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SCHOOL OF MATHEMATICS AND SCIENCES

**Virtual Campus – Spring 2014**

**February 24, 2014 – May 17, 2014**

**WAYLAND MISSION STATEMENT:** *Wayland Baptist University exists to educate students in an academically challenging, learning-focused and distinctively Christian environment for professional success lifelong learning, and service to God and humankind.*

**COURSE NUMBER AND TITLE:** **GEOL 1401 - Physical Geology 1**

**CAMPUS**: Virtual

**INSTRUCTOR**: Mark Bryan

Office Hours, Building and Location: Online (Email is checked during regular business hours)

Email: [bryanm@wbu.edu](mailto:bryanm@wbu.edu)

**CATALOG DESCRIPTION:**

An introduction to rock and mineral materials, and the dynamic processes responsible for shaping Earth and providing our natural resources, such as plate tectonics, volcanism, and various surficial processes.

**PREREQUISITE:** none

**REQUIRED TEXTBOOK:**

Earth: An Introduction to Physical Geology (ISBN 13: 978-0-321-81393-0), 11th ed., (*Check with WBU Virtual Campus Bookstore to verify edition – they will have the latest ISBN*)

by Tarbuck & Lutgens; Prentice Hall Publishing Co. **(NOTE: If the electronic version of the text is purchased, the student will not have access to any charts or figures in the text during exams. Software which prevents clicking outside of the exam is utilized for exams).**

**\*\*Online access to** [**http://www.masteringgeology.com/site/login.html**](http://www.masteringgeology.com/site/login.html) **com is required for completion of class activities. Access is included with purchase of a new textbook. Used or rented textbooks may require additional cost for purchase of online access registration.**

**REQUIRED LAB KIT:** WBU Geology Lab Kit (only available through Wayland Baptist University bookstore-kits from previous semesters CANNOT be used)

**OUTCOME COMPETENCIES**: Upon completion of the course the student will

* Understand current theories of the origin of the solar system and planetary differentiation
* Be able to identify common rocks and minerals
* Have knowledge of the current state of Plate Tectonics theory
* Understand major concepts used in study of the history of the earth
* Have knowledge of surface and subsurface geologic processes (e.g. volcanism, earthquakes)
* Be able to relate these processes to a plate tectonics reference frame

**ATTENDANCE-TIME COMMITMENT:** The university expects students to make class attendance a priority. Attendance in the context of a Virtual Campus course implies logging into the Blackboard system and checking for announcements, viewing lecture materials, working on assignments, etc. on a regular basis, preferably twice a week at a minimum.

This is a four hour lab course. As a lab class, it will take a greater commitment of time than other courses. If a student has previously taken online classes they may find that this course takes much more time to complete. In a traditional classroom setting, this class would meet for about 3 hours per week PLUS another 2 hours for lab. A good rule of thumb is that students should reserve AT LEAST as many hours outside of class as they spend in-class to review material and complete assignments. While virtual campus students have the benefit of flexibility in scheduling when they will review lecture and course materials, the content of this course is NOT reduced from the traditional format and will require AT LEAST the same level of effort as the in-class version of the course! Therefore, in order to succeed in this course, students should be prepared to invest a MINIMUM of 10 HOURS per week, with additional effort required to study for assignments or to prepare for exams.

The course is not designed as a self-paced course, and will be very difficult if the student falls behind.

If any student expects special consideration because of family, job requirements and/or taking other classes, please do not enroll in this course. *In order to remain fair to everyone*, *expectations are the same for all students*. It is up to each student to decide prior to enrolling if they will have adequate time to commit to the course. No excuses because of other classes or commitments will be accepted for student’s failure to comply with these requirements.

**DISCRIMINATION POLICY:** “In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university.  The Coordinator of Counseling Services serves as the coordinator of students with a disability and should be contacted concerning accommodation requests at (806) 291- 3765.  Documentation of a disability must accompany any request for accommodations.”  
It is the responsibility of the student to inform the instructor of any disability that may require accommodation during the lecture, laboratory or exam portions of the course. It is of particular importance to report any condition or disability that may affect the safety of the individual or others. Information provided for this purpose will be kept strictly confidential and will not in any way affect the individual’s course grade.

**COMPUTER/SOFTWARE REQUIREMENTS:** Software required includes an internet browser Firefox, Safari, Chrome or Internet Explorer (check version compatibility on login page-“Test Your Browser), Flash Player, JAVA, Microsoft Word (version '07 or later), Apple Quicktime and the Respondus Lockdown Browser (available free through Blackboard). A high speed internet connection is *highly recommended* due to large file sizes and streaming media.

