

Bachelor of Science Degree in Chemistry
Pre-Medical and Pre-Dental Track
Four Year Degree Plan – Total Credits: 120

First Year	First Semester		Second Semester	
	CHEM 111 General Chemistry I Lab	1	CHEM 112 General Chemistry II Lab	1
	CHEM 131 General Chemistry I Lec	3	CHEM 132 General Chemistry II Lec	3
	MATH 133 College Algebra	3	MATH 134 Plane Trigonometry	3
	BIOL 111 Biological Science I Lab	1	BIOL 112 Biological Science II Lab	1
	BIOL 131 Biological Science I Lec	3	BIOL 132 Biological Science II Lec	3
	ENG 131 Freshman English I	3	ENG 132 Freshman English II	3
		14 hrs		14 hrs

Second Year	Third Semester		Fourth Semester	
	CHEM 211 Organic Chemistry I Lab	1	CHEM 212 Organic Chemistry II Lab	1
	CHEM 231 Organic Chemistry I Lec	3	CHEM 232 Organic Chemistry II Lec	3
	MATH 241 Calculus & Analytic Geometry I	4	MATH 242 Calculus & Analytic Geometry II	4
	HIST 231 Social & Political History of the United States to 1877	3	MUSI 131 or Art 131 Introduction to Music or Drawing & Composition I	3
	CS 116 Introduction to Computer Science I	3	CS 117 Introduction to Computer Science II	3
	ENG 2xx (Any 200 level course)	3	HIST 232 Social & Political History of the United States since 1877	3
		17		17 hrs

Third Year	Fifth Semester		Sixth Semester	
	CHEM 322 Quantitative Analysis Lab	2	CHEM 445 Biochemistry	4
	CHEM 332 Quantitative Analysis Lec	3	POLS 232 American Political Systems II	3
	POLS 231 American Political Systems I	3	PHYS 238 College Physics II Lec	3
	PHYS 213 College Physics I Lab	1	PHYS 214 College Physics II Lab	1
	PHYS 237 College Physics I Lec.	3	BIOL 231 Cell Biology	3
	PSY 131 or SOC 157 Gen. Psy or Intro Soc.	3	CHEM 499 Seminar	1
		15 hrs		15 hrs

Fourth Year	Seventh Semester		Eighth Semester	
	CHEM 411 Physical Chemistry I Lab	1	CHEM 412 Physical Chemistry II Lab	1
	CHEM 431 Physical Chemistry I Lec	3	CHEM 432 Physical Chemistry II Lec	3
	CHEM 450 Inorganic Chemistry I	3	CHEM 451 Inorganic Chemistry II	3
	SC 135 or 136 Business & Professional Communication or Public Address	3	CHEM 453 Instrumental Analysis	3
	BIOL 460 Biostatistics	3	BIOL 245 Human Anatomy & Physiology	4
		13 hrs		14 hrs

TWO YEAR COURSE ROTATION SCHEDULE

X indicates a course shall be offered

COURSE NUMBER	COURSE NAME	SCH	FALL EVEN YEAR	SPRING ODD YEAR	SUM ODD YEAR	FALL ODD YEAR	SPRING EVEN YEAR	SUM EVEN YEAR	PREREQUISITES	COREQUISITE
Chem 111	Gen. Chem. Lab I	1	X	X	X	X	X	X		
Chem 112	Gen. Chem. Lab II	1	X	X	X	X	X	X	Chem 111	
Chem 131	Gen. Chem. I	3	X	X	X	X	X	X		Math 133 or Math 136
Chem 132	Gen. Chem. II	3	X	X	X	X	X	X	Chem 131	Math 133 or Math 136
Chem 211	Organic Chem. Lab I	1	X	X	X	X	X	X	Chem 111, 112	Chem 231
Chem 212	Organic Chem. Lab II	1	X	X	X	X	X	X	Chem 211	Chem 232
Chem 231	Organic Chem I	3	X	X	X	X	X	X	Chem 132	
Chem 232	Organic Chem. II	3	X	X	X	X	X	X	Chem 231	
Chem 322	Quan. Analysis Lab	2	X	X		X	X		Chem 111, 112	Chem 332
Chem 332	Quan. Analysis	3	X	X		X	X		Chem 132	
Chem 343	Biochemistry	4	X			X			Chem 231	
Chem 411	Physical Chem. Lab I	1	X			X			CS 116 Chem 322	CS 117, Chem 431, Math 241
Chem 412	Physical Chem. Lab II	1		X					CS 117 CHEM 411	Chem 432
Chem 431	Physical Chem. I	3	X			X			CHEM 232,332, *Phys 251	Math 241
Chem 432	Physical Chem. II	3		X			X		Chem 431	Math 242
Chem 445	Biochemistry	4		X			X		Chem 232	
Chem 450	Inorganic Chem I	3	X			X			Math 242 (Consent)	Chem 431
Chem 451	Inorganic Chem II	3		X		X			Chem 450 (Consent of Chair)	
Chem 453	Instrumental Methods	3		X		X			Chem 322, 332	Chem 411, 431
Chem 454	Research	3	X	X	X	X	X	X	Chem 132,232, Chem 332, 432	
Chem 476	Organic Mechanisms	3	X						Chem 232	
Chem 477	Environmental Chemistry	3		X					Chem 232	
Chem 478	Polymer Chemistry	3				X			Chem 232	
Chem 479	Biological Inorganic Chemistry	3					X		Chem 445, 232	
Chem 499	Seminar	1	X	X		X	X		Chem 232	

COURSE NUMBER	COURSE NAME	SCH	FALL EVEN YEAR	SPRING ODD YEAR	SUM ODD YEAR	FALL ODD YEAR	SPRING EVEN YEAR	SUM EVEN YEAR	PREREQUISITES	COREQUISITE
			*Physics 237, 238 required for pre-med, pre-dental track							
			* Physics 251, 252 required for ACS track							