FAU

FLORIDA ATLANTIC UNIVERSITY

COURSE CHANGE REQUEST
Undergraduate Programs

Department Geosciences

College Science

UUPC Approval 2/26/24
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

***Current* Course Prefix and Number**	GLY2010C	***Current* Course Title**	Physical Geology / Evolution of Earth

*Syllabus must be attached for **ANY** changes to current course details. See Template. Please consult and list departments that may be affected by the changes; attach documentation.*

Change title to:

Change prefix

From: **To:**

Change course number

From: **To:**

Change credits*

From: **To:**

Change grading

From: **To:**

Change WAC/Gordon Rule status**

Add ☐ **Remove** ☐

Change General Education Requirements***

Add ☐ **Remove** ☐

*See Definition of a Credit Hour.

**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines.

***GE criteria must be indicated in syllabus and approval attached to this form. See Intellectual Foundations Guidelines.

Change description to:

Using the scientific method, critical thinking skills, and data analysis, this course will examine the fundamental processes of the Earth system, composed of an atmosphere, hydrosphere, cryosphere, lithosphere, biosphere, and exosphere, through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories and emphasize lithospheric connections with humanity.

Change prerequisites/minimum grades to:

Change corequisites to:

Change registration controls to:

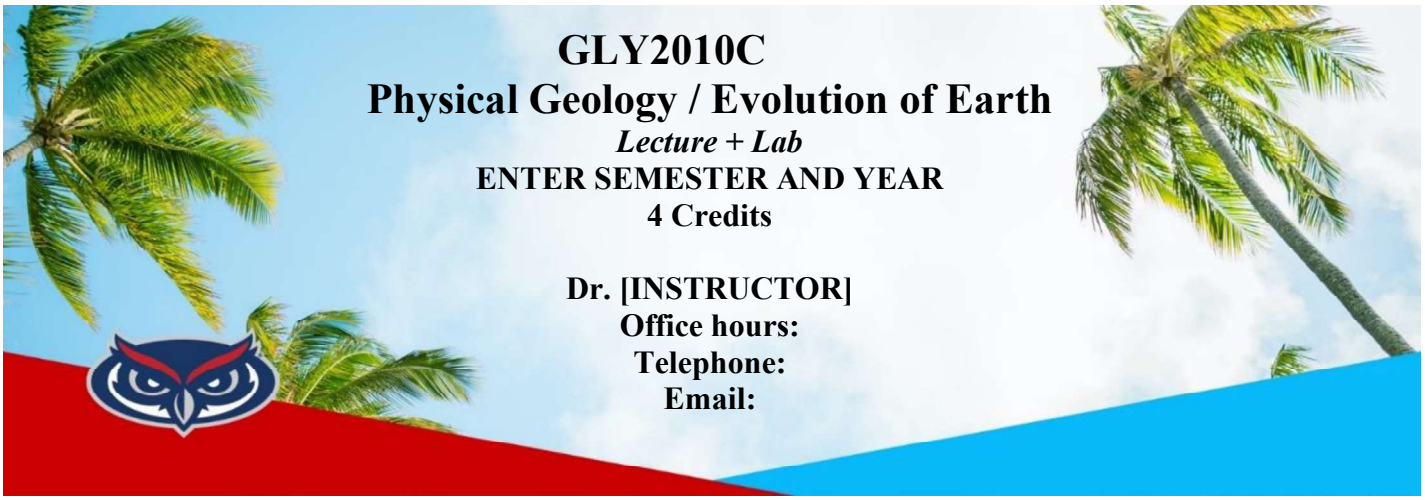
Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).

Effective Term/Year for Changes:	Fall 2024	**Terminate course? Effective Term/Year for Termination:**	

Faculty Contact/Email/Phone Tiffany Roberts Briggs / briggst@fau.edu / 561-297-4669

Approved by	***Date***
Department Chair	1/30/24
College Curriculum Chair	01 / 30 / 24
College Dean	2/1/24
UUPC Chair Korey Sorge	2/26/24
Undergraduate Studies Dean Dan Meeroff	2/26/24
UFS President	
Provost	

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.



