

Chemistry Major Advising Guide 2021-2022

Chemistry brings people and problems together. As chemists, our studies range from the measurement of physical properties to the biological effects of small molecules. Study in chemistry forms a firm foundation for progress in many other disciplines, some of which include medicine, engineering, and forensic science. Students who have studied chemistry at Alma College are currently solving environmental problems, working to provide energy solutions, developing pharmaceuticals, and treating patients, among many other applications and careers.

Suggestions for the first year for students considering a major in chemistry include:

	Fall Term 2021	Winter Term 2022
Courses in area of Study:	CHM 115	CHM 223
Cognates:	MTH 121 or MTH 112	MTH 122 or MTH 121
First Year Requirements:	FYS 101	ENG 101
General Education/Other:	BIO 121 Foreign Language Humanities Social Science	Foreign Language Humanities Social Science

NOTES:

- 1. Prerequisites.** Although not a prerequisite, *placement* in Precalculus (MTH 112) or higher through the math placement test or by ACT subscore is required for enrollment in CHM 115. Co-enrollment in MTH 112 is **not** required for enrollment in CHM 115.
- 2. Scheduling.** CHM 115 is the first course in the chemistry sequence and is offered in both the Fall and Winter Terms. Students should be aware that the majority of available seats in CHM 115 are scheduled for the Fall Term leaving *very limited* seats available in the Winter Term. Students who need to strengthen their math preparation prior to enrolling in CHM 115 may consider the Winter Term as a starting point for their studies in chemistry. Students may pre-enroll in the Winter Term section of CHM 115 during BASD or Fall Term advising by choosing the zero-credit section listed on the Portal (look for CHM-115W-01 under Fall 2021 courses). **CHM 223 will NOT be offered in Spring Term 2022.** Students who elect to take CHM 115 during the Winter Term and need more than one term of chemistry for their course of study should meet with a Chemistry Department faculty member prior to finalizing their course plans to discuss available options. *Students who plan a major in chemistry are strongly encouraged to enroll in CHM 115 in the fall of their first year. Students interested in a major in chemistry who delay starting CHM 115 until the second year will not have as*

much flexibility in their schedule as those who elect to take CHM 115 during the fall of their first year.

- 3. *Nursing Students.*** Students accepted into the BSN program are strongly encouraged to enroll in CHM 115 during the Winter 2022 term. Students should pre-enroll in the Winter Term section of CHM 115 during BASD or Fall Term advising by choosing the zero-credit section listed on the Portal (look for "CHM-115W-01" under Fall 2021 courses).
- 4. *Scheduling of Athletes.*** Athletes planning to enroll in chemistry courses with laboratories should consult the Athletics Department website and the game schedule for their sport to determine which lab options minimize conflicts and missed lab time (e.g. first-year students playing football should NOT elect either Monday afternoon or evening lab in the fall as junior varsity games are played on Monday afternoons). Athletes who participate in Spring sports who wish to enroll in a chemistry Spring Term course with a lab should consult with the course instructor to evaluate potential scheduling conflicts prior to adding the course.
- 5. *AP, IB, and Dual Enrollment.*** Students who earn a score of 4 or higher on the Advanced Placement exam will receive credit for CHM 115. Students who come to Alma College with credit for CHM 115 through Advanced Placement, International Baccalaureate, or dual enrollment (transfer) are encouraged to take the laboratory portion of CHM 115 in the Fall in order to gain necessary skills before taking CHM 223 in the Winter Term; consultation with the Department Chair is advised.
- 6. *Cognate Courses.*** Students are strongly encouraged to start their studies in math in their first year. This allows for a timely start in Physics 121 during the Sophomore year and Physical Chemistry in the Junior year. Well-prepared students who elect the Pre-Medicine track in chemistry are strongly encouraged to enroll in chemistry, math, and biology in their first year. For more information on planning a chemistry major and major course sequencing, a sample four-year course plan may be found at:
<https://www.alma.edu/academics/chemistry/chemistry-department/pathways-to-a-chemistry-major/>
- 7. *Pre-Med and Pre-Health Students.*** Students planning a career in medical/health fields who anticipate taking the MCAT or other assessment/entrance exams during the Junior year (or the following summer) will plan to take Biochemistry (BCM 321) during the fall of the Junior year in order to be fully prepared for the exam. BCM 321 requires four semesters of chemistry as its prerequisites. As these courses are sequential, it is necessary that students on this track start their chemistry preparation during the first year. A condensed summary of course recommendations from the Pre-Health Professions Committee (PHPC) for those considering pre-medicine can be found at:
<https://www.alma.edu/live/files/4024-pre-medical-coursework-recommendations>
Consult a member of the PHPC or your advisor if you are considering a pre-medicine or have any questions.