

El Camino College/ Compton Center

Dr. Jane Harmon, Dean

Geology Department

Program Review

Spring 2009

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Overview of Department

The geology department at the El Camino College (ECC) - Compton Education Center (CEC) offers two courses in geology, Geology 1 (physical geology) and Geology 3 (physical geology laboratory). The department has one full-time instructor, who teaches one geography course also, and one part-time geology instructor. Geology courses may be necessary for a student obtaining an associates degree or for transfer to another educational-institution.

In the previous program review dated February 16, 2006, several needs for equipment and supplies were identified. Working equipment for PowerPoint presentations and a DVD / VHS, player are still needed to utilize all teaching resources currently available. Supplies, such as transparency pens, transparencies and a projector cart, are still needed for an overhead projector. In the laboratory class, some suitable rocks and mineral were purchased recently, also a donation of rocks and minerals was made by Los Angeles Valley College facilitated by Jacqueline Hams. The CEC geology department is still in need of charts and maps for laboratory courses. Some departmental needs have been met by the Compton district, however the need for most items have been met by geology department faculty.

Analysis of Institutional Research Data (see following pages)

Curriculum – Course, Content and Articulation List

a) Courses not reviewed in the last five years

There are no courses that have not been reviewed in the last five years.

b) Specific timeline for submission of out-of-compliance courses to the College

All courses have been submitted to the Curriculum Committee for updating and review.

There are no courses being taught at CEC that need updating or review.

c) Course additions to current course offerings with explanations

No additional course offerings are being made at this time.

d) Course deletions from current course offerings with explanations

Course deletions will not occur.

e) Concerns and explanations regarding department/program's courses and their articulation

Both Geology 1 & 3 are suitable for students obtaining an associate degree, and they articulate fully to any Cal State, University of California or an other learning institution.

f) Recommendations

No recommendations are applicable.

Student Learning Outcomes

a) SLOs for each course in the discipline

Currently, the SLO being assessed for both Geology 1 & 3 is, “How do humans affect the earth,” and “How the earth affects the lives of humans.”

b) Courses with assessments

Four Geology 1 courses and one Geology 3 course were assessed Fall '08 as well as geology courses at ECC.

c) Description of changes resulting from assessment of the courses

Having read student responses to SLO questions, it seemed evident that students had a difficult time writing what they understood about how they relate to the earth and how it relates to them. In class it will be helpful to give students writing assignments so that feedback can be given for improving writing skills.

d) Program certificate and degree SLOs and manner of assessment

Only course SLO's have been implemented at this time, using student written-response to questions regarding their relationship to the earth.

e) Results from assessment – The results include data from ECC also, for Geology 1. Data and graphs follow.

2008 Fall - Relationship SLO - Geology 1

Overall A 13.7%

Grades B 25.8%

C 38.4%

D 14.2%

F 7.9%

Total 100.0%

Level 1: Beginning

Level 2: Developing

Level 3: Accomplished

choice accuracy discussion

Number 190 190 190

Median 2.80 2.00 2.00

Mean 2.39 1.82 1.70

St. Dev. 0.71 0.58 0.58

ALL choice accuracy discussion

1.0 - 1.4 9.6% 25.0% 34.4%

1.4 - 1.8 1.6% 0.5% 1.1%

1.8 - 2.2 34.6% 63.3% 57.1%

2.2 - 2.6 2.1% 1.6% 2.1%

2.6 - 3.0 52.1% 9.6% 5.3%

Check 100.0% 100.0% 100.0%

A's choice accuracy discussion

1.0 - 1.4 11.5% 15.4% 23.1%

1.4 - 1.8 0.0% 0.0% 0.0%

1.8 - 2.2 23.1% 53.8% 50.0%

2.2 - 2.6 0.0% 0.0% 7.7%

2.6 - 3.0 65.4% 30.8% 19.2%

Check 100.0% 100.0% 100.0%

B's choice accuracy discussion

1.0 - 1.4 8.2% 20.4% 24.5%

1.4 - 1.8 0.0% 0.0% 0.0%

1.8 - 2.2 32.7% 63.3% 65.3%

2.2 - 2.6 4.1% 4.1% 2.0%

2.6 - 3.0 55.1% 12.2% 8.2%

Check 100.0% 100.0% 100.0%

C's choice accuracy discussion

1.0 - 1.4 4.2% 25.0% 34.7%

1.4 - 1.8 1.4% 0.0% 0.0%

1.8 - 2.2 34.7% 68.1% 62.5%

2.2 - 2.6 2.8% 1.4% 1.4%

2.6 - 3.0 56.9% 5.6% 1.4%

Check 100.0% 100.0% 100.0%

D's choice accuracy discussion

1.0 - 1.4 18.5% 33.3% 48.1%

1.4 - 1.8 3.7% 3.7% 3.7%

1.8 - 2.2 40.7% 63.0% 48.1%

2.2 - 2.6 0.0% 0.0% 0.0%

2.6 - 3.0 37.0% 0.0% 0.0%

Check 100.0% 100.0% 100.0%

F's choice accuracy discussion

1.0 - 1.4 21.4% 42.9% 60.0%

1.4 - 1.8 7.1% 0.0% 6.7%

1.8 - 2.2 50.0% 57.1% 33.3%

2.2 - 2.6 0.0% 0.0% 0.0%

2.6 - 3.0 21.4% 0.0% 0.0%

Check 100.0% 100.0% 100.0%

Overall

0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
1.0 - 1.4 1.4 - 1.8 1.8 - 2.2 2.2 - 2.6 2.6 - 3.0
choice
accuracy
discussion