GLY2010C
Physical Geology / Evolution of Earth
Lecture + Lab
ENTER SEMESTER AND YEAR
4 Credits

Dr. [INSTRUCTOR]
Office hours:
Telephone:
Email:

TA:
Email:
Office hours:

Course Description
Using the scientific method, critical thinking skills, and data analysis, this course will examine the fundamental processes of the Earth system, composed of an atmosphere, hydrosphere, cryosphere, lithosphere, biosphere, and exosphere, through time. The course will also explore interactions between these spheres, including critical analysis of scientific theories and emphasize lithospheric connections with humanity.

Slide-illustrated lectures. This is a General Education course.

Course Objectives
This course provides students a general background in the fundamentals of physical geology.

- Students will use critical thinking to recognize the rigorous standards of scientific theories.
- Students will analyze and synthesize geoscience data to draw scientifically valid conclusions.
- Students will recognize the different time scales associated with different geologic processes.
- Students will effectively communicate the importance of the interactions between humans and Earth's spheres.
- Students will apply their understanding of these geologic principles to complex issues.

Welcome Message from [INSTRUCTOR]: Welcome to Physical Geology/Evolution of the Earth! In this course, we will learn "how the earth works". I am a coastal geologist, meaning that I focus on "how the Earth works" specifically at locations where the land meets the sea. I look

forward to getting to know each of you and working together to learn more about various aspects of the planet we call home.

GENERAL COURSE INFORMATION

Term:
Course type: Lecture and Lab
CRN:
Location:
Prerequisites: None. This is an IFP course and meets the requirement for a science course with laboratory.
Meeting Times:
Lecture:
Lab: Depends on section (see "LAB" section of syllabus)
Textbooks:
Marshak, S., 2019, Essentials of Geology, 6e (loose-leaf w/ Ebook folder) (*lecture*) and Ludman and Marshak, 2019, Laboratory Manual for Introductory Geology, 4e (spiral-bound). [ISBN: 978-0-393-41534-6]
Materials:
Lecture: See below for technology and computer requirements.
Lab: A **new** lab manual (and writing utensil) is required to complete the course. You may also need a calculator, a metric ruler, and a good eraser. Information for technology and computer requirements below for those who opt into remote offering.
Lab*
* Additional information on lab instructors (GTAs), format, and tentative schedule is provided after the lecture-related syllabus information.

Note on course credit and expected workload
FAU policy grants one semester hour of credit for every hour of (weekly) meeting time for *lecture* courses. As a general rule, students are expected to spend two hours per credit working outside of class. Work outside of this class will consist of class preparation, textbook reading, homework assignments, group project work, studying for and taking exams, and completion of other activities assigned by the instructor.

Course Delivery Mode
This course can be completed fully online or with the lecture fully online and the lab in-person. All course materials, assessments, and assignments will be accessible only through FAU's learning management system—Canvas. You must log into Canvas with your FAU ID and Password to access the materials and assignments in this course. If you do not know your FAU ID or Password, click the following link for help. Link to Office of Information Technology Help.

COURSE ASSESSMENTS, ASSIGNMENTS, GRADING POLICY, AND COURSE POLICIES

Course Evaluation

Course performance (or grades) for this course will be determined based on *lecture* **and** *lab*. Lecture grades will be based on 1) six quizzes, 2) a midterm, 3) a cumulative final exam, and 4) topical assignments. Lab grades will be based on 1) weekly lab assignments, 2) weekly pre-lab quizzes, and 3) a cumulative lab final/practical exam.

All assignments are submitted via Canvas and due by Sunday at 11:59 pm. This includes lecture assignments and lab assignments.

Lecture: Topical assignments each week are worth 10 points each for a total of 120 points – with 2 weeks of topical assignments serving as extra credit (up to 20 additional points) or allowing for two weeks of missed assignment deadlines without detriment to your grade.

