

Coursework Guide for the Medical/Dental/Vet Pre-Professional School Student at Regis College

This guide is intended to inform the Regis College student who wishes to apply to Medical Dental or Veterinary school.

As the admissions requirements of Medical/Dental/Veterinary schools are varied and changing, there is no one complete set of absolute rules for planning to apply to medical school. However, there are common course requirements. This guide addresses and clarifies those courses with respect to the course offerings at Regis College.

First, students should be aware that there is no premedical or other pre-professional major at Regis. Being a pre-Medical/Vet/Dental student means that one is majoring in an area of choice and fulfilling requirements for admission to these schools by taking certain courses.

The reason for taking the courses is to meet common application course requirements and to prepare for required examinations, such as the MCAT, that assume a background in relevant natural sciences. Students and their advisers should note that admission requirements are in flux and vary between schools.

Courses for Pre-Medical/Vet/Dental Study at Regis College:

At least two years of chemistry with a laboratory in all semesters. At Regis this means CH 103-104 (General Chemistry sequence) followed by the two-semester Organic Chemistry sequence, CH305-306. Note that there is mathematics prerequisite to start the sequence at Regis. Students must have completed Quantitative Reasoning (QR) or be enrolled in MA210 or MA 101A. Also note that chemistry courses for allied health areas do not meet medical school requirements. Students must take the courses listed here, or equivalent courses elsewhere, typically those designated for natural science majors.

One or Two semesters of Biochemistry. Recently a new MCAT test was introduced which includes a section for biochemistry. Biochemistry is also a required pre-req at some Medical and Dental Schools and recommended at others. At least one semester is required for Vet schools. At Regis, CH 315-316 is the relevant undergraduate course sequence. Also note that students, due to the multiple semesters of chemistry

sequences needed, should plan on beginning the study of chemistry as early as feasible. This means when prerequisites have been met and the student is ready to do well.

2 Semesters of Biology, with laboratories. At Regis, BI 103-104 is the General Biology sequence required for Medical Schools. Be aware that some Medical Schools will not accept AP credit for these (or other) required courses. In addition, if you had substituted BI-105/106 (A&P 1 and 2) for BI-103, which is allowed to major in Biology here at Regis that is not going to fly for Medical/Dental/Vet School, you will have to take BI-103.

Many schools require or recommend upper level Biology courses such as Cell Biology and Genetics. This can vary between schools, so this is a good point to remind you that if you have a particular school or area in mind, look at their requirements.

Many students think that taking Anatomy and Physiology (A&P) intended for allied health programs will help to gain admission to Medical School. Medical Schools want well prepared students. They do not want students to try to take Medical School subjects ahead of time, unless they naturally fit into the undergraduate major. At Regis the A&P course sequence is oriented toward nursing and allied health areas, not at Biology majors. The science courses that are common for premedical students are those intended for Biology majors, even if the student is not a Biology major.

2 Semesters of Physics. At Regis this is General Physics, PY 213-214. A full year course sequence with laboratory is recommended or frequently required. To begin this sequence, students must have completed or be co-enrolled in calculus. It is recommended that students first complete Calculus. To take second semester, PY 214, students must have passed calculus as well as PY 213. Completing MA 102 and statistics is also recommended. In order to do well in physics, you must have a solid mathematics preparation and mastery at the level of the course you take.

Calculus and/or Statistics are a requirement or recommendation for some schools. This can vary from school to school but note that mathematics background is important to courses such as Chemistry, Physics and Biology. Students should be well prepared in mathematics.

It is also advised (and required by some Medical Schools) that students complete courses in the behavioral/social sciences, such as psychology and sociology. The 2016 MCAT revision and admissions requirements put emphasis on these, as well as the

traditional natural science courses. This is good to keep in mind as you plan your core courses.

For many students the easiest way to meet these requirements is to major in Biology, but other majors are indeed possible with planning. Medical Schools like to see broad backgrounds, no matter the major. They also like to see strong MCAT scores and a GPA of a least 3.4. They do not like C and D grades in courses. So, students must not only take the premedical courses, but must do well. This means planning and timing, and possibly summer school or post-graduation course work. Rushing into courses with weak backgrounds is not a good idea. Better to delay, build one's academic background than to take the courses and do poorly.

This information is very general, and schools vary on their requirements, so students should be proactive and research schools as early as possible especially if they hope to go to a certain school or stay within a certain geographic area.