GLY4552C-Sedimentary Geology Course Syllabus and Rules of the Road
Fall 2025
Lecture Period 5 (11:45 AM - 12:35 PM) WM0202
Lab Wed (7-8; Class #12362), Th (6-7; Class #12363) & Fri (6-7; Class #25191)
Williamson 215
Final Exam: 12/9/2025 @ 10:00 AM - 12:00 PM

Instructor: John Jaeger
Office: Williamson 365
Telephone: 846-1381
Email: jmjaeger@ufl.edu
Jaeger Office Hours: Monday 2-3:30 pm, Thursday 2-3:30 pm, Appointments also available at request.

Teaching Assistants:
Maggie Brosky
Email: canvas
Office: Williamson Hall 274

Fer Duran
Email: canvas
Office: Williamson Hall 262

TAs Office Hours: See Canvas

This course complies with all UF academic policies. For information on those polices and for resources for students, please see this link. (The direct link is https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/.)

Teaching format and Attendance Policy
The course is based upon mandatory in-person lectures, lab assignments, field trips and class discussion. Students are required to complete the daily tasks assigned in lecture and labs, copies of which will be distributed through Canvas Modules. Attendance will be recorded as a Participation Score.

Notify the instructor ASAP if you have a known schedule conflict. If you cannot attend a lab or field trip due to illness, contact the instructor as soon as you are able to so to make arrangements for make-up work.

Requirements for class attendance and make-up exams, assignments, and other work in the course are consistent with university policies. See https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/ for more information

Email communication

All email correspondence to course instructor or TAs **must be from your CANVAS account**. Emails not meeting these requirements may not be recognized quickly, and thus may not be answered. Please follow this guide if you do not know how to craft an email to your professor.

Course Website

Course materials and related information will be posted on the course E-Learning (**Canvas**) website at http://lss.at.ufl.edu. You are responsible for all announcements made in class and/or posted on the course website for this course.

Note: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify the schedule, with reasonable notice to you, to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas under Announcements.

Required Text:
Principles of Sedimentology and Stratigraphy by Sam Boggs, Prentice Hall (5th addition preferred,4th is ok)

Required Field Equipment:

- Hand lens
- Notebook (field+lecture)
- Water bottle
- Pencils, pens

Materials and Supplies Fees: $11.48

Required Field TRIPS:
There will be two mandatory, all-day weekend field trips. Dates are:

- Talbot Island field trip (Sat. Nov. 8)
- Haile Quarry field trip (TBD)

Assessment goals:
The degree to which students have successfully attained these benchmarks is evaluated:

- Directly through a series of on-line quizzes that are used to evaluate the assimilation of key terminology and concepts
- Directly through two lab quizzes that are used to evaluate the assimilation of key terminology and concepts
- Directly through a series of field and lab exercises requiring the description and measurement of key characteristics of sediments
- Directly through the final, for which students must utilize their experiences in the lab and field to derive and interpret sedimentological data.

Course Content:

Basic disciplines important in understanding the origin and classification of sedimentary rocks including sedimentary petrology, sedimentology, and stratigraphy.

Sedimentary geology concepts are wrapped into many earth sciences disciplines. This course aims to develop the student's expertise in sedimentology by consideration of both theoretical and practical approaches. A broad range of techniques for the analysis of sediments will be introduced through a sequence of seven modules that contain lectures, in-class and laboratory exercises and field trips. Emphasis is placed on the study of sedimentology and its application to various topics in geology.

This course also will provide students with familiarity with concepts that are fundamental components of the National Association of State Boards of Geology Fundamentals of Geology (FG) examination. Completion of the FG exam is a primary step towards acquiring Geologist In Training status in the state of Florida. Other states have similar licensing exams. The National Association of State Boards of Geology (ASBOG ®) is a non-profit organization, comprised of state boards which license/register geologists. Feedback from students and alumni indicates that professional development content in undergraduate geology courses is highly desired and advantageous for post-graduate employment opportunities.

This class will cover many of the primary topics within the Sedimentology, Stratigraphy, and Paleontology (Domain C) for ASBOG. These include:

C-1. Stratigraphic principles
- C-1.1 Naming conventions (e.g., bed, units, members, formations, contacts)
- C-1.2 Rules (e.g., superposition, original horizontality, cross-cutting relationships)
- C-1.3 Unconformities (e.g., non-conformities, disconformities, paraconformities, angular unconformities)
- C-1.4 Using and interpreting stratigraphic columns, cross sections, fence diagrams
- C-1.5 Geochronology (e.g., geologic timescale, geochronologic methods)
- C-1.6 Correlation (e.g., geomagnetic polarity reversals, rock types, index fossils)

C-2. Sedimentary structures
- C-2.1 Primary (e.g., cross-bedding, ripples, flute and tool marks)
- C-2.2 Secondary (e.g., concretions, stylolites, Liesegang banding)
- C-2.2 Biogenic (e.g., burrows, trails, stromatolites)

C-3. Diagenesis
- C-3.1 Post depositional changes (e.g., compaction, recrystallization, dissolution, replacement, cementation, lithification, reduction-oxidation reactions)

