# FLORIDA ATLANTIC

# **COURSE CHANGE REQUEST Undergraduate Programs**

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Undergraduate Programs	SCNS Submittal
epartment	Confirmed
	Banner Posted

UUPC Approval \_\_\_\_\_

De UNIVERSITY College Catalog \_\_\_ **Current** Course Title **Current Course** Prefix and Number Syllabus must be attached for **ANY** changes to current course details. See <u>Checklist</u>. Please consult and list departments that may be affected by the changes; attach documentation. Change title to: Change description to: **Change prefix** From: To: **Change course number** Change prerequisites/minimum grades to: From: To: Change credits\* From: To: **Change grading Change corequisites to:** From: To: Change WAC/Gordon Rule status\*\* Add Remove **Change registration controls to:** Change General Education Requirements\*\*\* Remove Add \*Review Provost Memorandum \*\*WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines. \*\*\*General Education criteria must be indicated in syllabus and Please list existing and new pre/corequisites, specify AND or OR approval attached to this form. See GE Guidelines. and include minimum passing grade (default is D-). **Effective Term/Year Terminate course? Effective Term/Year** for Termination: for Changes: Faculty Contact/Email/Phone Date Approved by We zhe Department Chair \_\_\_\_\_ 01/26/2021 College Curriculum Chair \_\_\_\_\_ College Dean \_\_\_\_\_ UUPC Chair — Undergraduate Studies Dean UFS President \_\_\_ Provost \_\_\_

 $Email\ this\ form\ and\ syllabus\ to\ \underline{mjenning@fau.edu}\ seven\ business\ days\ before\ the\ UUPC\ meeting.$ 



## GLY 4750c Spring Semester, 2021

## **Geology Field Methods**

Prerequisites: GLY 2100 History of the Earth and life and/or GLY 2010 Evolution of the Earth and Permission of the Instructor

## Syllabus & Schedule

LECTURES: Friday 9:00 am - 11:50 am, Room 417

FIELD TRIPS: Fridays – time varies

**CREDIT:** 3 credits

**INSTRUCTOR:** Dr. Anton Oleinik

Office: SE 464 (561) 297-3297

E-mail: aoleinik@fau.edu

#### **OFFICE HOURS:**

Dr. Oleinik Friday 12:30 – 5:00 pm

By appointment, open door policy 24/7 during the Appalachian Field Trip

#### **GRADUATE TEACHING ASSISTANT:**

Daniel Vitkus, SE 422. Office Hours: open door, 24/7 during the Appalachian Field Trip dvitkus2019@fau.edu

#### **TEXTBOOK:**

**Required:** GEOLOGICAL FIELD TECHNIQUES, Edited by Angela Coe, Authors: Angela Coe, Tom Argles, David Rothery, Robert Spicer. Wiley-Blackwell, 2010. (**PDF file on CANVAS**)

#### ADDITIONAL USEFUL BOOKS:

Tom Freeman, 2010. Geology Field Methods. FriendShip Publications, 111 p. Robert Compton, 1985. Geology in the Field. John Wiley & Sons, 398 p.

#### **COURSE DESCRIPTION**

Introduction to field methods in geology. Geologic survey techniques, GPS, air photo interpretation, description and sampling of rock outcrops, and report writing. Includes an out-of-state field trip

(typically in the southeastern U.S.) plus several weekend trips to southern Florida localities. A fee is charged for field trips in addition to regular registration fees for this course. Lecture and field activities. **Spring 2021 note** 

The Spring 2021 course is unusual in a sense that the course is an "emergency replacement" of a regular Geology Field Methods course that includes the Appalachian Field Trip during the Spring Break. This Spring, there are travel restrictions and no Spring Break. Consequently, all field trips (excursions) will be held in South Florida.

#### **COURSE OBJECTIVES**

To master basic rock and geologic structure identifications and interpretations in the field. To practice standard geologic field techniques such as measuring sections, measuring strike and dip of the rocks, geologic mapping, working with topographic maps, recording field observations. Practice understanding of stratigraphy, rock record, and geologic history on the example of the South Florida.

