# INTRODUCTION TO ENVIRONMENTAL AND ENGINEERING GEOLOGY

UNIVERSITY OF FLORIDA, GLY2030C, FALL 2020

# CONTACT

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### WHAT YOU NEED:

**Text:** Introduction to Environmental Geology, Keller 5<sup>th</sup> edition

Access Code: No Access Code needed, used textbook OK!

Lab Manual: <u>Laboratory Manual</u> for Introductory Geology (Open Access)

### KEY DATES

Course Starts: Aug 31<sup>st</sup> Exam 1: Avail. Oct 1<sup>st</sup> – 5<sup>th</sup> Exam 2: Avail. Nov 5<sup>th</sup> - 9<sup>th</sup> Exam 3: Avail. Dec 7<sup>th</sup> – 9<sup>th</sup> Course Ends: December 9<sup>th</sup> Welcome to Environmental & Engineering Geology! In this course we explore the fundamental concepts of geology and investigate the interactions of nature and people (both individually and as a society) including natural hazards, resource utilization and environmental issues. Please read through the syllabus for important information to help you succeed in this course.

# COURSE QUESTIONS AND CONTACTS

Please post general questions about the course in the course in the Discussion Forum so the question can be answered for everyone. Before posting, please check to see if you question has already been asked and answered. For personal questions, use email or Canvas messaging. For questions about grading, please contact your TA. For accommodations and other personal non-grading related questions, please contact me by email or office hours.

### COURSE MATERIAL:

**Course Webpage:** Access this course by logging in at: <u>https://elearning.ufl.edu/,</u> and looking for the course tile.

**Textbook:** The text for this course is "Introduction to Environmental Geology", 5<sup>th</sup> edition, by Edward A. Keller. We will NOT be using the Pearson learning activities, which means rentals, used books, pdf versions or any other way to get the text is fine! The e-text is also available through UF All Access. The lab manual is online for free at:

https://open.umn.edu/opentextbooks/textbooks/laboratorymanual-for-introductory-geology

**Other materials:** Supplemental readings and videos may be assigned. Captioning and transcripts will be provided for all external videos, but some online readings may have limited accessibility features (such as missing alt text for images). If presenting information only in visual form creates a barrier to your full participation in this course, please contact me ASAP so we enact solutions.

# TECHNOLOGY REQUIREMENTS

**Computer & Internet:** Course work will require use of a computer and reliable internet. In addition, students are required to have a webcam to take the proctored exams. Competency in the basic use of a computer is required. For additional information on UF College of Liberal Arts and Sciences policy regarding computer requirements you can visit: <u>http://it.clas.ufl.edu/policies/student-computer-requirement/</u>

# COURSE DETAILS

**Prerequisite Knowledge:** This is a GenEd physical science (P) course. This course does not have prerequisites, but a basic knowledge of mathematics (middle school math, occasional basic algebra) is very helpful.

**Course Summary & Goals:** The focus of this course is investigating human interactions with the natural world – how the environment impacts us, and how we impact our environment. To accomplish this, we will establish foundational knowledge about geology and the scientific process. We will then apply that knowledge to understand the processes that shape the Earth's surface and natural systems. From this context we can also examine the complex relationship between humans and their environment. The goals of this course include:

- Learning about the materials, processes and events that comprise and shape the Earth to better understand the environment in which we live.
- Investigating how the intersection of human activity and geology relates to and impacts modern engineering and environmental issues such as resource utilization, environmental impacts of human activity and Natural hazards.
- Understanding the process of scientific inquiry to refine critical thinking skills.
- Improving scientific literacy the concepts and terminology needed to understand science stories in the news, or to make informed decisions on science-based issues.
- Building scientific communication skills the skills and mindset to understand, articulate and discuss technical concepts to peers and the public. This will be done through discussions and the course project.

**Course Responsibilities:** Assignments are listed by week in the chart below, and specific due dates can be found in the Calendar and Syllabus page in Canvas. You will need to have regular internet access and the time to explore the resources available on each topic. Over the course of the semester, you will have the following responsibilities:

- Complete all Module assignments in a timely fashion. Each module includes reading assignments, video lectures with accompanying PowerPoint presentations, a module quiz, assignments and/or discussions.
- Actively participate in class discussions as specified in each module.
- Complete online multiple-choice quizzes for each module (except module 7).
- Complete the course project, which transpires during modules 8-12.
- Check the course announcements at least three times a week or have them forwarded to your inbox. Announcements are the primary means of communication with the class.

