

**PSC 103 – Earth Science 4 Units Fall 2015**

**Professor:** Dr. Heide Doss

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**Office Hours:** T Th 11:30-1:00 PM, MWF 9:30-10:30 (RS 216), or by appointment

**Regular meeting times Sep 1, 2015 – Dec 11, 2014**

**Lecture:** T TH 9:00 am – 10:40 am (LBRT 201)

**Final Exam: Tuesday, Dec 15 10:30 AM to 1:00 PM**

**Textbook:** Earth Science by Tarbuck & Lutgens, 14th edition, Pearson 2013

Access to Mastering Physics, Course ID: MGEOLDOSS81618, Course Name: PSC 103 Fall 2015

**Course Description:** Earth Science provides an introduction to geology, oceanography, meteorology, and astronomy. In supporting general education this course will develop your abilities to synthesize information to arrive at reasoned conclusions, and solve problems that are quantitative in nature in the context of Earth Science.

**Student Learning Outcomes:** In each section there are a number of smaller learning outcomes which fit into broader course outcomes. Upon completion of this course you should be able to:

1. apply basic scientific principles to address Earth science questions and make informed decisions about scientific matters likely to confront educated citizens;
2. explain everyday observations of the natural world in terms of planetary processes;
3. apply an evidence-based, logical, scientific approach to ask and address questions about our planet and solar system;
4. articulate the relevance of Earth Science to individuals and to society;
5. solve problems relevant to introductory Earth Science and interpret solutions.

**Pre-class Assignments:** Reading and pre-class questions are due by 8:00 AM, except for the first class. The pre-class questions are in Mastering Geology/Earth Science 14/E at [www.masteringgeology.com](http://www.masteringgeology.com). These usually consist of 1 item (questions and simple problems) per section based on the reading assignment. Late submissions will not be accepted. Pre-class assignments are 5% of the overall grade. Some pre-class assignments have extra-credit points.

**Homework:** Weekly homework assignments besides reading and pre-class questions found in Mastering Geology at [www.masteringgeology.com](http://www.masteringgeology.com), are chapter problem sets in Mastering Geology at [www.masteringgeology.com](http://www.masteringgeology.com). These chapter problem sets are worth 15% of your overall grade and are due as noted in the syllabus – and if no time is given it is due at 8 AM on the day it appears. To be sure, use the times listed in mastering geology. Points earned during class and class projects that might come up during the semester will also be included in the homework grade.

**Quizzes:** There will be 12 quizzes throughout the semester, each covering about two chapters of the course work. These will be equally weighted and total 12% of your overall grade. Quizzes will be on Mastering Geology at [www.masteringgeology.com](http://www.masteringgeology.com). The date due is listed on the syllabus and the exact time that a quiz is due is listed in mastering geology.

**Exams:** There will be four in-class exams during the semester comprising 48% of your grade. There is also a final exam (worth 20% of your overall grade). Partial credit for non-multiple choice problems will be given for correct reasoning at any step of a problem, but only if it is communicated clearly enough for me to understand. For problems that call for solution or explanation, no credit will be given for an answer alone; the method or reasoning must also be shown. No make-up exams are allowed except for warranted circumstances. *You must take ALL the exams in order to pass the class.*

**Final Exam Policy:** Successful completion of this class requires taking the final examination **on its scheduled day, Tuesday December 15, 2014, 10:30 AM – 1:00 PM.** The final examination schedule is posted on the Class Schedules site. **No requests for early examinations or alternative days will be approved.** The final exam is worth 20% of your grade.

**Final Grade:** The points you receive during the course are weighted accordingly:

Component	Weight
Pre-Class	5%
Homework	15%
Quizzes (12)	12% (equally weighted)
Tests (4)	48%
Final Exam	20%

The grade you earn in this course is based on the following scale:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-
S $\geq$	91.5	89.5	86.5	82.5	79.5	76.5	72.5	69.5	66.5	62.5
91.5	>S $\geq$	>S $\geq$	>S $\geq$	>S $\geq$	>S $\geq$	>S $\geq$	>S $\geq$	>S $\geq$	>S $\geq$	>S $\geq$
	89.5	86.5	82.5	79.5	76.5	72.5	69.5	66.5	62.5	59.5

**Attendance and Participation:** Regular and punctual attendance at all classes is considered essential. Some activities through this course occur only during class time and cannot be made-up. Let me know in advance if you must miss class. Attendance is one factor used in determining borderline grades. If absences become excessive, you will be required to meet with me and the situation will be dealt with on a case-by-case basis.

