



Academic Program Assessment Report for AY 2019-2020

(Due: June 1, 2020)

Program: Civil Engineering Technology

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Brief statement of Program mission and goals: The Civil Engineering Technology (CET) program at Colorado State University-Pueblo is to provide an integrated educational experience so that its graduates are:

- Prepared to apply established engineering principles and standards of practice in developing solutions to civil engineering problems, and
- Prepared for successful careers in civil engineering by providing them with the ability to contribute to engineering teams in various practice areas including (a) engineering analysis and design, (b) construction planning and management, (c) experimentation, (d) technical documentation, and (e) systems operations or maintenance.

I. Assessment of Student Learning Outcomes (SLOs) in this cycle. Including processes, results, and recommendations for improved student learning. Use Column H to describe improvements planned for 2019-2020 based on the assessment process.

A. Which of the program SLOs were assessed during this cycle? Please include the outcome(s) verbatim from the assessment plan.	B. When was this SLO <u>last</u> reported on prior to this cycle? (semester and year)	C. What method was used for assessing the SLO? Please include a copy of any rubrics used in the assessment process.	D. Who was assessed? Please fully describe the student group(s) and the number of students or artifacts involved (N).	E. What is the expected proficiency level and how many or what proportion of students should be at that level?	F. What were the results of the assessment? (Include the proportion of students meeting proficiency.)	G. What were the department's conclusions about student performance?	H. What changes/improvements to the <u>program</u> are planned based on this assessment?
h.An understanding of the need for and ability to engage in self-directed continuing professional development	2016-2017	A presentation on CET 101 class Rubric is shown in Figure 1.	All students attended the class	75% students should attain 75% score	87.5% of 100% of the students completed the learning module.	As the target is met, nothing has been done now, but this result will be discussed in the next departmental meeting to find out how to maintain this	In the next assessment cycle, the improvement trend will be observed and continuous improvement will be expected.

						achievement and how to improve continuously.	
i.An understanding of and commitment to address professional and ethical responsibilities including a respect for diversity	2016-2017	A presentation on CET 101 class Rubric is shown in Figure 2.	All students attended the class	75% students should attain 75% score	77.81 of 100% of the students completed the learning module which included an instructional series on the concept of a ethics in civil engineering.	As the target is met, nothing has been done now, but this result will be discussed in the next departmental meeting to find out how to maintain this achievement and how to improve continuously.	In the next assessment cycle, the improvement trend will be observed and continuous improvement will be expected.
j.A knowledge of the impact of engineering technology solutions in a societal and global context	2016-2017	Quiz 11 of CET 207 Rubric is shown in Table 1.	All students attended the class	75% students should attain 75% score	83% attained 75%	As the target is met, nothing has been done now, but this result will be discussed in the next departmental meeting to find out how to maintain this achievement and how to improve continuously.	In the next assessment cycle, the improvement trend will be observed and continuous improvement will be expected.
k.A commitment to quality, timeliness, and continuous improvement	2016-2017	Exam 1 of CET 405 Rubric is shown in Table 1.	All students attended the class	75% students should attain 75% score	85% attained 75%	As the target is met, nothing has been done now, but this result will be discussed in the next departmental	In the next assessment cycle, the improvement trend will be observed and continuous improvement will be expected.

						meeting to find out how to maintain this achievement and how to improve continuously.	
CET Specific f. Perform economic analyses and cost estimates related to design, construction, operations and maintenance of systems associated with civil engineering;	2016-2017	Assignment 3 in CET 305 Rubric is shown in Table 1.	All students attended the class	75% students should attain 75% score	95% attained 75%	As the target is met, nothing has been done now, but this result will be discussed in the next departmental meeting to find out how to maintain this achievement and how to improve continuously.	In the next assessment cycle, the improvement trend will be observed and continuous improvement will be expected.
CET Specific g. Select appropriate engineering materials and practices, and;	2016-2017	Exam on 4/6/2020 on CET 404 Rubric is shown in Table 1.	All students attended the class	75% students should attain 75% score	100% attained 75%	As the target is met, nothing has been done now, but this result will be discussed in the next departmental meeting to find out how to maintain this achievement and how to improve continuously.	In the next assessment cycle, the improvement trend will be observed and continuous improvement will be expected.
CET Specific h. Perform standard analysis and design in at least	2016-2017	Exam 1 of CET 473	All students attended the class	75% students should attain 75% score	84% attained 75%	As the target is met, nothing has been done now, but this result will	In the next assessment cycle, the improvement trend will be observed and continuous

three sub-disciplines related to civil engineering.		Rubric is shown in Table 1.				be discussed in the next departmental meeting to find out how to maintain this achievement and how to improve continuously.	improvement will be expected.
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Table 1. Grading Rubric for Different Performance Indicators

	Good	Fair	Poor	Unable
Observes good lab practice and operates instrumentation with ease	100%	75%	50%	0%
Determines data that are appropriate to collect and selects appropriate equipment, protocols, etc. for measuring the appropriate variables to get required data	100%	75%	50%	0%
Uses appropriate tools to analyze data and verifies and validates experimental results including the use of statistics to account for possible experimental error	100%	75%	50%	0%

Comments on part I: All SLOs assessed during this cycle met the expected achievement level. In the next assessment cycle, the improvement trend will be especially observed and possible a revision of the target will be discussed in a program meeting.

II. Closing the Loop. Describe at least one data-informed change to your curriculum during the 2019-2020 cycle. These are those that were based on, or implemented to address, the results of assessment from previous cycles.

A. What SLO(s) or other issues did you address in this cycle? Please include the outcome(s) verbatim from the assessment plan.	B. When was this SLO last assessed to generate the data which informed the change? Please indicate the semester and year.	C. What were the recommendations for change from the previous assessment column H and/or feedback?	D. How were the recommendations for change acted upon?	E. What were the results of the changes? If the changes were not effective, what are the next steps or the new recommendations?
Outcome c (CET Sepcific)- Utilize surveying methods appropriate for land measurement and/or construction layout;	2018-2019	Intructor will work to enhance teaching methods and possibly integrate skill building modules possibly through Blackboard. In the next assessment cycle, the improvement trend will be especially observed and possible remedy will be discussed in a program meeting.	Intructor put more effort on the topic to make sure students achieved this SLO.	It is expected to improve on this SLO. The SLO is scheduled to be assessed in the next cycle.

Comments on part II: In the next assessment cycle, the improvement trend will be especially observed and possible remedy will be discussed in a program meeting.