BIOCHEMISTRY

This major allows students to call two departments home—the Department of Biological Sciences and the Department of Chemistry. This partnership results in an interdisciplinary major meeting the needs of students with broad interests in the sciences, or those preparing for a research career in a biomedical field or a clinical career in a health profession. It combines core foundational backgrounds from chemical, biological, and molecular sciences to offer an integrated program focusing on the chemistry and molecular mechanisms of biology.

BACHELOR OF SCIENCE (BS) GENERAL OVERVIEW

Six core courses:

General Biology: Organismal Biology

& Evolution

General Biology: Cell Biology

& Physiology

General Chemistry for Chemistry Majors A & B

Physics for the Life Sciences A & B or Fundamentals of Physics I & II

Three mathematics courses:

Calculus I

Calculus II

Calculus III or Elementary Probability & Statistics or Introduction to Statistics for Biologists

Ten upper-division courses:

Molecular Biology

Advanced Molecular Biology

Biochemistry

Advanced Biochemistry

Analytical Chemistry

Physical Chemistry

Organic Chemistry for Chemistry Majors A & B

Two upper-division electives

ACADEMIC OPPORTUNITIES

Trojan Chemistry Club: This student-run organization sponsors faculty luncheons, hosts receptions for new students, and participates in on-campus events for visiting local high school students.

Directed Research: By enrolling in an upper-level directed research course, students can delve further into their major by working with a mentor faculty member.

Peer Cohort Courses: Exclusive to Biochemistry and Chemistry majors, this program fosters Chemistry community through a sequential peer cohort, smaller class size, low student/teacher ratio, enhanced access to Chemistry faculty, and exposure to Chemistry department resources (internships, events, and scholarships).

Supplemental Instruction: This academic support program provides regularly scheduled, peer-led study sessions for common Biology, Chemistry, Math, and Physics courses.

Society of Cosmetic Chemists: This student-run organization aims to bridge the gap between undergraduate science education and cosmetic science through workshops and hands-on experiments in cosmetic chemistry and skin biology and by building connections with industry professionals.

