Requirements - Hope College Chemistry (Fall 2020)	Credits	Lab Hrs	BA chemistry	BS chemistry	BS ACS	ACS bioch emphasis	BS biochem/ molec biol
Gen Chem Lecture (either 125 & 126 or 131)	6		required	required	required	required	required
Gen Chem Lab (either 127 & 128 or 132)	2		required	required	required	required	required
Organic 1 (221)	3		required	required	required	required	required
Organic Lab 1 (255)	2	84	required	required	required	required	required
Organic 2 (231)	3		required	required	required	required	required
Organic Lab 2A (256A)	1	42	required	required	required	required	required
Organic Lab 2B (256B)	1	42	elective	elective	elective	elective	elective
Biochem 1 (311)	3		option (1)	elective	required	required	required
Biochem 2 (314)	3		elective	elective	option (3)	required	required
Biochem Lab (315)	1	42	elective	elective	elective	required	required
Inorganic (322)	3		option (1)	required	required	required	option (5)
Inorganic Lab (324)	1	42	elective	elective	required	elective	option (5)
Analytical lecture and lab (331 + 332)	4	42	option (1)	required	required	required	option (5)
Physical Chem 1 (343)	3		option (1)	required	required	required	required
Physical Chem Lab 1 (345)	1	42	elective	required	required	required	required
Physical Chem 2 (344)	3		elective	required	required	option (4)	option (5)
Physical Chem Lab 2 (346)	1	42	elective	required	required	elective	option (5)
Communication in Chem and Biochem (326)	2		elective	elective	option (3)	option (4)	option (5)
Neurochem (335) (lecture + lab)	4	42	elective	elective	option (3)	option (4)	option (5)
Advanced Laboratory Techniques (350)	2	21	elective	elective	option (3)	option (4)	option (5)
Reactions, Mechanisms and Synth (352)	2		elective	elective	option (3)	option (4)	option (5)
Computational Chemistry (354)	2	21	elective	elective	option (3)	option (4)	option (5)
Structures and Materials (356)	2		elective	elective	option (3)	option (4)	option (5)
Env. Geochemistry (GES 430)	4		elective	elective	option (3)	n/a	n/a
Research (490) (42 lab hrs/credit)	1	84 max	elective	elective	elective	elective	elective
Choose electives so Chemistry credits total at least:			25	36			
Lab requirement (beyond General Chemistry)			4 lab credits		400 lab hours	400 lab hours	
Calculus 1 (Math 131 or 125+126)	4		required	required	required	required	required
Calculus 2 (Math 132)	4		required	required	required	required	required
Multivariable 1 (Math 231)	4		elective	recommend			