## Department of Earth and Environmental Sciences California StateUniversity, East Bay

ASSESSMENT REPORT 2017 GEOLOGY B.S., B.A.

20 September 2017

### Department of Earth and Environmental Sciences California State University, East Bay

Program Learning Outcomes Geology B.S., B.A.

Students graduating with a B.S. or B.A. in Geology from Cal State East Bay will be able to:

- 1. identify and classify geologic materials, including minerals, rocks, and fossils, and know their material and/or biological properties or characteristics.

  (Geologic Materials)
- 2. collect, organize, and analyze qualitative and quantitative data from both field and laboratory investigations such as lithostratigraphic and biostratigraphic correlations, geologic maps, geophysical surveys, cross-sections, soil tests, and geochemical and groundwater quality analyses. (Data Collection and Analysis)
- 3. synthesize, interpret and critically analyze geologic datasets (2D and 3D) and reports using discipline-specific methods, techniques, and equipment. (Interpretation)
- 4. critically analyze geological and environmental issues through the evaluation of scientific literature, and present their positions clearly and persuasively in

## Department of Earth and Environmental Sciences California State University, East Bay

## ILO Alignment Matrix for Geology B.S., B.A. Programs

The table below shows which Institutional Learning Outcom

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## Assessment Summaries, Geology BS and BA, 2016-2017

## Overview

We present an assessment from the Geology BS & BA program that evaluates our Program Learning Outcome 1) Geologic Materials.

# GEOL 3701 Igneous & Metamorphic Petrology - Winter 2017

**PLO 1. Geologic Materials** 

Rock Suite Project. Term-long comprehe

#### 6 students evaluated

**CSUEB Geology Program Assessment** 

Rubric: Lab Project
Course: GEOL 3701
Quarter: Winter, 2017

**Assignment:** Rock Suite Project

Student ID	Organization	Presentation	Quantitative Skills	Execution	Connection, Synthesis, Transformation	Total (12 possible)
1	2	2	N/A	1	2	7
2	2	2	N/A	2	2	8
3	3	3	N/A	3	3	12
4	2	2	N/A	3	2	9
5	3	3	N/A	3	3	12

#### **GUIDELINES:**

In your paper you are expected to reference your sources -- class readings, any published source (books or articles) or the Internet (however, as the quality of materials on the Internet can vary drastically, you should use some discretion here). For a paper of this size, 10 cited references is a good average. YOUR PAPER MUST BE YOUR OWN WORK. Do not lift sentences directly from a text; this is plagiarism and is subject to academic punishment. You must express the ideas and concepts in your own words. But you MUST cite/reference the source of your information -- give credit where credit is due. If you do not cite the source of your information, this is also plagiarism. Feel free to use illustrations – plots – diagrams, etc. (remember a picture says a thousand words...), just be sure to include Figure Numbers, Figure Captions, and Figure References.

Follow the format for the journal Geochimica et Cosmochimica Acta for style (references, figure captions, organization, etc.). The instructions for contributors are found in each January issue of that journal (copy on our bookshelf; also scanned and posted on Blackboard).

#### **DUE DATES:**

Rock Suite Selection deadline: see syllabus.

Draft deadline: see syllabus. You must turn in your draft paper on

# **Grading Sheet**

NAME	ROCK SUITE	YEAR	
(100 Points Possible)	)		
(5) Title			
(15) Abstract			
(10) Introduction an	nd Geologic Setting		
(5) Methods			
(15) Hand sample d	escriptions and observations		
(15) Hand sams			

# Department of Earth and Environmental Sciences, CSCI

# ASSESSMENT PLAN: B.S., B.A. in Geology

Updated: Winter 2015, by Mitchell Craig and Luther Strayer

PROGRA		

Year 1: 2013-2014	
1. Which PLO(s) to assess	PLO2 (Data Collection and Analysis), PLO4 (Communication)
2. Assessment indicators	Course assignments and projects, precis & oral presentations of topical journal articles in the field. Department rubrics will be used.
3. Sample (courses/# of students)	GEOL 3701, GEOL 3801, GEOL 3810, GEOL 3910.
4. Time (which quarter(s))	Winter

Year 4: 2016-2017	
1. Which PLO(s) to assess	PLO 1 (Geologic Materials), PLO 5 (Geologic Time)
2. Assessment indicators	Course assignments and projects, precis & oral presentations of topical journal articles in the field. Department rubrics will be used.
3. Sample (co	