GLY 5558C –Sedimentology Spring 2022 Svllabus Ver. 1.0

Instructor: John Jaeger Office: Williamson 225 Telephone: 846-1381

Email: jmjaeger@ufl.edu

Time: TTh Period 6 - 7 (12:50 PM - 2:45 PM); LAB -To be discussed

Office Hours - Open

Web: E-Learning Canvas

Content

Purpose of course- To explore the sedimentary processes active along a Source-to-Sink transect of the continental margin and relate these processes to the types of sedimentary deposits that develop in each environment. The course will be a mix of lecture, seminar, homeworks, and field trips.

Grading- Grades will be based on participation in discussions, homeworks, reading questions, and a presentation and paper on a laboratory exercise that you create related to sedimentary processes. Students are required to submit a weekly reading/research log of papers pertaining to the topic of the week.

Reading logs = 70% Laboratory Exercise = 20 % Homeworks = 10 %

The following points scale (out of 100 total points) will be used to assign letter grades:

A = 90 or above	C = 70 - 73
A - = 87 - 89	C = 67 - 69
B+ = 84 - 86	D + = 64 - 66
B = 80 - 83	D = 60 - 63
B - = 77 - 79	D = 57 - 59
C+ = 74 - 76	E = 56 or below

Below is a tentative schedule of topics to be covered. However, due to the diverse backgrounds of students that enroll, I will revise topics to accommodate students' interests as best as possible.

Week 1: Introduction and discussion of course objectives

Week 2: Where we've been and where we're going in sedimentary geology

Week 3- Source –to-Sink Processes and Environments; Introduction to Weathering and Sediment Production **Homework** #1 *Sediment Yield Model*

Week 4- Chemical Weathering

Week 5 – Box Models in Sedimentology

Week 6 – Sediment Transport of Fines

Week 7 – Introduction to early diagenesis- geochemical processes in sediments **Homework #2** *Diagenesis and modeling problem* –

Week 8 – Mixing of the sediment surface - animal/sediment interactions and benthic ecology;

Week 9 – Bioturbation continued – modification/alteration of sediments by organisms

Week 10 - Spring Break

Week 12 – <u>Sedimentary environments</u> – rivers (coastal plain/meandering) <u>Lab Exercise Topic</u> due Mar. 17

Week 13 - Sedimentary environments - estuaries & lagoons-

Late March. One-day weekend field trip - salt marsh/tidal flat

Week 14 - - Sedimentary environments - Salt marshes and mangroves

Week 15 - Sedimentary environments- Beaches/Barrier Islands

Week 16 - Sedimentary environments- Continental Shelves

Final - Student presentations on lab exercises topics (Wednesday and Friday)

<u>Make-Up Policy:</u> Students that provide me with prior notification of an absence can make up any missed assignments.

For students with disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Class demeanor expected by the professor:

Please treat your instructor and fellow classmates with consideration and respect. If you are late for class, please quietly sit in the back. There will be no use of cell phones (talking, texting, etc.) once class has begun, so please put away your phones during class.

Academic Honesty Guidelines

All students are required to abide by the Academic Honesty Guidelines that have been accepted by the University. The academic community of students and faculty at the University of Florida strives to develop, sustain and protect an environment of honesty, trust and respect. Students are expected to pursue knowledge with integrity. Exhibiting honesty in academic pursuits and reporting violations of the Academic Honesty Guidelines will encourage others to act with integrity. Violations of the Academic Honesty Guidelines shall result in judicial action and a student being subject to the sanctions in paragraph XIV of the Student Conduct Code. The conduct set forth hereinafter constitutes a violation of the Academic Honesty Guidelines (University of Florida Rule 6C1-4.017).