



Northwest Missouri State University  
 Department of Natural Sciences  
 Chemistry: General Emphasis – Comprehensive Major – No Minor Required  
 Bachelor of Science

First Year					
First Term			Second Term		
17-117	Precalculus**	5	17-120	Calculus I	4
04-102/103 04-106/107	General Biology & Lab OR Principles of Biology & Lab	4	10-112	Composition II: Writing as Engagement	3
77-101	IR: University Seminar	1		Civics - History	3
10-111	Composition I: Academic Literacies	3	24-116/117	General Chemistry II & Lab	5
24-114/115	General Chemistry I & Lab*	4			
<b>Total Hours</b>		<b>17</b>	<b>Total Hours</b>		<b>15</b>
First Year – Summer Term					
24-135	Laboratory Safety	2			
<b>Total Hours</b>		<b>2</b>			
Second Year					
First Term			Second Term		
24-342/343	Organic Chemistry I & Lab	4	24-344/345	Organic Chemistry II & Lab	4
17-121	Calculus II	5	25-230/231	Fund of Classical Physics II & Lab	5
25-120/121	Fund of Classical Physics I & Lab	5	17-114	General Statistics	3
29-102	Fundamentals of Oral Communication	3		Elective	3
<b>Total Hours</b>		<b>17</b>	<b>Total Hours</b>		<b>15</b>
Third Year					
First Term			Second Term		
	Social and Behavioral Sciences (1 of 2)	3		Humanities (1 of 2)	3
24-532/523	Physical Chemistry I & Lab	4	25-534/535	Physical Chemistry II & Lab	4
	Fine Arts	3	24-522/523 24-552/555	Instrumental Analysis & Lab OR Advanced Inorganic & Lab	4
24-322/323	Analytical Chemistry & Lab	4		Chemistry Elective (300+)	4
<b>Total Hours</b>		<b>14</b>	<b>Total Hours</b>		<b>15</b>
Fourth Year					
First Term			Second Term		
34-102	Introduction to Am. Gov't & Politics	3	10-220	Intro to Literature	3
24-592	Chemistry Seminar	1		Humanities (2 of 2)	3
	IR: Digital Literacy	3		Social and Behavioral Sciences (2 of 2)	3
	Elective (300+)	3		Chemistry Elective (300+)	4
	Chemistry Elective (300+)	4			
<b>Total Hours</b>		<b>14</b>	<b>Total Hours</b>		<b>13</b>

\*Enrolling in Chemistry 112/113 should be considered prior to Chemistry 114/115 if a rigorous high school Chemistry background is absent. Similar considerations are warranted proficiency in high school Algebra II.

\*\*Students with a 27 or higher mathematics ACT sub score are eligible to begin with Calculus I. Students with mathematics ACT sub scores between 22 and 26 with a high-school GPA of 3.9 or higher are eligible to begin with Calculus I. Students not meeting these criteria must first complete either 17-117 or 17-118 and 17-119.