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WINTER 2014 (1/6-2/9, 2014)

Section # 1178

Location: MSA 307

Monday, Tuesday, Wednesday 10:45 am – 2:00 pm

PHYSICAL GEOLOGY LAB– GEOLOGY 6  
Lab Schedule (Tentative)

DATE	ACTIVITY	LAB MANUAL READING
JAN 6	LAB 0. INTRO. TO PHYSICAL GEOLOGY LAB	
JAN 7	<b>LAB 1.</b> OBSERVING & MEASURING EARTH MATERIALS AND PROCESSES	PAGES 1-29
JAN 8	<b>LAB 2.</b> PLATE TECTONICS AND THE ORIGIN OF MAGMA	PAGES 31-56
JAN 13	<b>LAB 3.</b> TOPOGRAPHIC MAPS	PAGES 195-226
JAN 14	<b>LAB 4.</b> EARTHQUAKE HAZARDS AND HUMAN RISKS	PAGES 349-362
<b>JAN 15</b>	<b>LAB 5.</b> MINERAL PROPERTIES, USES, AND IDENTIFICATION <b>1ST MID-TERM EXAM (LABS 1, 2, 3, 4)</b>	PAGES 57-88
JAN 21	<b>LAB 6.</b> IGNEOUS ROCKS AND VOLCANIC HAZARDS	PAGES 103-126
JAN 22	<b>LAB 7.</b> SEDIMENTARY ROCKS, PROCESSES, AND ENVIRONMENTS	PAGES 127-154
JAN 27	<b>LAB 8.</b> METAMORPHIC ROCKS, PROCESSES, AND RESOURCES	PAGES 155-174
<b>JAN 28</b>	<b>LAB 9.</b> GEOLOGIC MAPS <b>2ND MID-TERM EXAM (LABS 5, 6, 7, 8)</b>	PAGES 227-248
JAN 29	<b>LAB 10.</b> DATING OF ROCKS, FOSSILS, AND GEOLOGIC EVENTS	PAGES 175-194
FEB 3	<b>LAB 11.</b> STREAM AND GROUNDWATER PROCESSES	PAGES 249-272; 273-292
FEB 4	<b>LAB 12.</b> PROJECT	HANDOUT
<b>FEB 5</b>	<b>FINAL EXAM (LABS 9, 10, 11, 12)</b>	

**TEXTBOOK (REQUIRED):**

Busch, R.M., editor (2011). *Laboratory Manual in Physical Geology*. 9<sup>th</sup> Edition. American Geological Institute – National Association of Geoscience Teachers. PEARSON/Prentice Hall. ISBN 978-0-321-68957-3.

**TRANSFER:** CSU, UC

**PREREQUISITE/CO-REQUISITE:** Physical Geology (Geology 1)

### **COURSE RATIONALE & OBJECTIVES:**

Geology 6 is a 2 unit laboratory course. It is an introduction to common laboratory and field practices in physical geology such as identifying common minerals and rocks, understanding topographic and geological maps, applications of plate tectonics; the geologic work of running (surface) and groundwater, and analyzing hazards related to earthquakes and volcanoes.

### **STUDENT LEARNING OUTCOMES:**

*Upon completion of this course the student will be able to:*

1. Identify common minerals & rocks on the basis of their physical properties; determine the relative and absolute ages of rocks.
2. Analyze the role of plate tectonics in changing the sizes of the Earth's continents and oceans; explain the relationships between plate tectonics and distribution of volcanoes and earthquakes; graph seismic data to locate the epicenter and to determine the magnitude of earthquakes.
3. Analyze topographic and geologic maps to interpret the geologic and deformational history of an area.
4. Analyze landforms created by and hazards related to surface/running and groundwater.

### **LAB ATTENDANCE POLICY:**

Absence from a lab session will result in zero marks for that lab assignment. Irrespective of the reason for absence, no make-up lab will be given to anyone who does not show up during the scheduled lab sessions. Students are responsible for all work missed when absent.

If a student has been absent from any 3 lab sessions during the intersession, that student may be dropped from class.

Occasional tardiness of up to 5 minutes may be tolerated. If a student has been arriving late during 6 lab sessions, for whatever reason, that student may be dropped from class. Tardiness during two lab sessions will be considered as being absent for one full lab session. A student might as well be dropped if he/she had a combined absence and tardiness that add up to 3 absences.

### **LAB PROCEDURES:**

Each lab session lasts for approximately 3 hours and is worth 20 points. During each lab session, students will be provided with worksheets on which to write their work. Students must collect the worksheets for use for upcoming lab from their instructor. By having the worksheets a week earlier students are expected to read the lab introductions and make the necessary preparations before coming to the lab. If a student loses a worksheet or forgets it at home, the instructor will not give that student a substitute; no student will be allowed to sit in the Lab without a worksheet and without a Lab Manual.