C-4. Facies analysis
- C-4.1 Fabric (e.g., porosity, permeability, packing, isotropic vs. anisotropic)

C-4.2 Facies changes (e.g., movements of shorelines, shallowing or deepening upwards
successions)
C-4.3 Facies-depositional environment relationships
C-4.4 Relative sea level change (e.g., transgression, regression)

C-5. Depositional environments
C-5.1 Clastic environments
C-5.1.1 Textural indicators (e.g., grain size, shape, angularity)
C-5.1.2 Non-Marine (e.g., glacial, eolian, alluvial, fluvial, lacustrine)
C-5.1.3 Transitional (e.g., deltaic, tidal, beach, lagoon, barrier island)
C-5.1.4 Marine (e.g., shelf, slope, rise, abyssal plain)
C-5.2 Carbonate environments
C-5.2.1 Platform and bank
C-5.2.2 Ramp
C-5.2.3 Pelagic
C-5.3 Evaporite environments

C-6. Fossil record and evolution
C-6.1 Connections to structure of geologic time scale
C-6.2 Index fossils
C-6.3 Biostratigraphy

C-7. Basin analysis
C-7.1 Sequence stratigraphy
C-7.2 Seismic stratigraphy
C-7.3 Depositional systems
C-7.4 Global cycles (e.g., Milankovitch cycles of eccentricity, obliquity, precession)
C-7.5 Facies architecture
C-7.6 Provenance

Note that the order in which ASBOG classifies this material is not ideal for a 16-week semester. I have reordered this list as shown in the course schedule.

Course Schedule

Week #	Week Date	Monday Topic	Wednesday Topic	Friday Topic	Lab Topic	
1	8/18/25	No Class	No Class	No Class/Jaeger Chair Trair	No Lab	
2	8/25/25	FoG Quiz results/discussion	Chemical Weathering	Clay minerals	Weathering + Excel	
3	9/1/25	Holiday	Texuture	Texture Exercises	Sediment Texture	
4	9/8/25	Sedimentary Structures	Sediment Transport+ Exercise	Sediment Transport Exercis	Sediment Texture	
5	9/15/25	Sedimentary Structures	Sed Structures + Exercise	No Class/Jaeger Chair Trair	Sediment Structures-lab	
6	9/22/25	Sedimentary Petrology	Sed. Petrology+exercise	Sed. Petrology Exercise	AAPG Tutorial+Scavenge Hunt	
7	9/29/25	Sedimentaty Facies	Sed Facies+exercise	Sed. Facies Exercise	Hand/Thin sections+diagensis	
8	10/6/25	Clastic Dep.Enivronments	Non marine+exercise	Non-marine Exercise	Facies analysis	
9	10/13/25	Transitional Environments	Lab Midterm #1	Homecoming	No Lab	
10	10/20/25	Marine and Carbonates	Marine+Carbonate+exercise	No Class/Jaeger Chair Trair	Clastic Environments	
11	10/27/25	Stratigraphic Principles	Stratigraphic Principles+Exercise	Stratigraphic Principles Exercise	Carbonate Environments	
12	11/3/25	Straigraphic Columns+Cross Sections	Straigraphic Columns+Cross Sections +Exercise	Straigraphic Columns Exercise	Strat Principles	Talbot Island field trip (Sat. Nov. 8)
13	11/10/25	Stratigraphic Correlations	Stratigraphic Correlations+Exercise	No Class/Jaeger Chair Trair	Lithostrat-well logs	
14	11/17/25	Basin Analysis	Basin Analysis+Exercise	Basin Analysis Exercise	Basin Analysis	
15	11/24/25	Holiday	Holiday	Holiday	Holiday	
16	12/1/25	Seismic and Sequence Strat	Lab Midterm #2	No Class	No Lab	
		No class or Lab				

Semester Reading Schedule from Boggs 5th Edition Textbook

Week #	Readings in Boggs. 5th Ed.
1	None
2	Chapter 1-All
3	Chapter 3-All
4	Chapter 2-All
5	Chapter 4-All
6	Chapters 5-7-All
7	Part 4-Intro
8	Chapter 8
9	None
10	Chps. 9-11
11	Chapter 12
12	None
13	Chapter 15
14	Chapter 16
15	None
16	Chapter 13

Assessment

Course assessment is based upon:

- Lab Assignments = 40%
- On-line weekly quizzes=25%
- Lab Quizzes (2, each 10%) = 20%
- Final Exam = 10 %
- Class Participation using in-class exercises =5%

For in-class exercises, points will be given based on simple completion of the assignment.

Grading Scale

Point Range (%)	Letter Grade	GPA equivalent
≥ 94.00	A	4.0
90.0 – 93.99	A-	3.67
87.0 – 89.99	B+	3.33
83.0 – 86.99	B	3.0
80.0 – 82.99	B-	2.67
77.0 – 79.99	C+	2.33
73.0 – 76.99	C	2.0
70.0 – 72.99	C-	1.67
67.0 – 69.99	D+	1.33
63.0 –66.99	D	1.0
60.0 – 62.99	D-	0.67
< 60.0	E	0

This course follows current UF policies for assigning grade points. University grades and grading policies can be found here: https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/ .

