

BACHELOR OF SCIENCE DEGREE
MAJOR IN BIOCHEMISTRY

Freshman Year (Class-Lab-Credit Hours)

Fall

CHEM 105 Principles of Chemistry I	(3-0-3)
Or	
CHEM 111	(4-0-4)
MATH 121 Calculus for Science & Eng. I	(4-0-4)
SAGES First Seminar	(4-0-4)
PHED 100	(0-3-0)
GER Course	<u>(3-0-3)</u>
Total	(14-3-14) or (15-3-15)

Spring

CHEM 106 Principles of Chemistry II	(3-0-3)
Or	
ENGR 145	(4-0-4)
CHEM 113 Principles of Chemistry Laboratory	(1-3-2)
MATH 122 Calculus for Science & Eng. II	(4-0-4)
PHYS 121 General Physics I, Mechanics	(3-1-4) ^a
PHED 100	(0-3-0)
BIOL 214 Genes and Evolution	<u>(4-0-4)</u>
Total	(15-7-17) or (16-7-18)

Sophomore Year

Fall

CHEM 223 Introductory Organic Chemistry I	(3-0-3) ^a
CHEM 233 Organic Chemistry Laboratory I	(1-6-2)
MATH 223 Calculus for Science & Eng. III	(3-0-3)
PHYS 122 General Physics II, E & M	(3-1-4)
BIOL 215 Cells & Proteins	<u>(4-0-4)</u>
Total	(14-7-16)

Spring

CHEM 224 Introductory Organic Chemistry II	(3-0-3) ^a
CHEM 234 Organic Chemistry Laboratory II	(1-6-2)
MATH 224 Elementary Differential Equations	(3-0-3)
SAGES University Seminar I	(3-0-3)
GER Course	<u>(3-0-3)</u>
Total	(13-6-14)

Junior Year

Fall

BIOC 307 General Biochemistry	(4-0-4)
CHEM 301 Physical Chemistry I	(3-0-3)
SAGES University Seminar II	(3-0-3)
GER Course	(3-0-3)
GER Course or elective	<u>(3-0-3)</u>
Total	(16-0-16)

Spring

BIOC 308 Molecular Biology	(4-0-4)
PHYS 221 Introduction to Modern Physics	(3-0-3)
CHEM 302 Physical Chemistry II	(3-0-3)
Elective or GER course	(3-0-3)
Elective	<u>(3-0-3)</u>
Total	(16-0-16)

Senior Year

Fall

BIOC 334 Structural Biology	(3-0-3)
BIOC 373 SAGES Biochemistry Seminar	(3-0-3)
BIOC 391 Biochemistry Research.	(1-9-3)
Electives	<u>(6-0-6)</u>
Total	(13-9-15)

Spring

BIOC 312 Proteins and Enzymes	(3-0-3)
BIOC 393 Biochemistry Capstone	(1-9-3)
Statistics/Data Analysis Elective (PHYS 250, ECES 251, STAT 312, 313, or equiv.)	(3-0-3)
Electives	<u>(6-0-6)</u>
Total	(13-9-15)

Total Hours required for graduation: 123

- a. Selected students may be invited to take PHYS 123, 124, Physics and Frontiers, I, II (Honors) in place of PHYS 121, 122.
- b. Selected students may be invited to take CHEM 323, 324, Organic Chemistry, in place of CHEM 223, 224.