

Pre-Health Handbook

For Students Considering a Career in Healthcare or the Allied Health Professions

For more information contact:

Jonathan Karp, Ph.D. • Pre-Health Advisor • 2083 Lawrenceville Road • Lawrenceville, NJ 08648 • Phone: 609-895-5658 • Fax: 609-895-5782 • jkarp@rider.edu

Making A Decision

The healthcare industry includes a wide variety of career options. Some students will decide direct patient care is a perfect fit while others will choose research and still others will gravitate to careers in public health, health care administration, and/or other allied health professions.

The more courses you take and the more co-curricular experiences you acquire, the more informed you will be about your decision.

The figure below representative career paths to be thinking about as you choose a major and experiential activities while an undergraduate at Rider University.

Pre-Health Considerations

Pre-Health Science Sequence & Research Intensive

MD

MD/PhD

PhD

Pre-Health Science
Sequence & Clinical Focus

MD/DO

PA

Dental

Veterinary

Pharmacy

Podiatry

Chiropractic

Science Requirements Vary but Do Not Necessarily Include Organic Chemistry

Nursing

PT

OT

Audiology

Optometry

ATC

Science Coursework
Useful but not Required

Counseling/Psychology

Health Administration

Nutrition

MPH

MSW

Law

What Are Professional Schools Looking for?

In addition to academic excellence, professional schools want to see clear evidence that applicants are making a mature, informed decision to pursue a career.

Admission committees want to see evidence applicants understand the challenges, as well as the rewards of entering a specific profession. **Shadowing, clinical volunteering, or employment** that allows a prospective student direct observation of the profession is essential.

Indepth experiences in an area are also vital. In other words, students need something to talk about, in addition to good grades, to be considered a viable candidate for admission.

Undergraduate Coursework

Minimal Pre-Med Coursework*

Biology

At Least Two Semesters

Required #BIO 115/115L #BIO 116/116L

Recommended BIO 260/260L BIO 265/265L

Chemistry

At Least Four Semesters

Required # CHE 120, 121 # CHE 122, 123 # CHE 211, 211L

CHE 214, 214L

Recommended

BCH 325 (with optional BCH 326 laboratory)

Physics

At Least Two Semesters

Required # PHY 100/100L or PHY 101/101L # PHY 200/200L or PHY 201/201L

Mathematics

Requirements vary greatly. Some schools recommend Calculus or Statistics while others need just 2 semesters of collegelevel math

English

At Least Two Semesters

One semester should be writing intensive (ENG prefix preferred)

Social Sciences

At Least Two Semesters

> # PSY 100 # SOC 101

#Tested on the MCAT

Requirements for entry into specific post-baccalaureate programs vary. Students should check individual schools for details. Typical requirements for medicine, dentistry, and veterinary medicine are listed above. Requirements for other allied health professions and healthcare fields may vary.

Medical, Dental, Veterinary, and most health-related professional schools do not require students to have a specific major. Choose a college major based on your academic strengths and interests. You will earn better grades and be a more impressive applicant if you take courses you enjoy!

We recommend students start slowly and move into a more demanding schedule after a full year of college – when you know exactly how much you can do. Two science courses (including math) each semester during your first year is probably sufficient.

Take stock of whether you are enjoying the ideas in your science coursework. Many health care fields do NOT require advanced coursework in chemistry or biology. A graduate program based on prerequisite courses you truly enjoy may be your best choice!

Your faculty and advisors are here to help you find a career path that is a good fit for your specific abilities and career goals.

^{*}Always refer to specific schools of interest to determine if additional coursework is required

Developments In An Age of COVID19

- * Medical, graduate, and professional schools are aware of the extraordinary situation in which students, and universities find themselves as a result of the COVID-19 pandemic. All all students across the country are "in the same boat" during this uncertain and challenging time. Please try to use the resilience, creativity and compassion that you will use as a future professional to see you through this challenging situation.
- * Some universities offer pass/fail options for grades. It is advisable that you take any required courses, such as biology, chemistry, math and physics for a grade, if that option is offered. Pass/fail options will not influence your science grade-point-average but may not be viewed favorably by admission committees.
- * Non-classroom activities are important parts of the application process. Many internships, shadowing opportunities, volunteer hours, and similar engaged learning experiences for students are suspended/postponed due to the Coronavirus. Admissions committees understand all of this. All students/applicants nationally are in the same situation. Individual schools may have there own way of dealing with these events. Check school websites and contact their Graduate/Medical/Professional School Admission Office directly if you have questions about changes in admission requirements as a result of the pandemic.
- * Depending on current recommendations from public health experts, it is quite possible that medical and other professional school interviews in the fall of 2020 and spring 2021 may be conducted virtually either by phone or videoconferencing. Be prepared for this possibility.

Possible Ways to Enhance Your Application Remotely

- *If you are working in a research laboratory, get involved in data analysis and /or writing a paper for potential publication.
- * Study for the MCAT, DAT, PCAT, GRE or other admission tests.
- *Check out websites for ways that you can help during the COVID-19 pandemic are there ways to volunteer for remote activities via the United Way or Red Cross in your area? Investigate ways to connect with under-resourced schools and the summer programs that serve them, or isolated elderly.
- *Read the primary literature in your area of graduate school interest. Not only will you learn the current state of affairs, but you will also get better at talking about your area of study and undoubtedly will be a more interesting person to talk to during an interview!

Important things to consider when applying to medical school, dental school, veterinary schools, allied health programs, etc.

- An overall grade-point average of at least 3.4 at the time of application is a typical minimal threshold for success. Schools will see all your coursework from every school you attended. It is important to do well in both science and non-science classes.
- A science (Biology, Chemistgry, Physics, Math (BCPM)) grade-point-average less than 3.0 significantly reduces your chances of getting into most graduate programs.
- The minimum required courses for any professional program can be completed alongside almost any major. Plan ahead!
- Students can take the course requirements at any school or over the summer. It is best if the courses are taken at 4-year schools rather than community colleges.
- The required core science courses should be completed before taking professional entrance exams. The Medical College Admission Test (MCAT), Dental Admission Test (DAT), Graduate Record Examination (GRE), and the Pharmacy College Admission Test (PCAT) are an important component of a professional school application. Study extensively and sit for these exams when best prepared.
- Advanced Placement (AP) tests in biology, chemistry, and physics from high school usually DO NOT fulfill the requirements for medical school. We recommend NOT to skip any required prerequisite courses even if you received AP credit for them. AP credit may be sufficient for the math requirement for some programs. Be sure to check.
- Many professional schools inquire about student conduct. Students should maintain the
 highest ethical standards in both academic and non-academic activities throughout ones
 undergraduate years. Failure to do so will significantly jeopardize prospects for
 admission irrespective of grade-point-average and other activities.

Post-baccalaureate programs exist if you do not complete all the prerequisite course requirements during college (career change programs) or you need to enhance prospects for admission by improving grades (academic enhancement programs). The Rider University Post-baccalaureate Program is a best-fit for students interested in a career change.