

1  **Geology 100:**

Physical Geology
Fall 2017 (2 sections)

21 August through 14 October (8 weeks)
21 August through 16 December (16 weeks)

2 

3  **Teaching Philosophy**

4  **Recommended Textbook:**

"Earth" (12th edition)

by Tarbuck, Lutgens & Tasa

available in
Miramar College
Bookstore, online

5 

Required Blackboard Plug-in:

Modified "Mastering Geology"

Only available in Miramar College Bookstore, or through Blackboard
See instructions (including PowerPoints/Videos/PDF's) for more info

6 

Optional Book:

"Rise and Fall"

by Pat Abbott

available in
finer bookstores everywhere,
Online

Sedimentary Rocks
along San Diego Coast

7 

Optional Book:

"Roadside Geology Along Sunrise Highway"

by Mike Walawender

Igneous & Metamorphic rocks in
S.D. back country

8 

Optional Field Trips:

Tourmaline Beach, among others

9 

Student Learning Outcomes "SLO's"

● Students will be able to:

- ☒ Differentiate among the 3 major types of plate boundaries and recognize their characteristic geologic features.
- ☒ Identify common rock-forming minerals by their diagnostic properties.
- ☒ Classify rock strata, faults and intrusions by age, using relative dating techniques.

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San Diego County Geology

● One of the best places in the nation to study

☒ San Andreas Fault ZONE

● Living laboratories:

- ☒ Rose Canyon fault (and others)
 - Mission Bay, S.D. Bay, Mount Soledad
- ☒ Santiago Peak volcanics
- ☒ Marine sediments exposed in sea cliffs
- ☒ Peninsular Ranges Batholith
- ☒ Anza Borrego Desert State Park
- ☒ Salton Buttes

- ◆ Live volcanoes at our doorstep!
- 11  ***What Will I Learn?***
 - what geology is and what geologists do.
 - an appreciation of the immensity of geologic time
 - ☒ punctuated by instantaneous catastrophic events such as earthquakes, tsunamis, floods, landslides and volcanic eruptions
 - an understanding of how a variety of minerals and rocks are produced in the earth's crust.
 - the geologic origins of important mineral resources and the distribution of these resources on the earth.
 - an appreciation of how much we have learned about geologic processes since I began my geological studies forty-nine (!) years ago.
- 12  ***What Will I Learn? (continued)***
 - Mountain-building and opening of ocean basins
 - Bizarre sea creatures that live at underwater volcanic vents
 - Waves and coastal hazards
 - Earthquakes in some surprising places...
 - Supervolcanoes capable of rapid climate change
 - How to use Internet resources to keep up to date on Earth changes
 - Global climate changes through time
 - ... and more!
- 13  ***Syllabus Summary***
 - These presentations are only outlines
 - You paid big bucks for the book – use it!
 - ☒ End-of-chapter materials are useful (summaries, review questions, key terms)
 - ☒ Within chapters, additional items are added:
 - ◆ End of chapter:
 - “Concepts in Review”
 - “Give it some thought”
 - ◆ “Eye on Earth” boxes
 - ◆ “Concept Check” boxes
 - ◆ Graphics in general – visualization is fundamental
- 14  ***Online benefits vs. drawbacks***
 - Self-discipline required
 - Attention to details
 - Keeping up with the schedule
 - Reading comprehension
 - Writing skills
- 15  ***MasteringGeology Home***
- 16  ***MasteringGeology Home***
- 17  ***MasteringGeology Study Area***
- 18  ***Focus On Concepts***
- 19  ***Visualize:***
- 20  ***Read (e-text – if you opt in...)***
- 21  ***Visualize: Project Condor Videos***
- 22  ***Mobile Field Trips***
- 23  ***Visualize: “SmartFigures”***
- 24  ***Visualize: Animations***
- 25  ***Chapter Quizzes (practice)***
- 26  ***Syllabus Summary***
 - Keep up to date!
 - Blackboard and the unofficial web site have links to other resources
 - ☒ Videos
 - ☒ PowerPoints
 - ☒ Web-links
 - ☒ And more!

27  **Syllabus Summary**

- Most of the tests and assignments will be completed in MasteringGeology
 - ☒ For each chapter, there will be a:
 - Homework assignment (~15 to 45 points)
 - ☒ Use the Study Area for more information
 - ☒ Things that will be submitted into Blackboard:
 - Syllabus Quiz
 - Writing and/or Discussion Assignments
 - SLO Test (end of semester)
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28  **Geology 100 Grades**

Weighted Percentage

A (superior effort):	90 – 100%
B (better than average):	80 – 89%
C (average):	68 – 79%
D (below average):	55 – 67%
F (failing):	< 54%

29  **Tentative Grades**

Mastering homework:	283 points
Writing assignments (3):	200
Syllabus and SLO Quizzes:	20

Total: *503 points*

30  **On a negative note...**

- PLAGIARISM
 - ☒ Ugly word, even uglier deed!
 - ☒ Look it up – it's stealing...
 - ☒ It's easy to copy and paste from various sources, which makes it easy to detect!
 - ☒ "cheaters never prosper"
 - ☒
- 'nuff said...

31  **If you don't understand, please ask!**

(in a timely fashion)

42  **When you get to the end...**