

UMBC Pre-Veterinary Requirements

The PreMedical and PreDental Advising Office

PreMedical ♦ PreDental ♦ PreOptometry ♦ PrePodiatry ♦ PreVeterinary

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Common Veterinary Medical School Requirements	UMBC Course Recommendations to fulfill Veterinary Medical School Requirements	UMBC Course Title	Number of Credits at UMBC
Two semesters of Biology with labs	BIOL 302	Molecular & General Genetics	4.0 credits
	BIOL 303	Cell Biology	4.0 credits
	<p>Choose <u>two</u> labs from the list below:</p> <p>BIOL 300 Lab and <u>either</u>:</p> <p>BIOL 302 Lab or BIOL 303 Lab</p>	<p>Experimental Biology Lab (BIOL 300 Lab is a prerequisite for BIOL 302 and 303 Lab)</p> <p>Genetics Lab or</p> <p>Cell Biology Lab</p>	<p>2.0 lab credits</p> <p>2.0 lab credits</p> <p>2.0 lab credits</p>
Two semesters of Inorganic/General Chemistry with labs	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
Two semesters of Organic Chemistry with labs	CHEM 351 CHEM 351 Lab	Organic Chemistry I Organic Chemistry Laboratory II	3.0 credits 2.0 lab credits
	CHEM 352 CHEM 352 Lab	Organic Chemistry II (Spring/Summer only)	3.0 credits 2.0 lab credits

		Organic Chemistry Laboratory II(Spring/Summer only)	
One semester of Biochemistry (no lab)	BIOL 430 or CHEM 437	Biological Chemistry or Comprehensive Biochemistry I (Fall only)	4.0 credits 4.0 credits
Two semesters of Physics with labs	<u>Option 1</u> <u>(preferred)</u> PHYS 111 PHYS 112 or <u>Option 2</u> PHYS121 PHYS122 + [PHYS 111 or PHYS 122Lab]	Selection depends on a student's declared major, although the 111/112 sequence is preferred. <u>Option 1</u> (Combines the lecture and lab credit required by professional schools.) Basic Physics I Basic Physics II (may conflict with CHEM 352L) or <u>Option 2</u> (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]	 4.0 credits 4.0 credits 4.0 credits 4.0 credits + [4.0 credits or 3.0 credits]
One semester of Microbiology	BIOL 375	General Microbiology	3.0 credits
Two semesters of English	ENGL 100 and A second ENGL-prefix course.	Composition and A second ENGL-prefix course All courses must have the ENGL-prefix Examples: ENGL 206, 210, 226, 231, 232, 233, 241, 243,250, 260, 261, 271, 273, 281, 291, 301, 315, 380, 382, 383, 391, 393 This list is not exhaustive. Please see the UMBC course catalog for the entire list of ENGL-prefix courses	3.0 credits 3.0 credits

Electives (varies widely)	Open Selection	Humanities and/or Social Science courses—6.0 credits Courses to meet this requirement may include, but are not restricted to: art, philosophy, history, economics, psychology, or sociology.	6.0 credits
1-2 semesters of Math/Calculus	Choose <u>one</u> course from the list below: MATH 155* or MATH 151*	Math selections depend on math placement exam results and a student's declared major. Applied Calculus I or Calculus & Analytic Geometry I	4.0credits 4.0 credits
0-1 semester of Statistics	Choose <u>one</u> course from the list below: STAT 121 or STAT 350	Selection depends on a student's declared major. Intro to Statistics for the Social Sciences or Statistics with Applications in the Biological Sciences	4.0credits 4.0 credits
	EHS 115**	Medical Terminology	3.0 credits
0-1 semester of Speech	SPCH 100	Public Communications	3.0 credits

Required courses may have prerequisites. Carefully review prerequisites for courses in the course descriptions found in the UMBC [catalog](#).

* At UMBC, students need to complete MATH 150, MATH 155 **or** MATH 151 (or have MATH test placement into MATH 151) before registering for BIOL 141 and BIOL 142.

** Medical Terminology is not required by many Veterinary Medicine programs but is required for Virginia-Maryland College of Veterinary Medicine.

Transfer students may already have completed pre-veterinary medicine courses at other institutions and therefore can use those previous courses toward fulfilling the minimum requirements of veterinary medicine schools. Veterinary medicine schools evaluate transcripts of all colleges attended and will look at the original course when determining if a student fulfills the minimum requirements.

Admissions requirements for veterinary medical schools vary significantly, and therefore, it is a student's responsibility to research the admissions criteria of the veterinary schools to which they will be applying. Additional coursework to consider for preparation for veterinary medicine programs include Anatomy and Physiology (BIOL 251 and 252) and/or Comparative Animal Physiology (BIOL 305-3 cr), Microbiology Laboratory (BIOL 273L-2 cr), and Animal Nutrition (not offered at UMBC). Some veterinary schools require Animal Nutrition as part of the admission course requirements and many of those schools accept online animal nutrition courses as fulfillment of an animal nutrition requirement. North Carolina State University, Purdue, and Rutgers offer online animal nutrition courses for students who attend universities that do not offer Animal Nutrition.

A small number of veterinary medical programs require applicants to submit scores from the Graduate Record Examinations (GRE). The American Association of Veterinary Medical Colleges (AAVMC, www.aavmc.org) provides information on various veterinary school requirements. The AAVMC annually publishes the Veterinary Medical School Admission Requirements ([VMSAR](#)), a comprehensive source for veterinary medical school admissions information. Students may also log onto each individual veterinary school's website for detailed information about each school's admission requirements.

Current UMBC students are encouraged to join the PreVeterinary Society by following the Pre-Veterinary Society myUMBC group at <https://my3.my.umbc.edu/groups/preveterinarsociety>.