

# 2022-2023

# CHEMISTRY MAJOR, B.A.

Science & Health Department; School of Science, Health & Mathematics

Chemistry is a branch of the physical sciences involving the study of matter and its changes. It focuses on the composition, characteristics, changes, and uses of substances and energy. It also explores the benefits and dangers of those substances to people. The chemistry major provides students with experience in each of the sub disciplines of chemistry: inorganic, organic, analytical, biological and physical. Employment opportunities in chemistry are excellent. Qualified, creative graduates find employment in many areas, including teaching, research in virtually any industry, law enforcement, healthcare, or in environmental science. Excellent fellowships and assistantships are available for those going on to graduate school.

To graduate must complete all major requirements, foundational requirements, and additional electives needed for 124 hour minimum degree requirement.

## MAJOR REQUIREMENTS (64)

#### **Cross-Disciplinary Requirements (29)**

| Cross-Disciplinary Requirements (29)  |  |   |   |
|---|--|---|---|
| 3   | BIO  | 201   | General Biology I   |
| 3   | BIO  | 202   | General Biology II  |
| 1   | BIO  | 203   | General Biology Lab I   |
| 1   | BIO  | 204   | General Biology Lab II  |
| 3<br>1<br>1<br>2  | BIO  | 341   | Ethical Issues  |
|   |  |   |   |
| 4   | MAT  | 181   | Calculus I Lab  |
| 4   | MAT  | 182   | Calculus II Lab   |
|   |  | -   |   |
| 4   | PHY  | 201   | Intro Physics I Lab   |
| 4<br>4  | PHY  | 202   | Intro Physics II Lab  |
|   |  |   | ,   |
| 3   | PSY  | 315   | Stats for Behavioral Science  |
|   |  |   |   |
| Chemistry Requirements (35)   |  |   |   |
| 2   | CHE  | 404   |   |
|   | UNE  | 121   | Gen College Chemistry I   |
| 3   | CHE  | 121<br>122  | Gen College Chemistry I<br>Gen College Chemistry II   |
| 3   | CHE  | 122   | Gen College Chemistry II  |
| 3   |  |   | Gen College Chemistry II<br>Gen College Chemistry Lab I   |
| 3   | CHE<br>CHE   | 122<br>123<br>124   | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II   |
| 3   | CHE<br>CHE<br>CHE<br>CHE   | 122<br>123<br>124<br>221  | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I  |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE                                    | 122<br>123<br>124<br>221<br>222   | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II  |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE                             | 122<br>123<br>124<br>221<br>222<br>223  | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I   |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE                      | 122<br>123<br>124<br>221<br>222<br>223<br>224   | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab I  |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE               | 122<br>123<br>124<br>221<br>222<br>223<br>224<br>321                                    | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab II<br>Analytical Chemistry Lab   |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE        | 122<br>123<br>124<br>221<br>222<br>223<br>224<br>321<br>361                             | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab II<br>Analytical Chemistry Lab<br>Biochemistry   |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE | 122<br>123<br>124<br>221<br>222<br>223<br>224<br>321<br>361<br>363                      | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab II<br>Analytical Chemistry Lab<br>Biochemistry<br>Biochemistry Lab   |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE | 122<br>123<br>124<br>221<br>222<br>223<br>224<br>321<br>361<br>363<br>382               | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab II<br>Analytical Chemistry Lab<br>Biochemistry<br>Biochemistry Lab<br>Inorganic Chemistry  |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE | 122<br>123<br>124<br>221<br>222<br>223<br>224<br>321<br>361<br>363<br>382<br>399        | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab II<br>Analytical Chemistry Lab<br>Biochemistry<br>Biochemistry Lab<br>Inorganic Chemistry<br>Intro to Chem Research                    |
| 3   | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE | 122<br>123<br>124<br>221<br>222<br>223<br>224<br>321<br>361<br>363<br>382<br>399<br>400 | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab II<br>Analytical Chemistry Lab<br>Biochemistry<br>Biochemistry Lab<br>Inorganic Chemistry<br>Intro to Chem Research<br>Senior Research |
| $ \begin{array}{c}       -3 \\       -3 \\       -1 \\       -3 \\       -1 \\       -3 \\       -1 \\       -4 \\       -3 \\       -1 \\       -3 \\       -1 \\       -4 \\       -1 \\       -3 \\       -1 \\       -4 \\       -1 \\    $ | CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE<br>CHE | 122<br>123<br>124<br>221<br>222<br>223<br>224<br>321<br>361<br>363<br>382<br>399        | Gen College Chemistry II<br>Gen College Chemistry Lab I<br>Gen College Chemistry Lab II<br>Organic Chemistry I<br>Organic Chemistry II<br>Organic Chemistry Lab I<br>Organic Chemistry Lab II<br>Analytical Chemistry Lab<br>Biochemistry<br>Biochemistry Lab<br>Inorganic Chemistry<br>Intro to Chem Research                    |

#### **PLUS FOUNDATIONAL REQUIREMENTS (49)**

(3 hours Math and 4 hours Science satisfied by required major courses.)

## Plus electives needed for the 124 hour degree requirement (11)