CHEMISTRY (AMERICAN CHEMICAL SOCIETY CERTIFIED), B.S.

Requirements for a Major in Chemistry (American Chemistry Society Certified)

Code	Title	Hours
Forty-seven or forty-nine semester hours including the following:		
Required Courses		
CHE 1301 & CHE 1101	Basic Principles of Modern Chemistry I and General Chemistry Laboratory I	4
CHE 1302 & CHE 1102	Basic Principles of Modern Chemistry II and General Chemistry Laboratory II	4
CHE 2416	Laboratory Measurements and Techniques	4
CHE 3331	Organic Chemistry I	3
CHE 3332	Organic Chemistry II	3
CHE 3238	Organic Chemistry Laboratory	2
CHE 4001	Exit Examination	0
CHE 4227	Physical Chemistry Laboratory I	2
CHE 4228	Physical Chemistry Laboratory II	2
CHE 4151	Undergraduate Seminar I	1
CHE 4302	Modern Inorganic Chemistry I	3
CHE 4316	Instrumental Analysis	3
CHE 4321	Physical Chemistry I	3
CHE 4322	Physical Chemistry II	3
CHE 4341	General Biochemistry	3
Concentrations		
Select one of the following concentrations:		7-9
Chemistry Concentration		
CHE 4307	Modern Inorganic Chemistry II	
Select six semester hours from the following:		
CHE 4207	Preparative Inorganic Chemistry	
CHE 4207	Preparative Inorganic Chemistry	
CHE 4237	Advanced Organic Laboratory	
CHE 4199 & CHE 4V98	Senior Thesis and Senior Research Problems	
Biochemistry Concentration [1]		
CHE 4141	Modern Biochemistry Laboratory	
CHE 4142	Advanced Biochemistry Laboratory	
CHE 4342	Topics in Human Biochemistry	
Select two semester hours from the following:		
CHE 4217	Instrumental Analysis Laboratory	
CHE 4237	Advanced Organic Laboratory	
CHE 4207	Preparative Inorganic Chemistry	
CHE 4199 & CHE 4V98	Senior Thesis and Senior Research Problems	
Subtotal		**47-49**
Required Courses in Other Fields		
PHY 1420 & PHY 1430	General Physics I and General Physics II	8
MTH 1321	Calculus I	3
MTH 1322	Calculus II	3
MTH 2321	Calculus III	3
Select one of the following:		3
MTH 3325	Ordinary Differential Equations [1]	
STA 2381	Introductory Statistical Methods	
STA 3381	Probability and Statistics	
For students pursuing a concentration in Biochemistry, the following is required: [2]		8
BIO 1305 & BIO 1105	Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory	
or BIO 1405	Investigations of Modern Biology Concepts I	
BIO 1306 & BIO 1106	Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory	
or BIO 1406	Investigations of Modern Biology Concepts II	

1. MTH 3325 Ordinary Differential Equations is recommended unless the student is pre-health.
2. BIO 4306 Molecular Genetics and Genomics is recommended as a general elective.