

**Course Syllabus**  
Earthquakes and Volcanoes ISNS 2359.0W1/2 (Online)  
Department of Geosciences, School of Natural Sciences and Mathematics.  
The University of Texas at Dallas

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**Course Information**

Course Number/Section	ISNS 2359.0W1/2
Course Title	Earthquakes and Volcanoes
Term and Dates	Summer 2021 May 26 <sup>th</sup> – August 4 <sup>th</sup>
Professor	Dr. Ignacio Pujana <a href="mailto:pujana@utdallas.edu">pujana@utdallas.edu</a>
TA'S	TBA
Office Phone	972-883-2461
Office Location	ROC 2.301B
Office Hours	by appointment.
Geosciences Department	972-883-2401

**Course Description**

This course provides a broad overview of the science behind earthquakes and volcanoes, insights on the architecture, processes, evolution of the earth, and their impact on humankind and other organisms. The plate tectonics model provides the central framework in which the many aspects of earthquakes and volcanoes are described. This is an interdisciplinary science course offered in an online format. A flexible approach based on programmed self-instruction, with frequent testes to monitor progress, substitutes for the usual lecture with infrequent exams approach used in most 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 extra-terrestrial volcanism and Impacts

**Required Textbooks and Materials**

Abbott, Natural Disasters 11e (ISNS 2359) Standalone Connect: 9781260996142, Optional Connect with Leaf Loose Bundle: 9781260996005



The required textbook is “Natural Disasters”, 11<sup>th</sup> edition. We require the connect feature offered with an eBook. Follow the link inside ELearning, Earthquakes & Volcanoes ISNS 2359, will take you into the registration (only needs to be done once)

**Very Important:**

- Register with your UTD account and your official name on record, otherwise you will be unregistered.
- The publisher offers a free trial for about two weeks or so.
- Please familiarize yourself with the functionality and features of eLearning and connect as soon as possible (see further information below).
- Alternatives for those students who want a printed textbook (not required), may

be explored on the same publisher site

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**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 eLearning Folder

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

**Smart Book (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 100% in order to open each one of the 10-unit tests; most of the unit Tests have one Smart Book 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 Smart Book modules done well in advance of the test deadline. All SB assignments will contribute 12% to your final score.

**Tests:** A test includes material contained on one or two chapters. A prerequisite to open it is to earn at least 100% on the assigned SB Unit module/s.

Every week a new test will be added and the oldest one is closed.

Unit Tests contribute 90% of the final score, every test start at **11:00 AM Wednesdays** and close two weeks later also a Wednesday, 11:00 AM. This is a way to allow you to plan your testing time better but be careful don't wait until the deadline. Please read the onscreen instructions carefully, once it starts you will have 30 minutes to complete a test (saving and returning to it is not allowed). **Tests are based on the textbook, however right answers may require elaboration of the information no just mere repetition.** Each Test is timed 30 minutes and can be attempted two times (if the student wish to do so), highest grades will be recorded) within the scheduled time window.

**Make up:**

One Recovery test will be offered, to replace one missed test (not for improving a low grade), this is a comprehensive test. This opportunity will be offered at the end of the semester.

Please review the academic calendar below for the SB assignment and tests periods. Note that the due date for a Smart Book assignment is at the end of the semester, this is to allow students the maximum flexibility to complete the requirements for this class. 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.

Messages received 24 hours or more before the end of the test period (i.e. before Monday 11 AM for a test period ending on Wednesday 11 AM), will be addressed. No guarantee of response is given for messages received after a Tuesday 11 AM for a test period ending the following Wednesday.

