

**Sample Four-Year Plan** 

# Chemistry (BS)

#### Semester 1

- TRU 120: First Year Seminar (3 cr)
- CHEM 130: Chemical Principles I (4 cr)
- CHEM 145: Freshman Chemistry Seminar (1 cr)
- MATH 198: Analytic Geometry and Calculus I (\*) (5 cr)
- Dialogues Curriculum course (3 cr)

(\*) = Students with math placement lower than MATH 198: Analytic Geometry and Calculus I will take CHEM 130 in the spring semester and follow a modified plan.

## 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 course (3 cr)

## **Semester 5**

- CHEM 345: Junior Chemistry Seminar (1 cr)
- CHEM 323: Physical Chemistry I (3 cr), **AND** CHEM 324: WE/Physical Chemistry Laboratory (2 cr)

- PHYS 186: College Physics II (4 cr), **OR** PHYS 196:

Physics II (5 cr)

- JINS 3XX: WE/\_\_\_\_\_ (3 cr)

- Dialogues Curriculum course (3 cr)

# Semester 7

- CHEM 445: Senior Chemistry Capstone Seminar (1 cr)
- CHEM 473: Inorganic Chemistry (3 cr), **AND** CHEM 474: Inorganic Chemistry Laboratory (2 cr)
- CHEM 335: Biochemistry I: Structure and Function (3 cr)
- CHEM Elective and/or Dialogues Curriculum course (3-6

cr)

#### **Semester 2**

- CHEM 131: Chemical Principles II (4 cr)
- MATH 263: Analytic Geometry and Calculus II (4 cr)
- Dialogues Curriculum course (6 cr)

#### Semester 4

- CHEM 331: Organic Chemistry II (3 cr)
- CHEM 333: Organic Chemistry Lab (2 cr)
- PHYS 185: College Physics I (4 cr), **OR** PHYS 195: Physics I (5 cr)
- Dialogues Curriculum course (3 cr)

## Semester 6

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

## Semester 8

- CHEM 310: Biochemistry Laboratory (2 cr)
- CHEM Elective (3-6 cr)
- Elective(s) and/or Dialogues Curriculum course (6-9 cr)

#### NOTES:

- (\*) = Students with math placement lower than MATH 198: Analytic Geometry and Calculus I will take CHEM 130 in the spring semester and follow a modified plan.
- Electives only as needed to total 120 credit hours
- 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 <u>Portfolio</u> 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 <u>Assessment & Testing page</u> 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 <u>Center for Academic Excellence</u> with any updates to the plan above. *Rev.* 7/29/24