

De Anza College  
Geology 10 GEOL-010.-62  
Fall 2016  
Instructor: John Cook  
Email: geojcook@comcast.net

**NOTE: This syllabus is subject to change.**

Lecture Tu-Th S15 6:00-7:40, Lab Tu-Th S15 8:00-9:15  
Office hours: 5:30 – 6:00p Tu,Th room S15

**Topics to be covered:**

**Week**

- 1 Intro to geoscience, fundamental tectonics, Minerals part one
- 2 Minerals part 2  
Igneous rocks and intrusions
- 3 **EXAM # 1 (100 points) 10-11-16: Study q's # 1, 2, 3**  
Volcanism
- 4 Weathering, Erosion and Sedimentary Rocks  
Metamorphic Rocks + start topo maps
- 5 Topographic maps  
Geologic time  
Structural Geology
- 6 **EXAM # 2 (100 points) 11-1-16: Study q's # 4, 5, 6, 7**  
Structure/Earthquakes
- 7 Earthquakes  
Plate Tectonics
- 8 Deserts  
**EXAM # 3 (100 points) 11-17-16: Study q's # 8, 9, 11, 12**
- 9 Mass Movements  
THANKSGIVING
- 10 Streams and Floods  
Groundwater
- 11 Glaciers  
Coastal Processes

**MANDATORY FINAL EXAM 12-13-16: Study q's # 13, 14, 15, 16, 17**  
**(Comprehensive - 150 points) Tuesday December 13th - 6:15-7:45 p.m. BRING TWO SCANTRONS**

**Required Materials:**

**Course Reader (available only at DeAnza bookstore):** Notes, Study Questions, Lab Exercises, Geo Diagrams (Cook)

**Equipment:** mechanical pencil and a good eraser (I recommend the Pentel "stick"), 4 colored pencils (contrasting colors – red, green, blue, yellow), millimeter scale/ruler, simple calculator

**Recommended Materials**

**Textbook:** Geology, 4th edition, 2007 (Chernicoff and Whitney, paperback), ISBN 0-13-147464-2

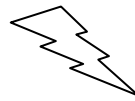
Geology, 3<sup>rd</sup> edition, 2002 (Chernicoff and Whitney, paperback), ISBN 0-61-811815-2

Scantrons will be used for all exams – **please purchase 5 – FORM NO. 882-E (green) NO SUBSTITUTIONS!**

**!Exams will not be accepted without the proper scantron form!**

**MANDATORY FIELD TRIP REQUIREMENT:**

**Attendance Policy** [this will be enforced]



**Saturday, November 12th**

Failure to attend will result in an **INCOMPLETE** for the course!!! The trip lasts all day 10:30a-4:30p.

**Regular attendance is a course requirement.** Class will begin **promptly** at 6p. Students may be dropped after missing three (3) full lecture periods or two (2) full lab periods.

**\*Last Day to drop with a W is Friday 11-18-16**

<b>Grading:</b> 600 total points for the course:	3 "hour" exams @ 100 points each	grading scale:
	1 Final exam @ 150 points	90-100 A
	1 field trip report @ 50 points	80-89 B
	21 labs @ 4 points each + 16	65-79 C
	(4 double-point labs)	55-64 D
		<55 F

**\*5 lab quizzes will total a possible 100 points. Your total quiz score may be used to replace your lowest regular exam score.**

