**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: College of Engineering and Computer Science**

**Department: Civil Engineering and Construction Management**

**Program: Construction Management**

**Assessment liaison: Tzong-Ying Hao**

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

**A. -----X ---- Measured student work within program major/options.**

**B. -----X ---- Analyzed results of measurement within program major/options.**

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

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

**Overview of Annual Assessment Project:**

After the last external accreditation visit by the American Council for Construction Educators (ACCE) in 2015, the undergraduate construction management program completed the first cycle of assessments of Student Outcomes and Program Educational Objectives in Spring 2018. All Construction Management courses were assessed; CM 110/L, CM 208/L, CM 210/L, CM 240/L, CM 309, CM 310/L, CM 312/L, CM 321, CM 326/L, CM 334/L, CM 336/L, CM 340, CM 401, CM 415/L, CM 434/L, CM 440/L, CM 441/L, CM 449, CM 480, CM 488A, CM 488B, and CM 494. The Student Outcomes assessed were:

(a) an ability to demonstrate an appropriate mastery of the knowledge, techniques skills and modern tools of their disciplines

(b) an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering, and technology

(c) an ability to conduct, analyze, and interpret experiments and apply experimental results to improve processes

(d) an ability to apply creativity in the design of systems, components, or processes appropriate to program objectives

(e) function effectively on teams

(f) an ability to identify, analyze, and solve technical problems

(g) an ability to communicate effectively

(h) an ability to recognize the need for and possess the ability to pursue lifelong learning

(i) an ability to understand professional, ethical, and social responsibilities

(j) an ability to recognize contemporary professional, societal, and global issues and awareness of and respect for diversity

(k) an ability to have a commitment to quality, timeliness and continuous improvement

(l) knowledge of construction contracts, documents, specifications, and codes

(m) knowledge of construction methods and materials

(n) knowledge of construction surveying

(o) knowledge of statics and strength of materials

(p) knowledge of material quantity and cost estimates of project

(q) knowledge of productivity software to solve technical problems

(r) knowledge of construction accounting and economics

(s) an ability to utilize modern instruments, methods, and techniques

(t) knowledge of construction law and ethics

(u) knowledge of soils, and foundations

(v) knowledge of scheduling and project management

(w) knowledge of construction safety

The Program Educational Objectives assessed were:

1. Technical skills necessary to enter careers in construction operation and/or maintenance of the built environment and supporting infrastructure.
2. The ability to thoroughly comprehend, manage and utilize basic construction documents used in construction.
3. The ability to specify and optimize utilization of project methods and materials.
4. The ability to perform reliable cost estimates and analyses.
5. The ability to effectively manage construction projects using state-of-the-art planning scheduling and monitoring tools.
6. Working knowledge of the management tools that are widely used for cost and schedule management in the construction industry.
7. The ability to communicate well both orally and in writing, and the ability to work as a productive member of a construction team.
8. A sense of exploration and the ability to maintain lifelong learning in the areas of emerging construction methods and management.

The course assessment reports of CM 326 and CM 326L (which have higher DUF rates) were carefully reviewed by the department. However, the required actions were not yet determined in 2017-2018 academic year.

**Preview of Planned Assessment Activities for Next Year:**

The second cycle of the assessments will continue. All required modifications to satisfy the program objectives will be determined and implemented in Fall 2018 and Spring 2019. Hence, the second assessment cycle will focus on the implemented changes. The review of the assessment of CM 336/L will be continued. The focus of this review is the satisfaction of the Student Learning Outcomes ‘(g) an ability to communicate effectively’.