

GLY2100C-0008(19885) - Historical Geology

GLY2100C – Historical Geology

Course Information Spring 2022

Dr. Joseph Meert

Credits: 4

Pre-requisites: Physical Geology GLY2010C, Environmental and Engineering Geology GLY 2030C or instructor permission.

Room/Time: Williamson 202 Tuesday Periods 4-5 (10.40am-12.35pm) and Thursday Period 5 (11.45am-12.35pm).

Special Notice: Exams will be scheduled 2 weeks in advance along with the study guide. Exams will be given in the online format we discussed earlier ONLY. Students enrolled in the classroom section will need to take the exam online with the remaining students. This will only apply to exam dates which are typically on Tuesdays.

Office Hours: Office Hours will be Mondays and Wednesdays from 11-12:30 jmeert@ufl.edu

Office: Williamson 361 (Downstairs near loading dock) or 112 Wm (Neil Opdyke Laboratory). I will let you know which one on the office hour days. Note: If you are not vaccinated and choose not to wear a mask, you can attend virtual office hours via zoom. Zoom office:

Joe Meert is inviting you to a scheduled Zoom meeting.

Topic: Joe Meert's Personal Meeting Room

Join Zoom Meeting

<https://ufl.zoom.us/j/4131442564?pwd=Yk1wY1VpYUtjUjhSZitiTk1BOWZnUT09>

Meeting ID: 413 144 2564

Passcode: 123987

Email: jmeert@ufl.edu (<mailto:jmeert@ufl.edu>)

Lab Syllabus/Schedule: [S2022_GLY 2100 Lab Syllabus.docx](#) ↓ (https://ufl.instructure.com/courses/450456/files/65348826/download?download_frd=1)

Lab Instructor: Ananya Singha

Office Hours : TBD

Email: singha.ananya@ufl.edu (<mailto:scottrimiller@ufl.edu>)

Lab Room: Williamson Hall Rm 215.

Suggested Text: *Evolution of the Earth* by Prothero & Dott. Not required as all test questions come from the lecture.

Course Description:

Evolution of the earth and its life, including the major physical events and evolutionary changes recorded in the geologic past.

Course Objectives:

1. Review key introductory geological concepts including: plate tectonics, evolution, stratigraphy.
2. Review/introduce the scientific method and how this is applied in gathering geological evidence. Develop skills for observing, interpreting and analyzing the rock record to tell the geological story.
3. Travel through geological time to understand how major geological events in Earth's history are reflected and recorded in the rock record and the modern landscape.
4. Be able to apply geological skills, knowledge and understanding of key concepts to decide how to approach an unknown area to discover its geological history.
5. Improve communication in a team and life-long learning skills.
6. Learn (memorize) Geological Time Scale (No dates/no rates)

7. The **primary goal** for this course is for you to be able to observe, interpret and analyze the rock record to understand geological history as recorded in crustal rocks.

CANVAS: All course announcements, assignments and exercises will be posted to the Canvas website. Your grades will also be updated on the Canvas website. If you fail to check CANVAS, you may not use that as an excuse for a late/absent assignment.

Expectations:

Cell Phones/Laptops: I expect each of you to read this [article \(https://www.technologyreview.com/s/614934/teenagers-without-cell-phones/?utm_campaign=site_visitor.unpaid.engagement&utm_source=email&utm_medium=social_share&utm_content=2019-12-30\)](https://www.technologyreview.com/s/614934/teenagers-without-cell-phones/?utm_campaign=site_visitor.unpaid.engagement&utm_source=email&utm_medium=social_share&utm_content=2019-12-30), before the first class. Cell phones/laptops are not really necessary for this course unless otherwise indicated. Your attention/engagement is more important.

I will put considerable effort into this class and therefore, I expect the same from you. It is vitally important that you understand all the major concepts covered. This is an important class for developing geological thinking— you must keep up with readings, class assignments and lab assignments. It will be **impossible to catch up**. I want you to succeed and I am willing and available to help, but I cannot help unless you **ASK FOR HELP**. Please come to me as soon as you start falling behind. If you come to me the day before the final exam it will be too late.

Class Participation:

Class participation is very important – you should be actively engaged in answering questions and listening to other answers given. You are also expected to ask questions during class about topics you do not understand. There will always be several other students who will benefit from you asking a question. The more engaged you are, the more you will get out of this class. There will be team-based class activities and peer review will form part of your class participation grade.

