Course Syllabus
Earthquakes and Volcanoes ISNS 2359.0W1 and W2 (Online)
Department of Geosciences School of Natural Sciences and Mathematics
The University of Texas at Dallas

Course Information

Course Number/Section	ISNS 2359.0W1
Course Title	Earthquakes and Volcanoes
Term and Dates	Fall 2024

Professor Contact Information

Professors	Dr. Steven Pirouz
TA	Muhammad M. Ahmad
Office Phone	972-883-2461
Email Addresses	mxp180004@utdallas.edu
Office Location	ROC 2.301L
Office Hours	by email appointment

Course Modality and Expectations

Instructional Mode	Asynchronous Online.
Course Platform	All course materials, tests, assignments, and communications will be provided online through eLearning at Connect. **ASSESSMENTS**: This includes tests and SmartBook modules. You can access these assessments by selecting the appropriate icon in the designated folder. All assessments will be conducted online on your computer. **SmartBook**: This is an adaptive learning system designed to help students learn faster, study more efficiently, and retain more knowledge for greater success. To unlock each of the 10-unit tests, you must pass the associated SmartBook modules with a score of 100%. Most unit tests have two SmartBook modules. These assignments will be available from the first day of class and will remain open until the end of the semester. Please note that test deadlines will be strictly enforced, so it's advisable to complete your SmartBook modules well before the test deadline. All SmartBook assignments will contribute 12% to your final grade.
Expectations	Students are required to log in regularly each week to the online class site, as a new unit with fresh assessments will be released every Monday at 11:59 PM. The schedule outlined in this syllabus will be strictly followed unless otherwise notified on the main page of the class.
Asynchronous Learning Guidelines	This class is offered exclusively as asynchronous instruction, including all instructional materials, assignments, and exams.

COVID-19 Guidelines and Resources

The information contained in the following link lists the University's COVID-19 resources for students and instructors of record.

Please see http://go.utdallas.edu/syllabus-policies.

Class Participation

Regular class participation is expected regardless of the course modality. Students who do not participate regularly are likely to face academic difficulties. A portion of your grade in this course is directly tied to your participation, which includes engaging in group activities or other class tasks that require your feedback on homework assignments, readings, or lecture (and/or lab) materials. Faculty will document class participation, and successful participation is defined as consistently meeting the university requirements outlined in this syllabus. Failure to comply with these requirements constitutes a violation of the Student Code of Conduct.

Course Pre-requisites, Co-requisites, and/or Other Restrictions

None

Course Description

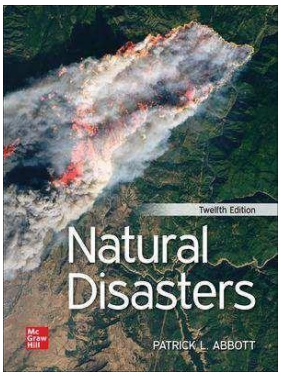
This course offers a comprehensive overview of the science behind earthquakes and volcanoes, providing insights into the Earth's architecture, processes, and evolution, as well as their impact on humankind and other organisms. The plate tectonics model serves as the central framework for understanding various aspects of earthquakes and volcanoes.

As an interdisciplinary science course offered online, it employs a flexible, self-paced approach with programmed self-instruction. Frequent tests are used to monitor progress, replacing the traditional lecture format with infrequent exams commonly found in other courses.

Student Learning Objectives/Outcomes

- Explain the basic divisions of the earth, their compositions, and their role in plate tectonics.
- Recognize the types of plate boundaries and explain their relationship to crustal movement and mountain building.
- Know the basics of crustal deformation and recognize geologic faults and structures.
- Develop an understanding of the geology of earthquakes and volcanoes, with an emphasis on plate tectonic theory.
- Discuss earthquake generation, measurement, and prediction.
- Describe types of volcanoes, lava viscosity, composition and their relation to plate tectonics and volcano explosion.
- Become familiar with the terminology used to describe earthquakes and volcanoes
- Identify and understand the following classes of volcanoes: hot spot volcanoes, subduction zone volcanoes, island arc volcanoes, and mid-ocean ridge volcanoes.
- Appreciate the relationship between human activity and geologic natural disasters with an historic perspective.
- Understand the constructive and beneficial results of volcanoes.
- Explore the subject of climate variability and natural Disasters
- Explore Extinction Events and extra-terrestrial volcanism and Impacts.

