De Anza College

Geology 10 GEOL-010.-62 CRN 30345-01/02

Winter 2016

Instructor: John Cook TTh Lecture S-15 6:00-7:50, lab S15 8:00-9:15

Email: geojcook@comcast.net Office hours: 5:30 – 5:55p TTh room S-15 or S-14(back room)

10:00-10:50am W by email

NOTE: This syllabus is subject to change.

Topics to be covered:

Week

- $\frac{1}{2}$ Intro to Earth
- Minerals
- Igneous rocks and intrusions

EXAM # 1 (100 points) 1-21-16: Study q's # 1, 2, 3

- Volcanic Processes and Volcanic Rocks 4
 - Weathering, Erosion and Sedimentary Rocks
- Metamorphic Rocks 5
 - Topographic maps Geologic time
- Structural Geology 6

EXAM # 2 (100 points) 2-11-16: Study q's # 4, 5, 6, 7

- 7 Seismology
 - Earth's Interior
- 8 Plate Tectonics
 - Deserts
- 9 EXAM # 3 (100 points) 3-1-16: Study q's # 8, 9, 10, 11, 12
 - Mass Movements
- 10 Streams and Floods
 - Groundwater
- Glaciers 11
 - Coastal Processes

MANDATORY FINAL EXAM 3-24-16: Study q's # 13, 14, 15, 16, 17

(Comprehensive - 150 points) Thursday March 24th - 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, 3rd edition, 2002 (Chernicoff and Whitney, paperback), ISBN 0-61-811815-2

Scantron FORM NO. 882-E (green) IS REQUIRED for all exams – please purchase 5 –NO SUBSTITUTIONS!

MANDATORY FIELD TRIP REQUIREMENT:

Attendance Policy [this *will be* enforced]



Saturday, March 5th

Failure to attend will result in an **INCOMPLETE** for the course!!! The trip lasts all day 9:30a-3:30p.

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 2-26-16

Grading: 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 22 labs @ 4 points each + 12 65-79 C (3 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.

Geology 10 Winter 2016 Tentative Schedule for Lecture and Lab Videos in italics

Lecture Topic	Date	Lab Exercise	
Intro to Earth	1-5-16	1A – Crystal Properties	
Intro to Earth	1-7-16	1C, D Lattice Structures	
Basic Chem	1-12-16	Mineral Identification	
Crystals & Silicates	1-14-16	Min. I.D. cont.	
Igneous Processes	1-19-16 crystals	Rock textures	
EXAM # 1	1-21-16	Rocks that Originate Underground	
Volcanism	1-26-16	Plutonic & Volcanic Rocks	
Sedimentary	1-28-16 texture	Sed Rocks + Topo Maps for HW (pgs 93-96 – read pages 89-92)	
Metamorphic	2-2-16	Topo Maps cont (pg 100) + Meta Rocks	
Geo Time	2-4-16 Topo maps	Sequence of Events	
Structure	2-9-16	Strike/Dip/Block Diagrams/Outcrop Patterns	
EXAM # 2	2-11-16	Earthquake Country LA	
Earthquakes	2-16-16	Anticlines and Synclines	
Earth's Interior	2-18-16	Seismology, Magnitude	
Plate Tectonics	2-23-16 geo maps/seismo	Plate Tectonics	
Deserts	2-25-16	Deserts	
EXAM # 3	3-1-16	Shockwaves	
Mass Movements	3-3-16	Riding the Storm	
Streams	3-8-16	Streams	EVEL D TEDLE GATEUDD AV
Groundwater	3-10-16	Groundwater	FIELD TRIP SATURDAY, March 5th from 9:30a - 3:30p
Glaciers	3-15-16 features	Glaciers	
Coastal Processes	3-17-16	Waves, Beaches and Coasts	

FINAL EXAM 3-24-16 6:15-7:45 p.m. Room S-15 BRING TWO SCANTRONS!

For the field trip bring: bag lunch, water, sunscreen or a hat, rain gear, sturdy comfortable shoes (it may be muddy), a pencil, eraser <u>and a clipboard</u> 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 on field trips.

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

^{*} Boxes indicate lab quizzes

Geology 10 Syllabus - De Anza College - J Cook - Winter 2016

More Attendance and General Guidelines

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

If you are late, I keep track.

Please expect to stay for the entire time each lab period

If you leave early, it will count as an absence.

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 $\underline{4}$ 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 you will $\underline{lose 4}$ points. If you forget your lab book you will $\underline{lose 4}$ points.

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

<u>Lab quizzes</u> will focus mainly on material we cover in lab but <u>may include relevant conceptual material from lecture</u>. 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**. KEEP SCANTRONS FLAT - Scantrons that jam the machine or won't run **lose 10 points**.

*Exams are timed – <u>time limit is: Exam 1, 2 and 3 = 60 minutes</u>.

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.

<u>Labs:</u> Please <u>DO NOT WORK AHEAD</u> 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 – <u>please check it frequently!</u>

Field Trip Waiver of Liability

State law mandates ALL students participating in an off campus "field excursion" sign an appropriate waiver. As the fieldwork is a requirement of the curriculum, students who refuse to sign the waiver are opting out of the course and will be dis-enrolled.

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.

<u>Field Trip make ups</u>: 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 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.

<u>I have a TWO STRIKE POLICY on CELL PHONES, PAGERS and other electronic devices.</u>
These devices <u>have no place in the classroom</u> and are not to be used <u>at any time, including break.</u>

Please **TURN THEM OFF** before entering the classroom. The two-strike rule also applies to behavior.

Failure to follow class rules <u>at all times</u> will result in expulsion from the class (<u>you'll be dropped!</u>) THANK YOU!

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.

Here is an email from one of my former students concerning how to look up your i.d. #

The ids used to be our social security numbers. Because of a new confidentiality law they were recently changed. People can find out what their id numbers are by logging in to the online registration system.

On the "main menu" section there is a link that says "student id lookup" or something to that effect.

<u>Academic Honesty</u>: 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.

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 <u>WRITE</u> 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 <u>WRITE</u> THE ANSWERS DOWN <u>EVERY TIME!</u> 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 <u>a minimum</u> 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!