#### **METHOD OF INSTRUCTION**

This is a face-to-face instruction course. There is no possible way for you to learn how to measure the orientation of rocks in the field without holding Brunton pocket transit in your own hands. Furthermore, it will not be possible for you to learn Field Geology without going to the field. The type of data that we will be collecting for field projects cannot be collected "remotely" or "digitally" The material for the lecture part of the course will be presented in lecture format, usually accompanied by PowerPoint presentations. Field exercises will be conducted during field trips in South Florida and require the investigation of various field sites, following instructions given on site by the instructor. Instructors and graduate teaching assistants will be available at the field sites to assist students.

#### **ATTENDANCE**

Students are expected to be present at all class meetings and field trips. Absence from class will have a negative impact on a student's grade. The main instruction method will be supervising a hands-on geologic activities in the field. Attendance and participation in all field exercises are mandatory. These cannot be completed on line. There will be no substitutions for any field trips missed for any reason.

#### FIELD TRIPS

Day trips to Miami, Stuart, West Palm Beach, and Islamorada will be held on Fridays. Tentative schedule of Field Trips is presented below. Field trips times and dates may be modified to fit the needs of the students of this particular group. Day long trips will involve students driving their own vehicles in order to keep social distancing. Carpooling is possible, but it has to be agreed upon between participants. Directions for the field sites for the Field Trips and materials necessary for the Field Trips are posted on Canvas.

**Lecture Examination.** One lecture/final examination based on lectures, readings from the textbook, and your own field experience will be held on April 16. Examination constitutes 10% of course grade. If you cannot make it to class on the day of the Examination, you have to notify me no later than the date and time stated for the Exam in order to make the exam up. If you will miss the Exam without notification, you will receive zero points for the Exam.

**Field notebook** will be collected and graded at the end of all field trips. Grade will depend on the completeness and accuracy of the information as well as on clarity of writing, field sketches and drawings. **No field lecture recordings** (using smart phones and video recording devices) are permitted during field trips. *All information must be recorded in the Field notebook in the field*. Only text written by hand in pencil will be accepted. **Typed and printed text in the Field notebooks, as well as glued in photographs are not acceptable!** 

Field Site papers/reports and projects/exercises - Every student will turn in three field reports on the geologic sites studied in the field: One report on one site of Miami Limestone, a report on the Key Largo Limestone and report on the Anastasia Formation. Reports will be based on student's observations in the field. Papers should clearly present data gathered in the field, formulate data-driven hypotheses, discuss alternative hypotheses, and discuss their interpretations. Papers must show knowledge of geologic concepts and processes, and understanding of relevant geologic history. Specific site will be randomly assigned by the instructors after the field trips are over. For example, we will be visiting three sites during the Miami Limestone field trip and two sites during the Anastasia Formation field trip. Each student will get one of the three Miami Limestone sites and one of the two Anastasia Formation sites. Every student will also turn in a stratigraphy project composed of the measured stratigraphic section of the Miami Limestone and paleocurrent project from measuring the direction of dip of cross-beds in the Miamim Limestone. See activities schedule for the submission deadline. Deadlines for papers are FINAL! No Exceptions! Papers will NOT be accepted after the deadline!

Guide to writing Field Site papers (Field reports) is available on Canvas.

## COURSE EVALUATION/GRADING will be based on the following criteria (out of 100 points/percent):

Item	Percent of final grade
Miami Limestone Field Report	15
Anastasia Formation Field Report	15
Key Largo Limestone Field Report	15
Stratigraphy Project, Miami Limestone	15
Paleocurrent project, Miami Limestone	15
Structural map project, Miami Limestone	5
Field Notebook	10
Lecture Examination	10

## **Grading Scale**

Percent	Grade	Percent	Grade
93-100 %	Α	73-76.9 %	С
90-92.9 %	A-	70-72.9 %	C-
87-89.9 %	B <sup>+</sup>	67-69.9 %	D <sup>+</sup>
83-86.9 %	В	63-66.9 %	D
80-82.9 %	B-	60-62.9 %	D-
77-79.9 %	C <sup>+</sup>	< 60 %	F

Attainment of the lowest grade average in any category will assure that your grade is not lower than the indicated grade.

