



Chemistry (BS), Pre-Med Track

This sample academic plan was developed by the Pre-Med Committee to assist students interested in pursuing medical school after graduation from Truman with course sequencing. The listed courses fulfill the Chemistry (BS) degree requirements while also incorporating prerequisites required by most medical schools. For a list of suggested pre-medical prerequisite courses, click [here](#).

Semester 1

- **CHEM 130: Chemical Principles I** (4 cr)
- **CHEM 145: Freshman Chemistry Seminar** (1 cr)
- TRU 120: First Year Seminar (3 cr)
- MATH 198: Analytic Geometry and Calculus I (*) (5 cr)
- BIOL 107: Cells, Molecules and Genes (4 cr)

Semester 3

- **CHEM 245: Sophomore Chemistry Seminar** (1 cr)
- **CHEM 312: WE/Foundations of Chemical Analysis** (5 cr)
- **CHEM 329: Organic Chemistry I** (3 cr)
- Dialogues Curriculum courses (6 cr)

Semester 5

- **CHEM 345: Junior Chemistry Seminar** (1 cr)
- **CHEM 323: Physical Chemistry I** (3 cr)
- **CHEM 324: WE/Physical Chemistry Laboratory** (2 cr)
- **CHEM 335: Biochemistry I: Structure and Function** (3 cr)
- PHYS 186: College Physics II (4 cr)
- JINS 3XX: WE/Junior Interdisciplinary Seminar (3 cr)

Semester 7

- **CHEM 445: Senior Chemistry Capstone Seminar** (1 cr)
- **CHEM 473: Inorganic Chemistry** (3 cr)
- **CHEM 474: Inorganic Chemistry Laboratory** (2 cr)
- Dialogues Curriculum courses (9 cr)

Semester 2

- **CHEM 131: Chemical Principles II** (4 cr)
- MATH 263: Analytic Geometry and Calculus II (4 cr)
- BIOL 104: Ecology and Evolution of the Organism (4 cr)
- Dialogues Curriculum course (3 cr)

Semester 4

- **CHEM 331: Organic Chemistry II** (3 cr)
- **CHEM 333: Organic Chemistry Lab** (2 cr)
- PHYS 185: College Physics I (4 cr)
- Dialogues Curriculum courses (6 cr)

Semester 6

- **CHEM 322: Instrumental Analysis** (5 cr)
- **CHEM 325: Physical Chemistry II** (3 cr)
- **CHEM 326: WE/Quantum Mechanics and Spectroscopy Laboratory** (2 cr)
- Dialogues Curriculum courses (6 cr)

Semester 8

- **CHEM 310: Biochemistry Laboratory** (2 cr)
- Dialogues Curriculum courses (12 cr)

NOTES:

- Typically, students planning to enter medical school will take *PSYC 166: General Psychology* or a similar course as part of the Dialogues curriculum or as an elective course.
- Students pursuing a CHEM major and planning to enter medical school will also take a year of biology courses with lab (generally BIOL 107: Cells, Molecules and Genes and BIOL 104: Ecology and Evolution of the Organism). Some medical schools will also expect that a student has taken a course in genetics, such as BIOL 300: Genetics.
- WE = Writing Enhanced course
- If you have not completed the Civics Exam, we recommend doing so in your **first year**.
- Truman students are required to complete a [Portfolio](#) to graduate. We recommend starting to compile your work for the Portfolio sooner than later.
- Students must complete their Application to Graduate **the semester prior to graduating**.

Apply to graduate through TruView.

- Graduating seniors need to complete their seniors test and questionnaire. We recommend reviewing the [Assessment & Testing page](#) to plan accordingly.
- **The Dialogues curriculum** requires a certain number of courses/credit hours in the following Perspectives: Social, Arts and Humanities, STEM, Communications, and Statistics. The exact number of courses a student will be required to take during their undergraduate career varies individually according to the credit transferred in.

Department Chair: Please contact the [Center for Academic Excellence](#) with any updates to the plan above. Revised 10-4-2025.