## John Carroll University Chemistry Study Plan

## LECOM/Medical with Chemistry Major

1 <sup>st</sup> yr				
Fall	16 cr total	Spring	16 cr total	
4 cr CH141 Gene	4 cr CH141 General Chemistry 1		4 cr CH142 General Chemistry 11	
1 cr CH143 Gene	1 cr CH143 General Chemistry Laboratory I		1 cr CH144 General Chemistry Laboratory II	
4 cr MT135 Calci	4 cr MT135 Calculus and Analytic Geometry I		4 cr MT136 Calculus & Analytic Geometry II	
3 cr EN125	3 cr EN125		3 cr CO125	
3 cr. BL155 Principles of Biology 1		3 cr. BL156 Principles of Biology 2		
1 cr. BL157 Principles of Biology 1 Lab		1 cr BL158 Principles of Biology Lab. II		
2 <sup>nd</sup> yr				
Fall	18 cr total	Spring	18 cr total	
3 cr CH221 Orga	nic Chemistry I	3 cr CH222 Organic Chemistry II		
1 cr CH223 Orgo	1 cr CH223 Organic Chemistry Laboratory I		1 cr CH224 Organic Chemistry Laboratory II	
3 cr PH125 General Physics I		3 cr CH261 Analytical Chemistry (QA)		
1 cr PH125L Gen	1 cr PH125L General Physics Laboratory I		1 cr CH263 Analytical Chemistry Laboratory	
	3 cr Foreign Language Requirement		3 cr PH126 General Physics II	
	3 cr Engaging the Global Community		1 cr PH126L General Physics Laboratory II	
	1 cr Creative Arts Requirement		3 cr Foreign Language Requirement	
3 cr TRS Course	3 cr TRS Course		3 cr PLKR course	
3 <sup>rd</sup> yr				
Fall	18 cr total	Spring	19 cr total*	
3 cr CH361 Intro	duction to Physical	1 0	ergraduate Research	
	Chemistry		0 cr CH478B Chemistry Seminar	
2 cr CH367 Physi	2 cr CH367 Physical Chemistry Laboratory I		3 cr EC101/201	
3 cr CH441 Instru	3 cr CH441 Instrumental Analysis		3 cr PLVS course	
2 cr CH443 Instru	2 cr CH443 Instrumental Analysis Laboratory		6 cr Linked Pair of Courses	
0 cr CH478A Ch	0 cr CH478A Chemistry Seminar		3 cr TRS course	
2 cr CH399A Un	2 cr CH399A Undergraduate Research		3 cr PS100 (ISJ)	
3 cr Introduction	to Humanities			
3 cr Introduction to Social Sciences				
Total of 105 credits				
15 cr Transferred back to JCU from Partner School				
Chemistry	3 cr total	Other	12 cr total	
<b>Required by partner school</b> <i>Required by JCU major</i> Elective or required by JCU core				

In general, timing of all core classes indicated here can be changed. However EN125 must be taken prior to enrolling in a linked pair of courses.

\*Going beyond 18 credits in a semester incurs a fee per credit hour.