending lecture is that you will both understand the relevance of, and be better prepared for, the upcoming lab. Reading and homework assignments (see attached syllabus) accompany each lecture. **You will find it helpful to look over the reading assignment before the appropriate lecture.**

You will do the pre-lab exercise both to acquire the background and to show us how well you understand the background to the lab. This allows us to spend the laboratory period **doing** the lab exercise rather than lecturing about it. Depending on the lab, you may finish it all in the lab period, or you might need to write up an overview question later, after lab. Finally, to make sure that you understand the topic we present in lab and lecture, you will do a homework problem that will be due after you've completed the laboratory exercise for the associated topic. While there are no quizzes in the lecture, I will present the opportunity for extra-credit exercises about once a week. A NOTE ABOUT EXAMS: If you are getting a B or better by mid-term on your combined pre-lab, lab, and homework grades, you will not need to take the midterm exam. Otherwise, I will see you in class for a mid-term exam, and a review will be held during a weekend help session. I will tally grades 1 week in advance and notify you if you are exempt.

**To pass this course, you will need to complete—in a timely manner—13 (of 14) homework, 13 (of 14) laboratory exercises, and the Final Project. You must also attend class and YOU MUST ATTEND THE FINAL TWO LABS (FIELD TRIPS).** The field trips are critical for you to really see the relevance of what we've presented concerning geology and the earth.

**We encourage you to work in groups for the labs (if you enjoy doing so) but please use your own words and DO NOT copy anyone else's work!!!!** Please refer to the Student Code of Conduct on p. 51 of the 2011–2012 UAF Catalog. If you have a documented disability that requires additional time on homework assignments or labs, or if you require other accommodation, please let us know within the first two weeks of the semester. The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials. We will work with the Office of Disability Services (474-5655) to provide reasonable accommodation to students with disabilities. The key is that if you are having problems in the class, see the TA or professor ASAP and we will try to help you.

## **LABS**

The first labs will meet Tuesday and Wednesday, January 24 and 25. Written laboratory reports from a given week are due at the start of the following week's lab. A weekly "pre-lab exercise" is due IN LECTURE at the start of class each Tuesday, and is worth 10% of the lab grade. **If you do not hand in your pre-lab, your lab grade will automatically drop by 10%.** The purpose of the pre-lab is to get you ready for the lab exercise; the reason for turning it in at lecture is to give the TA a chance to go over it and see where you need help before the lab starts. Our Thursday lectures should provide the information you need to do the pre-lab before the Tuesday class. If, after coming to the Thursday lecture, you are still unsure about the pre-lab questions, come to the Sunday afternoon help session or contact your TA or instructor.

### **Additional notes concerning Labs:**

1. Plan to bring your lab manual, **a pencil**, paper, and a calculator to each lab session.
2. You can make up a missed lab **if and only if** you have a really good reason and have notified your TA before the lab you will miss. You must arrange at that time when you will make it up. Some labs require extensive setup and your TA may not be able to prepare a lab especially for you on short notice.

3. It is possible to attend a different lab section **with approval** from the appropriate TA; however, make sure that you are registered for the lab time that you attend most often.
4. We will make every attempt to promptly return graded lab and homework exercises; consequently, we cannot accept materials turned in late (see Late Policy on next page).
5. Lab sections are **3 hours long**. We have designed these labs to run the full time for students who have attended lecture, completed the pre-lab, and have read the lab manual. If you aren't prepared it's likely to take you SIGNIFICANTLY longer than 3 hours or you may not be able to finish it. Please come prepared.

## HOMEWORK

Exercises are assigned on Thursday and due the following **Thursday at the start of lecture**. We urge you to set aside a regular time each week to work on homework and pre-lab assignments. The assignments are designed so that you can work on them over the weekend. The due date is such that you will have an opportunity to consult with your TA about the homework exercise. Attend the Sunday afternoon help session if you need extra help.

## HOMEWORK HELP SESSION: SUNDAYS 2 – 5, ROOM 230 (THE LAB)

## IN-CLASS EXERCISES

About once a week I will present a short exercise to be completed in class. You will need a sheet of paper on which you write your name (clearly) and the answer(s) to the exercise. I will collect the papers during class and use them to gauge attendance and to see if the class as a whole has 'gotten' the topic we are talking about. Even if you don't know the answer(s), please turn in a piece of paper with your name and best attempt.

## GRADING POLICY

As stated above, you must complete 13 of the 14 homeworks and 13 of the 14 labs. This gives you the opportunity to miss a week or to drop the lowest grade. **YOU MUST ATTEND THE FINAL TWO LABS (FIELD TRIPS)**. All homework and lab reports and Final Project summary must be handed in by 5 PM on Tuesday, May 8.

13 homeworks	--	30% of grade
13 labs	--	60% of grade
Final Project	--	10% of grade
In-class exercises	--	Extra Credit

**If you are missing more than 2 homeworks or labs prior to drop date (February 3) or withdrawal date (March 23) you will receive (copy to your advisor) a written request to drop the course. We may drop you from the course if you've done minimal work, but don't count on it. If you do minimal work, this indicates that you don't mind getting an F.**

**Late Policy:** Any pre-lab, lab report, or homework handed in after the due date will be docked 10% per day late. Homework or lab reports handed in after the graded assignment has been returned to the rest of the class will be docked 50%. [Exception: documented illness. If in doubt, talk to one of us.] Lab reports not submitted will receive a grade of 0%, even if you attended the lab. Remember that one lab and one homework grade will be dropped, so if you miss one deadline, it's not going to be a disaster. A habit of doing so, however, WILL be a disaster.

## EXAMS

As stated above, if your grade by mid-term on all material is less than a B (80%), you will be required to take a mid-term exam. Your exam grade will be averaged in with your lab grade. Those with >80% need not attend class that day.

**Plagiarism Policy:** It is fine to work with other students, but you *must use your own words* in answering a question. If two or more students hand in essentially identical lab or homework exercises, we will investigate and probably give at least one of the students a score of 0%.

### **General grading guidelines/predictors (what you can do to earn a grade in this class)**

A = All required homework, prelabs, and lab reports turned in on time and done to a high level.

B = All required homework, prelabs, and lab reports turned in (most on time) with good quality.

C = All required lab reports turned in, but some with low grades. Missing or poor quality HW.

D = Attend all labs, but missing a couple of lab reports, poor quality or missing homework.

F = Failure to attend labs, turn in lab reports and homework.

We will be using the +/- grading option to better evaluate borderline cases.

**A final word of advice:** Attendance of lectures is required and will be assessed with the in-class exercises. Further, it is our experience that students who regularly attend lecture are more apt to turn in their pre-labs and homeworks on time, be better prepared for lab (so they can get through in the allotted time), and get higher grades for the class. We will use the lectures to discuss homework and prelabs and to present extra credit in-class exercises.

## THE MOST IMPORTANT THINGS

- Attend Class
- Bring your lab manual to class and lab each day.
- Do the required reading before class.
- Work on the Prelab BEFORE it is due on Tuesday.
- Hand in assignments ON TIME.
- Ask questions if you do not understand something or have problems with the class.
- Take advantage of Office Hours for the instructors and TAs.
- Ask questions and participate in discussions IN CLASS.
- HAVE FUN!!!!!!!!!!!!!!