



GLY2010, The Dynamic Earth

Section 002, 3 credits

College of Arts & Sciences, School of Geosciences

Fall 2021

Here's the University course description:

"GLY 2010 is a first course in geology emphasizing the Earth's composition, structure, and dynamics. Lectures/activities include but are not limited to plate tectonics, earthquakes, volcanism, glaciation, global warming, shorelines, and natural resources."

This class is for both a general audience and for students continuing in Geosciences

This is a strong introductory course for potential geology majors. For other students, it may be the last earth science course they will take. For these students, the course will provide background understanding that you can use to evaluate geological events, hazards, and the effects of climate change that occur during your lifetime.

Here's everything you need to know about your instructors:

Instructor: Dr. Sarah Kruse (I'll say 'crew-za' to mimic the original German pronunciation; 'cruise' as my kids pronounce it, is also fine)
School of Geosciences
Email: skruse@usf.edu
Office hours: flexible, by appointment

TA: Tonian Robinson
Email: tonianr@usf.edu
Office hours: flexible, by appointment

Class Meetings and Structure:

The class meets 3:30 Monday and Wednesday in CMC 147. Attendance is not required; please do *not* attend if you do not feel well. Before every class meeting there will be some combination of required readings, videos and quizzes. There may also be homework assignments due the following class period or the following week. The class meetings will be devoted to discussion of questions that you have on the required material or on the homework assignments you are working through.

There will be four exams that take place during one of the scheduled class times (see more detailed description below).

If you cannot attend class, both the TA and I are available to meet with you by appointment via the course Teams site: <https://teams.microsoft.com/j/channel/19%3aJ435-wJHtVhl2m0bRomkLlxVfwndmLpqT2c-EPQ9Yl01%40thread.tacv2/General?groupId=46949d0d-d349-48d8-a934-bf2361577de7&tenantId=741bf7de-e2e5-46df-8d67-82607df9deaa>

The best way to communicate with me

- Email me at skruse@usf.edu (sending messages within *Canvas* works the same way, since these are automatically forwarded to my email address). Since students are not the only ones who use this address, **please put the class (e.g., "GLY2010") on the subject line** so I know who you are and what the email is about. Email is the best choice to notify me that you will be missing something and need a makeup time.

Note that my office hours and the TA Toni Robinson's office hours are flexible—we are counting on you to contact us whenever you need help, and we'll do our best to accommodate you.

First-day Attendance and the Syllabus Quiz

In lieu of taking first-day attendance **I've assigned a "First-day Attendance/Syllabus Quiz" that is due by midnight on Tuesday, August 24th. All students must have submitted this quiz at least once by this time or they will automatically be dropped from the class.** The quiz covers this syllabus and you can repeat it as many times as you want, with the highest score recorded in Canvas. The points count towards your online quiz score.

This class has specific objectives

Year in, year out, our alumni tell us the skills they are looking for in new hires go beyond factual knowledge. Most critically, they want employees to have communication skills and experience in the field. This class not only introduces our amazing Earth, but also helps you develop your writing and presentation skills, understanding of graphs and maps, and, pandemic permitting, will give you an introductory field experience.

I have expectations about what you will learn

At the completion of this course, you will be able to:

- Describe the theory of plate tectonics and explain how it relates to the distribution and occurrence of geologic features and natural hazards;
- Understand the processes of formation and distinguishing features of minerals, rocks, and soils.
- Recognize the concept of deep time and how time accommodates geologic processes.
- Explain at a basic level the science underlying various geologic hazards, including earthquakes, volcanic eruptions, floods, coastal erosion, and sinkholes.
- Describe the factors that influence the Earth's climate, and explain why the climate is changing.
- Discuss why and how a geophysical method (ground penetrating radar, seismics, or resistivity) can be used to image the subsurface.
- Evaluate graphs and maps illustrating geological phenomena.

Required Textbook and Course Materials

The textbook required for this course is Earth: Portrait of a Planet (6th edition) by Steven Marshak, ISBN: 9780393683196 and is available at a price negotiated by the USF bookstore and W.W. Norton. The Guided Learning Explorations (GLEs) and Geotours exercises are free with the purchase of the textbook.

