

The Bachelor of Arts Degree in Biochemistry (B.A.)

The Bachelor of Arts curriculum is designed for students seeking to enter professional programs such as medicine, veterinary medicine, optometry, or pharmacy.

- Chemistry 1610-1620 and Chemistry 2610-2620 are the recommended sequences for chemistry and biochemistry majors, although qualified students are urged to take the Honors sequences.
- Chemistry 1612 and 1622 are highly recommended. They provide a structure in which students can work actively in groups of 6 to 8 peers to enhance learning.
- Undergraduate Research (Biochemistry 4998/4999) is strongly recommended as an elective course.

| Autumn Semester (Year 1) | | Spring Semester (Year 1) | |
|---|-------|---|-------|
| General Chemistry 1 (1910H, 1610, 1210) | 5 | General Chemistry 2 (1920H, 1620, 1220) | 5 |
| PLTL in Gen Chem (1612) | 1 | PLTL in Gen Chem (1622) | 1 |
| Calculus 1 (Math 1151) | 5 | Calculus 2 (Math 1152) | 5 |
| GE Course (ex: social and behavioral science) | 3 | Introductory Biology 1 (Biol 1113) | 4 |
| Freshman Survey (Arts Sci 1100.10) | 1 | Launch Seminar (Gen Ed 1201) | 1 |
| | 15 | | 16 |
| Autumn Semester (Year 2) | | Spring Semester (Year 2) | |
| Organic Chemistry 1 (2910H, 2610, 2510) | 4 | Organic Chemistry 2 (2920H, 2620, 2520) | 4 |
| Organic Chemistry Laboratory 1 (2540) | 2 | Organic Chemistry Laboratory 2 (2550)*** | 2 |
| Introductory Biology 2 (Biol 1114) | 4 | Biochemistry 1 (5613) | 3 |
| GE Course (ex: writing and information literacy) | 3 | GE Course (ex: race, ethnicity, and gender diversity) | 3 |
| GE Course (ex: world language 1101) | 4 | GE Course (ex: world language 1102) | 4 |
| | 17 | | 16 |
| Autumn Semester (Year 3) | | Spring Semester (Year 3) | |
| Introductory Physics 1 (1200 or 1250) | 5 | Introductory Physics 2 (1201 or 1251) | 5 |
| Biochemistry 2 (5614) | 3 | Biochemistry 3 (5615) | 3 |
| GE Course (ex: world language 1103) | 4 | Biochemistry lab (5621) | 4 |
| GE Course (ex: citizenship theme) | 3-4 | GE Course (ex: second theme) | 3-4 |
| | 15-16 | | 15-16 |
| Autumn Semester (Year 4) | | Spring Semester (Year 4) | |
| Physical Biochemistry 1 (5721) | 3 | GE Course (ex: hist. and cultural studies) | 3 |
| Molecular Genetics (MolGen 4500 or 4606) | 3-4 | GE Course (ex: citizenship theme course #2) or Elective | 3-4 |
| GE Course (ex: literary, visual, and performing arts) | 3 | GE Course (ex: second theme course #2) or Elective | 3-4 |
| Elective | 3 | Elective | 3 |
| Elective | 3 | Reflection Seminar (Gen Ed 4001) | 1_ |
| | 15-16 | • | 13-15 |

Note:

- Classes listed in **BOLD** are only offered in those semesters Autumn or Spring ONLY, as shown.
- The world language courses are a requirement of the College of Arts and Sciences and students must demonstrate proficiency through the 1103 level in their chosen language.
- Please see degree requirements for further details, including options for each GE course requirement.

There is some flexibility in course scheduling – please see an undergraduate Biochemistry advisor for more information.

Total credit hour summary: minimum 31 semester hours in the major (121 minimum total semester hours for the degree), including 2 hours of major electives. ***Chem 2550 is the recommended major elective to complete the minimum 31 semester hours. There are 39 upper division hours required, of which 31-32 hours are encompassed in the major.