

Recommended Coursework for *Medical School*

Many medical schools (though not all) are shifting to competency-based assessments for admissions. This means that instead of fulfilling a specific checklist of classes and experiences, medical schools are more interested in how you show that you are competent in four key areas related to the skills needed to be a physician. The core competencies are outlined below.

Core Competency	How to Show Competency
Professional	<ul style="list-style-type: none"> • <u>Commitment to Learning and Growth</u>: practices continuous personal and professional growth for improvement, reflects on successes, challenges, and mistakes; seeks feedback • <u>Cultural Awareness</u>: appreciates how historical, sociocultural, political, and economic factors affect others' interactions, behaviors, and well-being; values diversity • <u>Cultural Humility</u>: understands a situation from various viewpoints; reflects on and addresses bias in oneself and others; values inclusivity • <u>Ethical Responsibility to Self and Others</u>: behaves in an honest and ethical manner when carrying out professional obligations • <u>Interpersonal Skills</u>: demonstrates awareness of how social and behavioral cues affect people's interactions and behaviors; adjusts behavior appropriately; manages one's emotions; treats others with dignity, courtesy, and respect • <u>Oral communication</u>: effectively conveys information; actively listens to understand meaning and intent; clarifies as needed • <u>Reliability and Dependability</u>: demonstrates accountability; fulfills obligations in a timely manner • <u>Resilience and Adaptability</u>: perseveres in challenging or stressful situations; adjusts behavior or approach in response to unexpected obstacles; seeks help when needed; reflects on setbacks; balances personal well-being with professional responsibilities • <u>Service Orientation</u>: demonstrates dedication to service; has a commitment to making meaningful contributions • <u>Teamwork and Collaboration</u>: adjusts role between team member and leader based on one's own and others' expertise and experience; gives and accepts feedback
Thinking and Reasoning	<ul style="list-style-type: none"> • <u>Critical Thinking</u>: uses logic and reasoning to identify alternative solutions to problems • <u>Quantitative Reasoning</u>: Applies quantitative reasoning or mathematics to solve problems • <u>Scientific Inquiry</u>: Applies the scientific process to synthesize information and solve problems • <u>Written Communication</u>: Effectively conveys information in writing
Science	<ul style="list-style-type: none"> • <u>Living Systems</u>: Skills in the natural sciences to solve problems related to molecular and macro systems including biomolecules, molecules, cells, and organs • <u>Human Behavior</u>: Knowledge of the self, others, and social systems to solve problems related to psychological, socio-cultural, and biological factors that influence health

However, a list of recommended courses can serve as a roadmap to show competency in the sciences and prepare students for the MCAT. Students can enter medical school with any undergraduate major. It is important to be well-rounded with a diversity of interests, leadership experiences, and intellectual curiosity.

Course recommendations or requirements can vary from school to school. It is a good idea to check directly with the schools you plan to apply to.

Recommended Courses	LC Course
1-year of Biology w/ lab	<p>BIO 202: Biological Core Concepts: Mechanisms (Pre-req: Bio 110 and Chem 120) <i>and</i></p> <p>An upper-level Biology course <i>with lab</i> such as:</p> <p>BIO 361: Cell Biology (Pre-reqs: Bio 110, Bio 201, Bio 202, and Chem 120. Math 123, Math 131, Math 255, or CS 171) <i>or</i></p> <p>BIO 369: Developmental Biology (Pre-reqs: Bio 110, Bio 201, Bio 202, Chem 120. Math 123, Math 131, Math 255, or CS 171) <i>or</i></p> <p>BIO 375: Physiology (Pre-reqs: Bio 110. Bio 202. Recommended pre-req: Math 123, 131, CS 171, or PHYS 141)</p>
1 semester Physiology (recommended)	BIO 375: Physiology (Pre-reqs: Bio 110 and Bio 202. Recommended pre-reqs: Math 123, 131, CS 171 or Phys 141)
1-year Chemistry w/ lab	<p>CHEM 110: General Chemistry I (Pre-req: QR 101) <i>and</i></p> <p>CHEM 120: General Chemistry II (Pre-req: Chem 110)</p>
1-year Physics w/ lab	<p>PHYS 141: Introductory General Physics I (Pre-req: Math 123 or Math 131) <i>and</i></p> <p>PHYS 142: Introductory General Physics II (Pre-reqs: Phys 141 or Phys 151. Math 131)</p>
1-year Organic Chemistry	<p>CHEM 210: Organic Chemistry I (Pre-req: Chem 120) <i>and</i></p> <p>CHEM 220: Organic Chemistry II (Pre-req: Chem 210)</p>
1 semester Biochemistry	CHEM 335: Metabolic Biochemistry (Pre-req: Chem 220. Recommended pre-req: Bio 202)
1 semester College Math	<p>MATH 123: Calculus and Statistics for Modeling the Life Sciences (Pre-req: Math 115) <i>or</i></p> <p>MATH 131: Calculus I (Pre-req: MATH 115)</p>
1 semester English Composition	CORE 120: Words
1 semester Psychology or Sociology (recommended)	<p>PSY 100: Introduction to Psychology (Pre-req: None) <i>or</i></p> <p>SOAN 100: Introduction to Sociology (Pre-req: None)</p>