

## **Chemistry (A4201) Curriculum Map (Fall 2012 & After)**

The curriculum map provides insight and direction for students to graduate in four years. With the assistance of a student's academic advisor and department chairperson, the map provides a guide between what should be taken term by term and where the student is with respect to grades received in courses. Milestones are noted on the map and serve as hints regarding what courses and/or activities must be completed that term. Please note that every term does not have a milestone. Prerequisites are also noted providing the student and his/her advisor a true indication of where the student falls within the curriculum. In this particular document, key prerequisites are listed that can prevent a student from moving along in the curriculum if not met. Also, note that the Department of Chemistry only considers the grade of "C" or higher as meeting the prerequisite. A grade of "C" or better is required in each course in chemistry taken for credit for a major or a minor in chemistry.

Students completing any of the chemistry programs will be prepared for employment in the corporate or government sectors, as well as studies in professional or graduate school. Students in this major must be comfortable with problem-solving, thinking critically and be extremely motivated.

<b>Chemistry Curriculum Guide (A4201)</b>		<b>Milestone and/or Prerequisite</b>
<b>Term 1</b>	<b>Credits</b>	<b>Term 1 Milestones and/or Prerequisites</b>
CHM 1045 General Chemistry I	3	CHM 1025 or Exam Scores
CHM1045L General Chemistry I Lab	1	CHM 1025 or Exam Scores
MAC 2311 Calculus I	4	Student must complete CHM 1045 and Lab
BSC 1010 Biological Science w/Lab	4	
ENC 1101 Freshman Communication Skills I	3	
CHM 1901 Fresh Special Topics I	1	Must be enrolled in CHM 1025, 1045 or 1046 ( <i>prereq</i> )
<i>Total Term 1 Credits</i>	16	
<b>Term 2</b>	<b>Credits</b>	<b>Term 2 Milestones and/or Prerequisites</b>
CHM 1046 General Chemistry II	3	Student must complete CHM 1046 and Lab
CHM1046L General Chemistry II Lab	1	
MAC 2312 Calculus II	4	
BSC 1011 Biological Science w/Lab	4	
ENC 1102 Freshman Communication Skills II	3	
CHM 1902 Freshman Special Topics II	1	Must be enrolled in CHM 1025, 1045 or 1046 ( <i>prereq</i> )
<i>Total Term 2 Credits</i>	16	
<b>Term 3</b>	<b>Credits</b>	<b>Term 3 Milestones and/or Prerequisites</b>
CHM 2210 Organic Chemistry I	3	Student must complete CHM 2210 and Lab
CHM 2210L Organic Chemistry I Lab	1	Student must complete CHM 3120 and Lab
CHM 3120 Analytical Chemistry w/Lab ( <i>fall only</i> )	4	
PHY 2048 General Physics I w/Lab	5	
Approved Humanities Electives	3	
CHM 2903 Sophomore Special Topic I	1	Must be enrolled in CHM 2210 or 2211 ( <i>prereq</i> )
<i>Total Term 3 Credits</i>	17	
<b>Term 4</b>	<b>Credits</b>	<b>Term 4 Milestones and/or Prerequisites</b>
CHM 2211 Organic Chemistry II	3	Student must complete CHM 2211 and Lab
CHM 2211L Organic Chemistry II Lab	1	
CHM 3610 Intermediate Inorganic Chemistry ( <i>spring only</i> )	3	
PHY 2049 General Physics w/Lab	5	
CHM 2904 Sophomore Special Topics II	1	Must be enrolled in CHM 2210 or 2211 ( <i>prereq</i> )
<i>Total Term 4 Credits</i>	13	

<b>Term 5</b>	<b>Credits</b>	<b>Term 5 Milestones and/or Prerequisites</b>
AMH 2091 Intro to African-American History	3	Student must complete BCH 4033 and Lab
CHM 4410 Physical Chemistry I	3	
CHM 4410L Physical Chemistry I Lab	1	
BCH 4033 Biochemistry I	3	
BCH 4033L Biochemistry I Lab	1	
Approved Computer Science Elective	3	
CHM 3905 Junior Special Topics I	1	Must be enrolled in CHM 4410 or 4411 ( <i>prereq</i> )
<i>Total Term 5 Credits</i>	15	
<b>Term 6</b>	<b>Credits</b>	<b>Term 6 Milestones and/or Prerequisites</b>
CHM 4411 Physical Chemistry II	3	Student must complete CHM 4411 and Lab
CHM 4411L Physical Chemistry II Lab	1	
BCH 4034 Biochemistry II	3	
BCH 4034L Biochemistry II Lab	1	
Approved Humanities Electives	3	
Approved Social Science Electives	3	
CHM 3906 Junior Special Topics II	1	Must be enrolled in CHM 4410 or 4411
<i>Total Term 6 Credits</i>	15	
<b>Term 7</b>	<b>Credits</b>	<b>Term 7 Milestones and/or Prerequisites</b>
BCH 4042 Proteins	3	
CHM 4900 Short Courses in Chemistry	3	Department Consent required
Approved Chemistry Electives	3	
Science Electives	4	
CHM 4930 Chemistry Seminar	1	Department Consent required
<i>Total Term 7 Credits</i>	14	
<b>Term 8</b>	<b>Credits</b>	<b>Term 8 Milestones and/or Prerequisites</b>
CHM 4220 Advanced Organic Chemistry	3	Apply for graduation in the 1 <sup>st</sup> 2 weeks
CHM 4130 Instrumental Analysis	3	
CHM 4130L Instrumental Analysis Lab	1	
Science Electives	7	
<i>Total Term 8 Credits</i>	14	
<b>Total Credits</b>	<b>120</b>	