Required Textbooks and Materials



Abbott, Natural Disasters 12e Standalone Connect: ISBN10: 1266592008
ISBN13: 9781266592003

a) We will be using the connect feature offered with an ebook. Just follow the link inside eLearning, Earthquakes & Volcanoes ISNS 2359, will take you into the registration (only needs to be done once)

b) Very Important:

i. Register with your UTD account and your official name on record, otherwise you will be unregistered.

ii. The publisher offers a free trial for about two weeks or so

iii. Please familiarize yourself with the functionality and features of eLearning and connect as soon as possible (see further information below).

iv. Alternatives for those students who want a printed textbook (not required), may be explored on the same publisher site.

Course Policies:

All supporting material, all tests and assignments, and all communication will be provided online through eLearning at https://elearning.utdallas.edu link to **connect**

ASSESSMENTS: Tests and Smart Book modules. You can access Assessments by clicking the proper icon on the designated Folder

All the assessment activities will be conducted online on your own computer.

SmartBook (SB): an adaptive learning system designed to help students learn faster, study more efficiently, and retain more knowledge for greater success. These assessments must be passed with at least 90**%** to open each one of the 10-unit tests; most of the unit Tests have two SmartBook modules. These assignments will be open the first day of class and remain open until the end of the semester. Please be aware, the deadline of the test will be enforced strictly, in consequence is wise to have your SmartBook modules done well in advance of the test deadline. All SB assignments will contribute 12% to your final score.

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Tests: A test includes material from one or two chapters. To take the test, you must earn at least 90% on the assigned SB Unit module(s). Each week, a new test will be added, and the oldest one will be closed.

Unit Tests contribute 90% of the final score. They start at 11:59 PM on Mondays and close two weeks later on the same day at 11:00 PM. This allows you to plan your testing time better, but be careful not to wait until the deadline. Please read the on-screen instructions carefully; once a test starts, you will have 30 minutes to complete it, and saving and returning is not allowed.

Tests are based on the textbook; however, correct answers may require elaboration on the information, not just mere repetition. Each test is timed for 30 minutes and can be attempted twice (if the student wishes to do so), with the highest grade recorded within the scheduled time window.

Make up:

No make-up tests. Two Recovery tests will be offered, to replace one missed test each, these are comprehensive tests. The first Recovery 1 will include units 1 to 5, and Recovery 2 includes questions from Units 6 to 10.

Please review the academic calendar below for the SB assignment and tests periods. Note that the due date for a SmartBook assignment is at the end of the semester, this is to allow students the maximum flexibility to complete the requirements for this class inside of busy schedules. However, it is strongly recommended that students do not wait until the last hours/minutes to take tests because it will take at least 30 min to an hour to complete the prerequisite assignment before you can open the test.

In addition, unforeseen internet and computer problems can interfere with the online test. Computer and connection

problems are not a valid excuse to miss a test. UTD keeps supported computer labs open around the clock that should solve problems with personal computers if necessary.

On rare occasions, internet crashes can occur while taking online test causing e-learning to submit a score for an incomplete test. Since, you are allowed 2 attempts for each test and only the highest score will count; it should take care of most of the issues. Still, if this occurs, please send a message to the instructors.

Student Assessments Grading Information Weights

Tests 1 to 10	90%
SB assignments	12%
Total	102 %

Grading Scale

Based on 10 Test grades (90%) + Homework (12%),

Scaled Score (%)	Letter Equivalent
97.1 -100	A+
93.1-97	A
90.1-93	A-
87.1-90	B+
83.1-87	B
80.1-83	B-
77.1-80	C+
73.1-77	C
70.1-73	C-
60.1-70	D
Less than 60	F

Grades will be posted to your grade book automatically via eLearning. Your first score will be the score shown in the GRADE BOOK. You may take the test a maximum of two times (Highest score will count) and submit the test on time.

Accessing Grades

Students can check their grades by clicking "My Grades" under Course Tools inside eLearning.

Note: There is a certain lapse time (as much as 24 hours) between display of your test score in Connect and eLearning. So, do not panic if your test score is not displayed in "My Grade" immediately after you completed the test. Your score should be saved in Connect and will be transferred eventually.

Computer and connection problems are not a valid excuse to miss a test, particularly, if you choose to do your test during the last hours/minutes of the Testing period. In case of computer/connection malfunctions, remember UTD keeps the supported computer labs open around the clock.

