

Faculty Guide: First Two Years for Students Interested in Healthcare

One or more of your advisees may be considering a career in healthcare, such as in medicine, physical therapy, dentistry, physician assistant, veterinary medicine, or pharmacy. This guide is designed to facilitate advising of such students on important steps they need to be taking, especially early on in their education at Cornell.

Many of the professional schools students may be interested in pursuing have steep and broad pre-requisites, particularly in chemistry and biology – and many of these courses are specific and highly-sequenced in nature. Further, if a student wishes to enter professional school immediately following Cornell, her or his application will be due the summer after her or his junior year; the student must have in effect completed these pre-requisites by this time as well. We note, however, that many of our students take a ‘gap’ year between college and professional school in order to have greater flexibility in courses during undergrad, as well as an opportunity to gain work or service experience prior to further schooling.

Additionally, there are expectations of significant service and health-related experiences outside of the classroom that students will need to participate in regularly. Much of this will take the form of research, internships, job shadowing, and volunteering. It is our hope that by priming students early with a carefully chosen first two academic years, they will become acquainted with the academic disciplines relevant to healthcare, maximize their chances to be successful applicants, and enable flexibility and broader education opportunities during their junior and senior years. We outline some recommendations below.

Coursework – 1st and 2nd Year

The following table details required, strongly recommended, and recommended coursework for the first two years for both pre-medicine and pre-physical therapy. While there are numerous healthcare career paths that a student can take, these offer our two most highly enrolled examples. Numbers listed in brackets indicate blocks that the course will be offered for the coming 2019-2020 school year.

Year in School	Pre-Medicine Student	Pre-Physical Therapy (PT) Student
First Year	<p><u>Required</u> ENG 111 (W) (Various Topics) [2-6] BIO 141 (Foundations: Cellular Biology) [2, 3, 5, 8] BIO 142 (Foundations: Organismal Biology) [2, 4-6] CHE 121 (Chemical Principles I) [2-4, 6] CHE 122 (Chemical Principles II) [4, 7, 8]</p> <p><u>Recommended</u> PSY 161 (Fundamentals of Psych. Science) [2-7] -or- SOC 101 (Sociological Thinking) [2, 3, 5-7]</p>	
Second Year	<p><u>Required</u> Any required course above not taken</p> <p><u>Strongly Recommended</u> CHE 225 (Organic Chemistry I) [1, 2, 5] BIO 205 (Molecular Biology) [3, 7] CHE 326 (Organic Chemistry II) [4, 6] CHE 327 (Organic Chemistry Laboratory) [5, 7] STA 201 (Statistical Methods I) [1, 3-8]</p> <p><u>Recommended</u> SOC 101 (Sociological Thinking) [2, 3, 5-7] -or- PSY 161 (Fundamentals of Psych. Science) [2-7]</p>	<p><u>Strongly Recommended</u> Any course above not taken KIN 207/BIO 207 (Human Systems Physiology & Anatomy I) [2, 5] STA 201 (Statistical Methods I) [1, 3-8]</p> <p><u>Recommended</u> KIN 208 (Human Systems Physiology & Anatomy II) [3] PHY 141 (Introductory Physics I) [4] PHY 142 (Introductory Physics II) [8] CHE 225 [1, 2, 5]--pre-req for BIO 329/330 (Advanced Human Anatomy and Physiology I/II) BIO 205 [3, 7]--pre-req for BIO 329/330</p>

Note also that while many of these courses may be taken at any time during the year, some are sensitive to pre-requisites (e.g. BIO 205 requires CHE 225). Outside of these recommended courses, there is no implied preference toward additional science coursework; in fact, students are encouraged to take coursework of interest to them, preferably *not* in the natural sciences.

Exploring Healthcare

Strong applicants for health professions need more than just high GPAs, strong exam scores, and outstanding letters of recommendation. They also must have cultivated experiences which clearly demonstrate to admissions committees that they understand what it is like to be a practicing member of that profession. To achieve this, students should be sure that each winter, spring, and summer break is carefully planned to help them learn about their strengths and interests, experience specific clinical settings (shadow/volunteer/work), broaden their cultural literacy, and/or participate in research or internships. In particular, students would be wise to consider a research position or internship after their first year; in order to do so, they should be encouraged to explore these possibilities through conversations with individual faculty, Dimensions, and the Berry Career Institute, during the fall semester.

Contact Us

If you have any questions regarding advisement of your students, please do not hesitate to contact the Dimensions office: either Assoc. Professor Jai Shanata, Faculty Advisor of Dimensions at jshanata@cornellcollege.edu (x4842); or Mark Kendall, Associate Director of Dimensions at mkendall@cornellcollege.edu (x4136). You may also contact Cornell's designated pre-med advisors: either Professor Barbara Christie-Pope at bchristie-pope@cornellcollege.edu (x4395); or Professor Craig Tepper at ctepper@cornellcollege.edu (x4376). For questions related to pre-physical therapy, you may contact Assoc. Professor Kristi Meyer at kmeyer@cornellcollege.edu (x4591).

As a final note: if any of your students with an expressed interest in healthcare have not made contact with [Dimensions](#), please encourage them to do so!