**Academic Integrity and Honesty:** All students are expected to uphold the highest standards of honesty and integrity in their academic work. Cheating or plagiarism may result at a minimum in failure on the assignment and may result in an automatic failure in this course. Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. As explained in the university catalog, academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. Violations of university academic honesty include cheating, plagiarism, falsification, aiding the academic dishonesty of others, or malicious misuse of university resources. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for a) that particular assignment or examination, and/or b) the course following the procedure in the university catalog. Students may appeal also using the procedure in the university catalog. See the university catalog, Academic Policies for further information.

**Academic Accommodations:** While all students are expected to meet the minimum academic standards for completion of this course as established by the instructor, students with disabilities may require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file documentation with the Disability Resource Center (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center will contact the student's instructors and provide written recommendations for reasonable and appropriate accommodations to meet the individual needs of the student. See Academic Policies in the undergraduate academic catalog. This policy assists the university in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with disabilities and guarantees all qualified students equal access to and benefits of PLNU programs and activities.

**FERPA Policy:** In compliance with federal law, neither PLNU student ID nor social security number should be used in publicly posted grades or returned sets of assignments without student written permission. This class will meet the federal requirements by distributing grades and papers individually. Also, in compliance with FERPA, you will be the only person given information about your progress in this class unless you have designated others to receive it in the “Information Release” section of the student portal. See Policy Statements in the undergrad academic catalog.

Tentative Syllabus – subject to updates

Pre-class assignments are due by 8:00 AM on day of class unless otherwise noted. HW are due as noted.

<b>Date</b>	<b>Topics</b>	<b>Assignments</b>
<b>9/1/15</b> <b>T =</b> <b>Monday</b> <b>schedule</b>	<b>NO MEETING</b>  <b>Monday schedule</b>	
9/3/15 Th	Introduction to Earth Science Chapter 1	Chapter 1 pre-class 1 due 9/5 <b>MG ch 1 due 9/6</b> <b>HW Intro to Mastering Geology due 9/5</b>
9/8/15 T	Minerals Ch 2.1-2.6	2.1-2.6 pre-class 2 due <b>MG ch 1 due</b>
9/10/15 Th	Rocks Ch 3.1-3.5	3.1-3.5 pre-class 3 due <b>MG ch 2 due</b> <b>Quiz 1 due by 9 pm (1,2)</b>
9/15/15 T	Weathering Ch 4.1-4.3, 4.9-4.13	4.1-4.3, 4.9-4.13 pre-class 4 due <b>MG ch 3 due</b>
9/17/15 Th	Running Water Ch 5.1-5.8	5.1-5.8 pre-class 5 due <b>MG ch 4 due</b> <b>Quiz 2 due by 9 pm (3,4)</b>
9/22/15 T	Ground Water and Glaciers 5.9-5.12, 6.1-6.7	5.9-5.12, 6.1-6.7 pre-class 6 due <b>MG ch 5 due 9/23 9 pm</b>
9/24/15 Th	Deserts and Wrap-Up 6.9-6.11	6.9-6.11 pre-class 7 due <b>MG ch 6 due 9/26 by 9 pm</b> <b>Quiz 3 due 9/27 by 9 pm (5,6)</b>
<b>9/29/15</b> <b>T</b>	<b>Exam 1 Chapters 2-6</b>	pre-class 8 due 7.1-7.11 MG ch 7
10/1/15 Th	Plate Tectonics 7.1-7.11	7.1-7.11 pre-class 9 due <b>MG ch 7 due 10/3 by 9 pm</b>
10/6/15 T	Plate Tectonics; Earthquakes 8.1-8.8	8.1-8.8 pre-class 10 due <b>MG ch 8 due 10/7 by 9 pm</b>
10/8/15 Th	Earthquakes; Volcanoes 9.1-9.7	9.1-9.7 pre-class 11 due; <b>Quiz 4 due by 9pm (7,8)</b> MG ch 9

