

GEO101
Dr. Weeraratne
Short Paper - Guidelines

Paper Topic due: Nov 25, 2013
Paper Outline due: Nov 27, 2013
Final Paper due: Dec 11, 2013 (Due with Final Exam)
Points: 70 pts

A short paper will be due Dec 11, 2013. You can choose any topic you like related to geology including topics discussed in class. You can use web based references listed at the end of each chapter and books or journals from the library. References must include 2 books or articles. Use the reference style shown below (*Note: Web URL's are NOT ACCEPTABLE as a reference*). Paper length must be 2 pages, double spaced with 12 point font. (smaller line spacing or longer length is acceptable). You may also do alternative project styles including lyrics to a song, a poem, a skit, or video production, but length requirements are the same (2 pages). If doing a group skit, the length must include 2 pages of text per person in the skit. You may be asked to read or perform your project to the class in the 1-2 weeks of the semester. All dialogue in your activity can be used as the text in your paper.

Look for topics in your text book, in library books, or the journals below.

Here are a few topic ideas (can be a specific type, event, location...):

Earthquakes (specific type, or event, etc...)	Seafloor
Earthquake hazards	Hydrothermal vents
Earthquake causes	Underwater landslides
Earthquake prediction	Fracture zones
World distribution of earthquakes	Seamounts
Seismic waves	Ophiolites
Volcanoes	Continental shelf
Floods	Planetary geology
Geologic Hazards	Mars geology
Tsunamis	Mars Rovers
Earthquakes which create tsunamis	Saturn – Casini mission
Sediment and Stratigraphy	Messenger mission to Mercury
Structural Geology	Geology of any planet
Plate tectonic boundaries (specific type, or location...)	Mountains on Mars
Subducting plates	Volcanoes on Io (Saturn's moon)
Spreading ridges	Sun, Solar system
Transform plate boundaries	Continental Rifting
Climate change, Global warming	Milky way, planets, moons
Earthquake engineering	Moon
Geology in construction and urban development	Meteorites
Desserts, Beaches, Waves	Asteroids
The Earth's core, magnetic field	Comets
Mantle plumes	Meteor impacts
Mountain building (specific example – Himalaya, Andes)	Strata versus Shield volcanoes
Geologic resources (oil, minerals)	Gems, Mining,
Groundwater flow, groundwater contamination (how to avoid / prevent it)	

Use This Reference example: (References must be provided in THIS STYLE and INCLUDE the authors names, title of article, publisher, dates, page number, and year.)

Note: *Web URL's are NOT ACCEPTABLE as a reference.*

1. Weeraratne, D. S., D. W. Forsyth, and K. M. Fischer, Evidence for an upper mantle plume beneath the Tanzanian craton from Rayleigh wave tomography, *J. Geophys. Res.* 2427, doi:10.1029/2002JB002273, 2003.

2. Jenkinson, D.S., Adams, D.E., A. Wild, Model estimates of CO2 emissions from soil in response to global warming, *Nature*, 351, page 304-306, doi:10.1038/351304a0, 1991.

Suggested references from the library:

* All Geology books can be found on the 3rd floor: QE3.0 to QE862.0

* Hot new recent journals (last 6 months) are on the 4th floor (east wing).

Journals:

Geotimes, www.geotimes.org, Library: QE1.G45

American Scientist, <http://www.americanscientist.org/>, Library: Q1.A549

Discover, www.discovermagazine.com, Library: Q1.D4

Issues in Science and Technology, www.issues.org, Library: Q1.I87

Science News, www.sciencenews.org, Library Q1.S76

Sky and Telescope, www.skytonight.com, Library QB1.S536

Los Angeles Times Newspaper, www.latimes.com, also in Library on 4th floor

Websites to try:

www.scec.org Southern California Earthquake Center

<http://www.pnsn.org/HELENS/welcome.html> Mt St Helen's

<http://vulcan.wr.usgs.gov/home.html> Cascades Volcano Observatory

<http://hvo.wr.usgs.gov/> Hawaii Volcano Observatory

<http://earthquake.usgs.gov/eqcenter/> USGS Earthquake information center

<http://www.iris.edu/seismon/> Earthquakes headlines

<http://www.noaa.gov/> National Ocean and Atmospheric Admin (tsunamis, weather, oceans)

<http://www.nasa.gov/> NASA website