

Bachelor of Science in Chemistry (Health Sciences Concentration) Four Year Plan

Freshman Year

Fall Semester

Course	Credits
CHM 121: Chemical Bonding	3
CHM 123: Laboratory IA - Chemical Systems	2
MAT 211: Calculus I	4
HIS 105: World History I	3
1 General Education/Required Course	3
	Total Credits: 15

Spring Semester

Course	Credits
CHM 122: Chemical Dynamics	3
CHM 124: Laboratory IIA – Exp. Quantitative Analysis	2
MAT 212: Calculus II	4
BIO 116: Principles of Biology II	4
HIS 106: World History II	3
	Total Credits: 16

Sophomore Year

Fall Semester

Course	Credits
CHM 221: Modern Organic Chemistry I	3
CHM 223: Laboratory IIIA – Exp. Organic Techniques	2
BIO 385: Cell Biology	3
PHY 205: Intermediate Physics I	4
1 General Education/Required Course	3
	Total Credits: 15

Spring Semester

Course	Credits
CHM 222: Modern Organic Chemistry II	3
CHM 224: Laboratory IVA – Qualitative Organic Analysis	2
BIO 260: Genetics	3
PHY 313: Intermediate Physics II	4
1 General Education/Required Course	3
	Total Credits: 15

Junior Year

Fall Semester

Course	Credits
CHM 361: Physical Chemistry I	4
CHM 301: Biochemistry I	3
BIO 220: Microbiology	3
1 General Education/Required Course	3
	Total Credits: 13

Spring Semester

Course	Credits
CHM 362: Physical Chemistry II	4
Biology Elective ^a	3
CHM 312: Chemistry Seminar	1
2 General Education/Required Courses	6
	Total Credits: 14

Senior Year

Fall Semester

Course	Credits
CHM 371: Analytical Chemistry	4
CHM 397: Introduction to Research I ^b	1
2 Biology Electives ^a	6
2 General Education/Required Courses	6
	Total Credits: 17

Spring Semester

Course	Credits
CHM 381: Advanced Inorganic Chemistry	4
Biology Elective ^a	3
3 General Education/Required Course	9
	Total Credits: 16

Four Year Credit Total: 121

^aAll students electing the chemistry-health sciences concentration should also select, with advisement, courses listed below which will accommodate specific professional requirement. A total of 12 Biology Elective credits are required to graduate.

BIO 317: Parasitology

BIO 324: Pathogenic Microbiology

BIO 350: Human Physiology

BIO 351: Animal Physiology

BIO 370: Comparative Anatomy

BIO 371: Human Anatomy

BIO 373: Vertebrate Embryology

BIO 374: Hematology

BIO 375: Histology

BIO 408: Virology

BIO 409: Immunology

BIO 450: Endocrinology

^bStudents are encouraged but not required to schedule Chemistry Research.

All chemistry majors will take a comprehensive examination in their junior year at a time and place designated by the department. A satisfactory performance in all areas of this examination is a requirement for departmental recommendation and ACS certification.