Lab: Lab assignments each week are worth 10 points each for a total of 100 points. These are based on the best 10 out of 11 labs. You can miss one without detriment to your grade.

All quizzes will be administered through Canvas and require that your browser is disabled (i.e., Lockdown Browser).

Lecture: Lecture quizzes are worth 30 points each and will be available each week until Sunday at 11:59 pm. Lecture quizzes occur roughly every two weeks.

Lab: Pre-lab quizzes are worth 5 points each and are due every week for a total of 50 points. These are based on the best 10 out of 11 pre-lab quizzes (i.e., you can miss one without detriment to your grade). The quizzes should be done prior to doing the lab assignment. Quiz content will be based on material from the previous week and the current week topic.

All exams will be in person, including the lecture midterm (150 points), lecture final exam (300 points), and lab final exam (100 points). If you miss the deadline for the exams, you will be required to provide documentation of an excused absence in order to make it up.

Grading

The total grade in this course is based on both lecture and lab performance.

Lecture:

The *lecture* grade will constitute 75% of the total grade (750 points total). The lecture grade will consist of 1) six quizzes (30 points each; 180 total), 2) topical assignments (120 points total), 3) a midterm exam (150 points), and 4) a cumulative final exam (300 points).

Assessment	Total Points	Percentage
Quizzes (6)	180 points	18%
Midterm	150 points	15%
Final Exam	300 points	30%
Topical Assignments	120 points	12%
TOTAL	750 points	75%

Lab:

The *lab* grade will constitute 25% of the total grade (250 points total). The lab grade will consist of 1) ten out of eleven pre-lab quizzes (lowest grade will be dropped), each worth 5 points (50 points total), 2) ten out of eleven lab assignments (lowest grade will be dropped) each worth 10 points (100 points total), and 3) a cumulative lab practical/final exam, worth 100 points.

Assessment	Total Points	Percentage
Pre-lab quizzes (10)	50 points	5%
Lab assignments (10)	100 points	10%
Lab practical	100 points	10%
TOTAL	250 points	25%

Overall course grade:
The total grade in this course is based on both the lecture and lab performance. The lecture grade is 750 points total (75% of your total grade) and the lab grade is 250 points total (25% of your total grade).

Assessment	Total Points	Percentage
Lecture	750 points	75%
Lab	250 points	25%
TOTAL	1000 points	100%

Letter grades will be assigned based on total points as follows:

940-1000 : A	900-939 : A-	
870-899 : B^+	840-869 : B	800-839 : B-
770-799 : C^+	740-769 : C	700-739 : C-
670-699 : D^+	640-669 : D	600-639 : D-
< 600 : F		

No extra credit will be given.

The grade given is for exactly the points earned, as outlined above. No extra credit will be given beyond that earned from extra in-class assignments. For geology majors, a grade lower than C must be repeated in order to graduate (note: that this includes grades of C-).

Student exams are available for individual review and discussion during office hours only. Grades will be posted to Canvas. You should also keep a record of your own grades earned in this course.

Incomplete grades will be given only when a student is unable to complete the course within the semester due to unforeseen circumstances, with a considerable impact on the student's life, and beyond the student's control. An incomplete or "I" grade shall ONLY be given for the reasons listed and under the conditions specified in the FAU course catalog (http://www.fau.edu/academic/registrar/catalog/academics.php).

NOTE: No make-up assignments, examinations or grade disputes will be considered after the last day of classes. The only exception to this will be the use of "Reading Days" in the case of emergencies or approved documentation for missing the final exam in the case of an emergency.

Tentative Course Schedule
A tentative course schedule is provided.
Note: The instructor reserves the right to make changes in the **Syllabus** and **Course Schedule** during the semester as necessary for the smooth functioning of the course. You are strongly encouraged to check Canvas frequently for the most current course schedule.