Attendance/Absences:

You are expected to attend **ALL** classes and labs and do the assigned readings. There is a strong positive correlation between attendance and final grade. Attendance will be taken at random times and will form part of your class participation grade. If you are going to be absent you need to email me **BEFORE** the scheduled class time and provide a subsequent written excuse from a doctor (for illness) or family member (for a death in the family). I expect you to be **on-time** to every class. I understand that sometimes lateness is unavoidable. If you are late on a test day you will not be given extra time.

Late Work:

Assignments will be due **before** class unless otherwise stated. I will accept late work up to three working days (M-F) after the original deadline with a deduction of 10% for each day i.e. if your work is graded at 90% and it is 3 days late you will receive a grade of 60%. After this, NO late work will be accepted. You will lose 5% if you hand it in late on the date due, but before 5pm. Penalties will be determined by 5pm each day. If you have a written excuse from a doctor (for illness) or family member (for a death in the family) AND let me know within a week of the assignment being due, you will not be penalized for late work as long as it is handed in by a re-scheduled date. Make-up exams are highly discouraged, but will be granted if a written excuse is provided.

Etiquette, Disabilities, Cheating:

All students are expected to adhere to the student honor code (<http://www.dso.ufl.edu/judicial/honorcode.php>). Cheating and plagiarism will not be tolerated. No texting, calling, radios, MP3 players, emailing or social media play during class. I will deduct points from your class participation for persistent offenders! Please show courtesy to our instructors and classmates by turning up on-time and leaving on-time (not early) and avoiding unnecessary disturbances during class. *Students with disabilities requesting classroom accommodation should contact the instructors as soon as possible to discuss appropriate accommodations.* The Dean of Students Disability Resource Center website is <http://www.dso.ufl.edu/drc> (<http://www.dso.ufl.edu/drc>).

COVID WARNING: You should be Covid cleared by UF and maintain continuous clearance. Your instructor is in a vulnerable population and would rather not die because I am teaching in person. Your cooperation in keeping us all healthy is appreciated.

Assessment and Grade Weighting:

See the grade weighting listed below. Each exam is 14.99% of your grade and the exams are non-cumulative although each assumes you've mastered the concepts previously addressed.

Geological Time Scale: Part of the 'pop' quiz score will be how well you know the geological time scale available at: <https://www.geosociety.org/documents/gsa/timescale/timescl.pdf> (<https://www.geosociety.org/documents/gsa/timescale/timescl.pdf>)

Grading Criteria:

Three major performance areas will determine your grade: **Individual Performance, Team Performance, Class Participation and Labs.**

Grade Weights:

1. Exams (3 exams 14.99% each)	44.97%
1. Pop Quizzes/In class stuff	25.03%
2. Labs	30%...
Total: 100%	

Determination of Final Grades:

Raw scores will be weighted according to the grade weights for each performance area as set out in the grade weighting section including the decisions made by the class online survey. Final course grade will be based on an individual's standing in the overall distribution of total individual scores in the class. There is no limit to the number of A's earned in this class, but the mean grade will be placed in the B category. There will be no down grading. Letter grades are as follows:

A=92% or above, A-= 89-91.9%, B+=86-88.9%, B=82-85.9%, B-=79-81.9%, C+=76-78.9%, C=72-75.9%, C-=69.5-71.9%, D+=67-69.4%, D=63-66.9%, D-=60-62.9%, E=<60%.



Syllabus is subject to change – including the number of assignments and grading.

Course Schedule (Extremely Flexible!). This course moves as quickly/slowly as required. Sometimes we get hung up on a certain topic and that's fun. Othertimes, we move quickly.

Week #	Topic	Suggested Reading
-		
1	Introduction to Science/Philosophy	None
2	Basic Concepts/Review of Intro Course	Chapter 2,3,7
3	Time, Relative and Absolute	Chapters 1,4 &5
4.	Origin/Evolution of the Earth	Chapter 6
EXAM 1- Covering the above topics		
5.	Precambrian #1	Chapter 8
6.	Precambrian #2	Chapter 9
7.	Evolution and Early Life	Chapter 9
8.	Early Paleozoic/Sauk Sequence	Chapter 10
EXAM 2- Covering the above topics		
9.	Late Ordovician	Chapter 11
10.	Middle Paleozoic	Chapter 12
11.	Late Paleozoic	Chapter 13
12.	Why life goes extinct	None
Exam 3-Covering the above topics		
13.	Mesozoic Life-1	Chapter 14
14.	Mesozoic Life-2	Chapter 14
15.	Cenozoic and Hominids	Chapters 15,16
16.	Summary	None

Final Exam-Optional, but cumulative and can replace lowest exam grade

Tentative Lab Schedule:

