



Academic Program Assessment Report for AY 2018-2019

(Due: June 1, 2019)

Program: Civil Engineering Technology

Date report completed: May 31, 2019

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Please describe the 2018-2019 assessment activities and follow-up for your program below. Please complete this form for each undergraduate major, minor, certificate, and graduate program (e.g., B.A., B.S., M.S.) in your department. Please copy any addenda (e.g., rubrics) and paste them in this document, save and submit it to both the Dean of your college/school and to the Assistant Provost as an email attachment before June 1, 2019. You'll also find this form on the assessment website at <https://www.csueblo.edu/assessment-and-student-learning/resources.html>. Thank you.

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 2018-2019 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> assessed? (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.	E. What is the expected achievement 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?
Outcome d (General)- An ability to design systems, components, or processes for broadly defined engineering technology problems appropriate to program educational objectives	AY 2012-2013	<ul style="list-style-type: none"> • Produces a clear and unambiguous needs statement in project. • Identifies constraints on the design problem, and establishes criteria for acceptability and desirability of solutions. • Carries solution through to the most economic/desirab 	CET 405 Students (Final Exam)	-75% will attain 75%	-75% attained 75%	The results of the data shows that the students are doing a good job in designing systems, components, etc. for CET.	No Changes should be made. The strong and rigorous process should continue. However, the instructor will be notified that this SLO was barely met.

		le solution and justifies the approach.					
Outcome e (General)- An ability to function effectively as a member or leader on a technical team	AY 2015-2016	<ul style="list-style-type: none"> • Recognize participant roles in a team setting. • Integrate input from all team members and makes decision. • Improves communications among teammates and ask for feedback. 	CET 456 Students	-75% will attain 75%	-91% attained 75%	The results of the data shows that the students are doing a good job in understanding the problem, finding solution methods, and solving the problems. The final capstone project is assessed for overall project quality, oral and written presentation by instructor and teamwork assessment by peers.	No Changes should be made. The strong and rigorous process should continue.
Outcome f (General)- An ability to identify, analyze and solve broadly-defined engineering technology problems	AY 2016-2017	<ul style="list-style-type: none"> • Problem statement shows understanding of the problem. • Solution procedure and methods are defined. • Problem solution is appropriate and within reasonable constraints. 	CET 404 Students (Exam 2)	-75% will attain 75%	-87% attained 75%	The results of the data shows that the students are doing a good job in understanding the problem, finding solution methods, and solving the problems	No Changes should be made. The strong and rigorous process should continue.
Outcome g (General)- An ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to	AY 2015-2016	<ul style="list-style-type: none"> • Writing conforms to appropriate technical style. • Appropriate usage of graphics. • Grammar and editorial aspects. • Oral: body language and clarity of speech 	CET 473 Students (Lab Report)	-75% will attain 75%	-88% attained 75%	The results of the data shows that the students are doing a good job in understanding the problem, finding solution methods, and solving the problems	No Changes should be made. The strong and rigorous process should continue.

identify and use appropriate technical literature							
Outcome c (CET Specific)- Utilize surveying methods appropriate for land measurement and/or construction layout;	AY 2013-2014	<input type="checkbox"/> Ability to choose the right surveying tools <input type="checkbox"/> Able to use survey tools and interpret results	CET 103 Students (Exam 1)	-75% will attain 75%	-70% attained 75%	The results of the data shows that the achievement level was not met.	Instructor 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.
Outcome d (CET Specific)- Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering.	AY 2013-2014	<input type="checkbox"/> Problem statement shows understanding of the problem <input type="checkbox"/> Solution procedure and methods are defined. <input type="checkbox"/> Problem solution is appropriate and within reasonable constraints	CET 372 Students (Final Exam)	-75% will attain 75%	-86% attained 75%	The results of the data shows that the students are doing a good job in understanding the problem, finding solution methods, and solving the problems	No Changes should be made. The strong and rigorous process should continue.
Outcome e (CET Specific)- Plan and prepare documents appropriate for design and construction;	AY 2015-2016	<input type="checkbox"/> Identifies construction documents and layouts <input type="checkbox"/> Develop construction documents and update capacity	CET 116 Students	-75% will attain 75%	-92% attained 75%	The results of the data shows that the students are doing a good job in understanding the construction document, layouts and develop it.	No Changes should be made. The strong and rigorous process should continue.

Comments on part I:

Most of the SLOs assessed during this cycle met the expected achievement level. The SLO which did not meet the expected achievement level will be discussed in the upcoming faculty meeting. Instructor will be requested 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.

The rubric to evaluate students' work is presented below. Four criteria are generally used to make the evaluation simple and effective.

Good	Fair	Poor	Unable
100%	75%	50%	0%
100%	75%	50%	0%
100%	75%	50%	0%
100%	75%	50%	0%

II. Closing the Loop. Describe at least one data-informed change to your curriculum during the 2017-2018 cycle. These are those that were based on, or implemented to address, the results of assessment from previous cycles.

A. What SLO(s) did you address? 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?	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 a (General)- An ability to select and apply the knowledge, techniques, skills and modern tools of the discipline to broadly-defined engineering technology activities	AY 2017/18	<input type="checkbox"/> Problem statement shows understanding of the problem <input type="checkbox"/> Solution procedure and methods are defined. <input type="checkbox"/> Problem solution is appropriate and within reasonable constraints	The expected achievement level was not met. The instructor was advised by the program chair to revise his lecture content and lecture style.	A new instructor was assigned to teach this class.

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.