Support Services and Online Resources

Office of Information Technology Online Help Desk	https://helpdesk.fau.edu/TDClient/Home/
FAU Libraries	http://www.fau.edu/library/
Center for Learning and Student Success	http://www.fau.edu/class/
University Center for Excellence in Writing	http://www.fau.edu/UCEW/
Math Learning Center	http://www.math.fau.edu/mlc/
Office of Undergraduate Research and Inquiry	http://www.fau.edu/ouri/
Student Accessibility Services	http://fau.edu/sas/
Office of International Programs and Study Abroad	http://www.fau.edu/goabroad/
Freshman Academic Advising Services	http://www.fau.edu/uas/index.php

SELECTED UNIVERSITY AND COLLEGE POLICIES

Disability policy statement
In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Counseling and Psychological Services (CAPS) Center
Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau,edu/counseling/

Grade Appeal Process
A student may request a review of the final course grade when s/he believes that one of the following conditions apply: 1) There was a computational or recording error in the grading; 2) Non-academic criteria were applied in the grading process; 3) There was a gross violation of the instructor's own grading system.
Procedures for a grade appeal may be found in Chapter 4 of the University Regulations.

University Approved Absence Policy Statement
In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student's responsibility to notify the instructor at least one week prior to missing any course assignment.

Drops/Withdrawals
Students are responsible for completing the process of dropping or withdrawing from a course. Please click on the following link for more information on dropping and/or withdrawing from a course. Link to FAU Registrar Office

Policy on makeup tests, late work, and incompletes
All assignments are due on time. No late assignments will be accepted. Only missed assignments accompanied by documentation for an excused absence will be considered for make-up. Examination dates are posted in the syllabus. Failure to take any test will result in a grade of zero (F) on that test. Exceptions will be granted only with appropriate documentation of an emergency. It is the student's responsibility to take exams on the specified date. Failure to take any exam will result in a grade of "F" and a score of "zero". Students are not penalized for absences due to participation in University-approved activities, including athletic or scholastics teams, musical and theatrical performances, and debate activities.

Code of Academic Integrity Policy Statement
Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high-quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

Plagiarism is unacceptable in the University community. Academic work that is submitted by students is assumed to be the result of their own thought, research, or self-expression. When students borrow ideas, wording, or organization from another source, they are expected to acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass off such work as one's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized. This includes all discussion posts and other written and oral presentation assignments. If in doubt, cite your source!

Attendance Policy
Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal

obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Netiquette and Classroom Etiquette Policy

Due to the casual communication common in the online environment, students are sometimes tempted to relax their grammar, spelling, and/or professionalism. Please remember that you are adult students and professionals—your communication should be appropriate.
For more in-depth information, please see the FAU statement on Netiquette.

Classroom Etiquette/Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as *"... activities which interfere with the educational mission within classroom."* Students who behave in the face-to-face and/or virtual classroom such that the educational experiences of other students and/or the instructor's course objectives are disrupted are subject to disciplinary action. Such behavior impedes students' ability to learn or an instructor's ability to teach. Disruptive behavior may include, but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor's expectations for classroom conduct.
For more information, please see the FAU Office of Student Conduct: Link to Student Conduct Policy

Lecture Schedule (Tentative) –
NOTE: The course schedule is subject to change as stated in the syllabus above.

Week	Date	Topic	Chapter(s)	Assessment
1		Welcome to Physical Geology & Introduction to Geology, Earth in Context	1	
2		Plate Tectonics	2	
3		Minerals	3	Quiz 1 (Ch. 1-2) -
4		Magma and Igneous Rocks	4	
5		Volcanic Eruptions	5	Quiz 2 (Ch. 3-5) -
6		Sediments, Soils, & Sedimentary Rocks	Interlude B & 6	
7		Metamorphic Rocks	7	Quiz 3 (Ch. 6-7) -
8		Earthquakes	8	***Midterm (Ch. 1-7) -***
9		*Spring Break*		
10		Geologic Structures and Mountain Building	9	
11		Deep Time Biography of Earth	10 11	Quiz 4 (Ch. 8-11) -
12		Landslides and Mass Movements Geology of Running Water	13 14	
13		Oceans and Coasts Groundwater	15 16	Quiz 5 (Ch. 13-16) -
14		Deserts Glaciers and Ice Ages	17 18	
15		Energy and Mineral Resources Global Change	12 19	Quiz 6 (Ch. 12, 17-19)
		Final Exam	ALL	***FINAL***

