Program Plan and Findings: Four Column Layout

Program (CEAT) - CHE - Chemical Engineering (BSCH) - 041

Program Mission Statement: The mission of the School of Chemical Engineering at Oklahoma State University is to develop human resources, professional knowledge, and the infrastructure through which chemical engineering can contribute to human welfare. We expect to maintain national recognition for our contributions.

Program Information

2019 - 2020
Program Information
Assessment Coordinator's Name: Sundararajan V. Madihally
Assessment Coordinator's E-mail Address: sundar.madihally@okstate.edu
Number of Students Enrolled in the Program: 280
Total Number of Students Graduated: 55
Number of Student Graduates from Stillwater Campus: 55
Were university assessment funds used by the department/program for assessment activities?: No
If yes, describe how funds were used and the contribution the funds had on the assessment process:
Number of Student Graduates from Tulsa Campus: 0

Annual Executive Summaries

2019 - 2020
Program Assessment Coordinator: Sundararajan V Madihally
Plan Review and Approval
Date Current Plan Was Reviewed and Approved: 08/15/2019
Date of Future Plan Review and Approval: 07/31/2021
Summary of Assessment Findings
Describe overall assessment findings and faculty members' interpretation of the assessment results: All metrics indicate that our approach is working well in meeting the requirements of student outcomes
Dissemination of Findings
Describe the individual(s) or committee responsible for reviewing and interpreting assessment data:
Describe the process for sharing and discussing assessment findings with program faculty:
Program Improvements Based on Assessment

Based on data collected this year, what changes are being considered or planned for the program?: ???
Based on this year's findings, what (if any) changes are planned for the assessment process?:
Describe the process for implementing these changes/planned program improvements:
Program Improvements Made in the Last Year: Revised Assessment Plan
"Other" Improvements:
Goals for the Coming Year: Keep up the good work
Is this Summary Report Complete?: Yes
List all individuals associated with this report preparation: ???

Outcomes	*Assessment Methods*	*Findings*	*Use of Findings (Actions)*
Problem Solving - An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. **Outcome Status:** Active **Planned Assessment Year:** 2016 - 2017, 2017 - 2018, 2019 - 2020 **Start Date:** **Archived Date:** **Outcome Type:** Skills **Reason for Archival:**	**Survey -** A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program *** Learning Outcome** **Goal/Benchmark:** 4/5 **Timeline for Assessment:** Yearly **Other Assessment Type:** Alumni Survey administered by UAT. See below	**Reporting Period:** 2019 - 2020 **Conclusion:** 3 - Meets Program Expectations (Proficient) Pleased with the outcome, average score was 4.33/5. (09/10/2020) **Number of Students Assessed:** 55 **Number of Successful Students:** 55 **How were students selected to participate in the assessment of this outcome?:** Survey was administered to all students, no selection. **What do the findings suggest about student achievement of this learning outcome?:** Meets the departmental expectations	
	Other - University assessement office sends out a survey and collects data. We get access to that *** Learning Outcome** **Goal/Benchmark:** **Timeline for Assessment:** Biannual **Other Assessment Type:** Alumni Survey	**Reporting Period:** 2019 - 2020 **Conclusion:** 4 - Exceeds Program Expectations (Advanced) Meets the expectations and we have been consistent, 4.67 (09/10/2020) **Number of Students Assessed:** 25 **Number of Successful Students:** 25 **How were students selected to participate in the assessment of this outcome?:** Survey administered by UAT **What do the findings suggest about student achievement of this learning outcome?:** meets our expectations	
Application - an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. **Outcome Status:** Active **Planned Assessment Year:** 2018 -	**Other -** University Testing sends out the survey and we collect data *** Learning Outcome** **Goal/Benchmark:** **Timeline for Assessment:** **Other Assessment Type:** Alumni Survey	**Reporting Period:** 2019 - 2020 **Conclusion:** 2 - Meets Minimum Program Expectations (Developing) Meets our expectation, with an average score of 4.04/5 (09/10/2020) **Number of Students Assessed:** 25 **Number of Successful Students:** 25 **How were students selected to participate in the assessment of this outcome?:** Assessed by UAT	