**\*\*I do not return quizzes – you must come to office hours to see your graded work.**

<b>Lecture Topic</b>	<b>Date</b>	<b>Lab Exercise</b>
Geosciences	9-27-16	1A – Crystal Properties
Basic Chem	9-29-16	1C, D Lattice Structures
Crystals & Silicates	10-4-16	Mineral Identification
Igneous Processes	10-6-16 <i>crystals</i>	Min. I.D. cont.
<b>EXAM # 1</b>	<b>10-11-16</b>	Rock textures
Volcanism	10-13-16	Plutonic & Volcanic Rocks
Sedimentary	10-18-16 <i>texture</i>	Sed Rocks + Topo Maps for HW (pgs 93-96 – read pages 89-92)
Metamorphic	10-20-16	Topo Maps cont (pg 100) + Meta Rocks
Geo Time	10-25-16 <i>Topo maps</i>	Sequence of Events
Structure	10-27-16	Strike/Dip/Block Diagrams/Outcrop Patterns
<b>EXAM # 2</b>	<b>11-1-16</b>	<i>Earthquake Country LA</i>
Structure/Earthquakes	11-3-16	Anticlines and Synclines
Earthquakes	11-8-16	Seismology, Magnitude (bring drawing compass)
Plate Tectonics	11-10-16 <i>geo maps/seismo</i>	Plate Tectonics
Deserts	11-15-16	Deserts
<b>EXAM # 3</b>	<b>11-17-16</b>	<i>Shockwaves</i>
Mass Movements	11-22-16	<i>Riding the Storm</i>
<b>THANKSGIVING</b>	11-24-16	<b>HOLIDAY</b>
Streams	11-29-16	Streams
Groundwater	12-1-16	<i>Groundwater</i>
Glaciers	12-6-16 <i>features</i>	<i>Glaciers</i>
Coastal Processes	12-8-16	<i>Waves, Beaches and Coasts</i>
<b>FINAL EXAM</b>	<b>12-13-16</b>	<b>6:15-7:45 p.m. Room S-15 BRING TWO SCANTRONS!</b>

**FIELD TRIP Saturday, November 12th from 10:30a - 4:30p**

\* Boxes indicate lab quizzes

**For the field trip** bring: bag lunch, water, sunscreen or a hat, rain gear, sturdy comfortable shoes (it may be muddy), a pencil, eraser and a clipboard or something hard to write on.

Weather along the coast can be unpredictable. I suggest dressing in layers and having a small pack so you can peel off layers if necessary. **WE GO RAIN OR SHINE! NO GUESTS, NO SMOKING, NO CELL PHONES** on field trips.

I suggest planning to arrive at UCSC at least 15 minutes early (10:15am).

**LATE AT EITHER SITE or failure to show at either of the sites will result in an INCOMPLETE**

There are **NO MAKEUPS OF ANY KIND** and **NO EXTRA CREDIT WORK**  
**Geology 10 Syllabus - De Anza College - J Cook - Fall 2016**

More Attendance and General Guidelines

I will be taking attendance twice each night - before lecture and at the end of lab (from the seating chart).

Please expect to stay for the entire time each class period (\*except after you finish an exam).

If you leave early on a regular class day it will count as an absence and you will receive a zero.

**For attendance/ lab points only (does not apply to exams or quizzes): If you must miss a class due to work or serious illness and you can provide me some form of OFFICIAL documentation, I will take that into consideration. Each instance will be treated on a case-by-case basis.**

If you miss class, it is your responsibility to get the information from one of your classmates.

The material we cover during lab is fair game for quizzes and exams, and you will receive up to **4** points for completing each lab exercise. I circulate during lab to answer questions and observe your progress. I award points based on your efforts and progress. If you are not present at the end of the lab period or you forget your lab book, you will **lose 4** points.

*I double the lab points on several unannounced nights to bring the total lab points to 100.*

**Lab quizzes** will focus mainly on material we cover in lab but may include relevant conceptual material from lecture. Lab quiz #5 is a "features-style" format. It is an automatically timed powerpoint accompanied by multiple choice questions. Study guides for some of the quizzes are in the Course Reader.

**Exams:** DO NOT stand outside the door and talk after you leave. If I have to come outside and speak to you - you will **lose 10 points!** Scantrons that jam the machine or won't run **lose 10 points!**

\*Exams are timed – time limit is: Exam 1, 2 and 3 = 60 minutes., Final Exam = 90 minutes

Well prepared students typically complete the exams in less than an hour.

*Attention English learners* – Dictionaries/ translational devices cannot be used for exams.

\*\*Exam scores are posted via email. **\*\*I DO NOT RETURN EXAMS OR QUIZZES\*\*.**

You must come to office hours to see graded work. I retain exams and quizzes until the end of the quarter.

Once the class ends, and course grades are posted, **I destroy your graded work.**

**Labs:** Please **DO NOT WORK AHEAD** in the lab book. We won't be doing every exercise, nor will we always do them in sequence or do what is listed in the schedule. I may give a short introduction to explain what you need to do for some lab exercises. Working ahead may confuse you and/or leave you with nothing to do during the lab period.

**Please don't ask to leave early if you are first to finish – work on study q's, read, study, etc...**

**Grades:** I do not use the +/- grading system. Please notice that the standard grading scale has been adjusted to expand the range for a C. There will not be any curving of grades.