**Course Schedule:** We will cover 12 topical Modules in this course, one per week. Please reference the syllabus/course calendar in Canvas for due dates of individual course assignments and any changes in due dates throughout the course.

Schedule by Week				
Week	Modules	Textbook Chapter		
<b>1.)</b> 8/31-9/8*	Start Here Module & Module 1: Introduction to Environmental Geology	Chapter 1		
<b>2.)</b> 9/8-9/14	Module 2: Earth Structure and Plate Tectonics	Ch 2		
<b>3.)</b> 9/14-9/21	Module 3: Rocks & Minerals	Ch 3		
<b>4.)</b> 9/21-9/28	Module 4: Weathering, Soils & Ecology	Ch 4 & 17		
<b>5.)</b> 9/28-10/5	Exam 1: Modules 1-4. Exam window is Oct 1 <sup>st</sup> - 5 <sup>th</sup>			
<b>6.)</b> 10/5-10/12	Module 5: Intro to Natural Hazards, Earthquakes and Volcanoes	Ch 5		
<b>7.)</b> 10/12-10/19	Module 6: Earthquakes Tsunamis and Volcanoes	Ch 6, 7 & 8		
<b>8.)</b> 10/19-10/26	Module 7: River Processes, Flooding and Human Impacts on Systems	Ch 9		
<b>9.)</b> 10/26-11/2	Module 8: Slope Stability and mass movements	Ch 10		
<b>10.)</b> 11/2-11/9	Exam 2 Modules 5-8. Exam Available Nov 5-9 <sup>th</sup>			
<b>11.)</b> 11/9-11/16	Module 9: Coastal Geology and Hazards	Ch 11		
<b>12.)</b> 11/16-11/23	Module 10: Groundwater Processes and water resources	Ch 13 & 14		
<b>13.)</b> 11/23-11/30	Module 11: Mineral and Energy Resources	Ch 15 &16		
<b>14.)</b> 11/30-12/7	Module 12: Global Change and Climate	Ch 18		
<b>15.)</b> 12/7-12/9	Exam 3: Modules 9-12. Exam window is December 7-9 <sup>th</sup>			

# COURSE ACTIVITY CATEGORIES

- Each Module has a main page which can be accessed from the homepage of the course website. The Module main page will clearly list reading and viewing assignments, activities, quizzes and anything else you need to complete for that Module. Unless otherwise stated, all Module activities are due by midnight on the listed due date. Each Module will have some combination of the following:
- **Assignments:** Most Modules have associated Assignments. Assignments for each module are worth 100 points. Assignment formats vary, but each one requires answers to be submitted online. Assignments count for 30% of your overall grade.
- **Quizzes:** There are 12 quizzes for the course, one for each module. The lowest quiz grade will be dropped at the end of the semester, even if it is a zero. This leaves 11 quizzes that count towards your grade. Each quiz is worth 100 points each and have no time limit. Quizzes are worth 20% of your grade.

- **Discussions:** Online discussion will be used for further exploration of the topics we study each week. Discussion are the place where we can go beyond what the text has to say and look at case studies and current events collaboratively. For each module that contains a Discussion Forum, you will be expected to post a thoughtful, detailed response according to the Substantive Post Guidelines and Discussion rubric that is provided in each discussion. Deadlines for discussion posts are listed on the course calendar. Each Discussion is worth 50 points (30 points for the initial post and 20 for follow up interactions) and Discussion participation counts for 20% of your grade.
- **Project:** During the course you will have the opportunity to investigate a specific geohazard in more depth and practice communicating scientific information. There are a range of options available for presentation types, from making an information page in Canvas to creating a short video or podcast. You will have the opportunity to improve/revise you presentation based on the feedback from your peers before it is assigned a final grade. This project is described in much greater detail on a Canvas page on the class website. The project is worth 10% of your grade.

**Proctored Exams:** There are three proctored Exams and each Exam covers 4 modules. There is no comprehensive exam for this course. Exams make up 20% of your overall grade in the course. Here are some key points about Honorlock Proctoring:

- You do not need to make a separate account or pre-schedule you exam.
- You will need a computer with reliable internet access, a webcam and microphone. Honorlock works best in the Chrome internet browser.
- Take your exam in a well-lit room where the primary light source is not coming from behind you.
- You will be required to show picture identification to your proctor at the time of your exam. Approved forms of identification include, but are not limited to, a driver's license, military identification card, passport, or school-issued identification card.
- You will not be video recorded during your exam, but you will need video capabilities to show your id. Internet browsing will be disabled while your exam is open, so it is important that any notes you wish to access are not stored on online or on cloud storage.

### GRADING

See <u>https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</u> for general UF grading policies. Grades will be based on points accumulated through course activities:

#### Percent Breakdown of Total Grade:

Assignments	30% of total grade
Module Quizzes	20% of total grade
Discussions	20% of total grade
Project	10% of total grade
Exams	20% of total grade

#### Grading Scale for Course Grade:

% Grade	Letter	GPA
	Grade	Value
90 +	Α	4.0
85-89.9	B+	3.5
80-84.9	В	3.0
75-79.9	C+	2.5
70-74.9	С	2.0
65-69.9	D+	1.5
59-65.9	D	1
< 58.9	E	0

**Late work**: Assignments and Quizzes can be turned in up to one week late. Discussions and Exams are not accepted late without approval from the instructor.

# ACCESSIBILITY, INCLUSION & RESPECT

**Respect & Inclusion:** In this classroom (physical or virtual), everyone should feel welcome to share their thoughts in a respectful way. Treat you classmates the way you would like to be treated. You deserve to be called by the name you prefer and have me pronounce it correctly. Please correct me if I write your name (or pronouns) incorrectly! If something in the course material, instruction or class interactions make you feel excluded or uncomfortable, please let me know so I can address it. Please see the Netiquette section under "UF Policies" for more details on how to interact respectfully online.

**UF Statement on Accommodating Students with Disabilities:** Students requesting accommodation Students with disabilities requesting accommodations should first register with the Disability Resource Center by calling 352-392-8565 or by computer at: <u>www.dso.ufl.edu/drc/</u> and provide appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students should follow this procedure as early as possible in the semester, as *accommodations are not retroactive*.

**My Statement on Accessibility**: We all learn differently. You do not have to have a formally recognized disability to find yourself having difficulty with some aspect of the college learning environment. For example, colorblindness is not typically recognized in formal accommodations, but very much impacts a student's ability to process visual information. Please let me know if something in the course material presents a barrier to your full participation in the class so we can work together to find a reasonable solution – *even if you don't have a formal accommodation letter*.

**Religious Observances**: Students who anticipate the necessity of missing homework deadlines and discussions due to religious observances *must provide notice of the date(s) to the instructor*, in writing at least two weeks in advance of the missed class days so accommodations to be made for missed work. Do not wait until after you have missed assignments to ask for an exception, as these requests may not be honored.

# STUDENT FEEDBACK AND COURSE EVALUATION

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

# UF POLICIES

**University Policy on Academic Misconduct:** Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at: <a href="http://www.dso.ufl.edu/students.php">http://www.dso.ufl.edu/students.php</a>.

**Netiquette – Communication Courtesy:** All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. More information at: <a href="http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf">http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf</a>

UF Online Handbook: Available at: http://handbook.ufonline.ufl.edu/

### NEED HELP?

**Technical Support:** For issues with technical difficulties for E-learning, please contact the UF Help Desk: <u>http://helpdesk.ufl.edu</u>, or (352) 392-4357 and select option 2. If you miss a deadline due to technical issues, requests for extensions or make-up activities MUST be accompanied by the ticket number received from The Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

**Help from me and/or TAs:** While I have a short window of time listed for office hours, I am happy to set up a virtual chat at another time. Office hours are for your benefit - ask questions, get assignment help, discuss geoscience degrees and career options, etc. You may also email me, but please check to make sure you question has not been answered already in the Announcements or Class Questions discussion board before reaching out. For questions about grading, please contact the TA first. They are also a great resource for questions about the material. Please be aware that your instructor and TA are humans that sleep at night and are not tied to their computers all weekend, so there are times when your email may go unanswered for up to 24 hours.

**Other Resources:** For support regarding Counseling and Wellness, disability, documenting student concerns and complaints, and a link to the Library Help Desk, please see: <a href="http://www.distance.ufl.edu/getting-help">http://www.distance.ufl.edu/getting-help</a>.