WEEK	Unit/Topic	Test Availability Dates <sup>1</sup>	Assignments and Assessments
1/11	Syllabus Orientation Homework	May, 24 <sup>th</sup> - June 9 <sup>th</sup>	Read the syllabus carefully; check all necessary plug-ins in your computer; Register for Connect; Familiarize yourself with the functionality and features of eLearning and Connect. Do the orientation Homework.
2/11	<b>1/</b> Introduction Chapter 1 Natural Disasters and the Human Population	May, 26 <sup>th</sup> at 11:00 AM. to Wednesday June 9 <sup>th</sup> 11:00 AM. (Two Weeks)	Read Chapter 1 in textbook, go to eLearning TEST & ASSIGNMENTS folder: Click the SmartBook assignment link, once completed with 90% test 1 will open. Take Test 1. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
3/11	<b>2/</b> Chapter 2 Internal Energy and Plate Tectonics	June 2 <sup>nd</sup> to June 16 <sup>th</sup> . (Two Weeks)	Read Chapter 2 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link, once completed Take Test 2. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
4/11	<b>3/</b> Chapter 3 Earthquake Geology and Seismology	June 9 <sup>th</sup> , to June 23 <sup>rd</sup> . (Two Weeks)	Read Chapter 3 in textbook, go to eLearning TEST & ASSIGNMENTS: Click the SmartBook assignment link, once completed Take Test 3. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
5/11	<b>4/</b> Chapter 4 Plate Tectonics and Earthquakes	June. 16 <sup>th</sup> to June 30 <sup>th</sup> . (Two Weeks)	Read Chapter 4 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link. Take Test 4. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
6/11	<b>5/</b> Chapter 5 Earthquakes Throughout the United States and Canada	June 23 <sup>rd</sup> to July 7 <sup>th</sup> , 11:00 am. (Two Weeks)	Read Chapter 5 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link, once completed Take Test 5. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
7/11	<b>6/</b> Chapter 6 Volcanic Eruptions: Plate Tectonics and Magmas	June 30 <sup>th</sup> to July 14 <sup>th</sup> , 11:00 am. (Two Weeks)	Read Chapter 6 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link, once completed Take Test 6. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
8/11	<b>7/</b> Chapter 7 Volcano Case Histories: Killer Events	July 7 <sup>th</sup> to July 21 <sup>st</sup> , 11:00 am)	Read Chapter 7 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link, once completed Take Test 7. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
9/11	<b>8/</b> Chapter 8 Tsunami versus Wind-Caused Waves	July 15 <sup>th</sup> , to July 29 <sup>th</sup> , 11:00 am. (two weeks)	Read Chapter 8 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link, once completed Take Test 8. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
10/11	<b>9/</b> Chapter 9, External Energy Fuels Weather and Climate	July 21 <sup>st</sup> to August 4 <sup>th</sup> , 11:00 am. (Two Weeks)	Read Chapter 9 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link, once completed Take Test 9. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
11/11	<b>10/</b> Chapter 17, Impacts with Space Objects.	July 21 <sup>st</sup> to August 4 <sup>th</sup> , 11:00 am. (two weeks)	Read Chapter 17 in textbook, go to eLearning folder TEST & ASSIGNMENTS: Click the SmartBook assignment link. Take Test 10. Maximum 2 attempts (Highest score will count). 30 minutes allotted for test attempt.
	<b>Recovery Period During Final Period 7<sup>th</sup></b>	Wednesday August 4 <sup>th</sup> , 11:00 AM, to August 9 <sup>th</sup> 11:00 AM (five days)	Recovery Test offered as one-time opportunity, to replace one missed test (will not count to improve low grades). Recovery 1 is comprehensive, 40 minutes allotted for this test.

## Student Assessments

### Grading Information Weights

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

### Grading Scale

Based on 10 Tests grades,

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	E

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.

### Recovery comprehensive test

There will be NO make-up tests. You can recover one missed test by taking a comprehensive recovery test at the end of the semester. Missed tests will be graded with zero marks.

### 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 30 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 30 minutes and can be attempted two times (if the student wish to do so, highest grades will be recorded) within the scheduled time window. Late submission is not allowed and will not accept any excuses.

### **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 on this syllabus will be strictly followed unless further notification or announcement is posted on the main page (eLearning) of this class.