<b>Date</b>	<b>Topics</b>	<b>Assignments</b>
10/13/15 T	Volcanoes 9.8-9.12	9.8-9.12 pre-class 12 due <b>MG ch 9 due 10/14 by 9 pm</b>
10/15/15 Th	Crustal Deformation 10.1-10.7	10.1-10.7 pre-class 13 due <b>MG ch 10 due 10/17 by 9 pm</b> <b>Quiz 5 due 10/18 - 9pm (9,10)</b>
10/20/15 T	Geologic Time 11.1-11.7	11.1-11.7 pre-class 14 due <b>MG ch 11 due 10/21 by 9 pm</b>
<b>10/22/15</b> <b>Th</b>	<b>Exam 2 Chapter 7-11</b>	pre-class 15 due MG ch 13
10/27/15 T	The Ocean Floor 13.1-13.7	13.1-13.7 pre-class 16 due <b>MG ch 13 due 10/28 9pm</b>
10/29/15 Th	Ocean Water and Tides 14.1-14.5, 15.9	14.1-14.5, 15.9 pre-class 17 due <b>MG ch 14 due 11/1 by 9 pm</b> <b>Quiz 6 due 11/2 9 pm (13,14)</b>
11/3/15 T	Dynamic Ocean 15.1-15.8	15.1-15.8 pre-class 18 due <b>MG ch 15 due 11/4 9 pm</b>
11/5/15 Th	The Atmosphere 16.1-16.9	16.1-16.9 pre-class 19 due <b>MG ch 16 due 11/7 9 pm</b> <b>Quiz 7 due 11/8 9 pm (15,16)</b>
11/10/15 T	Clouds 17.1-17.10	17.1-17.10 pre-class 20 due <b>MG ch 17 due 11/11 9 pm</b>
11/12/15 Th	Wind 18.1-18.8	18.1-18.8 pre-class 21 due <b>MG ch 18 due 11/15 9 pm</b> <b>Quiz 8 due 11/16 9 pm (17,18)</b>
11/17/15 T	Global Temperature and Climate; Wrap Up 20.8-20.11	20.8-20.11 pre-class 22 due <b>MG ch 20 due 11/17 9 pm</b> <b>Quiz 9 due 11/18 9 pm (20)</b>
<b>11/19/15</b> <b>Th</b>	<b>Exam 3 Chapters 13-18, 20</b>	pre-class 23 due MG ch 21

<b>Date</b>	<b>Topics</b>	<b>Assignments</b>
11/24/15 T	Astronomy Basics 21.1-21.6	21.1-21.6 pre-class 24 due <b>MG ch 21 due 11/25 9 pm</b>
11/26/15 Th	<b>No Classes Thanksgiving recess (Happy Thanksgiving!)</b>	
12/1/15 T	The Solar System 22.1-22.5	22.1-22.5 pre-class 25 due <b>MG ch 22 due 12/1 9 pm</b> <b>Quiz 10 due 9 pm (21,22)</b>
12/3/15 Th	Light 23.1-23.7	23.1-23.7 pre-class 26 due <b>MG ch 23 due 12/5 9 pm</b>
12/8/15 T	Beyond our Solar System 24.1-24.7	24.1-24.7 pre-class 27 <b>MG ch 24 due 12/8 9 pm</b> <b>Quiz 11 due 12/9 9 pm (23,24)</b>
<b>12/10/15</b> <b>Th</b>	<b>Exam 4 Chapters 21-24</b>	pre-class 28 <b>Quiz 12 due 12/10 9 pm (all)</b>
	Extra Study Session – to be determined	
<b>12/15/14</b> <b>T</b>	<b>FINAL EXAM 10:30 am - 1:00 pm</b>	
	Grades turned in by Dec 27	