

Spring 2020

## **EVSC 381-002: Geomorphology**

Nancy Jackson

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## Geomorphology: Spring 2020 Course Syllabus

**NJIT Academic Integrity Code:** All Students should be aware that the Department of Chemistry & Environmental Science (CES) takes the University Code on Academic Integrity at NJIT very seriously and enforces it strictly. This means that there must not be any forms of plagiarism, i.e., copying of homework, class projects, or lab assignments, or any form of cheating in quizzes and exams. Under the University Code on Academic Integrity, students are obligated to report any such activities to the Instructor.

### COURSE INFORMATION

#### Course Description:

This is a course in geomorphology, the study of landforms and the processes that create and modify them. This course will focus on geomorphology in a range of environments (aeolian, coastal, fluvial, glacial). We will examine the processes that drive geomorphic change in these environments and then assess the landforms that those processes create. We will examine how humans have altered contemporary landforms to adjust to extreme events (e.g. flooding) and climate change (e.g. sea level). Lectures will stress geomorphic principles and exercises will enable students to apply these principles to contemporary geomorphic problems.

**Number of Credits:** 3

**Prerequisites:** none

#### Course-Section and Instructors

Course-Section	Instructor
EVSC381002	Nancy Jackson (jacksonn@njit.edu)
	York Building Rm 126

**Office Hours:** Tuesday and Thursday 2:30-4:00

#### Required Textbook:

<b>Title</b>	Process Geomorphology
<b>Author</b>	Ritter, D.F., Kochel, R.C., Miller, J.R.
<b>Edition</b>	5 <sup>th</sup>
<b>Publisher</b>	Waveland Press
<b>ISBN #</b>	13: 978-1-57766-669-1

**University-wide Withdrawal Date:** The last day to withdraw with a W is **Monday, November 12, 2018**. It

will be strictly enforced.

**Learning Outcomes:** Students will be able to:

1. Describe landforms in different environments and the processes that create and maintain these landforms.
2. Know and apply common process-based formulae for the entrainment and transport of sediment by wind and water.
3. Explain how humans can influence both processes and landforms and the importance of this information in interpreting landform behavior.
4. Synthesize and communicate (oral and written) scientific research findings through development of a team-based term project.

## POLICIES

All CES students must familiarize themselves with, and adhere to, all official university-wide student policies. CES takes these policies very seriously and enforces them strictly.

**Grading Policy:** The final grade in this course will be determined as follows:

Exam I	25%
Exam II	25%
Final Project	25%
Exercises	10%
Field Problem	15%

Your final letter grade in this course will be based on the following tentative curve:

A	90+	C	70-74
B+	85-89	D	60-69
B	80-84	F	<60
C+	75-79		

Final grades are not subject to post-semester adjustment-with the exception of the amendment of a grading error. Under no circumstances will students be given the opportunity to complete extra-credit papers or other assignments to bolster their final grade.

**Attendance Policy:** The class builds on information from prior weeks and thus attendance is strongly recommended. It is also strongly preferred that you not depart the classroom in the middle of a session. Please arrive to class with the expectation that you will need to remain in place for the scheduled time period.

**Exams:** There will be two exams held in class during the semester. The following exam dates are tentative:

Exam I	Feb. 27
Exam II	Apr. 14

**Makeup Exam Policy:** There will normally be **NO MAKE-UP EXAMS** during the semester. In the event that a student has a legitimate reason for missing a quiz or exam, the student should contact the Dean of Students office and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc. clearly stating the date AND time of the mitigating problem. The student must also

notify the CES Department Office/Instructor that the exam will be missed so that appropriate steps can be taken to make up the grade.

**Cellular Phones:** All cellular phones and other electronic devices must be switched off during all class times. Such devices must be stowed in bags during exams or quizzes.

## ADDITIONAL RESOURCES

**Accommodation of Disabilities:** Office of Accessibility Resources and Services (*formerly known as Disability Support Services*) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT.

If you are in need of accommodations due to a disability please contact Chantonette Lyles, Associate Director at the Office of Accessibility Resources and Services at 973-596-5417 or via email at [lyles@njit.edu](mailto:lyles@njit.edu). The office is located in Fenster Hall Room 260. A Letter of Accommodation Eligibility from the Office of Accessibility Resources Services office authorizing your accommodations will be required.

For further information regarding self-identification, the submission of medical documentation and additional support services provided please visit the Accessibility Resources and Services (OARS) website at:

- <http://www5.njit.edu/studentsuccess/disability-support-services/>

### Important Dates

Date	Day	Event
January 21, 2020	T	First Day of Classes
January 31, 2020	F	Last Day to Add/Drop Classes
March 15-22, 2020	Su-Su	Spring Recess: No Classes/University Open
April 6, 2020	M	Last day to withdraw
April 10, 2020	F	Good Friday - University Closed
May 5, 2020	T	Friday Classes Meet - Last Day of Classes
May 6 & 7, 2020	W & R	Reading Days
May 8-14	F-R	Final Exam Period

## Course Outline

MONTH	DAY	DATE	TOPIC	READINGS/ASSIGNMENTS
JAN	T	21	Introduction to Course	
	R	23	Process and Response	CH 1
	T	28	Internal Forces and Climate	CH 2
	R	30	Internal Forces and Climate	
FEB	T	04	Weathering – Chemical	CH 3 48-64
	R	06	Weathering – Physical	CH4 86-100
	T	11	Slope and Mass Movement	CH 4
	R	13	Slope and Mass Movement	
	T	18	Drainage Basins – Morphometry	CH 5
	R	20	Drainage Basins – Hydrology	
	T	25	Review	
	R	27	Exam	
MAR	T	03	Research Projects	

	R	05	Fluvial Processes and Landforms	CH 6&7
	T	10	Fluvial Landforms	Research Project: Title, abstract, references due
	R	12	Aeolian Processes and Landforms	CH 8
	T	17	SPRING BREAK	
	R	19	SPRING BREAK	
	T	24	Aeolian Processes and Landforms	
	R	26	Glacial Processes and Landforms	CH 9&10
	T	31	Glacial Processes and Landforms	Research Project: outline and annotated bibliography due
APR	R	02	Coastal Processes and Landforms	CH 13
	T	07	Coastal Processes and Landforms	
	R	09	Review	
	T	14	Exam	
	R	16	Final Project Presentations	
	T	21	Field Problem	
	R	23	Field Problem	
	T	28	Final Project Presentations	
	R	30	Final Project Presentations	
	R	07	Final Projects Due	

*Updated by - 2020  
Department of Chemistry & Environmental Sciences  
Course Syllabus, Spring 2020*

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