Program-Level Student Learning Outcomes for Chemistry

A student who completes the B.S. in Chemistry at CMU will be able to:

- 1. Demonstrate fluency in the concepts from the major fields of chemistry (inorganic, organic, physical, and analytical...)
- 2. Utilize mathematics to solve chemical problems.
- 3. Employ proper experimental techniques.
- 4. Interpret chemical information from peer-reviewed publications.
- 5. Communicate chemical topics effectively, both verbally and in writing.

A matrix linking program-level student learning outcomes with each chemistry course is shown below.

Chemistry Program-Level Student Learning Outcomes by Course

Course	SLO 1	SLO 2	SLO 3	SLO 4	SLO 5
Course	(Knowledge)	(Computation)	(Laboratory)	(Literature)	(Communication)
100	X				
121	Х	Х			
121L	Х	X	Х		
122	Х				
122L	Х	X	Χ		
123	Х	Х			
131	Х	Х			
131L	Х	Х	Χ		
132	Х	Х			
132L	Х	Х	Χ		
151*					
151L*					
211*	X	X			
211L*	X	X	X		X
000					
300	X	X			
301	X	X			
301L	Х	X	Χ		Х
311	Х				
311L	Х	X	Χ		Х
312	X				
312L	X	X	X	Х	X
315	Х				
315L	Х	X	Х	Х	X
316	Х				
321	Х	X			
322	Х	X			
341	Х	X	Χ	X	Х
342*	Х	Х	Χ	Х	Х
351	Х	Х			Х
352	Х	Х		Х	
397	Х		Χ	Χ	Х
		-			
411*	X	X			Х
412*	Х	X		Х	
421	X			X	X
422	Х			Х	Х
431	Х	X			
431L	Х	X	Χ		X
442	X			Х	Х
482*					
483*					
487	Х	Х	Х	Х	Х
494*	Х			Х	Х
497*	Х	Х	Χ	Х	Х

^{*}inactive course