OnRamps Geoscience: GEO 302E Earth, Wind, and Fire (Dual Enrollment)
2016-2017 Course Syllabus

INSTRUCTOR INFORMATION

Instructor/Course Coordinator	Alison Mote	alison.mote@austin.utexas.edu
Geoscience Faculty Lead	Dr. Joel Johnson	joelj@jsg.utexas.edu

1. COURSE DESCRIPTION

This course is an introduction to geosciences, with a focus on the basics of physical geology with an emphasis on environmental problems. The geosciences are at the heart of many challenges facing humans in this century: topics like climate change, sustainability, energy resources, land use, and natural hazards. A solid grounding in geoscience literacy is an important base for all citizens, and is a primary goal of the course.

1.1 Course Pre-requisites

Geoscience is a capstone course that applies concepts in biology, chemistry, physics, and mathematics to the study of Earth processes. Pre-requisites for the course include two units of science: Biology and Chemistry or IPC and Chemistry.

1.2 Course Learning Outcomes:

The readings, labs and assignments in this course are designed to help you achieve these outcomes:

1. Understand the Earth systems and how they operate.
2. Understand change through time as it relates to Earth processes, and over the length of geologic time.
3. Analyze modern challenges from a geologic perspective and evaluate solutions.

1.3 Format and Procedures

The OnRamps Geoscience course integrates a variety of learning experiences to help students achieve the learning outcomes stated above. All of the course materials are posted in Canvas and are organized in the following categories: *Before Class*, *During Class*, and *After Class* activities. Students are expected to prepare for class by completing *Before Class* activities, which include reading assignments and/or video lectures. *During Class* assignments will be facilitated by the classroom teacher and include laboratory exercises, jigsaws, concept sketches, lectures, and peer instruction. *During Class* activities will require students to apply new knowledge in a variety of contexts and collaborate with their peers to achieve an enduring understanding of course material. *After Class* activities are designed to reinforce topics covered in class, and include reading assignments, practice quizzes, discussions, and reflections.

2. COURSE REQUIREMENTS

2.1 Materials and Devices

UT Austin provides an online learning environment in Canvas Learning Management Software for all students in this class: https://utexaslearn.instructure.com

You must have internet access to the Canvas LMS that we are using for this course. You will get many of your assignments, and will turn in your UT assignments, in the Canvas LMS. In addition to the assignments, there are learning tools and practice quizzes in Canvas to help you be successful in the course. Each unit has its own page, and the assignments are listed in order. Your teacher will tell you when assignments are due, and you will be able to see the due dates in Canvas. In general, each unit covers one 6-week grading period. You will have access to two Canvas courses: the OnRamps high school course (all coursework) and the UT Austin college course (College assignment gradebook).

2.2 Classroom Expectations

Consult classroom teacher

2.3 How to Succeed in this Course

This course will challenge you to apply concepts from readings, labs, and discussions to become a more scientifically literate citizen. We will be covering a lot of material, and this course will probably move at a faster pace than other courses you've taken in high school. Not only will you need to stay on top of deadlines so that assignments are turned in on time, but you will also need to study regularly. In order to keep up with the college-level coursework, students will need to attend class, stay organized, and study frequently. No one is perfect…adopting effective study habits takes time and practice. Students should review the tips below and integrate them into their daily schedule. Adopting good habits now will help students be more successful this year, in college, and in your future career!

10 Effective Study Habits:

1. Attend class every day and be an active participant
2. Take & review thorough notes and stay organized with class materials
3. Schedule study time, spread out your studying, and study often
4. Mix up problems & topics when you study
5. Instead of re-reading something, explain it to yourself or someone else
6. Generate your own questions & ask *why* something makes sense
7. Study with a group or partner
8. Eliminate distractions when studying
9. Take practice quizzes
10. Take care of yourself - Get plenty of rest, exercise to release stress, and eat well

Remember to ask for help when you need it. Email the UT instructor, attend office hours online, and ask your classroom teacher for help. We are here to help you succeed!

2.4 Assignments & Grading

Your final college course grade will be determined based on your performance on the following assessments. All of these assessments are located in the Canvas course:

Assessment	Frequency	Point Value	Total Possible Points	% Course Grade
Unit Tests	6	200	1200	60%
Labs	10	40	400	20%
Reading Responses	10	20	200	10%
Sketches	9	20	180	10%
OnRamps Orientation Modules	1	20	20	1%
Total			2000	100%

Midterm and Final Exams
In addition to the Unit tests, there will be a comprehensive exam at the end of each semester. This test can substitute for your lowest unit test in calculating your college grade.

COLLEGE COURSE GRADES:

Final grades will be assigned according to the grade cutoffs listed below:

Course Letter Grade	Percentage
A	90%
B+	87%
B	80%
C+	77%
C	70%
D+	67%
D	60%

MISSED WORK
A missed college assessment will result in a grade of 0, which will significantly decrease your course average. Your high school teacher will allow you to make-up the missed assignment if (a) you have a valid excused absence and (b) the UT assessment window is still open. Make-ups are NOT available once solutions have been released, so be certain to request a make-up from your high school teacher immediately.

