**WATAN, 'DAL** 

#### ADMITAIS IP! HOWANAWOLOGIU did DALANG-1000 PAR FED À

UNIT REPORT

Earth Sciences - Final Annual

Report

Generated: 9/11/18, 2:45 PM

Department mission: Earth Sciences

Start: 07/01/2017 End: 06/30/2018

Providing Department: Earth Sciences
Department/Unit Contact: Mike Harrison

Mission/Vision/Goal Statement:

- 1. To provide a robust undergraduate learning and research experience for geoscience students.
- 2. To demonstrate the importance of the geosciences to society.
- 3. To promote faculty research, scholarly activity and interdisciplinary collaboration.

#### Program goal 1: Recruitment

Progress: Ongoing

Define Goal:

Recruit and retain sufficient majors to maintain an average of 10 graduates/year.

## Program goal 2: Endowment

Progress: Ongoing

Define Goal:

Increase the Alumni Endowment so the department can offer more scholarships, domestic and international undergraduate field experiences, and to help fund student research.

#### Student-learning outcome 1: Competency

Progress: Ongoing

Define Goal:

Graduates will demonstrate sufficient geoscience knowledge that allows them to either pursue a graduate degree or enter the geoscience workforce.

## Student-learning outcome 2: Communication and critical thinking

**Pnot**gress: Ongoing

Define Goal:

Graduates will demonstrate proficiency in communication and critical thinking.

#### Student-learning outcome 3: Undergraduate research

Progress: Ongoing

Define Goal:

Graduates will demonstrate the ability to independently develop, conduct, and complete a novel research project.

### Assessment: California Critical Thinking Skills Test

Goal/hy

J₽FEŒFÌ Ú|æ}} } ã;\*

Attachments: Attached Files

#### CCTST chart 2018.docx

Results: Department and ACAT Geology exams

Goal/Objective/Outcome Number: Student learning outcome 2

Results:

From spring 2006-spring 2018, 129 students completed the department exit exam. During this time, 95 students scored 70 on the exam (9/9 for F2017-S2018 cohort). The 2017-18 exam average is 83% compared to 75% for 2016-17 (Appendix).

For the 2017-2018 AY, geosciences students (N=9) scored in the 45th percentile on the national ACAT Geology exam compared to 56th last year. This is our third year of data for this exam.

Attachments: Attached Files

CT, communication, exit exam chart 2018.docx

Results: Donations and endowment growth

Goal/Objective/Outcome Number: Program goal 2

Results:

As of August 2018, our Alumni Endowment is \$40,970, a slight decrease from summer 2018. However, it's a substantial increase from 2005, when the amount was \$31,332. We now offer two more scholarships to geoscience students: the Melvin Smith and the Moran Scholarships (Program Goal 2).

Results: Majors and graduates

Goal/Objective/Outcome Number: Program goal 1

Results:

The number of majors has increased from 38 (spring 2008) to 48 (fall 2017) (Appendix). For F2017-S2018, we graduated 17 students. As of summer 2018, our 5-year graduation average is 14.8 students/year—a decrease from last year's 5-year average of 15.2. (Program Goal 1).

Attachments: Attached Hides

Presentations, enrollment, graduates chart 2018.docx

Results: Presentation of thesis research

Goal/Objective/Outcome Number: Student learning outcome 1

Results:

Between spring 2003 and spring 2018, 118 (68%) geoscience graduates who completed a senior thesis have presented seniorthesis research outside the department. For F2017-S2018, 12/17 (71%) students presented their thesis research outside the department—an increase from last year (67%). Although year-to-year percentages fluctuate, then bencere e e

i ave

J₽FFBŒFÌ

Ú|æ}}}ã,\*

J#FF#D€FÌ Ú|æ}} ₫\*

Goal/Objective/Outcome Number: Student Learning Outcome 3

Program Changes and Actions due to Results:

We have been tracking Senior-Thesis grades for years, but the emphasis has been on communication and critical thinking (SLO-1). We will now assess the quality and thoroughness of research by the student. This will be reflected in the grades assigned for thesis, as described in the modified grading rubric.

Link to Assessment:

Track separate grades for critical thinking and communication of the senior thesis.

Link to Flight Plan: Undergraduate Co-Curricular Program

Improve Undergraduate Student Experience

# Improvement to Assessment Plan: Geology ACAT Exam

Improvements to Assessment Plan:

We lowered the target percentile for the ACAT exam from 70th to >50th as this denotes scores above the median which is more consistent with an average of >70% (letter grade C) on the department exit exam.