



College of Science (CSCI)  
North Science 135  
25800 Carlos Bee Boulevard, Hayward CA 94542

**2015-2016 CSCI EETF Assessment Year End Report, June, 2016**



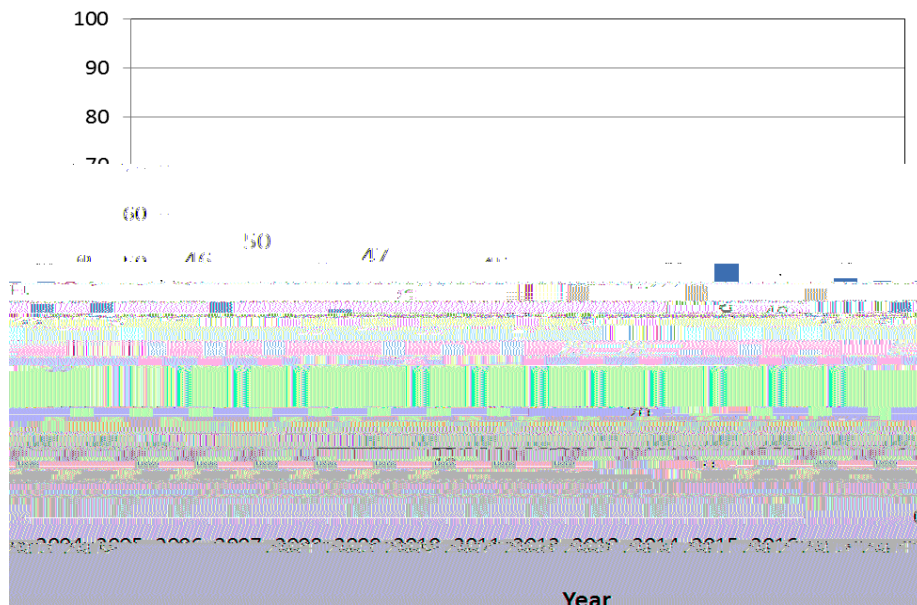
who have completed a year-long undergraduate series of courses in organic chemistry. Our goal is for our students to be at or above the 40<sup>th</sup> percentile in the nation. In 2016, 9/23 of our Chemistry and Biochemistry accomplished this goal. 3/23 of our majors were at or above the 70<sup>th</sup> percentile which we consider outstanding. Analysis of the most frequently missed questions by our chemistry and biochemistry students determined that the most problematic areas were in

conclusions. Having close to 90 % of the chemistry and biochemistry majors able to satisfactorily complete the process and identify at least one of their unknowns leads us to believe that student learning objectives in the Organic Chemistry lab are being met.

### Comparison to Previous Years

In an on-going effort to improve our students' success in meeting the student learning outcomes, we compare the results of this year's assessment data with previous years. As shown in the following graph and table, the results of this year's lecture assessment is on par with the results from recent years, although not the best that we have achieved. The results of this year's laboratory assessment are slightly lower than last year but still at our goal for demonstrating lab competence.

### Results of Capstone Organic Lecture Assessment during 2004 – 2016 for Chemistry and Biochemistry Majors



### Results of Capstone Organic Laboratory Assignment during 2004 – 2016 for Chemistry and Biochemistry Majors

Year	% At least one unknown	# with at least one unknown	% At least
2004	85	100	85
2005	85	100	85
2006	85	100	85
2007	85	100	85
2008	85	100	85
2009	85	100	85
2010	85	100	85
2011	85	100	85
2012	85	100	85
2013	85	100	85
2014	85	100	85
2015	85	100	85
2016	85	100	85



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correct  
answer

Goal	Assessment tool	Number of correct answers*	Percentage
1	Q6	2	100%
1	Q7	2	100%
2	Q9	2	100%

**BA Biochemistry Major:**

Goal	A
1	C
1	C
2	
3	
4	





3. be able to understand and describe transition state theory.	Final Question 7
4. understand how statistics and probability can be used to develop thermodynamic concepts.	Midterm Question 10
5. be knowledgeable about catalysis	Final Question 14