

Program learning outcomes	Courses related to these learning outcomes	Assessment method	Measures/Criteria, Rubric	Data collection	Assessment cycle
BA Chemistry					
1. Demonstrate a foundational understanding of organic, inorganic, analytical, and physical chemistry.	a. CHEM 2430/2440: Organic 1&2 b. CHEM 4500: Inorganic c. CHEM 2200: Analytical 1 d. CHEM 3330/3340: Physical 1&2	a. Overall percentile on ACS organic exam in Orgo 2 b. Total score on cumulative final exam c. Overall percentile on ACS analytical exam d. Overall percentile on ACS physical exam in P. Chem 1	a,c,d. >66th percentile exceeds, 45-66 meets, 33-44 approaching, <33 does not meet b. 90% exceeds, 80-89 meets, 70-79 approaching, <70 does not meet	Every offering	a-d. Year 1 of a 3-year cycle
2. Demonstrate proficiency of basic (general, organic, and analytical) laboratory techniques and conduct laboratory experiments safely.	a. CHEM 1115/1125: Gen Chem 1&2 Lab b. CHEM 2430/2440: Orgo 1&2 c. CHEM 2200: Analytical 1 d. CHEM 2435/2445: Organic 1&2 Lab e. CHEM 2205: Analytical 1 Lab	a. Score on safety exam in Gen Chem Lab 1&2 and total score on Gen Chem 2 lab Boiling Point Elevation b. Score on specific questions on ACS Orgo Exam c. Score on specific questions on ACS analytical Exam d. Score on safety exam in Orgo Lab 1&2 and technique points for Orgo 2 lab (Lab 7: E1/E2 Elimination) e. Semester score	a. For safety exam: 80% or higher meets expectations, below 80% does not meet. For Gen Chem 2 lab: 90% exceeds, 80-89 meets, 70-79 approaching, <70 does not meet b&c. For ACS exams: If course % correct on each question meets or exceeds Diff Index provided by ACS, meets expectations. If below, does not meet. d. For safety exam: 80% or higher meets expectations, below 80% does not meet. For technique points: 90% exceeds, 80-89 meets, 70-79 approaching, <70 does not meet. e. 90% exceeds, 80-89 meets, 70-79 approaching, <70 does not meet	Every offering	a,d,e. Year 2 of a 3-year cycle b,c. Year 1 of a 3-year cycle
3. Collect, interpret, and analyze quantitative data.	a. CHEM 2200: Analytical 1 b. CHEM 2205: Analytical 1 Lab c. CHEM 2430/2440: Orgo 1&2 d. CHEM 3330/3340: P Chem 1&2	a. Score on specific questions on ACS exam b. Semester score c. Score on specific questions on ACS exam d. Score on specific questions on ACS exam	a,c,d. If course % correct on each question meets or exceeds Diff Index provided by ACS, meets expectations. If below, does not meet. b. 90% exceeds, 80-89 meets, 70-79 approaching, <70 does not meet	Every offering	a,c,d. Year 1 of a 3-year cycle b. Year 2 of a 3-year cycle
4. Communicate scientific results effectively.	CHEM 2435: Orgo 1 Lab	Score on end of semester presentation in Orgo 1 Lab	90% exceeds, 80-89 meets, 70-79 approaching, <70 does not meet	Every offering	Year 2 of a 3-year cycle