

Basic course requirements for U.S. Dental, Medical, Optometry, and Podiatry Schools

REQUIRED COURSES	Hrs	Course Name	Prerequisites
Biol 211	4	Introductory Cell Biology & Genetics	high school biology & chemistry
Biol 212	4	Introductory Evolution & Ecology	high school biology & chemistry
Chem 200, 201, 202	3,1,1	General Chemistry I, lab & workshop	high school chem and Math 108
Chem 210, 211, 212	3,1,1	Gen & Inorganic Chem, lab & workshop	Chem 200, 201, 202 with C or better
Chem 340, 341	3+2	Organic Chemistry I & laboratory	Chem 210, 211, 212 with C or better
Chem 442, 443	3+2	Organic Chemistry II & laboratory	Chem 340, 341 with C or better
Engl 101, 102	3+3	English Composition I & II	
Math 108, 109	3+3	Col Algebra, Trig & Anal Geom	Placement score; Math108
Phys 203a, 253a	3+1	College Physics I & laboratory	Math 108 & 109, or 111
Phys 203b, 253b	3+1	College Physics II & laboratory	Phys 203a, 253a
<u>STRONGLY RECOMMENDED*</u>			
*Chem 350, 351	3+2	Introduction to Biological Chem & laboratory	Chem 340, 341 with C or better
*Micr 301	4	Principles of Microbiology	Biol 211, 1 year college chem
*Biol 305 or Micr 302	3	Genetics or Molecular Biology	Biol 211, Chem 200/201/202
*Phsl 310	5	Principles of Physiology	Biol 211, Chem 200 and 210
Phsl 301	4	Basic Human Anatomy	college level biology
*Biol 306	3	Cell Biology	Biol 211, 212 and Chem 200, 201, 202
*One of: Plb 360, Quan 402, Math 282	3	Statistics	Math 108
*Phil 105	3	Elementary Logic	
*Psyc 102	3	Introduction to Psychology	
*Soc 108	3	Introduction to Sociology (And possibly other upper level sociology-i.e., Soc 321)	
*Psyc 302, 312, 402	3	Intro to Neuroscience, Social Psyc, Medical Psychology -Psyc 102	
Sci 201	1	Career Prep Seminar for Health Professions	Math 108, 109, Biol 200; Chem 200
<u>RECOMMENDED/ upper level</u>			
Phsl 401 a, b	5 + 5	Advanced Human Anatomy with laboratory	Phsl 301
Phsl 410 a, b	4 + 4	Mammalian Physiology	Phsl 310
Micr 403	3	Medical Microbiology	Micr 301
Micr 453	3	Immunology	Micr 301, 403
Biol 409	3	Developmental Biology	Biol 305

Pre-med students- To be well-prepared for the revised MCAT, students will need biochemistry, statistics, and have a solid social science foundation in addition to the essential science classes in biology, physiology, physics and chemistry. For the social and behavioral science section, Introduction to both Psychology and Sociology are recommended, and at least one 300-level psychology. Four chemistry laboratories are required for medical school. Either the Organic II lab OR the Biochem lab may be taken; or both. * Denotes coursework appropriate for the MCAT beyond the required courses. (Honors Program courses are also valuable for the MCAT.)

University of Illinois College of Medicine requires 3 behavioral social science courses, two from the same department.

Pre-dental students – SIU SDM requires two semesters of organic with lab, and one semester of biochemistry (without lab). (No Physics on the DAT.) Also consider art classes in ceramics, pottery, stained glass and other hobbies that develop your manual dexterity and/or perceptual ability.

Pre-optometry students - Micro 301 and calculus are required. UMSL requires 2 psychology courses, SCO requires 1 psychology and 2 social sciences.

Pre-Dentistry, Pre-Medicine, Pre-Optometry and Pre-Podiatry are not majors. The student must also choose a major in which to earn a baccalaureate degree. This major must be declared, if possible, freshman year. Transfer students must declare a major their first semester following transfer. Popular majors include **Physiology, Biological Sciences/Biomed Track, Microbiology, and Chemistry**. A **non-science major** may be considered, but students must have a strong science GPA to be competitive. The Health Professions Information Office is located in the Science Advisement office, Neckers A 185, phone: 618-536-2147.

See the HPIO web page, which has links to schools and application services, at: <http://www.science.siu.edu/academics/prehealth.html>. The College of Science Advisors are Jean McPherson, Kim Doellman, Sara Rassing, and Yvonne Gramenz (536-5537); web site: <http://www.science.siu.edu/advisement/index.html>.