Each student must complete and submit the lab worksheet before leaving the laboratory. Students who do not submit their lab worksheet on the day the lab was conducted will not be allowed to submit it at a later date. If for legitimate reasons the instructor approves a student to submit his/her lab work at a later date, the student must submit the lab work before the start of the next lab. No lab work can be submitted after graded lab worksheets have been returned to other students. And remember, a student has to submit his work in person; a student cannot submit a lab worksheet on behalf of another student.

The instructor will return graded lab worksheets at the beginning of the next lab session. Review of the previous lab will be done during the first 10 minutes of the new lab session. Following the review of the previous lab, there will be a 20-25 minutes introduction to the new lab. Students are therefore expected to arrive in the lab on time.

### **EXAMS, PROJECT, AND GRADING:**

There will be three exams for this course. Tentative dates are shown in this syllabus; if there will be any changes in the schedule, these will be announced by your instructor in advance.

Exams will cover material completed during lab sessions. The final exam is NOT cumulative.

For each exam you will need to bring the following items: Regular Scantron (**882 E**), a ruler, a simple calculator, pencil and eraser.

Your final grade will be determined by the following:

1 <sup>st</sup> Mid-term Exam	120 points
2 <sup>nd</sup> Mid-term Exam	120 points
Final Exam	120 points
<u>12 Labs</u>	<u>240 points</u>
<b>TOTAL</b>	<b>600 points</b>

Final letter grades will be assigned as follows:

<b>A:</b>	≥540 points (≥90%)
<b>B:</b>	480-539 points (80-89%)
<b>C:</b>	420-479 points (70-79%)
<b>D:</b>	360-419 points (60-69%)
<b>F:</b>	<360 points (< 60%)

Once graded exam papers are returned to students and reviewed, they will have to be handed over back to the instructor.

Final grades for the course will be posted on the College's "Student Information System" within 10 days after the final exam. To log on to the site open the college's webpage ([www.wlac.edu](http://www.wlac.edu)) and click the button titled "Student Information System (SIS)".

#### **POLICY ON EXAM MAKE-UPS:**

Students should take exams on the scheduled dates; otherwise they will score zero points for that exam. There will be NO make-up exams except for valid and verifiable reasons (for example, if you were ill, you must submit a doctor's note). If you have a problem on the day of the exam you, your relatives or friends must e-mail or call your instructor before the scheduled exam time. Make-up exams, when approved, will take place on a date determined by your instructor.

#### **POLICY ON ACADEMIC DISHONESTY & CONDUCT IN CLASS:**

Pursuant to West Los Angeles College's [WLAC] policy on student conduct, all forms of disruptive behaviors such as private talking, use of cell phones and texting while class is in session, as well as going out of class to answer or make a call etc. will not be allowed. These behaviors detract from the learning experience of others in the class. Students should make certain that cell phones are turned off before entering the class. In addition, eating &/or drinking beverages (except water) in the classroom, as well as chewing gum are prohibited. These and other college policies on academic integrity (cheating, plagiarism) will be strictly enforced. Students should read WLAC's publication on all aspects of student conduct outlined in the most recent College Catalog or by logging onto the College website at [http://www.wlac.edu/academics/pdf/WLAC\\_12-14Catalog\\_FRONT.pdf](http://www.wlac.edu/academics/pdf/WLAC_12-14Catalog_FRONT.pdf).

Consequences of Misconduct: Violators of College regulations and rules are subject to disciplinary action under Board Rule 9803.15 of the Los Angeles Community College District. Depending upon the seriousness of the conduct, disciplinary procedures may range from a warning to removal from the class with a referral to the Vice President of the College.

#### **DEADLINES**

If you decide to withdraw from this course, you must file appropriate papers in the Admissions Office. Students should adhere to Add/Drop policies & deadlines of the College. It is the student's responsibility to officially drop out of the course, when he/she stops attending. Otherwise, grades other than a "W" may be assigned.

#### **STUDENTS WITH DISABILITY**

If a student has disability (with special physical, communication or learning needs) and requires accommodations, he/she should contact the Disabled Students Programs & Services (DSPS) located on the first floor of the Heldman Learning Resources Center (HLRC). DSPS' phone number is (310) 287-4450.

**IMPORTANT DATES:**

Last day to:

Add a class without a fee: Jan 5 (online); Jan 8 (in person)

Drop a class without a fee: Jan 8

Drop a class without a "W": Jan 8

Drop a class with a "W": Jan 31

College is closed:

Martin Luther King Day: Jan 20

*This syllabus may be modified in order to better meet student needs or in the event of an emergent matter.*