FIRST YEAR: Required prerequisite/predictor courses including recommended sequence: **Bachelor of Science** Fall: Spring: CHEM 121H* (Honors Gen Chem) or CHEM 111 MATH 131 (Calculus I) MATH 132 (Calculus II) BIOLOGY 151 (Intro to Biology I) or Spring **Bachelor of Arts** Fall: Spring: CHEM 121H* (Honors Gen Chem) or CHEM 111 MATH 127 or MATH 131 (Calculus I) MATH 128 or MATH 132 (Calculus II) BIOLOGY 151 (Intro to Biology I) or Spring * Recommended courses

SECOND YEAR: Required prerequisite/predictor courses, including recommended sequence: **Bachelor of Science**

Fall: CHEM 265/267 (Organic Chemistry and Lab) MATH 233 (Multivariate Calculus) CHEM 291A (Sophomore Seminar) PHYSICS 152 (General Physics II and Lab)

Bachelor of Arts

Fall: CHEM 265/267 Organic Chemistry CHEM 291A (Sophomore Seminar) PHYSICS 132 or 152 (General Physics II and Lab)

Advanced Placement score of 4 or 5:

Students planning to major in Chemistry should take the two-term general chemistry sequence: CHEM 121H/122H and should NOT accept AP credit for CHEM 111. Any questions should be addressed to the Undergraduate Program Director, Prof. Nathan Schnarr schnarr@chem.umass.edu

Spring:

Spring:

Minimum grade in prerequisite courses:

A minimum grade of "C-" in the prerequisite Chemistry, Math and Physics course, or permission of the instructor, is required for enrollment in all Chemistry courses.

Application procedure and recommended time to declare/apply:

Students should see a Chemistry advisor early in their program to be sure they are on schedule and able to take the appropriate courses for timely completion of either the B.A. or the B.S. degree. This is especially true for transfers with Sophomore/Junior standing.

Summary of Requirements for the Major After the Second Year:

B.S.: CHEM 341, 342, 391A, 475, 476, 477, CHEM 388 or CHEM 499 (research project), plus 12 additional upper-level credits as detailed on green curriculum sheets

B.A.: CHEM 341, 342, 391A, 471 plus 9 additional upper-level credits as detailed on green curriculum sheets.

Chemistry Minor

The Chemistry minor requires a minimum of 15 credits of Chemistry (CHEM) courses with a grade of Cor better at the 200-level or above, not including 291A (Seminar), 388 (B.S. Independent Research Project), 391A (Writing in Chemistry), 396 (Independent Study), 496 (Independent Research) and 499 (Honors).

for further information, contact:

Chief Undergraduate Advisor, Chemistry Prof. Ruthanne Paradise rparadise@chem.umass.edu Undergraduate Program Director, Chemistry Prof. Michael Knapp mknapp@chem.umass.edu Undergraduate Honors Coordinator fermann@chem.umass.edu Prof. Justin Fermann Undergraduate Program Manager, Interim Brigette McKenna bmckenna@chem.umass.edu Website: https://www.umass.edu/chemistry/undergraduate-students

Major: Chemistry

CHEM 122H* (HonorsGen Chem) or CHEM 112 PHYSICS 151 (General Physics I and Lab)

College: CNS

CHEM 122H* (Honors Gen Chem) or CHEM 112 PHYSICS 131 or 151 (General Physics I and Lab)

CHEM 266/268 (Organic Chemistry and Lab)

CHEM 315 (Quantitative Analysis)

CHEM 266/268 (Organic Chemistry)

CHEM 315 (Quantitative Analysis)