# **Course Syllabus**

GEOS1303.0W1 (Online) Department of Geosciences School of Natural Sciences and Mathematics The University of Texas at Dallas

## **Course Information**

| Course Number/Section | GEOS1303.0W1                           |
|-----------------------|--|
| Course Title          | Physical Geology (Online Course)       |
| Term and Dates        | Spring 2016—January t11h to April 30th |

### **Professor Contact Information**

| Instructor              | Dr. Ignacio Pujana                     |
|-------------------------|--|
| Office Phones           | 972-883-2461                           |
| Email Address           | ONLY use eLearning to email instructor |
| Office Location         | ROC 2.301B                             |
| Online and Office Hours | by appointment.                        |
| Geosciences Department  | 972-883-2401                           |

#### About the Instructor

Ignacio Pujana, Senior Lecturer and Researcher in the Geosciences Department for the last ten years; teaching, "The Oceans", "Paleobiology", "Introduction to Paleontology", "Earth and Life History" "Physical Geology", and "Geology Environment and Resources of Latin America". Research on Biostratigraphy of Mesozoic and Cenozoic Sequences.

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

None

### **Course Description**

The course presents an overview of the processes, both internal and external, that shape the surface of the earth. Specific topics addressed are: the rock-forming minerals; magmatic and volcanic processes; weathering and sedimentary materials; erosion, transport and deposition by water, wind and ice; coastlines; folding and faulting; earthquakes and the earth's interior; the sea floor the unifying theory of plate tectonics; mountain belts, metamorphism, and the evolution of the continental crust; geological time and environmental geology.

This is a science course offered in an online format. A flexible approach based on programmed selfinstruction, with frequent tests to monitor progress, replaces for the usual lecture with infrequent testing mode used in most courses.

The course is divided into 10 sections (called Units), each of which corresponds to one or two chapters in the textbook. A Syllabus Quiz should be passed with a 100% (can be repeated all times needed) in order to go on to Test one, but those points do not count towards your grade.

There is one test per Unit; therefore, the course consists of 10 Tests/Exams.

### Student Learning Objectives/Outcomes

After completing this course, students will be able to:

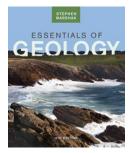
• Explain how the discovery of spontaneous reversals of the earth's magnetic field led to plate tectonics

• Explain how two heat sources energize terrestrial processes, one being the core and the other the sun

• Define the two classes of sediments: clastic and non-clastic.

•Explain the superficial processes in which a transporting medium moves mechanically abraded material from an area of erosion to one of deposition

• Explain how the theory of plate tectonics predicts where volcanoes and earthquakes will occur.



**Required Textbooks and Materials** 

Essentials of Geology 3<sup>rd</sup> or 4<sup>th</sup> Editions. Stephen Marshak W. W. Norton & Company, Inc. ISBN: 978-0-393-93238-6 (pbt.) Textbooks can be ordered online through <u>UTD Bookstore</u>. They could be also available at the <u>Off-Campus Books</u>. A wide offer of used textbooks is also available in many other electronic outlets fell free to explore it.

#### **Course Policies**

Sequence of events

All supporting material, all exams and assignments, and all **communication** will be provided through eLearning at <u>https://elearning.utdallas.edu/</u>

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

### Assessments

There are two types of tests; 1) **Tests** which cover 1 unit (Tests 1,2,3,4,6,7,8, and 9), and 2) **EXAMS** which cover several units (Tests 5 and 10).

**TESTS**: each test will be open for two weeks starting and ending Wednesdays at 11 AM. Every week a new test will be added and simultaneously ending the oldest one. **Tests** are open for 35 minutes; and two attempts are allowed per test, although the second attempt is optional. The final test grade is either the average of both attempts or the grade of the first attempt. This is done online on any computer at any time during the allowed two weeks.

**EXAMS** are comprehensive and cover several units is comparable to a Midterm and Final exam. They run for two weeks and it's online on your own computer. EXAM 5 covers units 1, 2, 3, 4 and 5. EXAM 10 covers units 6-10. Both run for 50 minutes with one attempt allowed.

Make-up Exams

There will be NO make-up tests; each student will be allowed to miss and recover just **one test** during the semester on the recovery period at the end of the term.

Missed tests in excess of one or no recovered will be graded with zero marks.

#### **Class Participation**

Students are required to log in regularly; there is a new test every week. The Schedule included on this syllabus will be strictly followed, in case is necessary to change it, a notification will be posted on the main page.

### Virtual Classroom Citizenship

The same guidelines that apply to traditional classes should be observed in the virtual classroom environment. Please use proper netiquette when interacting with class members and the instructors. The usage of the e-mail tool is intended for communication between a student and the instructors, **no mass mailing** to the whole class is allowed; 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: <u>http://www.utdallas.edu/elearninghelp</u>, 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. <u>Top</u>

### Requirements.

Students shall:

-have regular access to a computer that meets the specifications outlined -have regular access to a reliable Internet connection (56K minimum, high speed preferred) -access e-Learning 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. Please review the important technical requirements and the web browser configuration information.

