

2019-2020 Annual Program Assessment Report Guide

Please submit your report to your department chair or program coordinator, the Associate Dean and Dean of your College, and to james.solomon@csun.edu, Director of the Office of Academic Assessment and Program Review, by **September 30, 2020**. 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 include this form with your report in the same file and identify your department/program in the file name. Please do not change the date on the form, and be sure to check that your report is ADA accessible.**

College: College of Engineering and Computer Science

Department: Civil Engineering and Construction Management

Program: Civil Engineering

Assessment liaison: Tzong-Ying Hao

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. Participated in the 2019-20 assessment of General Education Section D: Social Sciences and U.S. History and Government student learning outcomes

2. 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 GE 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: e.g. SLO revision (especially to ensure continuing alignment between program course offerings and both program and university student learning outcomes) and the creation or modification of new assessment instruments

3. Preview of planned assessment activities for 2020-21. Include a brief description as reflective of a continuous program of ongoing assessment.

Overview of Annual Assessment Project:

Civil Engineering program had its accreditation visit in October 2019. To address the weaknesses and concerns that were cited during the visit the department took steps to alleviate the weaknesses and concerns.

The faculty met twice after the ABET visit. The department meetings were held on November 15th, 2019 and December 19th, 2019. During these meetings, the department acting as Curriculum Committee, reviewed Table 3.1 Course Contribution and Student Outcomes Alignment in the Self-Study Report and re-evaluated the process by which Student Learning Outcomes (SLO) are assessed for the attainment of said Outcomes. A paradigm shift in the departmental approach to the assessment of the Outcomes was discussed and adopted. Outcomes will be assessed on a 3-tier evaluation methodology, namely

- 1. Below Expectations
- 2. Meets Expectations
- 3. Exceeds Expectations

With new SLO, the Course Contribution and Student Outcomes Alignment is revised as below.

Outcomes	Courses contributing to the attainment of Outcome
Outcome 1	CE439, CE488A/L, CE488B
Outcome 2	CE460/L, CE488A/L, CE488B
Outcome 3	CE308/L, CE488A/L, CE488B, SDPS
Outcome 4	CE101/L, CE488A/L, CE488B
Outcome 5	CE308/L, CE315/L, CE488A/L, CE488B
Outcome 6	AM317, CE308L, CE426L
Outcome 7	CE101/L, CE315/L, CE438

- AM317 Mechanics Lab
- CE101/L Introduction to Civil Engineering and Lab
- CE308/L Surveying and Lab
- CE315/L Construction Engineering and Lab
- CE426L Soil Mechanics Lab
- CE438 Reinforced Concrete Design
- CE439 Structural Steel Design
- CE460/L Engineering Hydrology and Lab
- CE488A/L Civil Engineering Senior Design I and Lab
- CE488B Civil Engineering Senior Design II
- CE526 Geotechnical Foundation Design
- SDPS Senior Design Project Showcase

For the Fall 2019 semester, AM317, CE439 and CE488A/L were assessed to verify the attainment of the desired Outcomes. For the Spring 2020 semester, CE308/L, CE438 and CE488B were assessed to verify the attainment of the desired Outcomes. It is worthy to note that the Outcomes will be assessed over a 3-year period, which implies that the Outcomes will be assessed twice during an ABET cycle. This will allow the department to re-evaluate the effectiveness of achieving the Outcomes and consider changes in the pedagogy of course offerings.

The experimental course for CE240 Engineering Statics implemented in Fall 2018 and Spring 2019 was previously reported. This experimental course includes a 3-unit lecture (CE 296S) and a 1-unit (3 hours) problem solving session (CE 296SL). The department discussed the possible change in the offering of CE240 Statics course. The department decided to pursue a course modification whereby the existing 3-unit course will be changed to a 2-unit lecture and a 3-hours problem-solving recitation session. As such, the units for the course/recitation 2+1 will keep the units toward the degree unchanged.

To comply with the changes of SLO, the design problems in the CE438 Reinforced Concrete Design, CE439 Structural Steel Design, and the Senior Design Capstone Courses were modified with great complexity, e.g. multiple constraints.

Preview of Planned Assessment Activities for Next Year:

For the Fall 2020 semester, CE101/L, CE315/L CE426L and CE460/L will be assessed. As the attainment of Outcomes are evaluated, changes in pedagogy or course offerings will be reviewed and changes will be implemented to foster the attainment of all Outcomes. The department also plans to discuss about:

- Selection of assessment tools
- Selection of assessment instruments