LAB

GTA Contact Information

Section 002: Tuesday, 8:00 am to 9:50 am (*002*)
T.A.:
Email:
Office Hours & location:

Sections 003 and 008: Tuesday, 10:00 am to 11:50 am (*003*) and 12:00 pm to 1:50 pm (*006*)
T.A.:
Email:
Office Hours & location:

Sections 005 and 006: Thursdays, 8:00 am to 9:50 am (*005)* and Thursdays, 10:00 am to 11:50 am (*006*)
T.A.:
Email:
Office Hours & location:

Sections 004 and 007: Tuesdays, 2:00 to 3:50 pm (*004)* and Thursdays, 2:00 pm to 3:50 pm (*007*)
T.A.:
Email:
Office Hours & location:

Lab Format

Each week, pre-lab quizzes are due before conducting lab activities. All lab assignments are due the day of your lab section.

Lab Policies

- You *MUST* attend the lab section and session for which you are enrolled. Do not go to another TA's lab without permission or attend a session you have not signed up for.
- You *MUST* have a new lab manual to complete the course.
- Reading the lab manual introduction before you participate is required.
- Only do assigned problems. No credit will be given otherwise.
- If you miss a lab with an excused absence, you must make arrangements with your TA to make up your work.
- Grade changes and problems should be addressed within 2 weeks after lab completion.
- Students are expected to adhere to FAU's Academic Policies and Regulations, as laid out in the current University Catalog. These include attendance, completion of assignments, and cheating. See the section titled 6C5-4.001 Honor Code, Academic Irregularities, and Students' Academic Grievances.

Lab Schedule (Tentative)

Week	Date	Topic	Lab Manual
1		Welcome	--
2		Lab 1: Earth Intro	Ch.1 (pg. 1)
3		Lab 2: Examining Plate Tectonics	Ch. 2 (pg. 25)
4		Lab 3: Mineral Properties and Identification	Ch 3 (pg. 53)
5		Lab 4: Minerals, Rocks, and the Rock Cycle	Ch 4. (pg. 89)
6		Lab 5: Igneous Rocks	Ch. 5 (pg. 111)
7		Lab 6: Sedimentary Rocks	Ch. 56 (pg. 143)
8		Lab 7: Metamorphic Rocks	Ch. 7 (pg. 173)*
9		*Spring Break*	
10		Lab 8: Earthquakes	Ch. 11 (pg. 275)
11		Lab 9: Geologic Structures & Topo Maps	Ch. 9 & 10 (pgs. 217 & 239)
12		Lab 10: Streams	Ch. 13 (pg. 327)
13		Lab 11: Groundwater & Shorelines	Ch. 14 & 17 (pgs. 361 & 431)
14		*Review*	
15		LAB FINAL EXAM	*Comprehensive*

All lab materials due each week on Sunday at 11:59 pm via Canvas.

Science and Natural World Syllabus Description

Intellectual Foundation (General Education) Program Outcomes.

Scientific principles are behind what we find in nature and in natural occurrences. Scientific issues, such as those dealing with stem-cell research, cloning and global warming, are hotly debated by policy makers. Courses that meet this requirement share the goal of seeking to understand patterns and principles behind phenomena and occurrences, both in the inorganic world and in the living world. They typically fall within either the physical sciences (astronomy, physics, chemistry, and the earth sciences) or the biological sciences.

Students who satisfy the Science and the Natural World requirement will be able to:

- Explain important scientific concepts, principles, and paradigms.
- Explain how principles of scientific inquiry and ethical standards are used to develop and investigate research questions.
- Explain the limits of scientific knowledge and of how scientific knowledge changes.
- Critically evaluate scientific claims, arguments, and methodology.

After completion of the associated lab, the student will be able to:

- Demonstrate and explain how experiments are conducted.
- Analyze resulting data and draw appropriate conclusions from such data.