

# UMBC Pre-Medical Requirements

The PreMedical and PreDental Advising Office, University Center 116

PreMedical ♦ PreDental ♦ PreOptometry ♦ PrePodiatry ♦ PreVeterinary

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UMBC Course Equivalent of Medical School Requirements	UMBC Course Title	Number of Credits at UMBC
BIOL 302	Molecular & General Genetics	4.0 credits
BIOL 303	Cell Biology  <b>Transfer students may already have completed pre-medical courses at other institutions and therefore can use those previous courses toward fulfilling the minimum requirements of medical schools. Medical schools evaluate transcripts of all colleges attended and will look at the original course when determining if a student fulfills the minimum requirements.</b>	4.0 credits
<b>Choose two labs from the list below:</b> BIOL 300 Lab BIOL 302 Lab <b>or</b> BIOL 303 Lab	Experimental Biology Lab Genetics Lab <b>or</b> Cell Biology Lab	2.0 lab credits 2.0 lab credits 2.0 lab credits
CHEM 101	Principles of Chemistry I	4.0 credits
CHEM 102 CHEM 102 Lab	Principles of Chemistry II Introductory Chemistry Lab	4.0 credits 2.0 lab credits
CHEM 351 CHEM 351 Lab	Organic Chemistry I Organic Chemistry I Lab	3.0 credits 2.0 lab credits
CHEM 352 CHEM 352 Lab	Organic Chemistry II (Spring/Summer only) Lab (Spring/Summer only)	3.0 credits 2.0 lab credits
BIOL 430 <b>or</b> CHEM 437	Biological Chemistry Comprehensive Biochemistry I (Fall only)	4.0 credits 4.0 credits
PSYC 100	Introduction to Psychology	4.0 credits
SOCY 101	Basic Concepts in Sociology	3.0 credits

<p><b>Option 1</b> <b>(preferred)</b></p> <p>PHYS 111 PHYS 112</p> <p><b>or</b></p> <p><b>Option 2</b></p> <p>PHYS121 PHYS122 + [PHYS 111 or PHYS 122Lab]</p>	<p><b>Selection depends on a student's declared major, although the 111/112 sequence is preferred.</b></p> <p><b>Option 1</b>(Combines the lecture and lab credit required by professional schools.) Basic Physics I Basic Physics II</p> <p><b>Option 2</b> (Lab credit is earned either via PHYS 111 or PHYS 122Lab) Introductory Physics I Introductory Physics II + [Basic Physics I (combined lecture+lab) or Introductory Physics Laboratory]</p>	<p>4.0 credits 4.0 credits</p> <p>4.0 credits 4.0 credits + [4.0 credits or 3.0 credits]</p>
<p>ENGL 100 <b>and</b> A second ENGL-prefix course.</p>	<p>Composition <b>and</b> A second ENGL-prefix course <b>All courses must have the ENGL-prefix</b> Examples: ENGL 206, 210, 226, 231, 232, 233, 241, 243,250, 260, 261, 271, 273, 281, 291, 301, 315, 380, 382, 383, 391, 393</p> <p>Please see the UMBC course catalog for the entire list of ENGL-prefix courses.</p>	<p>3.0 credits 3.0 credits</p>
<p><b>Choose <u>one</u> course from the list below:</b> MATH 155 <b>or</b> MATH 151</p> <p><b>And, <u>one</u> course from this second list:</b> STAT 350 <b>or</b> MATH 152</p>	<p><b>Math selections depend on math placement exam results and a student's declared major.</b> Applied Calculus I <b>or</b> Calculus &amp; Analytic Geometry I</p> <p>Statistics with Applications in Biological Sciences <b>or</b> Calculus &amp; Analytic Geometry II</p>	<p>4.0 credits 4.0 credits</p> <p>4.0 credits 4.0 credits</p>
<p><b>Choose <u>one</u> course from the list below:</b></p> <p>STAT 121 <b>or</b> STAT 350</p>	<p><b>Selection depends on a student's declared major.</b> (Only for students who did not take STAT 350 as one of their Mathematics courses, as per the above section.)</p> <p>Intro to Statistics for the Social Sciences <b>or</b> Statistics with Applications in the Biological Sciences</p>	<p>4.0 credits 4.0 credits</p>

Admission requirements vary among medical schools and therefore, it is a student's responsibility to research the admissions criteria of the medical schools to which they will be applying. The Association of American Medical Colleges (AAMC, [www.aamc.org](http://www.aamc.org)) provides information on various medical school requirements. The AAMC annually publishes the *Medical School Admission Requirements* (MSAR), a comprehensive source for medical school admissions information. Students may purchase their own MSAR from AAMC or log onto each individual medical school's website for detailed information about each school's admission requirements.

NOTE: The science, statistics, and social science prerequisite courses must be completed before a student takes the Medical College Admission Test (MCAT). UMBC pre-medical students are required to take the MCAT by the end of April; the April that precedes the summer during which they will submit their AMCAS application. Please see the office website for more detailed information about UMBC's pre-health committee's requirements and recommended MCAT study and completion timelines.

Current UMBC students are encouraged to join the Pre-Medical Society listserv by asking one of the Society officers to add them to the listserv. Please check out the UMBC Student Life website for officer contact information, <http://osl.umbc.edu>.

## **The MCAT Study Phase**

**Approximately 26 months prior to expected medical school matriculation (beginning of medical school)**

The MCAT Study Phase begins when students are completely finished with the prerequisite courses tested on the MCAT. Students should be mastering the content of courses as they are taking the classes, so MCAT study technically begins with the first science prerequisite course. To keep the timeline as uncomplicated as possible, the MCAT Study Phase deals with the time frame after students are finished with the MCAT prerequisite coursework.

Competitive MCAT scores are accomplished by completely finishing MCAT prerequisites, then studying 8–10 hours per week for 30 weeks (the equivalent of two semesters) prior to taking the MCAT. Students should only take the MCAT exam when they are fully prepared. “Trialing” the MCAT is never recommended, leads to poor scores, and makes it very difficult for an applicant to gain admission. Statistics show that scores on second attempts of the MCAT rarely produce significant increases (Reference: <https://www.aamc.org/students/applying/mcat/data/>). Therefore, adequate and sufficient preparation for the first (and hopefully only) attempt at the MCAT is strongly recommended.