Note that a "C-" will not be a qualifying grade for critical tracking courses. To graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement.

On-line Quizzes: You will have on-line quizzes to complete through Canvas **at the end of each module.**

Lab Quizzes: You will have two 45-min long lab quizzes to complete during the semester. Quizzes will be on paper and will be held during lecture time. Lab quizzes will cover lab material and assignments, building upon material that is covered throughout the semester.

Weekly Lab/Lecture Assignments –Assignments will accompany the particular module being completed that week (or weeks). Late assignment policy is that all students have ONE month to submit an assignment after it is assigned. After that, zero points will be added to Canvas for that assignment. We will deduct 25% from earned points each week that it is late (e.g., you receive 90/100 from your responses, you are assigned a grade of 67.5).

Final Exam – The final will be the only lengthy in-class exam that you will have to complete. It will be comprehensive and based on lecture notes, text, and labs.

Make-Up Policy: Students that provide me with prior notification of an absence can make up any missed quizzes. The TAs will determine their policy for missed lab assignments.

For students with disabilities:
Students may find themselves limited in their ability to accomplish course requirements for a variety of reasons, including but not limited to: autism, visible physical disability, non-visible physical disability or chronic illness, learning disability, mental illness, and bereavement processes. I aim to provide an inclusive and safe environment for all students and will work with the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information: https://disability.ufl.edu/get-started/ .

Students may contact and register with Office of Disability Resources at any point in the semester. Some students seeking disability accommodations may choose to do so through non-medical routes. I recognize potential barriers to seeking medical disability accommodations and will work with students seeking non-medical disability accommodations to specify a plan of action, if needed. Please notify be as soon as possible of any accommodation needs, as it is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed.

The University of Florida is dedicated to creating a positive work environment that rejects any form of hostile workplace, discrimination, or bullying. We have a clear statement of behavioral expectations that can be found here: http://aa.ufl.edu/media/aaufledu/policies/Classroom-Behavior.pdf .Please note that as a faculty member I am a mandatory reporter for Title IX violations.

It is my goal to create a positive learning environment for my students. To help accomplish this:

- If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me.
- As a participant in course discussions, you should also strive to honor your classmates viewpoints (e.g., make sure all voices are being heard).
- In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Appropriate Use Of Artificial Intelligence

Students are free to use AI and natural language processing tools to enhance their understanding of the course content. Students should be aware of the potential biases and pitfalls of AI, and its potential to both aid and suppress learning. Students will not be penalized for using these tools. However, students are responsible for ensuring that they are providing assignment responses that are high-quality and correct. **Simply put: if you complete lab assignments using ChatGPT you will not be marked down for using ChatGPT; you will be marked down because the ideas are generic and the answers do not apply to the question.**

AI programs are not a replacement for human creativity and critical thinking. It is the student's responsibility to review and ensure the appropriateness and accuracy of assignment submissions. Failure to cite and correctly edit work will result in a reduced grade and could be referred to Student Conduct and Conflict Resolution in consistent or severe cases.

Students should consider the potential biases and implications of AI and make efforts to mitigate any discriminatory or harmful effects. When using AI tools, students should ensure that they comply with the respective licenses and terms of use set by the tool developers. Students should properly attribute any resources used from external sources, including AI libraries, frameworks, or pre-trained models.

Conduct in Class

- Please treat your instructor and fellow classmates with consideration and respect. Please be courteous and do not talk during lecture. This can be distracting to other students and the instructor. If you are late for class, please quietly sit in the back.
- Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

  A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Academic Honesty Guidelines

All students registered at the University of Florida have agreed to comply with the following statement: **"UF students are bound by The Honor Pledge which states We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."** The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the UF Conduct Code website (https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/) for more information. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Any suspected instance of dishonesty must be reported via the SCCR process. If a student is found responsible, the instructor may impose a sanction, which for this course would be a zero grade for that assignment.

UF Counseling Services

Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the Counseling and Wellness Center website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.
- University Police Department: Visit UF Police Department website or call 352-392-1111 (or 9-1-1 for emergencies).

- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website.

Many students experience test anxiety and other stress related problems. “A Self Help Guide for Students” is available through the Counseling Center (301 Peabody Hall, 392-1575) and at their web site: http://www.counsel.ufl.edu/.

Course Evaluations Fall 2025

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online. Students can complete evaluations in three ways: [1] The email they receive from GatorEvals; [2] Their Canvas course menu under GatorEvals; or [3] The central portal at https://my-ufl.bluera.com . Guidance on how to provide constructive feedback is available at https://gatorevals.aa.ufl.edu/students/ . Students will be notified when the evaluation period opens. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/ .

Academic Resources

- E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- Library Support: Various ways to receive assistance with respect to using the libraries or finding resources.
- Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information.
- On-Line Students Complaints: View the Distance Learning Student Complaint Process.