**Email:** **You must have a valid email address to participate in the course.**

I use email regularly to communicate with the class – please check it frequently!

**Field Trip Waiver of Liability**

State law mandates ALL students participating in an off campus "field excursion" sign an appropriate waiver. Since fieldwork is a requirement of the curriculum, students refusing to sign the waiver are opting out of the course and must drop.

Americans With Disabilities Act (ADA) Exemption from Field Work:

Students with physical limitations or other special needs that would preclude participation in fieldwork will be given an appropriate alternate assignment. Every reasonable accommodation will be provided so that all students can participate and benefit from the field experience. If you have questions or concerns regarding access and participation issues please contact your instructor. This exemption only applies to students with documented disabilities that have been verified through the Disabled Students Program & Services Office at De Anza College.

**Field Trip make ups:** If you miss the field trip and have to take an incomplete for the course, you must make up the trip in the quarter immediately following the quarter of your original enrollment. Enrollment during Spring quarter means you must attend the make up trip during the following Fall quarter. Failure to attend the make up trip will result in an F for the course regardless of your class average.

NO laptops, personal stereos, recording devices, games or other entertainment devices during class time.

**I have a TWO STRIKE POLICY on CELL PHONES, PAGERS and other electronic devices.**

These devices **have no place in the classroom** and are not to be used **at any time, including break**. Please **TURN THEM OFF** before entering the classroom. The two-strike rule also applies to behavior. Failure to follow class rules **at all times** will result in expulsion from the class (**you'll be dropped!**) THANK YOU! I suggest you DOWNLOAD the free Pocket Points app and earn discounts with your phone!

**Grade postings**

I periodically send your scores in .pdf email attachments by the last 4 digits of your student i.d. #'s **NEVER** tell another student your exact score for any assignment or test – you could compromise confidentiality.

**Academic Honesty:** Students caught cheating or plagiarizing will receive a zero on the assignment, quiz or test and will have their name reported to the Dean of Students. Repeat offenders will be referred for disciplinary action.

**Student Learning Outcomes (SLOs) for GEOL 10: Introductory Geology**

1. Apply the principles of scientific methodology to test hypotheses on how the Earth works as an integrated system.
2. Use data and observations to track and predict changes in the Earth system resulting from dynamic Earth Processes.
3. Use observations from the crust and lithosphere of the Earth to determine geologic history at hand sample, outcrop, local, and regional scales.
4. Apply scientific methodology and geologic principles to analyze the impact of the Earth system on humanity, from specific natural hazards and the availability, use, and distribution of Earth resources.

**Professor Cook's Study Strategies**

Here are some Study Strategies I have found to be helpful for myself and my students:

- 1) Leave the original sheet of study questions blank.
- 2) Write the correct answers on a separate sheet of paper – now put the “key” away and don’t look at it unless you have to.
- 3) Use the blank questions to quiz yourself or have someone else quiz you. Every time you answer, **WRITE IT DOWN!**
- 4) Repeat the process until you don’t need the “key” anymore, and you can **WRITE** the answers without hesitation.
- 5) Move on to the next set of study questions until the answers to that set are automatic. Return periodically to previous question sets to make sure the answers still come without hesitation – **WRITE THE ANSWERS DOWN EVERY TIME!**

Try teaching the material to someone that is **not in the class** – draw pictures/diagrams - explain.

DO NOT write out the questions and answers in the same place and then just read them repeatedly – by doing this you are relying solely on your reading retention – a REALLY BAD IDEA – almost guaranteed to make you PERFORM POORLY!

For diagrams - make a copy of the original diagram and white out the labels on the copy. Cut out small pieces of paper and make labels that you can lay on the diagram like a puzzle.

Form a study group with other students who are committed to and serious about success – don’t let it turn into a social group!

Study in short bursts (studying to exhaustion only makes you tired!) – set aside a block of time each day – be consistent.

Don’t procrastinate.

Set a schedule and stick to it.

I recommend spending **a minimum** of one hour per day “drilling” yourself with the study questions (including weekends!).

Ask me questions during class if there are things you don’t understand.

Utilize office hours.

Don’t wait to get help.

Don’t fall behind.

Make school your first priority – treat it like a job!