

B.S. in Chemistry: Concentration in Environmental Chemistry

Effective Fall, 2018

Chemistry (CHEM) (49 credits)

General Chemistry lecture and lab	<input type="checkbox"/> 211 (3)	<input type="checkbox"/> 213 (1)	<input type="checkbox"/> 212 (3)	<input type="checkbox"/> 214 (1)
Organic Chemistry lecture and lab	<input type="checkbox"/> 313 (3)	<input type="checkbox"/> 315 (2)	<input type="checkbox"/> 314 (3)	<input type="checkbox"/> 318 (2)
Quantitative Chemical Analysis	<input type="checkbox"/> 321 (4)			
Physical Chemistry lecture and lab	<input type="checkbox"/> 331 (3)	<input type="checkbox"/> 336 (2)	<input type="checkbox"/> 332 (3)	<input type="checkbox"/> 337 (2)
Prop. and Bonding of Inorganic Compounds	<input type="checkbox"/> 441 (3)	-or- Bioinorganic Chemistry		<input type="checkbox"/> 446(3)
Instrumental Methods of Chemical Analysis and Lab	<input type="checkbox"/> 422 (3)	<input type="checkbox"/> 423 (2)		
Aquatic Environmental Chemistry	<input type="checkbox"/> 427 (3) [<i>Spring, even years</i>]			
Atmospheric Chemistry	<input type="checkbox"/> 438 (3)			
CHEM Elective (lecture or research course)	<input type="checkbox"/> ____ (3)			

Physics (PHYS) (8 credits)

University Physics lecture and lab	<input type="checkbox"/> PHYS 160 (3)	<input type="checkbox"/> PHYS 161 (1)	<input type="checkbox"/> PHYS 260 (3)	<input type="checkbox"/> PHYS 261 (1)
-or-				
College Physics lecture and lab	<input type="checkbox"/> PHYS 243 (3)	<input type="checkbox"/> PHYS 244 (1)	<input type="checkbox"/> PHYS 245 (3)	<input type="checkbox"/> PHYS 246 (1)

Mathematics (MATH) (11 credits)

Analytic Geometry and Calculus	<input type="checkbox"/> 113 (4) (-or- 123-124)	<input type="checkbox"/> 114 (4)	<input type="checkbox"/> 213 -or- STAT 250 (3)
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Science Core Courses (11 credits)

Introductory Geology	<input type="checkbox"/> GEOL 101 (4)		
Soil Geology	<input type="checkbox"/> GEOL 306 (3)		
Environmental Biology: Molecules and Cells	<input type="checkbox"/> EVPP 210 (4)	-or- Cell Structure and Function	BIOL 213 (4)

Science Electives (6-8 credits)

Chemical Oceanography	<input type="checkbox"/> CHEM 458 (3)	-or- Intro. to Oceanography	BIOL/EVPP/GEOL 309 (3)
Envir. Sci.: Biological Diversity and Ecosystems	<input type="checkbox"/> EVPP 301(4)		
Principles of Environmental Toxicology	<input type="checkbox"/> EVPP 445 (3)		
Environmental Geology	<input type="checkbox"/> GEOL 305 (3)		
Hydrogeology	<input type="checkbox"/> GEOL 313 (3)		
Biology of Microorganisms	<input type="checkbox"/> BIOL 305/306 (4)	-or- Envir. Microbiology Essentials	EVPP 305/306 (4)
	[<i>Pre-requisite BIOL213</i>]		[<i>Pre-requisite EVPP 210</i>]
Global Environmental Hazards	<input type="checkbox"/> GGS 302 (3) [<i>Pre-requisite GGS 121</i>]		

Mason Core (30 credits) (approved courses are listed in the University Catalog)

Written Communication	<input type="checkbox"/> ENGH 101 (3)	-and-	<input type="checkbox"/> ENGH 302 (3)
Oral Communication	<input type="checkbox"/> COMM 100	-or-	COMM 101 (3)
Western Civilization/World History	<input type="checkbox"/> HIST 100	-or-	HIST 125 (3)
Information Technology	<input type="checkbox"/> ____ (3)		
Literature	<input type="checkbox"/> ____ (3)		
Fine Arts	<input type="checkbox"/> ____ (3)		
Social and Behavioral Sciences	<input type="checkbox"/> ____ (3)		
Global Understanding	<input type="checkbox"/> ____ (3)		
Synthesis	<input type="checkbox"/> ____ (3)		

Electives (3-5 credits)

From any area	<input type="checkbox"/> (5)
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TOTAL CREDITS REQUIRED: 120 Minimum (of which 45 must be upper-division \geq 300 level); overall GPA \geq 2.00; major requirements GPA \geq 2.30; maximum of two courses of CHEM with a "D" grade. **All CHEM prerequisite courses require a grade of C or better.**