



**Chemistry Major**  
**with a Biochemistry Concentration**  
**Major Academic Plan (MAP) for Catalog Year 2024-2025**

The catalog is the final authority on CATC and major requirements; this is intended as a tool for planning purposes. Student course sequencing may vary depending on course offerings and other variables.

<p><b>Fall Semester 1</b> CHEM 231: General Chemistry I<sup>F</sup> or CHEM 341: Organic Chem. I<sup>*,F</sup> MATH 235: Calculus I<sup>*1</sup></p> <p><i>CORE 101: First Year Seminar</i> <i>CORE 131: H. H. Flourishing (1)</i> <i>First-Year CATC options-</i></p> <ul style="list-style-type: none"> <li>▪ <i>COMM 101: Oral Comm (2)</i></li> <li>▪ <i>ENGW 103: First-Year Writing</i></li> <li>▪ <i>Language Core Competency or Thematic Core Course</i></li> </ul>	<p><b>Spring Semester 1</b> CHEM 232: General Chemistry II<sup>*,S</sup> or CHEM 342: Organic Chem. II<sup>*,S</sup> MATH 235: Calculus I<sup>*</sup>, if not complete</p> <p><i>First-Year CATC options</i> <i>Language Core Competency</i> <i>BITH 211/ARCH 211: Old Testament</i></p>	<p><b>Summer 1</b></p> <p><i>Consider study, internship or research options – Wheaton In summer program, WIN (HoneyRock), Wheaton in the Black Hills, non-major internship, summer research</i></p>
<p><b>Fall Semester 2</b> CHEM 341: Organic Chemistry I<sup>*,F</sup>, if not complete CHEM 294: Chem. Colloquium (1)<sup>2</sup> PHYS 221: General Physics I<sup>1*,F</sup> or 231: Introductory Physics I<sup>1*,F</sup></p> <p><i>Core Competency Courses (4-8)</i> <i>BITH 213/ARCH 213: New Testament</i></p>	<p><b>Spring Semester 2</b> CHEM 342: Organic Chemistry II<sup>*,S</sup>, if not complete CHEM 294: Chem. Colloquium (1)<sup>2</sup> PHYS 222: General Physics II<sup>*,S</sup> or 232: Introductory Physics II<sup>*,S</sup></p> <p><i>BITH 315: Christian Thought*</i></p>	<p><b>Summer 2</b></p> <p><i>Consider study, internship or research options.</i></p>
<p><b>Fall Semester 3</b> CHEM 355: Intro. to Analytical Chem. (2)<sup>*,F</sup> CHEM 371: Physical Chem. I<sup>*,F</sup></p> <p><i>Thematic Core Course (4-8)</i> <i>Advanced Integrative Seminar?*</i></p>	<p><b>Spring Semester 3</b> CHEM 336: Inorganic Chemistry<sup>*,S</sup> CHEM 461: Gen. Biochemistry<sup>*,S</sup> CHEM 455: Adv. Analytical I (2)<sup>*,S,3</sup></p> <p><i>Thematic Core Course</i> <i>Advanced Integrative Seminar?*</i></p>	<p><b>Summer 3</b></p> <p><i>Consider study, internship or research options.</i></p>
<p><b>Fall Semester 4</b></p> <p>CHEM 494: Chemistry in Context (2)<sup>*</sup> CHEM 462: Adv. Biochemistry (2)<sup>*,F</sup> CHEM 457: Adv. Analytical II (2)<sup>*,F,3</sup> if 455 has not been taken yet</p> <p><i>Thematic Core Course (4-8)</i> <i>Complete CATC Coursework</i></p>	<p><b>Spring Semester 4</b></p> <p>CHEM 463: Biochemistry Analysis (2)<sup>*,S</sup> CHEM 455: Adv. Analytical I (2)<sup>*,S,3</sup> if neither 455 or 457 been taken yet</p> <p><i>Thematic Core Course</i> <i>Complete CATC Coursework</i></p>	<p><b>Summer 4</b></p>

### Notes or Special Guidance for Majors:

\* Course has prerequisite

<sup>F</sup> Fall only course

<sup>S</sup> Spring only course

<sup>1</sup> Classes that meet CATC tags: MATH 231 (AAQR), PHYS 231 (SP)

<sup>2</sup> CHEM 294 has two distinct courses that should be taken in order: first the fall course, followed by the spring course

<sup>3</sup>A big difference between the Basic Major and the Biochemistry Emphasis major is one can get by with only one semester of calculus and take algebra-based physics (PHYS 221/2). Beyond that, there are no electives in the major, other than which one of the two Adv. Analytical courses is taken: CHEM 455 or CHEM 457.