**IMPORTANT NOTES:** *As an online course, it is imperative that you have reliable access to the internet. Excuses for assignments being late due to internet reliability issues or computer failure will not be accepted. The best way to avoid problems is to get assignments done early, so that if problems should arise, you can effectively deal with them before any deadlines.*

\*\*The use of a Wayland Baptist University email account is mandatory for all correspondence in this course– this is the official means of communication between faculty and students. If you require assistance in getting this done, please contact the IT department at itsupport@wbu.edu.Email from any other email account may not receive a reply.

**COURSE REQUIREMENTS:** Students will be evaluated by examinations, class assignments, etc. as described in this syllabus under the heading “Evaluation”.

**EVALUATION**: University Grading System: A=90-100, B=80-89, C =70-79, D=60-69, F=below 60.

Students will be evaluated by examinations, class participation and labs.

The final class grade will be based on the average of grades that are earned as listed below.

Points %

Exams 4 (150 points each) 600 60%

Assignments 10 (25 points each) 250 25%

Participation (discussions, etc.) 5 (30 points each) 150 15%

1000 100%

**Students who do not participate in discussions or pass at least half of the lab assignments will automatically fail the course.**

Exams\*: The 4 online tests will have specific dates for completion (to be announced). Tests not completed by that date will be graded as 0. With the exception of the final, exams are open book. However, exams are designed to test a student’s knowledge of the material and not their ability to look up questions. All exams are set to be completed within a specific amount of time. There will not be enough time to complete these exams if a student attempts to lookup the majority of question. Exceeding the time limit will result in a deduction of points.

Labs\*: All labs are due no later than the date AND time listed on the posted DUE DATES document. Time is based on Plainview time (Central Time Zone U.S.) Late labs are graded as 0. The first lab may be turned in by the second week deadline. (This is to allow all students ample time to obtain the materials.) Students should allow *at least* 3 hours per week to complete lab activities. In order to pass the course, a passing grade must be earned on at least 50% of labs. There will be 11 labs posted. Students are expected to complete any 10 lab assignments for regular credit. If a student chooses to complete all 11, the 11th is counted as extra credit.

Labs may be completed in advance of the week assigned but should be completed in the order listed (most materials are available 2 weeks prior to due date). Labs will not be graded before their due date

Online forums/discussions\*: Several questions/discussion topics will be posted during the term. Students are expected to respond to these postings *and* to each other’s responses. The topics may be of current events, new discoveries or any variety of earth science related items. Student responses may require some additional reading and extensive thought or may be just asking for an opinion.

\*Exception for serious illness (hospital time) or major emergencies may be allowed only at instructor discretion. You may be required to furnish evidence of any extenuating circumstances. If you are military and will be going TDY during the course, you need to let me know ahead of time (verification from your C.O. may be required).

# COURSE SCHEDULE OUTLINE:

Date week

### Week of # subject chapter

02/24 1 Introduction 1

03/03 2 Matter and minerals 3

Spring Break/March 10-March 14, 2014

03/17 3 Igneous rocks and Volcanism 4 & 5

03/24 EXAM 1 4 Sedimentary rocks and their environments 7

03/31 5 Metamorphic rocks, mass wasting, weathering and soils 6, 8 &15

04/07 6 Crustal deformation- Structural Geology 10

04/14 EXAM 2 7 Geologic time 9

04/21 8 Earthquakes and Earth’s interior 11 & 12

04/28 9 Plate tectonics, mountain building & sea floor 2, 13 & 14

05/05 EXAM 3 10 Running Water and Groundwater 16 & 17

05/12 EXAM 4 11 Glaciers & deserts 18 & 19

EXAM 1 covers weeks 1-3

EXAM 2 covers weeks 4-6

EXAM 3 covers weeks 7-9

EXAM 4 covers weeks 10-11

**\*\*EXAM 4** **is a proctored exam (*if it is impossible to arrange for a proctor, do not enroll in the course*) .**

All coursework MUST be completed by the end of the term.

NOTES: The instructor expects emails with questions or other concerns about the class and any activities.

Communication with the instructor regarding due dates should be done **BEFORE** items are due.  
Exams, discussions and assignments are set to close at a pre-determined time (based on Plainview-CST). Failure to submit any coursework by the posted deadline will result in a 0.

This outline and other syllabus items are subject to change at university or instructor discretion.