Date	Details	
Fri Jan 10, 2020	 SURVEY	due by 11:59pm
Mon Jan 13, 2020	 Lab 1- How do Geologists study Geology? (Written Report)	due by 4pm

















Date	Details	
Tue Jan 21, 2020	Quiz 1	due by 1pm
	Lab 5 Mineral Evolution	due by 1:55pm
Mon Feb 10, 2020	Lab 6- Miller-Urey Experiment	due by 2:15pm
	Lab 4 Rock Evolution Pt. 2	due by 11:59pm
Tue Feb 18, 2020	Exam1	due by 11:59pm
Mon Mar 30, 2020	Lab 10- Mesozoic Life Activity	due by 1:50pm
Tue Mar 31, 2020	Assignment #1-Covid Interval	due by 11:59pm
Mon Apr 6, 2020	Exam 2-Part 2	due by 11:59pm
Mon Apr 13, 2020	Lab 11- Extinctions, a mollusk based activity	due by 1pm
Mon Apr 20, 2020	Lab 9- Geography of Phanerozoic Geology using Google Earth (GPGuGE)	due by 5pm
Fri Apr 24, 2020	University of Florida GatorEvals – Spring 2020	11:59pm
	Exam 3, Part 2	due by 11:59pm
Fri May 1, 2020	Exam 3-part 1	due by 11:59pm
	Lab 7- Introduction to trilobite morphology	
	Lab 2- Geologic Maps, Cross Sections & Structure Contours	
	Lab 3- Geologic Maps Exercise	
	Lab 4- Rock Evolution Pt 1, Rock ID	
	Lab 8- Paleozoic Life	







January 2021						
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	1	2	3	4	5	6

Course assignments are not weighted.

Course Summary:

Date	Details	Due
------	---------	-----

Date	Details	Due
	 Exam 1 (https://ufl.instructure.com/courses/450054/assignments/5025396)	
	 Exam 2 (https://ufl.instructure.com/courses/450054/assignments/5025395)	
	 EXAM 3 (https://ufl.instructure.com/courses/450054/assignments/5025397)	
	 Lab 1- How is geologic research conducted? (https://ufl.instructure.com/courses/450054/assignments/5025402)	
	 Lab 10- Paleozoic Life (https://ufl.instructure.com/courses/450054/assignments/5025398)	
	 Lab 11- Mesozoic Life (https://ufl.instructure.com/courses/450054/assignments/5025399)	
	 Lab 12- KT Extinction (https://ufl.instructure.com/courses/450054/assignments/5025400)	
	 Lab 13- Hominin Skull Activity (https://ufl.instructure.com/courses/450054/assignments/5025401)	
	 Lab 2- Geologic Maps, Cross-Sections, and Structure Contours (https://ufl.instructure.com/courses/450054/assignments/5025403)	
	 Lab 3- Geologic Maps and Geologic Structures: A Texas Example (https://ufl.instructure.com/courses/450054/assignments/5025404)	
	 Lab 4- Rock Identification (https://ufl.instructure.com/courses/450054/assignments/5025405)	
	 Lab 5- Rock and Mineral Evolution (https://ufl.instructure.com/courses/450054/assignments/5025406)	
	 Lab 7- Introduction to Trilobites (https://ufl.instructure.com/courses/450054/assignments/5025407)	
	 Lab 8- Precambrian Interview (https://ufl.instructure.com/courses/450054/assignments/5025408)	
	 Lab 9- Geography of Phanerozoic Geology using Google Earth (GPGuGE) (https://ufl.instructure.com/courses/450054/assignments/5025409)	
	 Roll Call Attendance (https://ufl.instructure.com/courses/450054/assignments/5025410)	

Date	Details	Due
	 University of Florida GatorEvals – Spring 2021 (https://ufl.instructure.com/calendar?event_id=2356755&include_contexts=course_450054)	
	 University of Florida GatorEvals – Spring 2021 (https://ufl.instructure.com/calendar?event_id=2356756&include_contexts=course_450054)	
	 University of Florida GatorEvals – Spring 2021 (https://ufl.instructure.com/calendar?event_id=2356757&include_contexts=course_450054)	
	 University of Florida GatorEvals – Spring 2021 (https://ufl.instructure.com/calendar?event_id=2356758&include_contexts=course_450054)	
	 University of Florida GatorEvals – Spring 2021 (https://ufl.instructure.com/calendar?event_id=2356759&include_contexts=course_450054)	
	 University of Florida GatorEvals – Spring 2021 (https://ufl.instructure.com/calendar?event_id=2356760&include_contexts=course_450054)	