2023-2024

## CHEMISTRY GRADES 8-12 MAJOR, B.S.

Science \& Health Department; School of Science, Health \& Mathematics
Asbury is well known for the quality of its education programs, and science teachers are in demand. The Science and Health department offers majors leading to grades $8-12$ certification in either Biology or Chemistry. Students interested in middle school certification choose two concentration areas, one of which can be Science.

To graduate must complete all major requirements, foundational requirements, and additional electives needed for 124 hour minimum degree requirement. This program may require more than 124 credits for a degree due to specific requirements.
[Education majors must choose COM130 in the Foundations Communication pool due to state certification requirements.]

## MAJOR REQUIREMENTS (88)

| -3 | BIO | 201 | General Biology I | Complete Education Requirements: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | BIO | 203 | General Biology Lab I | - ${ }^{2}$ | ED | 200 | Intro to Education |
| _ 2 | BIO | 341 | Ethical Issues | _2 | ED | 220 | Tech for Education |
|  |  |  |  | _2 | ED | 230 | Human Growth/Development |
| -3 | CHE | 121 | Gen College Chemistry I | -1 | ED | 301 | Guided Inquiry Cllinical |
| -3 | CHE | 122 | Gen College Chemistry II | -3 | ED | 320 | Exceptional Learner |
| -1 | CHE | 123 | Gen College Chemistry Lab I | -3 | ED | 385 | Read/Writ Across Curriculum |
| 1 | CHE | 124 | Gen College Chemistry Lab II | -1 | ED | 401 | Open Inquiry Clinical |
| -3 | CHE | 221 | Organic Chemistry I | -3 | ED | 405 | Learning/Performing Assess |
| -3 | CHE | 222 | Organic Chemistry II | -3 | ED | 410 | Classroom Management |
| -1 | CHE | 223 | Organic Chemistry Lab I | -3 | ED | 420 | Content Methods |
| -1 | CHE | 224 | Organic Chemistry Lab II | -1 | ED | 424 | Content Methods Lab |
| 4 | CHE | 321 | Analytical Chemistry __ Lab | -3 | ED | 428 | Interventions/Differentiation |
| -4 | CHE | 421 | Physical Chemistry I__ Lab | - ${ }^{12}$ | ED | 499 | Student Teaching |
| -3 | ED | 263 | Science Content (P-5) |  |  |  |  |
| -4 | MAT | 181 | Calculus 1 _ Lab |  |  |  |  |
| -4 | PHY | 201 | Intro Physics I __ Lab |  |  |  |  |
| -4 | PHY | 202 | Intro Physics II Lab |  |  |  |  |

Choose one:
$\begin{array}{lll}-4 & \text { BIO } & 372+374 \text { Cell \& Molecular Biology } \\ & \text { CHE } & 361+363 \text { Biochemistry \& Lab }\end{array}$

## PLUS FOUNDATIONS REQUIREMENTS (40)

(3 hours Math and 4 hours Science satisfied by required major courses; Foreign Language not required for B.S. CHEE majors.
Degree becomes B.A. with completion of foreign language.)

## Plus electives if needed for the 124 hour degree requirement