## **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 NetID account to login to the course using the elearning; <u>http://elearning.utdallas.edu</u>. Please see more details on <u>course access and navigation information</u>.

To get started with an eLearning course, please see the <a href="http://www.utdallas.edu/elearning/students/getting-started.html">http://www.utdallas.edu/elearning/students/getting-started.html</a>.

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: <a href="http://www.utdallas.edu/elearninghelp">http://www.utdallas.edu/elearninghelp</a>.

## Communications

This eLearning course has built-in communication tools which will be used for interaction and communication. All emails related to the class must be inside the eLearning environment and directed

to both Instructor and TA if you want a quick response. Class related emails directed to regular email address won't be answered unless is a malfunction on the system.

Under no circumstance email the whole class, if you need/want to communicate with your classmates use the **Discussion Group**.

Interaction with Instructors: 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 course email tool. The instructor will reply to student emails within 2 working days, less under normal circumstances. My office phone is 972-883-2461 also to be used for unusual circumstances.

## **Student Resources**

The following university resources are available to students:

UTD Distance Learning: <u>http://www.utdallas.edu/oee/distance/students/cstudents.htm</u>

**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 <a href="http://www.utdallas.edu/library/distlearn/disted.htm">http://www.utdallas.edu/library/distlearn/disted.htm</a>.

## **Student Assessments**

### **Grading Information Weights**

| Syllabus Quiz                            | 0%   |
|--|------|
| Quizzes 1,2,3,4,6,7,8,and 9              | 70%  |
| (8.75% each)                             |      |
| EXAMS 5 and 10- Comprehensive (15% each) | 30%  |
| Total                                    | 100% |
| Optional Comprehensive test Extra Credit | 2%   |

Grading Scale

Based on 10 Test grades

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

Grades to the Exams 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 two times.

Unit tests require no specific score to "pass." If you wish to improve your first grade a second attempt could be made in the allowed time and your two scores will be averaged as the grade for that test. Tutorial quizzes grades won't count towards your final grade.

## Academic Calendar

You can access tests by clicking the Assessments link on the course menu or see the exam icon on the designated Folder. Each quiz is timed and can be attempted only two times within the scheduled time window; from Wednesday to Wednesday, 11 AM.

Please read the onscreen instructions carefully before you click "Begin Assessment". Once it starts you will have 35 minutes to complete a quiz (for quizzes 1, 2, 3, 4, 6, 7, 8, and 9); or 50 minutes (for Exams 5 and 10). Tests are based solely on the text book, however right answers may require elaboration of the information no just mere repetition.

| WEEK       | Tested Unit          | CHAPTER  | Торіс   | Schedule of Assignments and Assessments  |
|------------|----------------------|--|---|--|
| 1-<br>2/16 | Syllabus             | Syllabus   | Introduction<br>Syllabus                            | Read Syllabus; check all necessary plug-ins in your computer. Pass<br>the "Syllabus Quiz" no points will be counted towards your grade<br>but it has to be passed with 100% to go on Unit 1 Test<br>Syllabus Quiz: Wednesday, Jan. 13 <sup>th</sup> 11:00 AM to Wednesday<br>February 10 <sup>th</sup> 11:00 AM, unlimited attempts but must be passed<br>with 100% in order to see Test 1.  |
| 3/16       | 1                    | 1  | The Earth in<br>Context                             | Read Chapter 1 on textbook, Go to Folder UNIT1: Presentations,<br>Animations, Tutorial Quizzes and links<br>Take Test 1; Wednesday January 13 <sup>th</sup> at 11:00 AM until<br>Wednesday February 10 <sup>th</sup> 11:00 AM.<br>This grade is what will start counting towards your final grade.<br>Maximum Two attempts and the average will make your grade on<br>the Test.  |
| 4/16       | 2                    | 2  | The Way the<br>Earth Works:<br>Plate<br>Tectonics   | Read Chapter 2 text book, Go to Folder UNIT2: Presentations,<br>Animations, Tutorial Quizzes and links<br>Take Test 2 available Wednesday February 3 <sup>rd</sup> 11:00 AM, to<br>Wednesday February 17 <sup>th</sup> , 11:00 AM.   |
| 5/16       | 3                    | 3 and<br>Interlude A                                   | Patterns in<br>Nature:<br>Minerals<br>Rock Groups   | Read Chapter 3 and Interlude A on text book. Go to Folder UNIT 3:<br>For learning materials.<br>Take Test Unit 3 available Wednesday February 10 <sup>th</sup> , 11:00 AM to<br>Wednesday February 24 <sup>th</sup> , 11:00 AM.  |
| 6/16       | 4                    | 4 and 5  | Magma and<br>Igneous Rocks<br>Volcanic<br>Eruptions | Read Chapters 4 and 5 on text book, Go to Folder UNIT 4: For<br>learning materials.<br>Take Test 4 available Wednesday February 17 <sup>th</sup> 11:00 AM. to<br>Wednesday March 2 <sup>nd</sup> , 11:00 AM.   |
| 7/16       | 1, 2, 3,<br>4, and 5 | 6 plus<br>Interlude B<br>Weathering<br>pp. 138-<br>145 | Pages of Earth's<br>Past:<br>Sedimentary<br>Rocks   | Read Units 1, 2, 3, 4, and Unit 5: Chapter 6 and Interlude B:<br>Weathering (p.138-145) on text book, Go to Folder UNIT 5: For<br>learning materials.<br><b>Take EXAM 5</b> available Wednesday February 24 <sup>th</sup> , 11:00 AM. to<br>Wednesday March 9 <sup>th</sup> , 11:00 AM. This test is worth 15% of your<br>grade, testing one time and will be open for 50 minutes; <b>include</b><br><b>questions from Units 1, 2, 3, 4 and 5.</b> |
| 8-<br>9/16 | 6                    | 7 and<br>Interlude C                                   | Metamorphism:<br>A Process of<br>Change Rock        | Read Chapter 7and and Interlude C on text book, Go to Folder<br>UNIT 6: For learning material.<br>Take Test 6 available Wednesday March 2 <sup>nd</sup> , 11:00 AM to  |