To get this discounted price, you should purchase the ebook through Canvas by clicking on the link for the ebook in "Modules", any of the GLEs, or here. You should be prompted to "opt-in". This "opt-in" action will charge \$60.59 to your student account. If you are on financial aid, the school will take care of the charge behind the scenes. If you do not opt-in before the end of drop/add, the price increases, and you should follow the instructions for textbook purchase under Modules on Canvas. ***Having technical issues with your computer will not be an acceptable excuse for failing to complete readings and the GLE assignments.***

This class is divided into modules

The content of this class is organized into modules of uneven length. All the work for each module must be completed by the deadline, which will not be extended. Each module will require you to learn material in small chunks and take short online quizzes to check your progress. The modules will close on their due dates.

How grades are calculated

Your grade will be based on the following:

Midterm Exams (4 total)	45%
Homework, GLEs, quizzes, field trip (if possible)	40%
National Park Project	15%
TOTAL	100%

Final grades will be assigned based on the following scale:

> 97%	A+	73-76.99%	C
93-96.99%	A	70-72.99%	C-
90-92.99%	A-	67-69.99%	D+
87-89.99%	B+	63-66.99%	D
83-86.99%	B	60-62.99%	D-
80-82.99%	B-	< 60%	F
77-79.99%	C+		

You can always check your grades on *Canvas*, but see note below.

A note about the Canvas gradebook

Although Canvas tries hard, it's actually not a very good program for calculating final grades and averages. The "gradebook" is best considered a place to *display* your scores. Do not assume that the final total in Canvas is representative of your actual total at any given time (it may be close, but it is often a little too high or too low). A missing assignment is not counted as a zero until a zero is entered. The formula for calculating your grade is shown in the table above. If you really want to know what your actual class average is, calculate it.

The elephant in the room: cheating

- Students caught cheating will immediately receive an FF grade for the class, no matter how small the assignment. No warnings, no second chances.
- Some of your grade will come from group assignments, where not only may you work together, you *must* work together.

Course Schedule

The course schedule appears under Modules on Canvas, and you will generally need to work through the material in a module in the order in which it is presented. Assignments also appear under Syllabus on Canvas. Make sure you consult it every day to see your assignments and know what's due.

Here's what you need to know about the Exams (including absence policy)

Almost half of your grade will come from four 75-minute exams, about one every three weeks, that must be taken in class, or if you are quarantining, online with a lockdown browser. The final midterm will be held during the scheduled final exam time (Wed Dec 8, from 12:30-2:30) but you will only have 75 minutes to complete it (e.g., the exam will run from 12:30-1:45). Each exam will cover the material since the last exam only. Exams will consist of a mix of multiple-choice, multiple-answer, essay, and questions.

Making up exams will only be allowed in exceptional situations. To qualify for a makeup you must: (a) have a valid, documented excuse; (b) communicate to me *before* the exam via email or some other written manner that preserves a record, and; (c) promise to avoid discussing the exam with any other student until you've completed it. Students who do not satisfy these conditions will not be allowed to make up the exam.

Here's what you need to know about the Final Exam

There is none. You will take the fourth and final midterm during the allotted final exam time slot, but this will not be a final exam—it will be just another midterm.

Here's what you need to know about the short Online Quizzes

Within each module you will have to complete background readings (which often contain videos) and then take a online quiz to check your understanding. These quizzes are multiple-choice and you can take them three times. Your highest score will be recorded in Canvas. All quizzes must be taken before the due date to earn any credit.

Here's what you need to know about the Homework Activities

Forty percent of your grade will be determined from various homework activities, some of which may be group activities. Homework activities may require you to do calculations, work with real data, and reach conclusions. Some

will require you to use Excel. Some assignments will be short, and some will be longer, requiring a substantial effort. As a result, the homework activities will all have different point values.

If assigned a group activity, in addition to submitting the assignment, for which each student will receive the same grade (75%), the group must submit an annotated explanation of how each student contributed (10%), and each student must also submit a reflective statement about what they've learned from the experience (15%).

Homework activities have firm deadlines, and students/groups will be penalized 20% for each day it is late. Make sure you read the note about plagiarism (below) which applies to written homework activities.

Here's what you need to know about the National Park Project

The National Park Project constitutes 15% of your grade and is described in another document under Files. It must be done in groups of 2 or 3, and will follow a group grade format similar to the group Homework Activities.