Choice of Examples

0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
1.0 - 1.4 1.4 - 1.8 1.8 - 2.2 2.2 - 2.6 2.6 - 3.0
A's
B's
C's
D's
F's

**Accuracy, Completeness, & Relevance
of Information**

0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
80.0%
1.0 - 1.4 1.4 - 1.8 1.8 - 2.2 2.2 - 2.6 2.6 - 3.0
A's
B's
C's
D's
F's

**Discussion of the Relationship
Between Humans & Their Environment**

0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
1.0 - 1.4 1.4 - 1.8 1.8 - 2.2 2.2 - 2.6 2.6 - 3.0
A's
B's
C's
D's
F's

g) Recommendations

There are no recommendations at this time.

Facilities, Equipment and Technology List:

a) Facilities, equipment and technology used by the program/department

Currently two classrooms and one laboratory preparation room are used for geology instruction. A projection system is used for instructor lecture / student presentations. This system can be used to project from a laptop/desktop computer, but any application using sound is not allowed because there is no working sound system. When there is a geologic VHS tape to reinforce concepts, the students must change classrooms, because the presentation / VHS system doesn't work in both rooms. An overhead projector is used by the instructor to show concepts and students use the same method to demonstrate their understanding of these concepts. The geology classrooms are not well equipped for learning and instruction.

b) Adequacy and currency of these facilities, equipment and technology

An adaptation of teaching methods has been made to compensate for ill-equipped rooms. The classrooms have a maximum capacity of 30 students. Larger classrooms are needed, keeping in mind that the CEC student enrollment is increasing. All equipment / technology used for instruction are wholly out of date.

c) Immediate needs of facilities, equipment, and technology

The projection system is the most pressing need in both classrooms.

d) Long-range needs in these areas

Current geology VHS/DVD media, software, binocular microscopes, transparency pens, transparencies, a technologically updated classroom that facilitates learning, chalk, xerographic paper, maps, charts, stereoscopes, ink pens / pencils, rulers and a continual supply of rocks and minerals, budgeting for field-trip transportation.

Staffing

a) Current Staffing

At this time there is one full time and one part-time faculty member.

b) Program/department's current needs

Current staffing is adequate at this time.

c) Program/department's future needs

With increasing enrollment at CEC, hiring another full-time faculty member will be required.

d) Recommendations (where applicable)

Currently, no recommendations are necessary.

Planning

a) Internal and external changes or trends impacting the program in the next five years.

Before Fall 2006, only one type of geology lecture was offered at CEC. Today the department has expanded, offering other courses such as geography and natural

disasters. Those additional courses present an increased variety of course offerings to students. The greatest external changes impacting the department are those imposed by the State of California as a result of budget cuts. These cuts may effect student enrollment, money for geology field trips and funds for faculty development.

b) Direction of program in five years

The program will continue to offer a variety of courses to students. With these courses a better equipped learning and teaching environment should be obtained.

c) Goals and objectives of program related to district's mission and college's strategic initiatives

The geology department at CEC is in full agreement with these tenets. Specifically, a classroom environment of mutual respect, integrity, diversity and excellence is foundational. Students are to be valued by offering them innovative, interactive and distinctive experiences in geology. Students will be expected to leave their familiar surroundings to participate in subject-related experiences. The department will continue to strive for improved facilities for the betterment of classroom instruction.

Conclusion and Summary

a) Prioritize recommendations and needs of you program/department

The projection system must be updated, allowing VHS/DVD course content enhancement and student/instructor presentations. Daily school supplies such as binocular microscopes, transparency pens, transparencies, adhesive poster paper, chalk, xerographic paper, maps, charts, stereoscopes, ink pens / pencils, rulers and a continual supply of rocks and minerals, and budgeting for field-trip transportation are needed promptly.

b) After speaking with staff in the Instructional Technology area, it is estimated that the media upgrade and school supplies will total approximately \$10,000.

c) Other comments

Since the last Program Review two different geology courses are being offered additionally. Examining the previous program review (2/16/2006), nothing has been purchased but a few rocks and minerals. The department still needs a fully functional projection system and schools supplies. Success and retention rates are improving in geology from Fall 2006 to 2008. In five years the needs of the department are expected to be fulfilled so that instruction and learning can be further enhanced. The department will continue to improvise and make accommodations while taking every opportunity to provide a varied, innovative experience for students in geology. Department progress will be monitored using instructor evaluations from peers, students and administrators, also institutional data regarding retention and success rates are crucial for this purpose.