Outcomes	Assessment Methods	Findings	Use of Findings (Actions)
2019, 2019 - 2020, 2020 - 2021, 2021 - 2022 **Start Date:** 08/22/2018 **Archived Date:** **Outcome Type:** Skills **Reason for Archival:**	**Survey -** A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program *** Learning Outcome Goal/Benchmark:** 4/5 **Timeline for Assessment:** Yearly **Other Assessment Type:** Biannual Assessment from UAT	**What do the findings suggest about student achievement of this learning outcome?:** Meets our expectations **Reporting Period:** 2019 - 2020 **Conclusion:** 2 - Meets Minimum Program Expectations (Developing) Meets our expectation and consistent (09/10/2020) **Number of Students Assessed:** 55 **Number of Successful Students:** 55 **How were students selected to participate in the assessment of this outcome?:** All graduating seniors were administered in the graduating class. No selection **What do the findings suggest about student achievement of this learning outcome?:** Meets our expectations.	
Effective Communication - an ability to communicate effectively with a range of audiences **Outcome Status:** Active **Planned Assessment Year:** 2018 - 2019, 2019 - 2020 **Start Date:** 08/22/2018 **Archived Date:** **Outcome Type:** Skills **Reason for Archival:**	**Survey -** A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program *** Learning Outcome Goal/Benchmark:** 4/5 **Timeline for Assessment:** Yearly **Other Assessment Type:** Biannual Survey From UAT **Other -** University Testing sends out the survey and we collect data_copy *** Learning Outcome Goal/Benchmark:** **Timeline for Assessment:** **Other Assessment Type:** Alumni Survey	**Reporting Period:** 2019 - 2020 **Conclusion:** 3 - Meets Program Expectations (Proficient) Meets our expectation, average was 4.31/5 (09/10/2020) **Number of Students Assessed:** 55 **Number of Successful Students:** 55 **How were students selected to participate in the assessment of this outcome?:** All graduating seniors were given the survey. No selection **What do the findings suggest about student achievement of this learning outcome?:** Meets our expectations	
Professionalism - 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.	**Survey -** A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program_copy *** Learning Outcome Goal/Benchmark:** 4/5 **Timeline for Assessment:** Yearly **Other Assessment Type:** Biannual	**Reporting Period:** 2019 - 2020 **Conclusion:** 3 - Meets Program Expectations (Proficient) Meets our expectation, average was 4.43/5 (09/10/2020) **Number of Students Assessed:** 55 **Number of Successful Students:** 55 **How were students selected to participate in the assessment of this outcome?:** Administered to all graduating seniors without selection **What do the findings suggest about student achievement	**Use of Findings (Actions):** Discussed with faculty and we expected these results based on feedback from faculty in other classes (09/10/2020)