UT assignments must be submitted by the due date to receive credit. If you are unable to complete a college assignment that takes place outside of scheduled class on time, then you must contact the UT Instructor. In this professional email, you should explain why you were unable to complete the assignment and appeal to have your work accepted late. There may be a grade reduction for late work

that will be determined on a case by case basis. This option should not be used more than once during the course, unless there are special circumstances.

LETTER GRADE VS. PASS/FAIL

You may elect in January to take the course for a letter grade or as pass/fail. Regardless of the option you choose, you may drop the course in May according to OnRamps late drop policy.

If you enroll in the course for a letter grade and you attend UT Austin, then your UT transcript will have a letter grade for the course and will factor into your GPA. If you enroll in the course as pass/fail and you pass an OnRamps course, this will not be factored into your GPA should you enroll at UT Austin. Courses taken for Pass/Fail designation at **UT Austin do not** fulfill core curriculum requirements at the University. The applicability toward a degree for Pass/Fail courses is entirely up to the UT Austin college, program, and major. Students are encouraged to contact their planned major departments to determine whether OnRamps courses taken Pass/Fail count toward that major at UT Austin.

If you plan to attend a college other than UT Austin, please consult that college to fully understand how letter grades and Pass/Fail designations are treated in terms of transfer. For many Texas institutions, OnRamps courses will transfer as credit without the letter grade.

COLLEGE READINESS

You must meet the college-readiness requirements to be eligible to receive college credit for OnRamps Earth, Wind, and Fire. College readiness can be met in one of two ways:

1. Meet the Texas Success Initiative (TSI) mathematics requirements for enrolling in a college course.
2. Meet the OnRamps Earth, Wind and Fire Requirement: Complete all required college-course assessments for Units 1 - 3 by the December deadline, with an overall average of 75% or better. Students who have not met this criterion can appeal. See your high school teacher for information on the appeals process.

3. COURSE SCHEDULE

Date Window	Unit & Topic
8/22 – 9/29	Unit 1: Solid Earth (Earth's Interior & Plate Tectonics)
Week of 9/26	Unit 1 Exam
9/30 – 10/2	Unit 2: Earth's Surface (Fresh Water & Sediments, Earth's Changing Surface)
Week of 10/31	Unit 2 Exam
11/3 – 12/9	Unit 3: Geologic Time (Sedimentary Rocks & Principles, Evolution & Geologic Time)
Week of 12/5	Unit 3 Exam
12/12 – 12/14	Mid-term Review
12/15 – 12/20	Mid-term Exam
1/4 – 2/15	Unit 4: Oceans and Climate
Week of 2/13	Unit 4 Exam
2/16 – 3/27	Unit 5: Geologic Hazards
3/22 – 3/27	Unit 5 Exam
3/28 – 4/27	Unit 6: Earth's Resources & Sustainability
5/1 – 5/5	Final Exam

4.1 Overview

This is a dual-enrollment course, which means you may earn UT Austin credit for GEO 302E Earth, Wind, and Fire, an introductory geoscience course for non-science majors, in addition to earning high school credit. This course is taught by a high school teacher who receives curricular content, training, and support from UT Austin faculty and staff.

Your high school teacher is responsible for assigning high school grades and determining high school credit. The OnRamps Instructor of Record is responsible for assigning college grades and determining college eligibility and credit. High school grades may differ from college grades, even on identical assignments, because of differences between in high school and college academic expectations.

4.2 Important Steps and Dates in College Credit Process

Step	Action	Due Date
1	Instructor of Record determines student's eligibility to earn college credit based on student's grades on college assessments taken in the course.	Dec 16, 2016
2	Student visits OnRamps Registration website to find out if they are eligible to earn UT credit.	Dec 16, 2016
3	If not eligible to earn UT credit, student may submit an appeal [remove if course does not permit appeals] or TSI documentation for [subject area] to demonstrate college readiness and be allowed to earn UT college credit.	Jan 13, 2017
4	Instructor of Record reviews appeals and TSI documentation and makes final determination of whether student is eligible to earn UT credit.	Jan 20, 2017
5	If eligible to earn UT credit, student selects the type of credit to earn: • Letter Grade • Pass/Fail	Feb 3, 2017
6	Instructor of Record assigns one of three Credit Statuses based on final grade in the course: • No credit is assigned for F or "Fail". Student is automatically dropped from course and will have no academic record for the course at UT Austin. • Credit declined is assigned for D-, D, or D+. Student is automatically dropped from course and will have no academic record for the course at UT Austin UNLESS student changes credit status to "Credit claimed". • Credit claimed is assigned for C-, C, C+, B-, B, B+, A-, A, or Pass. Student will be issued UT Austin credit UNLESS student changes credit status to "Declined credit".	May 5, 2017
7	Student visits OnRamps Registration website to find out final grade and Credit Status.	May 8, 2017
8	Student may elect to decline any credit earned. If a student declines credit, the student will have no academic record for the course at UT Austin.	May 12, 2017

OnRamps students may visit the OnRamps Registration website to view their OnRamps course enrollments, whether they qualify to earn college credit, and, at the end of the course, whether they earn college credit: https://utdirect.utexas.edu/apps/ce/onramps_registration/

4. UNIVERSITY POLICIES AND RESOURCES

5.1 Students with Disabilities

Dual-enrollment students who receive high-school accommodations/modifications related to a disability may also receive accommodation in their dual-enrollment courses. Accommodations in an OnRamps course follows accommodations in the student's Individual Education Plan for 504 that have been provided by the high school. Accommodations are individualized and based on the student's need and disability.

Possible accommodations that are allowable depending on the student's need and disability include extended test time, test administration in a reduced-distraction area, utilizing speech software, using a calculator, or reading test questions aloud (but NOT explaining the questions).

OnRamps Instructors may not eliminate answers on a test or provide a word bank as these are not approved post-secondary accommodations for disabilities.

5.2 Academic Integrity

OnRamps dual-enrollment students are considered students at The University of Texas at Austin and are subject to the University's academic integrity policies. Each student in the course is expected to abide by the University's Honor Code:

> "As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity."

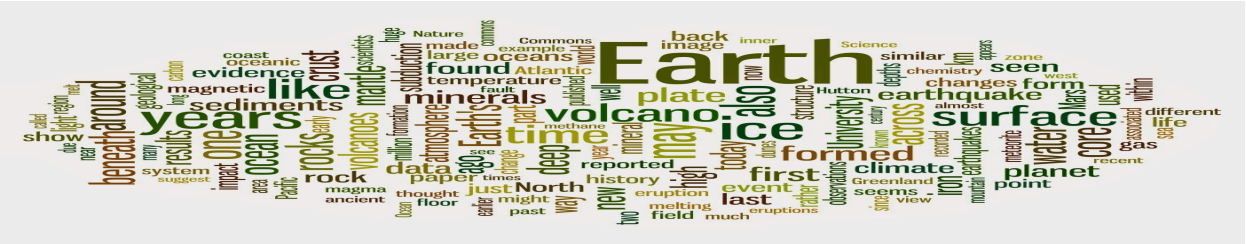
This means that work you produce on assignments, tests and exams is all your own work, unless it is assigned as group work. The Instructor of Record or your high school teacher will make it clear for each test, exam, or assignment whether collaboration is allowed or not.

Always cite your sources. If you use words or ideas that are not your own (or that you have u sed in previous class, you must make that clear otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course.

You are responsible for understanding UT's Academic Honesty Policy which can be found here: http://deanofstudents.utexas.edu/sjs/acint_student.php

5.3 University of Texas Libraries

All OnRamps students have online access to The University of Texas Libraries: http://www.lib.utexas.edu/
For questions about how to use the library site to fine the information you need, contact a librarian: http://www.lib.utexas.edu/services/reference/



COURSE OUTLINE

Unit 1: Earth Science and Solid Earth	*Unit 2: Earth's Surface and How it is Shaped*	*Unit 3: Rocks at the Surface, Geologic History, Geologic Time*
Geologic Thinking	Rivers, deltas, floods	Sedimentary rocks and sedimentary environments
Earth as a System of Interacting Spheres	Aquifers and groundwater	Stratigraphic principles
Earth's Interior	Coastal processes	Geologic structures: folding and faulting
Plate Tectonics	Glaciers	Geologic maps and cross-sections
Development of the theory	Deserts and Wind deposits	Geologic time
Geologic processes at plate boundaries	Mass Wasting	Relative time and the Geologic Time Scale
Igneous and metamorphic rocks in tectonic settings	Topography and Topographic Maps	Radiometric dating
		The fossil record as a geologic clock
		Origin of life on Earth
		Evolution and extinction of life

Unit 4: Oceans and Atmosphere	*Unit 5: Geologic Hazards*	*Unit 6: Living with the Planet*
Ocean circulation	Tectonic Hazards	Energy resources
Thermohaline circulation	Volcanoes	Fossil fuels
Surface currents	Earthquakes	Renewable Energy
Atmospheric Circulation	Asteroid Impacts	Human Population
Climate system	Atmospheric Hazards	Sustainability
Greenhouse gasses	Hurricanes	Class choice final project on issue of interest: fracking, drought, coastal land loss, climate
Carbon cycle	Tornadoes	
Ocean/Atmosphere links	Drought/Storm	
Coastal Erosion		
Paleoclimates		
Ice ages		
Milankovich cycles		
Proxy climate data		
Global climate models		