

Bachelor of Science Degree in Chemistry, College of Science Biochemistry Specialization

<i>University Core Curriculum Requirements</i> ¹	41
<i>College of Science Academic Requirements</i>	6
Biological Sciences – six hours (not UCC courses) ^{1,2}	
Mathematics – completed with the Chemistry major	
Physical Sciences – completed with the Chemistry major	
Supportive Skills – a minimum of six hours from two subject areas:	
Computer Science 201 or 202; English 290, 291 or 391; Mathematics 282 or 483	
<i>Requirements for Major in Chemistry</i> ¹	63
Introductory: Chemistry 200 ¹ , 201 ¹ , 210, 211	(3) + 7
Foundation: Chemistry 330, 340, 341, 350 ² , 351, 360, 361, 411, 410	24
Mathematics 150 ^{1,3} , 250 and either 221, 251, 305 or 483 ⁴	(3) + 8
Physics 205a,b; 255a,b	8
Chemistry 442, 443, 452, 453	10
Biochemistry Electives	6
Select at least six hours at 300- to 400-level in two courses selected from:	
Biology 305, 306; Chemistry 434, 444, 451 ² , 456, 460 with 463;	
Microbiology 301, 302, 425, 460; Physiology 310 ¹ , 401, 410, 420, 430;	
Plant Biology 320, 419, 427; Zoology 409 or 418.	
<i>Electives</i>	10
Total	120

¹A total of nine hours of biological science, mathematics, and physical science course work are accounted for in the 41-hour University Core Curriculum requirement. An additional two hours of human health are accounted for if students choose Physiology 310 as part of the *Biochemistry Specialization*.

²Three hours of biological sciences are completed with biological chemistry or biochemistry. Chemistry 451a may substitute for Chemistry 350, if a student continues with Chemistry 451b.

³Prerequisite is Mathematics 111 or 108 and 109. The elective hours are decreased by three to six hours for students who place into a course lower than calculus.

⁴Three hours of supportive skills are accounted for in the College of Science requirement and elective hours may increase by two hours if students choose Mathematics 483.

Biochemistry Specialization Curricular Guide

Chemistry B.S. for Pre-Professionals with ACS Certificate

FIRST YEAR	FALL	SPRING
CHEM 200/201, 210/211 General Chemistry	5	5
BIOL 200a, 200b General Biology	4	4
MATH 109, 150 Trig & Calculus I	3	4
ENGL 101 Composition	-	3
UCOL 101s Scientific Inquiry	3	-
CI 199 Library Info	1	-
<i>Total</i>	16	16

SECOND YEAR	FALL	SPRING
CHEM 330 Quantitative Analysis	5	-
CHEM 350/351 Biochemistry	-	5
CHEM 340/341, 442/443 Organic Chemistry	5	5
MATH 250 Calculus II	4	-
ENGL 102 Composition & PHIL 105 Logic	3	3
PHSL 301 Anatomy	-	4
<i>Total</i>	17	17

THIRD YEAR	FALL	SPRING
CHEM 360/361 Physical Chemistry	4	-
CHEM 452, 453 Advanced Biochemistry	3	2
BIOL 305 Genetics & Physiology 310	-	8
PHYS 205a,b 255a,b University Physics	4	4
Speech 101 & ENGL 290 Writing	3	3
HCP 105 Terminology & SCI 201 Career	3	-
<i>Total</i>	17	17

FOURTH YEAR	FALL	SPRING
CHEM 410/411 Inorganic Chemistry	-	5
CHEM 490, 396 Research	2	1
MATH 483 Statistics	4	-
Microbiology 301 & Sociology 108	4	3
UCC Fine Arts & Multicultural	3	3
Psychology 102 & UCC Humanities	3	3
<i>Total</i>	16	15