

Section VI: Program Curriculum

Course Prefix and Number	Title	Credit Hours
General Education Required Courses		
CIS 1200 or CIS 1201	Computer Literacy	0-3
ENGL 1010 or ENGL 1010A or ENGL 1010D	English	3
ENGL 2010 or ENGL 2010A	English	3
LIB 1000 or LIB 1010	Information Literacy	0-1
	Mathematics	3-5
	American Institutions	3-6
	Life Sciences	3-4
	Physical Sciences	3-4
	Laboratory Science	1
	Fine Arts	3
	Literature / Humanities	3
	Social & Behavioral Sciences	3
	Exploration	3-5
	Global & Cultural Perspectives	0-3
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	Sub-Total	22
Chemistry Program Requirements		
MATH 1210	Calculus I	5
MATH 1220	Calculus II	5
BIOL 1610/15	Principles of Biology I/Lab	5
BIOL 1620/25	Principles of Biology II/Lab	5
PHYS 2210/15	College Physics I/Lab	5
PHYS 2220/25	College Physics II/Lab	5
	Sub-Total	30
Chemistry Core Requirements		
CHEM 1200 (or placement out of)*	Preparation for General Chemistry	(3)
CHEM 1210/15	General Chemistry I/Lab	5
CHEM 1220/25	General Chemistry II/Lab	5
CHEM 2310/15	Organic Chemistry I/Lab	5
CHEM 2320/25	Organic Chemistry II/Lab	5
CHEM 3000/05	Analytical Chemistry I/Lab	4
CHEM 3060/65	Physical Chemistry I/Lab	5
CHEM 3070/75	Physical Chemistry II/Lab	5
CHEM 3100	Inorganic Chemistry	4
CHEM 3300	Instrumental Analysis	4
CHEM 3510/15	Biochemistry I/Lab	4
CHEM 4910	Senior Seminar	1
	Sub-Total	43
Chemistry Elective Courses (core) (must choose two of the following)		
CHEM 3520/25	Biochemistry II/Lab	4
CHEM 4100	Advanced Inorganic Chemistry	3
CHEM 4000	Advanced Laboratory	3
	Sub-Total	6-7

Course Prefix and Number	Title	Credit Hours
Chemistry Elective Courses		
CHEM 4200	Environmental Chemistry	3
CHEM 4120	Bioinorganic Chemistry	3
CHEM 4310	Advanced Organic Chemistry I	3
CHEM 4320	Advanced Organic Chemistry II	3
CHEM 4520	Medicinal Chemistry	3
CHEM 4510	Chemistry of Materials	3
CHEM 4700	Special Topics in Chemistry	3-6
CHEM 4800	Independent Research	1-4
BIOL 3030	Molecular Genetics	4
BIOL 3150/55	Biostatistics and Lab	3
BIOL 4300/05	Molecular Biology/Lab	4
Sub-Total		18
Total Number of Credits		120

Program Schedule – Chemistry BS Degree (course sequence based on Spring 2018 Graduation)

Year 1 – Fall Semester - 14 hours	Year 1 – Spring Semester - 16 hours
CHEM 1210/15 – General Chemistry I/Lab (5) MATH 1210 – Calculus I (5) ENGLISH 1010 – Intro. to Writing(3) LIB 1000 – Information Literacy (1)	CHEM 1220/25 - General Chemistry II/Lab (5) MATH 1220 – Calculus II (5) ENGLISH 2100 – Technical Writing (3) CIS 1200 – Computer Literacy (3)
Year 2 – Fall Semester - 15 hours	Year 2 – Spring Semester - 15 hours
CHEM 2310/15 – Organic Chemistry I/Lab (5) BIOL 1610/15 – Principles of Biology I/Lab (5) PHYS 2210/15- College Physics I/Lab (5)	CHEM 2320/25 – Organic Chemistry II/Lab (5) BIOL 1620/25 – Principles of Biology II/Lab (5) PHYS 2220/25 – College Physics II/Lab (5)
Year 3 – Fall Semester - 14 hours	Year 3 – Spring Semester - 16 hours
CHEM 3000/05 – Analytical I/Lab (4) CHEM 3100 – Inorganic (4) CHEM 4310 – Advanced Organic Chemistry (3) ANTH 1000 – Introduction to Anthropology (3)	CHEM 3300 – Instrumental Analysis (4) CHEM 4510 – Materials Chemistry (3) CHEM 4100 – Advanced Inorganic (3) CIS computer literacy (3) ARTH 2710 – Art History I (3)
Year 4 – Fall Semester – 16 hours	Year 4 – Spring Semester –14 hours
CHEM 3060/65 – Physical Chemistry I/Lab (5) CHEM 3510/15 – Biochemistry I/Lab (4) Chemistry Elective (3) e.g. CHEM 4200 – Environmental Chemistry (3) Chemistry or General Elective (3) CHEM 4800R – Independent Research (1-3)	CHEM 3070/75 – Physical Chemistry II (5) CHEM 3520/25 – Biochemistry II/Lab (4) Chemistry Elective (3) e.g. CHEM 4700 – Special Topics in Chemistry (3) CHEM 4800R – Independent Research (1-3) CHEM 4910 – Senior Seminar (1)