

Chemistry Major with a Biochemistry Concentration

Major Academic Plan (MAP) for Catalog Year 2022-2023

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.

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

Notes or Special Guidance for Majors:

* Course has prerequisite

^F Fall only course

^S Spring only course

¹ Classes that meet CATC tags: MATH 231 (AAQR), PHYS 231 (SP)

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

³ 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.