

Chemistry (grid only)

Course Sequence:

Semester 1

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
CHEM 121 - College Chemistry I *	CHEM 110 with a grade of "C" or better and FNMT 118 or MATH 118.	4 credits	Scientific Reasoning
MATH 171 - Calculus I	MATH 162 or higher with a grade of "C" or better or placement in MATH 171 or higher	4 credits	Quantitative Reasoning
ENGL 101 - English Composition I		3 credits	Writing/Research/Info Lit 1
CIS 103 - Computer Applications & Concepts		3 credits	Technological Competency

Semester 2

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
CHEM 122 - College Chemistry II	CHEM 121 with a grade of "C" or better	4 credits	
MATH 172 - Calculus II or Natural Science with Lab Elective ¹	MATH 171 or higher with grade of "C" or better, or placement in MATH 172 or higher	4 credits	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3 credits	Writing/Research/Info Lit 2
SOC 101 - Introduction to Sociology or HIST 121 - World		3 credits	Cultural Analysis and Interpretation

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
History: The Distant Past or HIST 122 - World History: The Recent Past or HUM 101 - Cultural Traditions: Ancient to the 13th Century			

Semester 3

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
CHEM 221 - Organic Chemistry I	CHEM 122 with a grade of "C" or better	5 credits	
CHEM 214 - Chemical Analysis	CHEM 122 with a grade of "C" or better MATH 162 with a grade of "C" or better	5 credits	
PHYS 140 - Mechanics, Heat and Sound*	MATH 171	5 credits	

Semester 4

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
CHEM 222 - Organic Chemistry II	CHEM 221 with a grade of "C" or better	5 credits	
PHYS 241 - Electricity, Magnetism and Light	PHYS 140 and MATH 172 or dept. head approval	5 credits	
BIOL 123 - Principles of Biology I or BIOL 281 - Biochemistry I or BTT 101 - Biomedical Technician Training Practicum CIS 106 - Introduction to Computer	BIOL 123: CHEM 121 or CHEM 110 with a grade of "C" or better and high school biology or permission of the department head	3 credits	

Programming	BIOL 281: CHEM 221 , which may be taken concurrently, and BIOL 123 with a grade of "C" or better BTT 101: Permission of the Biomedical Technician Training Academic Coordinator and completion of the Orientation to Biomedical Technology		
ENGL 115 - Public Speaking	ENGL 101 , which may be taken concurrently	3 credits	Oral Communication/ Creative Expression

Minimum Credits Needed to Graduate: 60

* It is suggested that students who have never had a physics course take PHYS 111 before PHYS 140.

Courses and Completion Sequence

Semester 1

Course Number and Name	Credits	Advisory Notes
CHEM 121 - College Chemistry I	4 credits	Prerequisite: CHEM 110 with a grade of "C" or better or department head approval
MATH 171 - Calculus I	4 credits	Prerequisite: MATH 162 with a grade of "C" or better or department head approval
ENGL 101 - English Composition I	3 credits	ENGL 101 is a prerequisite for ENGL 102 and ENGL 115
CIS 103 - Computer Applications & Concepts	3 credits	Prerequisite: ENGL 101 ready

Semester 2

Course Number and Name	Credits	Advisory Notes
CHEM 122 - College Chemistry II	4 credits	Prerequisite: CHEM 121 with a grade of "C" or better
MATH 172 - Calculus II	4 credits	Prerequisite: MATH 171 with a grade of "C" or better
ENGL 102 - The Research Paper	3 credits	Prerequisite: ENGL 101 with a grade of "C" or better
SOC 101 - Introduction to Sociology or HIST 121 - World History: The Distant Past or HIST 122 - World History: The Recent Past or HUM 101 - Cultural Traditions: Ancient to the 13th Century	3 credits	

Semester 3

Course Number and Name	Credits	Advisory Notes
CHEM 221 - Organic Chemistry I	5 credits	Prerequisite: CHEM 122 with a grade of "C" or better
CHEM 214 - Chemical Analysis	5 credits	CHEM 214 is offered only during the fall semester. Prerequisites: CHEM 122 and MATH 162 with a grade of "C" or better.
PHYS 140 - Mechanics, Heat and Sound	5 credits	MATH 171 with a grade of "C" or better. It is suggested that students who have never had a physics course take PHYS 111 before PHYS 140.

Semester 4

Course Number and Name	Credits	Advisory Notes	Course Type
CHEM 222 - Organic Chemistry II	5 credits	Prerequisite: CHEM 221 with a grade of "C" or better	Major Course
PHYS 241 - Electricity, Magnetism and Light	5 credits	Prerequisite: PHYS 140 with a grade of "C" or better, and MATH 172 with a grade of "C" or better or Dept. Head approval	Major Course
BIOL 123 - Principles of Biology I or BIOL 281 - Biochemistry I or BTT 101 - Biomedical Technician Training Practicum or CIS 106 - Introduction to Computer Programming	3 credits	Prerequisite for BIOL 123: CHEM 121 or CHEM 110 with a "C" or better and high school biology or permission of the department head. Prerequisite for BIOL 281: CHEM 221, which may be taken concurrently, and BIOL 123 with a "C" or better. Prerequisite for BTT 101: Permission of the Biomedical Technician Training Academic Coordinator and completion of the Orientation to Biomedical Technology	Directed Elective
ENGL 115 - Public Speaking	3 credits each	Prerequisite: ENGL 101, which may be taken concurrently	