Biochemistry, Cellular and Molecular Biology, B.S.

Cellular and Molecular Emphasis

Required Credits: 76
Required GPA: 2.25

I REQUIRED COURSES

BIOLOGY CORE

COMPLETE THE FOLLOWING COURSES:

- BIOL 1400 Cellular Principles (4 credits)
- BIOL 2360 Genetics (4 credits)
- BIOL 3380 Molecular Genetics (3 credits)
- BIOL 3590 Cell Biology (3 credits)
- BIOL 3710 Microbiology (4 credits)

CHEMISTRY CORE

COMPLETE THE FOLLOWING COURSES:

- CHEM 2211 Principles of Chemistry I (4 credits)
- CHEM 2212 Principles of Chemistry II (4 credits)
- CHEM 3311 Organic Chemistry I (3 credits)
- CHEM 3312 Organic Chemistry II (3 credits)
- CHEM 3371 Organic Chemistry Laboratory I (1 credit)
- CHEM 3372 Organic Chemistry Laboratory II (1 credit)
- CHEM 4411 Biochemistry I (3 credits)
- CHEM 4412 Biochemistry II (3 credits)
- CHEM 4471 Biochemistry Laboratory I (1 credit)

RELATED FIELD REQUIREMENTS

SELECT ONE OF THE FOLLOWING GROUPS:

GROUP 1:

- PHYS 1101 General Physics I (4 credits)
- PHYS 1102 General Physics II (4 credits)

GROUP 2:

- PHYS 2101 Physics I (4 credits)
- PHYS 2102 Physics II (4 credits)

SEMINARS

COMPLETE THE FOLLOWING COURSES:

- BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)
- BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)

TECHNIQUES CORE

SELECT ONE OF THE FOLLOWING:

- BCMB 3074 Molecular Techniques (2 credits)
- BIOL 3074 Molecular Techniques (2 credits)

SUGGESTED SEMESTER SCHEDULE FOR BIOCHEMISTRY, CELLULAR, AND MOLECULAR BIOLOGY, B.S. MAJOR

Freshman:
• BIOL 1400 Cellular Principles (4 credits)
• CHEM 2211 Principles of Chemistry I (4 credits)
• BIOL 2360 Genetics (4 credits)
• CHEM 2212 Principles of Chemistry II (4 credits)
• BCMB 1000 Biochemistry, Cell and Molecular Biology Careers (BCMB Careers) (1 credit)

Sophomore:

• BIOL 3590 Cell Biology (3 credits)
• CHEM 3311 Organic Chemistry I (3 credits)
• PHYS 1101 General Physics I (4 credits)
  or PHYS 2101 Physics I (4 credits)
• BIOL 3380 Molecular Genetics (3 credits)
• CHEM 3312 Organic Chemistry II (3 credits)
• BCMB 3074 Molecular Techniques (2 credits)
  or BIOL 3074 Molecular Techniques (2 credits)
• PHYS 1102 General Physics II (4 credits)
  or PHYS 2102 Physics II (4 credits)

Junior:

• BIOL 3710 Microbiology (4 credits)
• CHEM 4411 Biochemistry I (3 credits)
• BCMB 3075 Cellular Techniques (2 credits)
  or BIOL 3075 Cellular Techniques (2 credits)
• CHEM 4412 Biochemistry II (3 credits)
• BCMB 3000 Biochemistry, Cell and Molecular Biology Research (BCMB Research) (1 credit)
• STAT 2610 Applied Statistics (4 credits)
• Emphasis Biology elective

Senior:

• BIOL 4894 Advanced Research Project I (2 credits)
• BIOL 4895 Advanced Research Project II (2 credits)
• Emphasis Chemistry elective(s)
• Emphasis Biology electives