

CHEM required courses for BA Degree Spring 2021 version	Option 1 All course prefixes are CHEM unless otherwise noted	Option 2 All course prefixes are CHEM unless otherwise noted	Comments	Lab contact Hours
General Chemistry lecture + lab	1400 / 1401 2100 / 2101	1113 / 1114 1133 / 1134		
Organic Chemistry lecture	3451 3471 (or BCHM 3491)	3311 3331		
Organic Chemistry lab	3361 3381	3321 3341 and EITHER 3381 OR 4021 OR 4901 w/ at least 2 credits	4 lab credits total required Each credit = 3 hrs / week, 15 weeks/semester	180
Inorg Chem	4011			
Intrumental Analysis	4171 4181		"Two Lect. and 3 hours of lab per week"	90
Physical Chem Lecture	4511 4531			
Physical Chem Lab	4581 4591		4581: "One 3-hour lab per week" 4591: "One lect. and one 3-hour laboratory every two weeks"	45 45
			Total	360
Four additional Requirements for ACS Certified Degree			Notes	Lab contact Hours
1. Lab requirement - 400 contact hours beyond Gen Chem required for ACS certified Degree				
Inorg lab: One lect. and two 3-hour labs per week	4021			90
Independent Study, variable credit 1 credit = 3 contact hours / week = 45 hours / semester	OR 4901			45
Biochem Lab: "Two 4-hour periods per week"	OR BCHM 4761			120
2. Foundation Course Work requirement "must cover the five subdisciplines"				
Foundations of Biochemistry	BCHM 2700			
Principles of Biochemistry	OR BCHM 4611			
Bioorganic Chemistry in Biotechnology	OR 4791			
Survey of Biochemistry	OR 4611		Historical course - no longer offered but could appear on transcript	
Foundations of Biochemistry	OR 4700		Historical course - no longer offered but could appear on transcript	
3. "macromolecular, supramolecular, mesoscale, and nanoscale systems" requirement:				
Materials Chemistry and Properties	4251 (5251 at grad level)			
Organic Materials	OR 4261 (5261 at grad level)			
Chemistry of Solar Energy	OR 4271 (5271 at grad level)			
Chemical Engineering Materials	OR CHEN 4440			
Polymer Chemistry	OR CHEN 4450			
Polymer Engineering	OR CHEN 4460			
4. Computation requirement:				
Ochem 2 lab for majors	3381			
Physical Chem lab	OR 4591 by petition		Must do optional simulation experiment. Reach out to Molly Larsen for additional information.	
Theoretical and Computational Chemistry	OR 4555 (5555 at grad level)			
Independnet Study	OR 4901 by petition		Research must have a significant computational aspect and student must write a summary of the computational research	