

## Required Curriculum

### Chemistry Major with the Pre-Professional Option

This option is designed for students interested in medical, dental, optometry, or veterinary professional school, but who wish to have an alternative career path to careers in industry, law, government, journalism, business, etc., that would benefit from a strong background in the physical sciences and mathematics. This option also provides excellent preparation for graduate study in biochemistry, biotechnology, and molecular biology.

<b>B.S. in Chemistry, Pre-Professional Option</b>		<b>Credits</b>	
<b>First Year</b>		<b>F</b>	<b>S</b>
Biol. 150	General Biology	3	
Biol. 150L	General Biology Laboratory	1	
Chem 150, 151	Principles of Chemistry I, II	3	3
Chem 160, 161	Principles of Chemistry I, II Labs	1	1
Engl. 120	College Composition	3	
Comm. 110	Fundamentals of Public Speaking		3
Math 165, 166	Calculus I, II	4	4
Gen. Ed.	Wellness, General Ed. Electives		5
		<b>15</b>	<b>16</b>
<b>Second Year</b>			
Chem 341, 342	Organic Chemistry I, II	3	3
Chem 353, 354	Organic Chemistry I, II Majors Labs	1	2
Math 128	Introduction to Linear Algebra	1	
Math 259**	Calculus III	3	
Math 266 <b>or</b>	Intro. To Differential Eq., or		3
Stat 330	Intro. Statistics		
Phys 251, 252	University Physics I, II	4	4
Phys 251L, 252L	University Physics Laboratory I, II	1	1
Gen. Ed., Electives*	General Ed. Elective	3	3
		<b>16</b>	<b>16</b>
<b>Third Year</b>			
Chem 431, 431L	Analytical Chemistry I and Laboratory	5	
Chem 364, 365	Physical Chemistry I, II	3	3
Chem 380	Chemistry Junior Seminar		1
Micr. 350, 350L	Microbiology I and Laboratory	4	
Engl. 324	Writing in the Sciences		3
Gen. Ed. Electives*	General Education Electives	3	6
		<b>15</b>	<b>13</b>
<b>Fourth Year</b>			
Chem 425	Inorganic Chemistry	3	
Bioc 460, 460L	Found. of Biochem. I & Lab	4	
Biol. 220, 221	Human Anatomy and Physiology	3	3
Biol. 220L, 221L	Human Anatomy Laboratory	1	1
Chem 491	Chemistry Senior Seminar		2
Electives	Electives	3	3
Gen. Ed. Electives*	General Education and other Electives		7
		<b>14</b>	<b>16</b>
<b>SAMPLE CURRICULUM TOTAL</b>			<b>121</b>

\*Electives must include 18 credits in humanities and social sciences; six of these must be in humanities/fine arts, and six in social sciences. In addition, three credits must have a global perspective and three must be in the cultural diversity category.

\*\*MATH 265 may be substituted for MATH 259.