### Course Schedule

LECTURES AND FIELD ACTIVITIES SCHEDULE AND IMPORTANT DEADLINES (These dates are tentative and may be modified to better fit the needs of the course)

1/15 (Friday) – Class scheduling, Lecture – Introduction to Field Techniques and equipment Reading: Textbook, Chapters 3, 4; Canvas references – Course Materials – References – Background References

1/22 (Friday) – Lecture – Brunton Pocket transit, Carbonate geology of Florida.

**Reading:** Textbook, Chapters 2, 12, 13., Section 3 of the JFC Field Exercise Manual. Manual and Brunton Pocket Transit Operation module on Canvas; Handouts on Canvas, also see Virtual Field Trips on the Department of Geosciences web site: <a href="http://www.geosciences.fau.edu/events/virtual-field-trips/">http://www.geosciences.fau.edu/events/virtual-field-trips/</a>

1/29 (Friday) – Field GIS and Digital techniques (Mr. Gammack-Clark)

2/3 (Wednesday) - Key Largo Limestone trip, Coral Gables

2/5 (Friday) - Lecture - Geology of Florida

2/12 (Friday) - Field Trip Windley Key, Islamorada

2/24 (Wednesday) - Field Trip Miami Limestone, Coral Gables.

**Reading:** Handout on Canvas, also see Virtual Field Trips on the Department of Geosciences web site: http://www.geosciences.fau.edu/events/virtual-field-trips/

3/3 (Wednesday) – Field trip Greynolds park, North Miami Beach

3/5 - Key Largo Limestone paper due. Deadline 10:00 pm

3/26 - Miami Limestone Exercises are due. Deadline 10:00 pm

3/31 (Wednesday) – Anastasia Formation Field trip, Stuart and West Palm Beach Reading: Handout on Canvas, also see Virtual Field Trips on the Department of Geosciences web site: <a href="http://www.geosciences.fau.edu/events/virtual-field-trips/">http://www.geosciences.fau.edu/events/virtual-field-trips/</a>

4/9 - Miami Limestone paper is due. Deadline 10:00 pm

4/16 - Lecture Exam, Field Notebooks must be submitted to Dr. Oleinik for grading.

4/20 - Anastasia Formation paper due. Deadline 10:00 pm

### **GENERAL CLASS POLICIES/MANDATORY SECTIONS**

#### **CLASSROOM ETIQUETTE:**

In order to enhance and maintain a productive atmosphere for education, personal communication devices such as pagers, beepers, and cellular telephones are to be disabled in class sessions. (University policy which applies to all classes - see FAU Academic policies (<a href="http://www.fau.edu/academic/registrar/catalog/academics.php">http://www.fau.edu/academic/registrar/catalog/academics.php</a>.) Any use of these devices during a quiz or examination will be considered to be cheating, and will be penalized accordingly. Communication devices (cell phones, pages, laptop computers, etc.) must be turned off and **out of reach** during all lectures and examinations.

#### **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.

#### **Disability Policy**

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 <a href="http://www.fau.edu/counseling/">http://www.fau.edu/counseling/</a>

#### **Honor Code and Academic Integrity**

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.

## ACADEMIC DISHONESTY ON ALL ASSIGNMENTS AND EXAMS IS GROUNDS FOR FAILURE IN THE COURSE.

By remaining enrolled in this course past the end of Drop /Add, you are agreeing to:

- uphold The Academic Honor System of Florida Atlantic University, and
- accept accountability for the course requirements, the course expectations, and the attendance policy stated in this document.
- attend the final exam which takes place as scheduled by the University.

Please see the following link for more information:

http://www.fau.edu/ctl/4.001 Code of Academic Integrity.pdf