

[Please see the Courses section of this catalog for complete course descriptions.](#)

<b>First Year – 31-32 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
CHEM 1110/1110L: <i>General Chemistry I/Lab</i>	4	CHEM 1120/1120L: <i>General Chemistry II/Lab</i>	4
BIOL 1110/1110L: <i>Principles of Biology I/Lab</i>	4	BIOL 1130: <i>Principles of Biology III</i>	4
MATH 1950: <i>Calculus w Analytic Geometry I (Math)</i>	4	MATH 1960: <i>Calculus w Analytic Geometry II</i>	4
ENGL 1010 or 1011 (Rhetoric and Writing I)	3-4	ENGL 1020 or HIST 2100 (Rhetoric and Writing II)	3
STEM 1030: <i>Step One/Two: Inquiry-Based Math &amp; Science Teaching</i>	2		
	17-18		15
<b>Second Year – 29 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
STEM 2010: <i>Knowing and Learning</i>	3	STEM 2020: <i>Classroom Interactions</i>	3
CHEM 3010/3010L: <i>Organic Chemistry I/Lab</i>	4	CHEM 3020/3020L: <i>Organic Chemistry II/Lab</i>	4
PHYS 1030/1030L: <i>Gen Phys: Mechanics &amp; Heat/Lab</i> or 2300/2300L: <i>Princ. of Phys: Mechanics &amp; Heat/Lab (Natural Science)</i>	4	PHYS 1040/1040L: <i>Gen Phys: Eletromagnetism &amp; Optics/Lab</i> or 2310/2310L: <i>Princ. of Phys: Electricity &amp; Magnetism/Lab (Natural Science)</i>	4
MATH 2100: <i>Introductory Stats</i> or 3100: <i>Applied Stats (Statistics)</i>	3	CHEM 3210/3210L: <i>Quantitative Analysis/Lab</i>	4
	14		15
<b>Third Year – 31 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
STEM 3010: <i>Perspectives on Science &amp; Math</i>	3	STEM 3020: <i>Research Methods in Science</i>	3
CHEM 3310: <i>Inorganic Chemistry</i>	3	CHEM 4510: <i>Biochemistry</i>	3
CHEM 3820: <i>Chemical Literature</i>	1	Behavioral and Social Science	3
CHEM 2810: <i>Scientific Communication</i>	2	FAH: <i>Literature</i>	3
CHEM 3710/3710L: <i>Physical Chemistry I/Lab</i>	4	FAH: <i>Thought, Values &amp; Beliefs</i>	3
FAH: <i>Historical Understanding</i>	3		
	16		15
<b>Fourth Year – 30 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
STEM 4010: <i>Project-Based Instruction</i>	3	STEM 4020: <i>Apprentice Teaching</i>	6
CHEM 4030: <i>Advanced Organic Chem</i> or 4230: <i>Instrumental Analysis*</i>	4	CHEM 3720: <i>Physical Chemistry II*</i> , 4220: <i>Methods of Environmental Analysis</i> , or 4997r: <i>Research</i>	4
CHEM 4830r: <i>Seminar</i>	1	Non-Western Culture	3
EDUC 4170: <i>Technology &amp; Learning</i>	3	FAH: <i>Visual and Performing Arts</i>	3
Behavioral and Social Science	3		
	14		16

\*Cannot take both CHEM 4230 and CHEM 3720

<b>Completed:</b>			
<b>Graduation Requirements:</b>	<b>Hrs</b>	<b>Degree Requirements:</b>	<b>Hrs</b>
121 Total Hours		27-28 General Education Hours	
39 Upper Division (3000-4000) Hours		95 Program (Major) Hours	
30 Hours at UTC		Minor ( <i>Not Required</i> )	
60 Hours at 4-year Institution		Elective Hours ( <i>Not Required</i> )	
		Foreign Language ( <i>Not Required</i> )	