

University of Iowa Pre-Med REQUIRED UNDERGRADUATE COURSEWORK & Microbiology Program

Course and Title	Semester Courses Required	ISU Course Equivalent Required for Micro Major
English Composition Two courses (to include composition and literature).	2 semesters	English 250 and Eng 302, 309, 312, or 314
General Chemistry A complete introductory course in modern general chemical principles including labs.	2 semesters	Chemistry 177, 177L, and Chemistry 178, 178L
Organic Chemistry A semester course of organic chemistry including lab.	1 semester	Chemistry 331, 331L,
Physics A complete introductory course (1 year), including lab and instruction	2 semesters	Physics 131, 131L and Physics 132, 132L
Biology 1 Year introductory course with labs covering the principles of biology and 1 advanced course. Recommended advanced biology courses include molecular & cell biology, human physiology, genetics or microbiology. Micro 115 is accepted as a Bio Lab.	3 semesters	Biology 211, 211L or M115 and Biology 212, 212L Biology 313, Bio 314, Micro 302, Micro 310 or Biol 335 (Human physiology)
Biochemistry 1 course that includes a comprehensive review of molecular structures and biochemistry of carbohydrates, nucleic acids and proteins, central metabolic pathways, enzyme functions, and metabolism of carbon based molecules.	1 semester	BBMB 301 or BBMB 316 or BBMB 404 & 405
Mathematics 1 advanced college mathematics course or a statistics course.	1 semester	Math 143 & Math 160 or Math 165 & Math 166 or Math 165 & Stat 301
Social and Behavioral Sciences, Humanities: Four courses. Applicants are strongly encouraged to complete coursework that addresses race/racism in the United States. Recommended courses include behavioral psychology, sociology, foreign language and other non-science writing intensive courses.	4 semesters	Social Sciences, Humanities, Ethics, International perspectives, US diversity requirements

Many medical schools only require 1 semester of Organic Chemistry and Biochemistry, but there are a few that require a full year of Organic Chemistry or Biochemistry. Make sure you check the requirements of the schools you are interested in attending to make sure you meet the requirements. Also consider that the material learned from a full year of Organic & Biochemistry should improve your MCAT scores.

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