Here's what you need to know about the Geophysics module

The Geophysics module will hopefully incorporate an opportunity to collect your own data on the USF campus in late October or early November. If this becomes impossible due to coronavirus or other complications, you can complete the module with existing data.

A note about plagiarism

Plagiarism is "intentionally or carelessly presenting the work of another as one's own" ([USF link](#)). In this course plagiarism specifically refers to stealing words that you've read or copied as your own when you answer essay questions on the exams or submit homework activities. Note that the definition of plagiarism leaves no leeway for ignorance—even if you didn't intend to borrow someone's words, it's still plagiarism if you do.

The USF Libraries have produced a [useful website](#) with some video links describing plagiarism and offering suggestions for how to avoid it; everyone should watch these videos, even if you think you already know all about plagiarism. Plagiarism is essentially cheating, so students who plagiarize—no matter how inconsequential the instance—will be treated as described under the section *The Elephant in the Room: Cheating*.

The most common reason students plagiarize is because they don't understand something, and it's easier to simply copy someone else's words than try and figure it out. Sometimes non-native English speakers plagiarize because they're afraid of making grammatical or stylistic mistakes. Resist these temptations! It is not worth risking an FF in the course for a few points on an exam or homework activity.

One way to avoid plagiarizing is to use quotation marks and cite your source. For example, I could write, plagiarism is "an act or instance of plagiarizing" (Merriam-Webster dictionary). Here I've used someone else's words (Merriam Webster's) but the quotation marks show that they're not mine. This avoids plagiarism, but **you may not use this strategy in this class**. Everything you write must be in your own words, not someone else's even if you enclose them in quotation marks and give them credit. The reasoning should be clear: I don't want you to hide your ignorance of a subject by using someone else's explanation.

You will need to have regular access to Canvas, and use it frequently

This class will be managed on *Canvas*, and I expect students to check the *Canvas* home page several times a week to see if there are any changes or announcements. If you need help learning how to perform various tasks related to this course or other courses being offered in *Canvas*, please consult the *Canvas* help guides. You may also contact USF's IT department at (813) 974-1222 or help@usf.edu.

I may grant an incomplete grade in exceptional circumstances

The current university policy concerning incomplete grades will be followed in this course. An Incomplete grade ("I") is exceptional and granted at my discretion only when you are unable to complete course requirements due to illness or other circumstances beyond your control. In this case, you and I must complete and sign the "I" Grade Contract Form that describes the work to be completed, the date it is due, and the grade you would earn factoring in a zero for all incomplete assignments. We can negotiate the due date as long as it does not extend longer than two semesters from the original date grades were due. An "I" grade not cleared within two semesters (including summer semester) will revert to the grade noted on the contract.

Note that, as per USF policy, an “I” grade may be awarded to a student only when a small portion of the student’s work is incomplete and only when the student is otherwise earning a passing grade.

You get to evaluate me and the course; please do!

All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued.

Here's the fine print you need to read (Standard University Policies)

Policies about disability access, religious observances, academic grievances, academic integrity and misconduct, academic continuity, food insecurity, and sexual harassment are governed by a central set of policies that apply to all classes at USF. These may be accessed at: <https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx>

Covid-19 Procedures

The university requires:

“I will deliver this class, as scheduled, in-person and will provide a flexible component for students who are asked to isolate or quarantine, or are unable to attend a class in-person for an extended period of time. Please note: All students may be required to attend in-person classes, especially to complete assessments and examinations. For students planning to attend in-person, I will teach in-person classes in the assigned classroom and on the scheduled day and time. For students who are unable to attend a class in-person, I will provide course content in a flexible format to support the student’s academic progression and success. Please contact me directly if you have questions. In addition, I will post details on how a student can join the class remotely in Canvas.”

USF has a plan in case of a campus emergency

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: *Canvas*, *Elluminate*, *Skype*, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor the *Canvas* site for each class for course specific communication, and the main USF, college, and department websites, emails, and MoBull messages for important general information.

Tentative order of topics to be covered

Module
Formation of Earth
Structure of Earth
Plate Tectonics
Minerals and Rocks
Geologic History
Volcanism
Earthquakes
Sinkholes
Groundwater
Geophysics
Global Change
Streams
Coasts