

BA in Chemistry with concentration in Biological Chemistry

Below is a sample 4-year plan for students pursuing the BA in Chemistry with a Biological Chemistry option. To view the list of courses approved to fulfill KU Core Goals, please visit the KU Core website (<http://kucore.ku.edu/courses/>).

This degree plan assumes students will have the equivalent of MATH 101 or MATH 104 prior to freshman year, fall semester.

Freshman

| Fall | Hours | Spring | Hours |
|---|-------|--|-------|
| ENGL 101 (Goal 2.1 Written Communication/BA Writing I) ¹ | 3 | ENGL 102 (Goal 2.1 Written Communication/BA Writing II) ¹ | 3 |
| MATH 115 (Goal 1.2 Quantitative Literacy) | 3 | MATH 116 (Major Pre-requisite) | 3 |
| CHEM 170, 130, or 190 (BA Quantitative Reasoning, Major Requirement) ² | 5 | CHEM 175, 135, or 195 (Major Requirement) | 5 |
| First Year Seminar or Goal 1.1 Critical Thinking | 3 | Second Area of Study/ Elective/Degree/Junior-Senior Hours ⁸ | 3 |
| CHEM 180 (Major Requirement) ⁵ | 0.5 | | |
| 14.5 | | 14 | |

Sophomore

| Fall | Hours | Spring | Hours |
|--|-------|---|-------|
| 1st Semester Language (BA Second Language) | 5 | 2nd Semester Language (BA Second Language) | 5 |
| PHSX 114 (Major Pre-requisite; Goal 1.1 Critical Thinking) | 4 | Goal 2.2 Oral Communication (COMS 130 or other approved course) | 3 |
| CHEM 201 (Major Requirement) ⁵ | 1 | PHSX 115 (Major Pre-requisite) | 4 |
| CHEM 330 or 380 (Major Requirement) | 3 | CHEM 335 or 385 (Major Requirement) | 3 |
| CHEM 331 (Major Requirement) | 2 | CHEM 336 (Major Requirement) | 2 |
| 15 | | 17 | |

Junior

| Fall | Hours | Spring | Hours |
|--|-------|--|-------|
| 3rd Semester Language (BA Second Language) | 3 | 4th Semester Language, or 1st semester of Another Language, unless req for mjr (BA Second Language) ⁹ | 3 |
| Goal 3 Social Science | 3 | Goal 3 Arts and Humanities | 3 |
| CHEM 520 (Major Requirement) ³ | 5 | Goal 4.1 US Diversity | 3 |
| BIOL Elective 300+ (Major Requirement) | 3 | Goal 5 Social Responsibility & Ethics | 3 |

Second Area of Study/
Elective/Degree/Junior-
Senior Hours⁸

14 **15**

| Senior | Hours | Spring | Hours |
|---|-------|---|-------|
| Goal 4.2 Global Awareness | 3 | BIOL 638 (Major Requirement) ⁵ | 4 |
| CHEM 695 (Major Requirement) ⁵ | 0.5 | CHEM 635 ^{5,6} | 2 |
| Second Area of Study/ Elective/Degree/Junior- Senior Hours ⁸ | 3 | CHEM 636 (Goal 6 Integration and Creativity) ^{5,6} | 3 |
| CHEM 400 (Major Requirement) ⁵ | 3 | Second Area of Study/ Elective/Degree/Junior- Senior Hours ⁸ | 3 |
| CHEM 401 (Major Requirement) ⁵ | 2 | Second Area of Study/ Elective/Degree/Junior- Senior Hours ⁸ | 3 |
| BIOL 636 ⁵ | 4 | | |
| 15.5 | | 15 | |

Total Hours 120

- The BA requires completion of two courses of collegiate-level writing instruction. Students who test out of Composition will still need to complete ENGL 102 (or equivalent) and one additional Goal 2.1 course.
- CHEM 170 requires eligibility for MATH 115 in order to enroll.
- BIOL 150 or BIOL 151 is a pre-requisite for the elective courses needed to fulfill the Biological Chemistry concentration elective requirement.
- Choose from a list of electives approved to count for the Biological Chemistry elective requirement. See the degree requirements (<http://catalog.ku.edu/liberal-arts-sciences/chemistry/ba/#requirementstext>) tab for a list of courses.
- CHEM 180, CHEM 201, CHEM 400, CHEM 401, CHEM 530, CHEM 695 are Fall only courses. CHEM 635 and CHEM 636 are Spring only courses. BIOL 636 is a fall only course. BIOL 638 is a spring only course.
- A Goal 6 course is required to fulfill the KU Core. Students can elect to enroll in 3 hours of research or CHEM 636, Instrumental Methods of Analysis Lab to fulfill the Capstone, Goal 6 requirement. Goal 6 may also be satisfied by 3 hours of CHEM 698. Those students that elect CHEM 636 must also take CHEM 635 Instrumental Methods of Analysis as the co-requisite.
- Visit this website (<https://collegeadvising.ku.edu/ba-quantitative-reasoning-courses/>) for a list of courses that fulfill the BA Quantitative Reasoning requirement.
- Hour requirements (incl. 45 jr/sr hrs) are typically met through KU core, degree, major, second area of study and/or elective hours. Students completing the BGS with a major must choose a secondary area of study. Individual degree mapping is done in partnership with your advisor.
- For students completing the language requirement via the 3+1 language option, note that many first semester languages are 5 credit hours.

Please note:

All students in the College of Liberal Arts and Sciences are required to complete 120 total hours of which 45 hours must be at the Jr/Sr (300+) level.

The same course cannot be used to fulfill more than one KU Core Goal. However, overlap of a KU Core course with a major or degree-specific requirement is allowed. Overlapping is recommended to allow more opportunities to explore other majors and/or minors.