**2017-2018 Annual Program Assessment Report**

Please submit report to your department chair or program coordinator, the Associate Dean of your College, and to james.solomon@csun.edu, Director of the Office of Academic Assessment and Program Review, by September 28, 2018. You may, but are not required to, submit a separate report for each program, including graduate degree programs, which conducted assessment activities, or you may combine programs in a single report. **Please identify your department/program in the file name for your report.**

**College: Social and Behavioral Sciences**

**Department: Geography**

**Program:**

**Assessment liaison: Ron Davidson**

1. **Please check off whichever is applicable:**

**A. \_\_\_\_\_\_\_\_ Measured student work within program major/options.**

**B. \_\_\_\_\_\_\_\_ Analyzed results of measurement within program major/options.**

**C. \_\_\_\_\_\_\_\_ Applied results of analysis to program review/curriculum/review/revision major/options.**

**D. \_\_\_\_\_X\_\_\_\_ Focused exclusively on the direct assessment measurement of General Education Natural Sciences learning outcomes**

1. **Overview of Annual Assessment Project(s).** On a separate sheet,provide a brief overview of this year’s assessment activities, including:
* an explanation for why your department chose the assessment activities (measurement, analysis, application, or GE assessment) that it enacted
* if your department implemented assessment **option A**, identify which program SLOs were assessed (please identify the SLOs in full), in which classes and/or contexts, what assessment instruments were used and the methodology employed, the resulting scores, and the relation between this year’s measure of student work and that of past years: (include as an appendix any and all relevant materials that you wish to include)
* if your department implemented assessment **option B**, identify what conclusions were drawn from the analysis of measured results, what changes to the program were planned in response, and the relation between this year’s analyses and past and future assessment activities
* if your department implemented **option C**, identify the program modifications that were adopted, and the relation between program modifications and past and future assessment activities
* if your program implemented **option D**, exclusively or simultaneously with **options** **A, B, and/or C**, identify the basic skill(s) assessed and the precise learning outcomes assessed, the assessment instruments and methodology employed, and the resulting scores
* in what way(s) your assessment activities may reflect the university’s commitment to diversity in all its dimensions but especially with respect to underrepresented groups
* any other assessment-related information you wish to include, including SLO revision (especially to ensure continuing alignment between program course offerings and both program and university student learning outcomes), and/or the creation and modification of new assessment instruments

**3. Preview of planned assessment activities for 2018-19.** Include a brief description as reflective of a continuous program of ongoing assessment.

We were asked to assess classes that offer GE Natural Science learning outcomes.  At the same time, a Faculty Learning Community (FLC) composed of department faculty aimed to better understand and develop strategies to deal with the causes of high DUF rates in certain of our classes. The most prominent such classes – Geography 101 and Geography 150 – both offer GE Natural Sciences credit. Therefore the two efforts overlapped significantly, with both the assessment committee and FLC zeroing in on these two classes. We looked, though less intensively, at Geography 103 -- another science class with a high DUF rate, though a smaller impact factor due to lower enrollment.

The Natural Sciences Student Learning Outcomes measured were:

1. Demonstrate an understanding of basic knowledge, principles and laws in the natural sciences.

4. Recognize the contribution and potential of science in human society and everyday life.

6. Demonstrate an ability to apply scientific knowledge and to critically assess real-world issues and make sound decisions.

Our main assessment effort pertaining to these SLOs was through 101. In fall 2017 (n=38), the final exam of 101 contained 11 questions that related to these SLOs. The class average score was:

SLO 1: 69%

SLO 4: 65%

SLO 6: 58%

This result surprised us since the highest score was for SLO 1, which we anticipated would be the “driest” and least interesting to students. Our assumption based on the result is that students find the added complexity of dealing with scientific principles in “real life” application difficult to manage.

Our intervention here – based on meetings, interviews with students, watching videos of teaching, and our interpretation of the pre-test – was to 1) more frequently and formally content check and quiz students on scientific principles, especially prior to exams; and 2) offer incentives for higher scores on later exams. (If a student received a higher score on exam 3 than exam 2, for example, the exam 2 score would be replaced by the exam 3 score.)

Results of this intervention in spring 2018 (n=40), as measured via direct assessment (unit exams):

SLO 1: 79%

SLO 4: 70%

SLO 6: 59%

The results show a modest improvements in performance of SLOs 4 and 6, and a significant (10%) improvement in SLO 1.

The assessment committee and faculty learning community did far more than is reflected in this single assessment, however.

1. We discovered that students who take 101 are not required to simultaneously take 102, the corresponding (but obviously not co-requisite) lab. An analysis of 2016-17 data by Dr. Steve Graves demonstrated to a high degree of certainty that students are less likely to fail 101 when they are simultaneously enrolled in 102. Making 101 and 102 co-requisite would make curricular sense and ought to lower DUF rates in 101. A task force has been created to look further into the issue.

2. We surveyed students in Geography 101 and 103 to find what their course loads were. Our sample of 78 students revealed that nearly 40% of students in these classes were taking 16-18 units. In interviews, some students said that advisors had encouraged them to take high course loads in order to shorten their time to graduation. Advising students NOT to take excessive course loads, especially during semesters when they are enrolled in high DUF courses, seems to us a more sensible strategy. This is especially the case given that another survey we conducted showed that 30% of students work 5-8+ hours per day, and just over 10% travel 3-6+ hours per day. The message is further reinforced by the fact that student performance on 101 exams declines over the course of the semester. (Mean scores on the 3 exams dropped from the C to D ranges in both the fall 17 and spring 18 semesters.) In other words, students appear to burn out over the semester due to their extremely busy lives.

3. In Geography 150, students were given mock quizzes before actual quizzes and exams. The results were ambivalent: mock quizzes before quizzes, which dealt with single-sources (i.e. each quiz focused on a single article or book chapter) seemed to improve subsequent quiz scores. (The actual quiz score was on average 20% higher than the mock-quiz score on the same material.) However, mock quizzes did not significantly raise scores on longer exams that covered wider ranges of material, compared to exam scores in previous semesters.

 4. The committee members videotaped and watched faculty lectures using the Peer Observation Instrument provided by the university FLC coordinators. One discovery was that the “front stage” of the classroom we used, room 120 Sierra Hall, where many of our large GE courses are held, tends to be messy. There are usually 2 long tables flanking the lectern, which are rarely aligned neatly, and which often have flyers, an instructor’s bag, class materials, and other random items atop them, and 3 or 4 chairs randomly placed in the area. The lectern itself is an untidy amalgam of instruments, including an overhead projector, keyboard, a monitor mounted on an adjustable arm that can cut off an instructor’s face from view, chords, etc. The messy appearance of the front of the room is discordant with the formal tone and professionalism we believe ought to characterize our classes. Some faculty have therefore made it regular practice to “clean up” the area before each class – an act that may prime students to take things more seriously, as well.

5. The video observation also led us to recognize the importance of providing simple, story-like frameworks around particular batches of material. For example, a discussion of geopolitical tensions in Africa might begin with the statement, “I’m going to tell you about three countries in conflict with each other.” This strategy is being adapted by Dr. Davidson, who consistently teaches 150.

6. The committees had numerous additional ideas that could not all be followed through with, but which can be pursued this year. We will discuss these as we resume our normal, ongoing assessment activities this year.