|       |   |                           | Cycle  | Wednesday March 23 <sup>rd</sup> , 11:00 AM.  |  |
|-------|---|---------------------------|--|---|--|
|       | Spring Break March 14 <sup>th</sup> to 19 <sup>th</sup>   |                           |  |   |  |
| 10/16 |   | T                         | 1  |   |  |
| 11/16 | 7   | 8 and 9                   | Earthquakes<br>Crustal<br>Deformation<br>and Mountain<br>Building                    | Read Chapters 8 and 9 on text book Go to Folder UNIT 7: For<br>learning materials.<br>Take Test 7 available Wednesday Wednesday March 23 <sup>rd</sup> , 11:00<br>AM to Wednesday April 6 <sup>th</sup> , 11:00 AM.   |  |
| 12/16 | 8   | 10, 11 and<br>Interlude E | Deep Time:<br>How Old Is Old?<br>A Biography of<br>Earth<br>Fossils and<br>Evolution | Read Chapters 10, 11 and Interlude E on text book, Go to Folder<br>UNIT 8: For learning materials.<br>Take Test 8 available Wednesday March 30 <sup>st</sup> , 11:00 AM to<br>Wednesday April 13 <sup>th</sup> , 11:00 AM.  |  |
| 13-   | 9   | 15 and 17                 | Oceans and   | Read Chapters 15 and 17 on text book, Go to Folder UNIT 9: For  |  |
| 14/16 |   |                           | Coasts<br>The Geology of<br>Deserts  | learning materials.<br>Take Test 9 available Wednesday April 6 <sup>th</sup> , 11:00 AM to<br>Wednesday April 20 <sup>th</sup> , 11:00 AM.  |  |
| 15/16 | 6, 7, 8,<br>9, and<br>10  | 18 and 19                 | Glaciers and Ice<br>Ages<br>Global Change<br>in the Earth<br>System                  | Read Units 6, 7, 8, 9 and Unit 10: chapters 18 and 19 on text book,<br>Go to Folder UNIT 10: for learning materials.<br>Take EXAM 10 Wednesday April 13 <sup>th</sup> , 11:00 AM to Wednesday<br>April 27 <sup>th</sup> , 11:00 AM.<br>This test is worth 15% of your grade, testing one time and will be<br>open for 50 minutes; <b>include questions from Units 6, 7, 8, 9, 10.</b> |  |
| 16/16 | <ul> <li>Recovery Period of one missed test (maximum), this is not for improving grades of attempted assessments.</li> <li>Make Up Test: one time, comprehensive, 40 minutes 20 questions.</li> <li>During the same period an Optional Comprehensive Test is offered or extra credit (maximum 2 %.) This test is one time, comprehensive, 50 minutes 30 questions.</li> <li>Both Tests available Wednesday April 20<sup>th</sup> to Friday April 30<sup>th</sup> 11:00 AM.</li> </ul> |                           |  |   |  |

## Scholastic Honesty

The University has policies and discipline procedures regarding scholastic dishonesty. Detailed information is available on the <u>UTD Judicial Affairs</u> 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.

## **University Policies**

### **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 deal 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 <u>**F**</u>.

### **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. 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, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

### **Off-Campus Instruction and Course Activities**

Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at the website address given below. Additional information is available from the office of the school dean. (<u>http://www.utdallas.edu/BusinessAffairs/Travel\_Risk\_Activities.htm</u>)

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