Academic Calendar

You can access Assessments by clicking the proper icon on the designated Unit Folder.

Tests will start at 11:00 AM Wednesday and close two weeks later also on Wednesday 11 AM. This is a way to allow you to plan your testing time better but be careful don't wait until the deadline.

Unit Tests: Please read the onscreen instructions carefully, once it starts you will have 35 minutes to complete a test. **Tests are based on the textbook; however right answers may require elaboration of the information not just mere repetition.** Each test is timed 35 minutes and can be attempted two times (if a student wishes to do so, the highest grades will be recorded) within the scheduled time window. Late submission is not allowed and will not accept any excuses.

Important dates and notes:

- Every test will open on Mondays **at 11:59 PM** (see schedule below) and **close after 2 weeks (Mondays at 11:59 PM)**.
- To be **eligible to take the tests**, you need to complete the corresponding BookSmart **assignment(s) with a perfect score of 100%**.
- **IF YOU DO NOT START** reading book chapters, fulfilling assignments, and participating in tests **within one month (September 18th) following the commencement of the Fall 2024 semester**, you could be required to **WITHDRAW FROM THE COURSE.**

ASSIGNMENT (Exam Material)	Percentage of the final grade	OPEN	CLOSE	TIME limit/ attempts	Prerequisite
ORIENTATION	0 %	08/19/2024	12/13/2024	None, no limit	none
SB Chapters	12 %	08/19/2024	12/13/2024	none, no limit	none
Test 1 (Ch.1)	9 %	08/19/2024	09/02/2024	35 min, attempts 2	Orientation HWK & BS CH1
Test 2 (Ch. 2 and 4)	9 %	08/26/2024	09/09/2024	35 min, attempts 2	BS CH2 & BS CH4
Test 3 (Ch. 3 and 5)	9 %	09/02/2024	09/16/2024	35 min, attempts 2	BS CH3 & BS CH5
Test 4 (Ch. 6)	9 %	09/09/2024	09/23/2024	35 min, attempts 2	BS CH6
Test 5 (Ch. 7 and Ch. 8)	9 %	09/16/2024	09/30/2024	35 min, attempts 2	BS CH7 & BS CH8
RECOVERY 1	**9 %**	**09/30/2024**	**10/07/2024**	**50 min, 50 questions, 1 attempt**	**BS CH1 & BS CH8**
TEST 6 (Ch.9 and 10)	9 %	10/07/2024	10/21/2024	35 min, attempts 2	BS CH9 & BS CH10
TEST 7 (Ch.11 and 12)	9 %	10/14/2024	10/28/2024	35 min, attempts 2	BS CH11 & BS CH12
TEST 8 (Ch. 13 and 14)	9 %	10/21/2024	11/04/2024	35 min, attempts 2	BS CH13 & BS CH14
Test 9 (Ch. 15 and 16)	9 %	10/28/2024	11/11/2024	35 min, attempts 2	BS CH15 & BS CH16
Test 10 (Ch. 17 and 18)	9 %	11/04/2024	11/18/2024	35 min, attempts 2	BS CH17 & BS CH18
RECOVERY 2	**9 %**	**11/18/2024**	**11/25/2024**	**50 min, 50 questions, 1 attempt**	**BS CH9 & BS CH18**

akeup:

No make-up tests will be available. However, two Recovery tests will be offered as a replacement for one missed test each. These Recovery tests are comprehensive. **Recovery 1** will cover materials from Tests 1 to 5, and **Recovery 2** will include questions from materials covered in Tests 6 to 10.

Class Participation

Students are required to log in regularly every week to the online class site; there is a new unit with fresh assessments every week -Wednesday at 11:00 AM. The Schedule included in this syllabus will be strictly followed unless further notification or announcement is posted on the main page (e-Learning) of this class. **Always make sure to check the class announcement for new updates and changes**.

Technical Requirements

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage**.**

Course Access and Navigation

This course can be accessed using your UT Dallas NetID account on the eLearning website.

Please see the course access and navigation section of the Getting Started with eLearning webpage for more information.

To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance (1-866-588-3192), an email request service, and an online chat service.

Communication

This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the Student eLearning Tutorials webpage for video demonstrations on eLearning tools.

Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

Distance Learning Student Resources

Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student Access Ability, and many others. Please see the eLearning Current Students webpage for more information.

Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time-sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor, or contact the online eLearning Help Desk. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.