

ASSESSMENT REPORT
SEMESTER FALL 2020
CHEG 4043 Process Design and Analysis
ROY G. PERRY COLLEGE OF ENGINEERING
CHEMICAL ENGINEERING DEPARTMENT

Dr. Jorge Gabitto

PROFESSOR

ABET expects assessment on a regular cycle in each program, using a process that is effective and sustainable. According to the ABET assessment plan prepared by the Chemical Engineering Program Assessment committee and approved by the faculty body and with approval of the Head of Department, the subject course is not due for assessment in Fall 2020 semester. Full course binder assessment will be submitted at the designated point in the assessment cycle, as per the plan. However, to help collect assessment data a summary assessment table for this course section is provided.

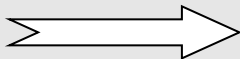
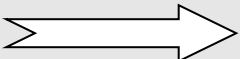
END OF SEMESTER COURSE OUTCOME ASSESSMENT REPORT

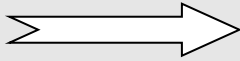
CHEG4043-001 Process Design and Analysis

Fall 2020 SEMESTER

Report Prepared by: Dr. Jorge Gabitto

Report Date: December 21, 2020

Semester	Analysis Type	Number of Students	Outcome 1 An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.			Outcome 4 An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts		
			Expected Average	Class Average	% Students Meeting Expected Average	Expected Average	Class Average	% Students Meeting Expected Average
Fall 2020	Direct	29	75	93.6	100.0	75	84.3	93.1
Fall 2019	Direct	31	75	91.7	93.5	75	89.2	93.5
Fall 2018	Direct	23	75	85.3	82.6	75	81.3	78.3
Implementation Summary			Class discussion about design techniques. Strong emphasis on procedures discussed in class. Informal design problems started from scratch.			Class discussion about costs and professional responsibilities. Strong emphasis on economic, environmental, and societal impact discussed in class.		
Perceived Problems			1. Students have problems identifying the critical design parameters. 2. Students failed to produce reasonable estimates of design parameters. 3. Students knowledge did not have the required bread in some subjects.			Students were not familiar with use of costs and financial analysis, Lack of awareness of safety issues.		
Plans for Addressing Problems			The instructor should: 1. Increase the time spent discussing design problems on the board. 2. Stress different approaches for estimation of design parameters. 3. Provide tutoring assistance to interested students			The instructor should: 1. The instructor introduced new examples and case studies in class. 2. Need to provide problem sessions to interested students		

Overall Trend over Periods		Students performed above average. Performance remained the same compared to previous semester in this criterium. Continue with implementation plan.	Student performance was above average. The average decreased with respect to previous semesters, but the number of students achieving the average remained constant. More interaction students/instructor is needed. Tutoring on software needed.
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