**Always make sure to check the class announcement for new updates and changes.**

### **Virtual Classroom Citizenship**

The same guidelines that apply to traditional classes should be observed in the virtual class room environment. Please use proper netiquette when interacting with class members and the instructors. The course website on eLearning has a discussion forum, feel free to post questions and answers on common problems. The forum is monitored, please do not post, test answers or any offending material.

**NOTE: Do NOT use the eLearning mail system to post mass-emails to the entire class.**

**USE the monitored discussion forum instead**

### **Policy on Server Unavailability or Other Technical Difficulties**

The university is committed to providing a reliable online course 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 extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the UTD eLearning Help Desk: <http://www.utdallas.edu/elearninghelp>, 1-866-588-3192. The instructor and the UTD eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

### **Requirements**

Students shall:

- have regular access to a computer that meets the specifications outlined.
- have regular access to a reliable Internet connection.
- access eLearning three times per week (minimum).

### **Knowledge/Attitude/Skills**

The online student must be:

- proficient using a computer
- disciplined to comply with deadlines
- a self-starter with intrinsic motivation to read, write, and learn
- able to manage time effectively
- able/willing to work independently
- willing to devote approximately 12 hours a week to a 3-credit course
- committed to academic honesty
- willing to contact the instructor immediately if a problem with course content should arise
- willing to contact technical support immediately should a technical issue arise

### **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.

### **Course Access and Navigation**

This course is developed using a web course tool called e-Learning. It is to be delivered entirely online. Students will use their UTD Net ID account to login to the course through UTD Galaxy: [Net ID Login](#) or directly at <http://elearning.utdallas.edu>.

UTD provides eLearning technical support 24 hours a day/7 days a week. The services include a toll free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service. The UTD user community can also access the support resources such as self-help resources and a Knowledge Base. Please use this link to access the UTD eLearning Support Center: <http://www.utdallas.edu/elearninghelp>.

## Communications

This eLearning course has built-in communication tools which will be used for interaction and communication. Some external communication tools such as regular email may also be used

Interaction with Instructor: The instructor will communicate with students mainly using the Announcements and Discussions tools. Students may send personal concerns or questions to the instructor using the **INSTRUCTOR EMAIL tool**. The instructor will reply to student emails within 2 working days, less under normal circumstances. My office phone is 972-883-2408 to be used only for unusual circumstances.

## Student Resources

The following university resources are available to students:

**McDermott Library:** Distance Learners (UTD students who live outside the boundaries of Collin, Dallas, Denton, Rockwall, or Tarrant counties) will need a UTD-ID number to access all of the library's electronic resources (reserves, journal articles, eBooks, interlibrary loan) from off campus. For UTD students living within those counties who are taking online courses, a Comet Card is required to check out materials at the McDermott Library. For more information on library resources go to <http://www.utdallas.edu/library/distlearn/disted.htm>.

## Scholastic Honesty

The University has policies and discipline procedures regarding scholastic dishonesty. Detailed information is available on the [UTD Judicial Affairs](#) web page. All students are expected to maintain a high level of responsibility with respect to academic honesty. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. Precise and detailed tracking of all online activities is a characteristic of the e-Learning system. Anything you do while log on the system is recorded.

## Student Conduct & Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Board of Regents, the University of Texas System, Part 1, Chapter VI, Section 3*, and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

## Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. Scholastic dishonesty includes, but is not limited to, statements, acts or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work or material that is not one's own. As a general rule, scholastic dishonesty involves one of the following acts: cheating, plagiarism, collusion and/or falsifying academic records. Students suspected of academic dishonesty are subject to disciplinary proceedings.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

### **Email Use**

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

### **Withdrawal from Class**

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

### **Student Grievance Procedures**

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

### **Incomplete Grade Policy**

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of **F**.

### **Disability Services**

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union.

The contact information for the Office of Disability Services is:

The University of Texas at Dallas, SU 22

PO Box 830688

Richardson, Texas 75083-0688

(972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolled students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

### **Religious Holy Days**

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, and Texas Code Annotated.

***These descriptions and timelines are subject to change at the discretion of the Professor.***