Outcomes	Assessment Methods	Findings	Use of Findings (Actions)
Outcome Status: Active **Planned Assessment Year:** 2018 - 2019, 2019 - 2020 **Start Date:** 08/22/2018 **Archived Date:** **Outcome Type:** Skills **Reason for Archival:**	Assessment from UAT **Other -** University Testing sends out the survey and we collect data_copy *** Learning Outcome Goal/Benchmark:** **Timeline for Assessment:** **Other Assessment Type:** Alumni Survey	**of this learning outcome?:** Meets our expectation	
Leadership and Collaboration - an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives. **Outcome Status:** Active **Planned Assessment Year:** 2018 - 2019, 2019 - 2020 **Start Date:** 08/22/2018 **Archived Date:** **Outcome Type:** Skills **Reason for Archival:**	**Survey -** A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program_copy *** Learning Outcome Goal/Benchmark:** 4/5 **Timeline for Assessment:** Yearly **Other Assessment Type:** Biannual Assessment from UAT **Other -** University Testing sends out the survey and we collect data_copy *** Learning Outcome Goal/Benchmark:** **Timeline for Assessment:** **Other Assessment Type:** Alumni Survey	**Reporting Period:** 2019 - 2020 **Conclusion:** 3 - Meets Program Expectations (Proficient) Meets our expectation, with an average score of 4.44/5 (09/10/2020) **Number of Students Assessed:** 55 **Number of Successful Students:** 55 **How were students selected to participate in the assessment of this outcome?:** Administered to all graduating seniors without selection **What do the findings suggest about student achievement of this learning outcome?:** Meets our expectation	
Experimentation and Analysis - an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions. **Outcome Status:** Active **Planned Assessment Year:** 2018 - 2019, 2019 - 2020 **Start Date:** 08/22/2018 **Archived Date:** **Outcome Type:** Skills **Reason for Archival:**	**Survey -** A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program_copy *** Learning Outcome Goal/Benchmark:** 4/5 **Timeline for Assessment:** Yearly **Other Assessment Type:** Biannual Assessment from UAT **Other -** University Testing sends out the survey and we collect data_copy	**Reporting Period:** 2019 - 2020 **Conclusion:** 3 - Meets Program Expectations (Proficient) Meets our expectation, with an average score of 4.44/5 (09/10/2020) **Number of Students Assessed:** 55 **Number of Successful Students:** 55 **How were students selected to participate in the assessment of this outcome?:** Administered to all graduating seniors without selection **What do the findings suggest about student achievement of this learning outcome?:** Meets our expectation	

Outcomes	Assessment Methods	Findings	Use of Findings (Actions)

* Learning Outcome Goal/Benchmark:
Timeline for Assessment:
Other Assessment Type: Alumni Survey

Knowledge - an ability to acquire and apply new knowledge as needed, using appropriate learning strategies
Outcome Status: Active
Planned Assessment Year: 2018 - 2019, 2019 - 2020
Start Date: 08/22/2018
Archived Date:
Outcome Type: Knowledge
Reason for Archival:

Survey - A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program_copy
* Learning Outcome Goal/Benchmark: 4/5
Timeline for Assessment: Yearly
Other Assessment Type: Biannual Assessment from UAT

Reporting Period: 2019 - 2020
Conclusion: 3 - Meets Program Expectations (Proficient)
Meets our expectation, with an average score of 4.36/5 (09/10/2020)
Number of Students Assessed: 55
Number of Successful Students: 55
How were students selected to participate in the assessment of this outcome?: Administered to all graduating seniors without selection
What do the findings suggest about student achievement of this learning outcome?: Meets our expectation

Other - University Testing sends out the survey and we collect data_copy
* Learning Outcome Goal/Benchmark:
Timeline for Assessment:
Other Assessment Type: Alumni Survey

Program criteria - American Institute of Chemical Engineers, under which Chemical Engineering program is approved has a program requirement. This learning outcome is stated as "Engineering application of basic sciences to the design, analysis, and control of processes, including the hazards associated with these processes." This is listed as outcome 8 in the graphs.
Outcome Status: Active
Planned Assessment Year: 2018 - 2019, 2019 - 2020
Start Date: 08/13/2018
Archived Date:

Survey - A survey was administered to all graduating seniors. Also, school head met with students and discussed their views on the program_copy
* Learning Outcome Goal/Benchmark: 4/5
Timeline for Assessment: Yearly
Other Assessment Type: Biannual Assessment from UAT

Reporting Period: 2019 - 2020
Conclusion: 2 - Meets Minimum Program Expectations (Developing)
Meets our expectation, with an average score of 4.29/5 (09/10/2020)
Number of Students Assessed: 55
Number of Successful Students: 55
How were students selected to participate in the assessment of this outcome?: Administered to all graduating seniors without selection
What do the findings suggest about student achievement of this learning outcome?: Meets our expectatio

Outcome Type: Knowledge
Reason for Archival: