PREPARING FOR A CAREER IN THE HEALTH PROFESSIONS

2018-19

PRINCETON UNIVERSITY
HEALTH PROFESSIONS ADVISING

36 University Place, Suite 230
(Floor 2M in the U-Store Building)
Phone: 609.258.3144
Email: hpa@princeton.edu
Web: hpa.princeton.edu
Preparing for a Career in the Health Professions

First Year
- Explore academic interests: take classes in areas that you may never have heard of in high school.
- Think about the things that you want to explore or accomplish in college. Don’t sacrifice them to your interest in “being premed.”
- Strive to do well in your classes: join study groups, go to office hours and foster relationships with faculty, go to the McGraw Center, Writing Center, etc.
- Improve your time management strategies and study skills.
- Develop your co-curricular interests; seek student organizations where you feel supported.
- Attend Premed Society, MAPS, Pre-Dental, Pre-Vet group meetings and events.
- Attend events that relate to your interests or take you out of your comfort zone.
- Meet with an adviser at Health Professions Advising (HPA) to introduce yourself and discuss your academic and career interests.
- Start gaining a realistic understanding of the medical world and its diversity.
  - Borrow and read some medically related books from the HPA Library.
  - Surf through the Explore Health Careers website: [www.explorehealthcareers.org](http://www.explorehealthcareers.org)
  - Read the Health section of The New York Times, or otherwise stay abreast of current events in health care.
- Draft your resume and bring it to Career Services (next door to HPA) for review. Your resume should include academic, employment, and activities information.
- Explore and apply for summer volunteering / research / work opportunities.

Summer after First Year
- Gain concrete understanding of your career(s) of interest: volunteer in a health care facility, shadow health professionals in your potential career area, do research in a hospital or academic medical setting.
- Continue to update your resume to include recent experiences.
- Continue to reflect on your interests, values, and career motivations.

Reflect on the questions:
- Why do I want to be a health professional?
- What qualities do I want to embody as a professional?
- What can I do to develop these qualities in myself?
Dear aspiring health professionals:

Welcome to Princeton! We look forward to helping you explore your interest in serving others in health careers.

At Health Professions Advising (HPA), we work with all students and alumni interested in any and all health professions: medicine is the most popular, but we have advised students who aspire to become dentists, veterinarians, physician assistants, nurse practitioners, physical therapists, pharmacists, physician scientists, public health professionals, and many others.

This guide will help you plan your path to health professions school. As you will hear us reiterate throughout your time with us, there is no single, correct way to prepare—there is no magical formula that will ensure your acceptance to professional school. We are here to help you make informed choices about classes, activities, and your future.

In addition to using this guide, we encourage you to attend workshops, familiarize yourself with our website, read Vitals, our weekly e-newsletter, and come to meet with us at any time! We are your advisers for all four years at Princeton and beyond. The sooner we get to know you, the more helpful we can be. Drop-In Hours are available during the school year (times are posted on the HPA website and on Facebook); you may make individual appointments through WASE online scheduling.

We enjoy working with students with every level of interest in a “prehealth track”—indecision and questions are welcome!

Kate Fukawa-Connelly, director
Jessica Matzko, assistant director
Randall Perez, health professions adviser
Jennifer Samarel, administrative assistant
SUITABILITY FOR A CAREER IN THE HEALTH PROFESSIONS

It is easy to progress through premed without stopping to reflect, especially if you’ve known “since you can remember” that you were “destined” to become a doctor, but now is the time to think long and hard about your motivation, consider your personal goals and values, and measure them against concrete information about the reality of becoming a health professional.

How do you know if you’re well-suited to pursue a career in healthcare?

- You should have an intellectual interest and ability in science, particularly concerning human biology and disease. Different health careers require differing amounts of science mastery.
- You should have a deep and abiding interest in people and their problems, and a service-oriented mentality.
- You should be ready to work in a team setting, both as a leader of the team, and as a collaborator who draws on others’ expertise. You should be ready to work with a wide variety of people as your colleagues and as your patients.
- You should be comfortable interacting with patients and others in a healthcare setting. Some medical schools will assign you to your first patients in the first week of school. You are going to spend much of your training in the clinical setting—knowing that you enjoy the environment before you apply to health professions school is critical.

Gaining actual experience—through courses and activities—will help you to clarify your values, skills, and interests, and to determine whether they’re best applied to a health professions career.
THE DIVERSITY OF CAREERS IN THE HEALTH PROFESSIONS

Among the health professions, there are many options, which require varying amounts of time in school, specific knowledge and technical skills, and career advancement opportunities. Within medicine alone there are many career options and a wide variety of ways to contribute to society. There are physicians, veterinarians, and dentists in clinical practice, academic medicine, biomedical research, healthcare administration, public health, college health, government, and many other areas.

The HPA website provides information about prerequisite courses for a number of health professions, as well as links to gather more information.

**US News Best Healthcare Jobs 2018**

1. **Dentist**
2. **Physician Assistant**
3. **Nurse Practitioner**
4. **Orthodontist**
5. **Pediatrician**
6. (tie) **Obstetrician/Gynecologist**  
   **Oral & maxillofacial surgeon**  
   **Physician**
9. **Occupational Therapist**
10. **Physical Therapist**

Common questions in considering a healthcare career:

- How much science do I want to study?
- How much schooling do I want to pursue?
- How much responsibility do I want to have?
- What lifestyle do I envision for myself?
- What brings me satisfaction in my day-to-day life?
- How much am I willing to sacrifice for my career goals?
PLANNING YOUR PREMED/PREHEALTH PROGRAM

What Do Medical and Other Health Profession Schools Look For?

The environment in which health professionals work demands high levels of intellectual and interpersonal ability. Here are some characteristics valued by admission committees:

**Academic readiness.** You will need to demonstrate that you can manage the rigorous curriculum, which will include a higher volume of scientific content than most students encounter as undergrads.

**Orientation to learning.** Developing strategies that allow you to process and retain vast quantities of information is important. Additionally, you are likely to thrive in the health professions if you are intellectually curious, able to solve complex problems, and interested in lifelong learning. You have to know how to learn and love learning.

**Interpersonal skills/Ability to work with others.** You should be able to relate well to a broad spectrum of people with respect, empathy, and compassion, with an open mind and a willingness to help. Step outside your comfort zone to work with sectors of the population that you may have had limited exposure to or feel uncomfortable with so you will be ready to care for them.

**Evidence of understanding of your future career.** It is expensive to educate a health professions student and deciding whom to train is a responsibility that schools take seriously—they want to accept students who understand what they are getting into. You will also be more likely to persist in your preparation if you have concrete experience with your future career of interest.

**Personal Competencies.** Factual knowledge is only part of what makes a skilled physician; personal characteristics, experiences, and attributes are equally significant. Characteristics that are considered particularly important in physicians (and other health professionals) include:

- Ethical responsibility
- Reliability & dependability
- Service orientation
- Social & interpersonal skills
- Teamwork
- Capacity for improvement
- Resilience & adaptability
- Cultural competence
- Oral & written communication
How Do Admissions Committees Evaluate Applicants?

There are five main factors that schools will consider in evaluating applicants:

1. **Academic History.**
   Admissions committees will look at the **breadth** and **depth** of coursework, and **balance** of the academic program. They may want to know your rationale for course, concentration, and other academic choices. They will look at trends in your performance and will compute your GPA. All courses taken at a US college/university will count toward your application GPA (including courses taken outside of Princeton and courses that you repeat). The average GPA of Princeton applicants who were accepted to medical school is about 3.56; **nationally, it is about 3.7**. For more admissions statistics, we maintain a Data of Interest binder in the HPA library.

2. **Activities.**
   Carefully choose your activities and strive for **quality of involvement over quantity**. The only required activity is experience in a clinical setting that will provide a realistic understanding of caring for others in a healthcare environment, such as volunteering or working in a hospital or another patient care facility. Other activities should help you to develop all of those **personal competencies** listed above. Leadership, community service, and research activities are considered particularly useful in preparing for a health professions career.

3. **Letters of Recommendation.**
   All schools require letters of recommendation and most require some written by faculty in your science courses. For medical and dental school admissions, you’ll be expected to have at least three academic recommendations. Cultivate relationships with faculty and other mentors who will be able to advocate for you in the admissions process.

4. **Standardized Test Scores.**
   Every health professions school requires a standardized test. These tests are designed to evaluate your abilities in areas that will be important in your further study. Like the SAT and ACT, they also provide a universal “number” that schools can use to compare all applicants.

5. **Interview.**
   All schools require an interview: you will have an opportunity to expand on your written application and learn more about the schools to which you are applying. Cultivate your oral communication skills and gain comfort in speaking with diverse audiences in preparation for interviews.
Co-Curricular Preparation for Medical, Vet & Dental School

Get involved with activities that matter to you, on campus, in the larger Princeton community, and during your summers. There are seemingly endless opportunities—arts, athletics, service, religious organizations, etc. Find something you enjoy and devote time and energy to it. You will be a richer person for it and you will come to your academic work refreshed. But remember, you are a student first! Heavy participation in activities at the expense of your academic performance is discouraged. Come and talk with an adviser who can help you navigate your activities and time management.

You may have to work on campus to contribute to your college expenses. Your ability to keep up with coursework and handle a job speaks well of your discipline, motivation, and priorities.

Developing Your Narrative

Where you spend your time will indicate your interests and passions to schools. If you plan to make a claim as an applicant (e.g., “I may be interested in pediatrics”), make sure that you have evidence to back it up (e.g., volunteer work or internships with kids). Some of your co-curricular activities may relate directly to your profession, many will help you develop personal competencies that transfer to your profession, and some just show that you’re a well-rounded, multi-dimensional person: it’s okay to do a few things just for fun!

Research Experience

Many students are interested in health careers due to a fascination with science or society and related problem solving. All students at Princeton will gain research experience beyond peers at most institutions due to our independent work requirements, but some students go beyond this opportunity via work in campus labs, internships in academic medical centers, or glide year research positions. Do research to try it out or because you know you love it, but do not focus your energy here if it is not a passion of yours. Learn more about research at Princeton: undergraduateresearch.princeton.edu

Service Experience

Many students are interested in health careers because they gain satisfaction through direct service to others. As a health professional, you will be serving a diverse patient population: learn more about the needs of those different from yourself in service to them. Popular opportunities include working with Community House, the Petey Greene Prisoner Assistance Program, all of the Student Volunteer Corps opportunities, and Princeton Internships in Civic Service (PICS) summer internships. The Pace Center for Civic Engagement coordinates service opportunities at Princeton: pace.princeton.edu
Alum Advice: Isabelle Byers ’16 (WWS with GHP certificate)

Pursuing an MD at Duke School of Medicine
Key Princeton activities: Varsity Soccer, PFA, Co-president, Premedical Society, Moments of Mindfulness Initiative, HPA Peer Adviser; Peer Academic Adviser for Butler College
Glide year activities: Patient Advocate and clinic coordinator, San Francisco Free Clinic

My number one piece of advice would be to let your curiosity drive you. Although it may sound easy in theory, in practice it can be quite difficult. A number of external factors—even your own pre-conceived ideas or expectations—can have a significant bearing on how you decide to spend your time as an undergraduate and as a premed (e.g., what major to choose or extra-curricular to engage in). But I would urge you to take the time to take a step back, and think hard about what ideas and experiences genuinely intrigue you. And yes, it’s likely that there are too many ideas and experiences at Princeton for you to meaningfully engage with in four years, but that’s ok! Using curiosity as a compass can help you chart a path that is honest and sustainable. Through intentional wandering, I also guarantee you will start to ask questions that inspire you and share in communities that resonate with you. Cheers to you and the wonderfully winding journey you have ahead!

Health-Related & Clinical Experience

It is essential for you to gain some real-world perspective on whatever form of medicine interests you. There are many ways in which you can learn about the field, many of which are discussed in detail on our website:

- Work or volunteer in hospitals or clinics
- Pursue internships (posted in the HPA Vitals newsletter, the International Internship Program, PICS program, or through Career Services)
- Read medical memoirs or other books about the field
- Attend HPA or student organization workshops and programs
- Shadow health professionals
- Work on clinical trials as research assistants
- Serve as Nursing Assistants, Scribes, or EMTs

You should seek to gain a realistic understanding of what being a health professional is like, to reflect on how your career of choice might be satisfying to you, and to consider ways that you will best serve your patients and the profession. This should be a top priority. Many students who do some clinical or service work during the semesters find it easier to keep the “bigger picture” in mind—you’re going into medicine to help people; helping people as you take classes can remind you of this larger goal. Also note: you will want to develop and sustain your exposure to clinical practice, not rely on what you did back in high school or observed through family members who are in health care—you will develop as a person in college, and your perspectives will change.
Academic Preparation for Medical, Vet & Dental School

COURSE REQUIREMENTS FOR MEDICAL SCHOOL

It is best to be aware of the admission requirements early on in college so that you can time your coursework wisely. The basic requirements for medical schools are outlined in the following chart.

Note that there are two types of course we include here: courses required before you begin medical school and courses that may not be required, but are recommended for the Medical College Admissions Test (MCAT).

Additional notes:

- While the chart (p. 10) is representative of the requirements at the majority of schools, individual schools may have additional requirements.
- All requirements must be taken for a grade, not P/D/F.
- All courses taken at any US college or university will count toward your application GPA even if they do not transfer to Princeton.
- It is preferable to take all science requirements at Princeton during the academic year. Consult with HPA if you plan to take courses in the summer (and see advice, p. 25).
- Your performance in Biology, Chemistry, Physics, and Math (BCPM) courses will be calculated on your application.
- Generally, taking more than the minimum required Biology courses is valued. Consider Genetics (MOL 342), Microbiology (MOL 380), Immune Systems (EEB 327), Comparative Physiology (EEB 314), and other courses with human biology content.
- We recommend that students know the prerequisites and AP policies for the public medical schools in their state of residence. About 70% of medical students attend their public, state medical school.
  - Residents of Hawaii, Illinois, Iowa, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, Oklahoma, Texas, Virginia, and Wisconsin, should expect to take 3-4 semesters of Biology.
  - Many questions about course requirements are answered in the FAQs on the HPA website: hpa.princeton.edu/faqs/academics-faq

BCPM Credits for accepted Princeton med applicants¹

mean = 70 credits
or about 17-18 courses
range = 40-112 credits
or 10-28 courses

¹Does not include students with postbac science courses
# COURSE REQUIREMENTS FOR MEDICAL SCHOOL

<table>
<thead>
<tr>
<th>Course type</th>
<th>Course number @ Princeton</th>
<th>Required by most medical schools</th>
<th>Required by some medical schools</th>
<th>Recommended for MCAT prep</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry</td>
<td>CHM 201 (or 207) + CHM 202</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>CHM 301 + CHM 302/304</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Biology</td>
<td>EEB 211 (fall only) + MOL 214 (fall/spring)</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Physics</td>
<td>PHY 101 or 103 + PHY 102, 104 or 108</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Biochem</td>
<td>MOL 345 (fall/spring)</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>English / Literature</td>
<td>Writing Sem + 1 semester of literature</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Math</td>
<td>1 semester of calculus or AP + 1 semester of statistics</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>Psychology and Sociology</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

**A note about Biochemistry**

Biochemistry is required by about 55 US MD schools and recommended by most of the others. The MCAT includes significant Biochemistry content. Members of the class of 2022 should take Biochemistry.

**A note about English**

Focus on courses that require reading, analyzing literature, and writing papers for the majority of your grade. See our FAQs online for more information.

**A note about Math**

Over 50 medical schools require college math. Of those, almost 20 require one semester of statistics, and concepts from statistics will be tested on the MCAT. Members of the class of 2022 are strongly encouraged to take statistics in any department.

**A note about Psychology and Sociology Social Sciences**

A few medical schools now require behavioral or social science courses. Concepts related to the Psychological and Social Foundations of Behavior are tested on the MCAT. No specific course will align perfectly with the MCAT; PSY 101 and Sociology courses that discuss race and culture (e.g., SOC 227, SOC 236) will be most relevant.
Course Descriptions for Med School Prerequisites

General Chemistry

General Chemistry I (CHM 201) (offered in Fall) and General Chemistry II (CHM 202) (offered in Spring). The goal of General Chemistry is to enhance our understanding of our surroundings through a study of matter at the molecular scale. Topics in CHM 201 include chemical reactions, equilibrium, energy and entropy, quantum theory, atomic structure, and chemical bonding. Topics in CHM 202 include introduction to chemical bonding and solid state structure; chemical kinetics, descriptive inorganic chemistry; laboratory manipulations, preparations, and analysis.

Organic Chemistry

Organic Chemistry I: Biological Emphasis (CHM 301) (offered in Fall) and Organic Chemistry II: Biological Emphasis (CHM 302) or Organic Chemistry II: Foundations of Chemical Reactivity and Synthesis (CHM 304) (offered in Spring). CHM 301 will introduce concepts of organic chemistry including the structures, properties, and reactivity of simpler organic compounds. The emphasis will be on the mechanisms of organic reactions, with examples taken from biology when appropriate to illustrate the principles. CHM 302/304 will extend on concepts introduced in CHM 301 to the structures and reactions of more complex molecules, with an emphasis on how organic chemistry provides the framework for understanding molecular processes in biology in CHM 302. General Chemistry (CHM 201/202) is a prerequisite for Organic Chemistry.

Biology

Life on Earth: Chaos and Clockwork of Biological Design (EEB 211) (offered in Fall). An examination of how life evolved and how organisms function. Design—“intelligent” and otherwise—will provide a unifying theme. Why are males brightly colored in some species, but in others females are the showy sex? Why do humans have knees that fail whereas horses and zebras do not? These and other “why is it so” questions related to the origin and history of life, genetic code, biochemistry, physiology, morphology and body plans, sex and reproduction, cooperation, and ecosystems will be explored. Required of all EEB majors.

Introduction to Cellular and Molecular Biology (MOL 214) (offered in Fall and Spring). Important concepts and elements of molecular biology, biochemistry, genetics, and cell biology, are examined in an experimental context.

Physics

Concerned with an introduction to the fundamental laws underlying physics and general application in other areas of science. The treatment in PHY 101-102 is complete and detailed, however, less mathematical preparation is assumed than for PHY 103-104. PHY 108 is designed to introduce life science students to selected topics in physics. Molecular Biology majors should take PHY 101 or 103 (fall) and PHY 108 (spring).

Biochemistry

MOL 345 – Biochemistry (offered in Fall and Spring). Fundamental concepts of biomolecular structure and function will be discussed, with an emphasis on principles of thermodynamics, binding and catalysis. A major portion of the course will focus on metabolism and its logic and regulation. Prerequisites: MOL 214 and either CHM 302/304 or ISC 335. CHM 302/304 may be taken concurrently with MOL 345.

Statistics

We recommend any of the following statistics courses: ECO 202, ORF 245, POL 345, PSY 251, SML 201, SOC 301, WWS 200, WWS 332.
## COURSE REQUIREMENTS FOR OTHER HEALTH PROFESSIONS

Always check with individual schools for exact requirements, but the following is a basic guideline for some programs of interest.

<table>
<thead>
<tr>
<th>Prereq</th>
<th>Dental</th>
<th>Vet</th>
<th>Optom</th>
<th>Nurse Prac</th>
<th>Pharm</th>
<th>Phys Asst</th>
<th>PT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Chem</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Some</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Organic Chem</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Some</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Some</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Physics</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Calculus</td>
<td>Few</td>
<td>Some</td>
<td></td>
<td></td>
<td></td>
<td>Few</td>
<td></td>
</tr>
<tr>
<td>Stats</td>
<td>Some</td>
<td>Some</td>
<td></td>
<td>✓</td>
<td>Some</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Biochem</td>
<td>Many</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td>Some</td>
<td></td>
</tr>
<tr>
<td>Microbio</td>
<td>Few</td>
<td>Some</td>
<td>Some</td>
<td>✓</td>
<td>Some</td>
<td>Some</td>
<td>Some</td>
</tr>
<tr>
<td>Anat &amp; Phys</td>
<td>Few</td>
<td>Some</td>
<td>✓</td>
<td>Some</td>
<td>Some</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>Many</td>
<td>Some</td>
<td></td>
<td></td>
<td>Some</td>
<td>Some</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>Adv bio, Psyc</td>
<td>Varies widely</td>
<td>Psyc, humanities and soc sci</td>
<td>Nutrition, psyc</td>
<td>ECO, Public Speaking</td>
<td>Psyc</td>
<td>Psyc/Soc</td>
</tr>
</tbody>
</table>

**Dental School:** Prereqs similar to med, but often includes Microbiology (MOL 380). The dental admissions test (DAT) covers the biology, general and organic chemistry, perceptual ability, reading comprehension, and quantitative reasoning (no higher than algebra-level problem solving).

**Vet School:** Veterinary school prerequisites vary widely, though all include the four basic sciences with labs. Consult with an HPA adviser if you are considering veterinary school. Veterinary schools require the GRE General Test, which tests verbal and quantitative reasoning, and analytical writing.
ADVANCED PLACEMENT CREDIT AND PREMED

Schools have differing policies regarding Advanced Placement. Almost all will accept advanced courses that supplement AP credit to satisfy requirements.

**AP Biology**: Some medical schools insist on two semesters of lab. MOL and NEU concentrators with AP credit can satisfy this requirement by taking MOL 214 and core lab. EEB concentrators are required to take EEB 211. If you choose another concentration and have a 5 on the AP test, either opt to take EEB 211 and MOL 214 (especially recommended if you don’t plan to concentrate in a science), or take MOL 214 and at least one additional upper-level Biology course, preferably with lab, e.g., Comparative Physiology (EEB 314), Human Adaptation (ANT 215/EEB 315).

**AP Chemistry**: Students with a 4 on the AP test can take CHM 202 or CHM 215, Organic Chemistry, Biochemistry and an additional upper-level Chemistry course. Students with a 5 on the AP test often take Organic Chemistry (typically in the sophomore year, so you can focus on adjusting to Princeton before tackling this sequence), Biochemistry, and at least one additional upper-level Chemistry course. Medical schools have not traditionally expected an additional Chemistry lab course to supplement AP. Past premed students have taken advanced Chemistry courses including CHM 440 (Drug Discovery), CHM 305 (The Quantum World), and CHM 306 (Physical Chemistry).

**AP Physics**: Students with one or two units of AP credit should take at least one physics-based class from the following courses: PHY 108; CHM 305; CHM 306; AST 204 (not 203), or GEO 371 (Global Geophysics). Other courses that require Introductory Physics as a prerequisite may be appropriate – contact HPA to check on other courses.

**AP English**: Students should take Writing Seminar and an additional literature course in which writing comprises at least half of the graded assignments.

**AP Math**: Students with 2 units of AP in math do not need to take Calculus or advanced math. This is the only exception to the rule about supplementing AP with upper-level coursework. A class in statistics is still recommended.

“Giving up AP”: if you do not feel well-prepared in a subject area despite your AP score, we recommend a conversation with HPA advisers or your Director of Studies/Dean to discuss whether or not to “backtrack” in the subject.
YOUR ACADEMIC PLAN

No one academic plan is suitable for all students.

The following timelines show how you might plan the pre-medical coursework in conjunction with your other academic responsibilities. No one plan is the “right” way, no one plan “better” than another. Your background and goals for your years at Princeton (both academic and non-academic) make it important for you to speak with an HPA adviser, your faculty adviser, and/or your Director of Studies in order to craft a timeline that most effectively leads to your success. The following are samples: talk with advisers about your unique situation.

Starting with one science course:

Most AB students should take one of the two-course basic science sequences in the first year. We recommend starting with General Chemistry since it is a prerequisite for organic chemistry (and organic is a prereq for Biochemistry); math and chemistry are usually taken before biology, physics after math.

At many colleges, students “double up” on sciences in the first year; based on our experiences, Princeton students tend to fare much better taking just one science (and possibly math) in the first semester. If the fall goes well, you might choose to add a second science (probably MOL) in the spring.

BSE students without AP credit will take General Chemistry and Physics.

Standardized tests:

Included in the following timelines are the premed prerequisite courses, as well as the timing of application and MCAT (timing for DAT and GRE testing, for dental and other prehealth students, varies slightly). Students apply to medical school in June, over a year ahead of their desired date of matriculation. To apply, they must take the MCAT, and to take the MCAT, they must have completed the coursework covered on the exam.

When to Apply:

Most incoming prehealth students expect that they will apply “direct entry” in their junior year to enter medical school directly after graduation (i.e., prepare applications in Spring 2021, apply in Summer 2021, graduate in Spring 2022, start medical school in Fall 2022).

Ultimately, more than 70% of our applicants are seniors and alumni, taking one or more “glide” or “gap” years between graduation and matriculation at their school of choice. See more about glide years on our website: hpa.princeton.edu/pre-health-after-princeton/glide-year
<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>Gen Chem WRI/FRS Math (Fall or Spring)</td>
<td>Gen Chem WRI/FRS MOL 214 or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>2019-20</td>
<td>Organic Chem Physics or EEB 211</td>
<td>Organic Chem Physics or MOL 214 Stats (Fall or Spring)</td>
<td></td>
</tr>
<tr>
<td>2020-21</td>
<td>Physics or EEB 211 MOL 345</td>
<td>Physics or PSY/SOC</td>
<td>MCAT</td>
</tr>
<tr>
<td>2021-22</td>
<td>English/Literature</td>
<td>Graduate</td>
<td>Apply to med school in June</td>
</tr>
<tr>
<td>2022-23</td>
<td>Glide Year Activity Interviews</td>
<td>Glide Year Activity Interviews</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>Start med school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This plan is suitable for MOL, EEB, or non-science concentrators. Chemistry concentrators will be expected to take Physics by sophomore year. PSY/SOC are optional but may be helpful for MCAT preparation. Always work with your academic adviser and a departmental representative to plan for the implications of your concentration.

Pros:
- All four years of your course work will be taken into consideration when you apply – most students finish strong.
- Letters of recommendation may be stronger as students move into more advanced course work and can ask for a letter from the thesis advisor.
- Allows for a full summer of MCAT study and more time to retake if necessary.
- The “glide year” allows you to build your resume, gain experience, maturity, and professionalism, and to recharge mentally before taking on the rigor of medical school course work.

Cons:
- Need to complete MCAT prep course work in three years.
### Glide Year Timeline II

**No AP • MCAT senior spring • apply senior summer**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19 Gen Chem WRI/FRS</td>
<td>2018-19 Gen Chem WRI/FRS MOL 214 or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>Math (Fall or Spring)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019-20 Organic Chem PSY/SOC</td>
<td>2019-20 Organic Chem Stats (Fall or Spring)</td>
<td></td>
</tr>
<tr>
<td>(Fall or Spring)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020-21 EEB 211 Physics</td>
<td>2020-21 MOL 214 or PSY/SOC Physics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apply to med school in June</td>
</tr>
<tr>
<td>2021-22 MOL 345 English/Literature</td>
<td>2021-22 MCAT Graduate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022-23 Glide Year Activity</td>
<td>2022-23 Glide Year Activity Interviews</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start med school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This plan is suitable for non-science concentrators. Science concentrators will need to take some of the science courses earlier in their curriculum to complete the concentration in a timely manner. Always work with your academic adviser or a departmental representative to plan for the implications of your concentration.

The MCAT should be taken no later than May of the year in which you plan to apply to medical school.

**Pros:**
- Same as Glide Year Timeline I, plus: spreads courses out across all four years; it can be more reasonable for students to do well with a course load that balances sciences more equally with other courses.

**Cons:**
- Juggling MCAT study with thesis requires careful time management.
- Lack of time to repeat MCAT if score is less than desired and still apply early in the application cycle.
### Glide Year Timeline III

2 Units AP Chemistry • MCAT junior summer • apply senior summer

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19 EEB 211 or Org Chem</td>
<td>MOL 214 or Org Chem</td>
<td></td>
</tr>
<tr>
<td>WRI/FRS Math or PSY/SOC</td>
<td>WRI/FRS Math or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>2019-20 EEB 211 or Org Chem</td>
<td>MOL 214 or Org Chem</td>
<td></td>
</tr>
<tr>
<td>Stats (Fall or Spring)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020-21 Physics</td>
<td>Physics</td>
<td>MCAT</td>
</tr>
<tr>
<td>MOL 345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021-22 Advanced Chem</td>
<td>Graduate</td>
<td>Apply to med school in June</td>
</tr>
<tr>
<td>English/Literature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022-23 Glide Year Activity</td>
<td>Glide Year Activity</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>Interviews</td>
<td></td>
</tr>
<tr>
<td>2023 Start med school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Glide Year Timeline IV

2 Units AP Physics • MCAT junior summer • apply senior summer

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19 Gen Chem</td>
<td>Gen Chem</td>
<td></td>
</tr>
<tr>
<td>WRI/FRS Math or PSY/SOC</td>
<td>WRI/FRS Math or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>EEB 211</td>
<td>Stats (Fall or Spring)</td>
<td></td>
</tr>
<tr>
<td>2020-21 MOL 345</td>
<td>PHY 108 or advanced PHY</td>
<td>MCAT</td>
</tr>
<tr>
<td>PSY/SOC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021-22 English/Literature</td>
<td>Graduate</td>
<td>Apply to med school in June</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022-23 Glide Year Activity</td>
<td>Glide Year Activity</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>Interviews</td>
<td></td>
</tr>
<tr>
<td>2023 Start med school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Direct Entry Timeline I

**No AP credit • MCAT junior spring • apply junior summer**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19 General Chem WRI/FRS</td>
<td>General Chem WRI/FRS</td>
<td></td>
</tr>
<tr>
<td>Math (Fall or Spring)</td>
<td>WRI/FRS MOL 214 or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>2019-20 Organic Chem EEB 211</td>
<td>Organic Chem MOL 214 or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>2020-21 Physics MOL 345</td>
<td>Physics MCAT</td>
<td>Apply to med school</td>
</tr>
<tr>
<td>Stats (Fall or Spring)</td>
<td></td>
<td>in June</td>
</tr>
<tr>
<td>2021-22 English/Literature</td>
<td>Interviews</td>
<td>Graduate</td>
</tr>
<tr>
<td>Interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>Start med school</td>
<td></td>
</tr>
</tbody>
</table>

About 20-30% of Princeton applicants choose to apply as juniors to matriculate directly after graduation. The MCAT should be taken no later than May of the year in which you plan to apply to medical school.

**Pros:**
- “Fast track” to completion of medical degree.
- Some students fear that taking a break will make it harder to “get back into” a schoolwork frame of mind.

**Cons:**
- Thesis work, recommendation letters from senior year classes and thesis, and grades from senior year will not be part of your profile when you apply (because you apply the summer after junior year).
- May take away from time to explore other disciplines and reduce time to participate in activities/build social foundation.
- Students who apply as juniors to go directly to medical school may be at a disadvantage compared to applicants who have taken more time to build their resumes, develop relationships with recommenders, and gain experience, maturity, and professionalism.
- Lack of time to repeat MCAT if the score is less than desired and still apply early in the application cycle.
- Academically strenuous—it’s more important to focus on doing well than on doing quickly.
### Direct Entry Timeline II: BSE Students

No AP credit • junior spring MCAT • apply junior year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>Gen Chem</td>
<td>Gen Chem</td>
</tr>
<tr>
<td></td>
<td>PHY 103</td>
<td>PHY 104</td>
</tr>
<tr>
<td></td>
<td>FRS/WRI</td>
<td>WRI/FRS</td>
</tr>
<tr>
<td></td>
<td>Math</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSY/SOC</td>
<td>MOL 214</td>
</tr>
<tr>
<td>2020-21</td>
<td>EEB 211</td>
<td>PSY/SOC</td>
</tr>
<tr>
<td></td>
<td>MOL 345</td>
<td>Stats (Fall or Spring)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MCAT</td>
</tr>
<tr>
<td>2021-22</td>
<td>English/Literature</td>
<td>Interviews</td>
</tr>
<tr>
<td></td>
<td>Interviews</td>
<td>Graduate</td>
</tr>
<tr>
<td>2022</td>
<td>Start med school</td>
<td></td>
</tr>
</tbody>
</table>

Note: Taking Physics and General Chemistry concurrently as a first-year student is demanding; engineering students without AP credit should speak with their faculty advisers about their options.

### Direct Entry Timeline III: 2 Units AP Chemistry & AP Math

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>EEB 211 or Physics</td>
<td>MOL 214 or Physics</td>
</tr>
<tr>
<td></td>
<td>WRI/FRS</td>
<td>WRI/FRS</td>
</tr>
<tr>
<td></td>
<td>PHY or EEB 211</td>
<td>PHY or MOL 214</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PSY/SOC</td>
</tr>
<tr>
<td>2020-21</td>
<td>MOL 345</td>
<td>Stats or Adv Chem</td>
</tr>
<tr>
<td></td>
<td>PSY/SOC</td>
<td>MCAT</td>
</tr>
<tr>
<td></td>
<td>Stats or Adv Chem</td>
<td>Apply to med school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>in June</td>
</tr>
<tr>
<td>2021-22</td>
<td>English/Literature</td>
<td>Interviews</td>
</tr>
<tr>
<td></td>
<td>Interviews</td>
<td>Graduate</td>
</tr>
<tr>
<td>2022</td>
<td>Start med school</td>
<td></td>
</tr>
</tbody>
</table>
### Direct Entry Timeline IV: 2 Units AP Physics

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-19</td>
<td>Gen Chem WRI/FRS Math (Fall or Spring)</td>
<td>Gen Chem WRI/FRS MOL 214 or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>2019-20</td>
<td>Organic Chem EEB 211</td>
<td>Organic Chem MOL 214 or PSY/SOC</td>
<td></td>
</tr>
<tr>
<td>2020-21</td>
<td>MOL 345 PSY/SOC Stats or Adv Physics</td>
<td>Stats or Adv Physics MCAT</td>
<td>Apply to med school in June</td>
</tr>
<tr>
<td>2021-22</td>
<td>English/Literature Interviews</td>
<td>Interviews Graduate</td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>Start med school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Post-Baccalaureate Timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-22</td>
<td>Take whatever classes interest you</td>
<td>Begin prehealth pre-requisites in postbac program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Explore your interest in health careers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apply to post-bac programs in senior year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022-23</td>
<td>Course work</td>
<td>Apply to med school in June</td>
<td></td>
</tr>
<tr>
<td>2023-24</td>
<td>Interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2024</td>
<td>Start med school</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some students decide to defer prehealth prerequisite course work until after they graduate from Princeton, enrolling in a postbaccalaureate, or “postbac” program, in order to complete their requirements. More information about these programs is available at HPA and on the HPA website: hpa.princeton.edu/pre-health-after-princeton/post-bac-programs

In the Brown Med entering class of 2017:

- 35% majored outside of the sciences
- Average age = 24
- 67% took at least one glide year
Choosing a Major

Many think you “should” concentrate in science, and that you will be a less competitive candidate for health professional school if you major in the humanities or social sciences. This is not the case. You should choose a major based on questions like: What discipline is most interesting to you? Which field will best draw on your talents and abilities? What do you want to study in your independent work?

Some additional things to consider when choosing your concentration:

- Health professional schools are interested in students who have challenged themselves in the sciences and have demonstrated strong ability in science.

- Health professional schools are interested in students who have a broad view of the human condition, an understanding gained through the study of literature, history, language, and the social and behavioral sciences.

- If you demonstrate both the ability in science and that broader understanding through a strong academic record, you will be a successful applicant to health professional school. In a typical year, about a third of our applicants are humanities/social science concentrators, and they are just as successful in gaining admission as our science majors.

- It is not necessary to pursue certificates, but there are a few that are particularly popular with prehealth students, including Global Health and Health Policy (GHP), Neuroscience, and Quantitative & Computational Biology (especially popular with engineering majors).

Want a current student’s opinion? Talk to some of our HPA Peer Advisers in the residential colleges about their major choices!
Selecting a concentration is not required until the spring of sophomore year. See additional resources about major choices:

- [hpa.princeton.edu/pre-health-prep/major-choices](http://hpa.princeton.edu/pre-health-prep/major-choices)
- [odoc.princeton.edu/advising/choosing-major](http://odoc.princeton.edu/advising/choosing-major)
- [careerservices.princeton.edu/undergraduate-students/major-career-choices](http://careerservices.princeton.edu/undergraduate-students/major-career-choices)

### Most Popular Majors for Princeton Health Professions School Applicants, 2014-2017

1. Molecular Biology
2. Ecology & Evolutionary Biology
3. Chemistry
4. Psychology
5. Chemical & Biological Engineering
6. Woodrow Wilson School
7. Anthropology
8. Economics
9. Politics, Music, History, English (tie)

### Alum Advice: Marina Nogueira ’16 (MOL with NEU certificate)

**Pursuing a MD/PhD at Wash U St. Louis**

**Significant college activities:** Biochemistry thesis research in the Petry lab; summer research at Stanford, Princeton, and the NIH; DREAM Team leader; LGBT Peer Educator; Community Action Leader; TigerCall Supervisor

**Post-college activities:** Research Technician, Dana-Farber Cancer Institute and the Broad Institute (2016-18)

Don’t ever be afraid to ask for help! I entered Princeton as an engineer and really floundered through my classes freshman year. I didn’t realize there were so many resources available, and that there were also so many people on campus who were not only willing to help me, but also excited to help. Asking for help also opened up opportunities for new experiences and relationships with administrators and professors on campus. During the application process, I asked a lot of people for help. Despite not knowing any physicians or scientists in my family or community I grew up in, I felt informed and prepared after talking with HPA and especially with friends who had gone through the process.

My second piece of advice is to follow your interests and passions that don’t relate to medicine. This applies to choosing classes and extracurricular interests. Obviously there are times when you do need to take that science class, but sometimes being premed can feel like running on a treadmill that never stops, and sometimes it can be good to take a risk and jump off that treadmill to explore your other intellectual interests during undergrad!
OTHER ACADEMIC CONSIDERATIONS FOR PREHEALTH STUDENTS

Study Abroad

Future health professionals will need to be broadly educated, mature, adaptable citizens who have had significant experience in the world beyond the classroom. Study abroad is an ideal vehicle for developing some of the skills and attitudes that are valued in the practice of medicine—flexibility, self-reliance, and sensitivity to other cultures. Study abroad can offer prehealth students a unique chance to observe diverse health care systems, explore different cultural attitudes towards health and healing, and often, to gain volunteer experience in a unique healthcare setting.

Many Princeton prehealth students have studied or pursued internships abroad. Taking one semester abroad is quite doable with careful course planning. Similarly, study abroad for both junior year semesters works if you apply to health professional school after senior year (taking a glide year) or if you have AP credit and complete the course requirements early, taking the MCAT in the summer after sophomore year.

For more information, read the handout “Study Abroad and the Prehealth Student” available at the HPA office and on our website, and then come and chat with us about your plans. You will also want to visit the Office of International Programs (www.princeton.edu/oip).

Summer courses

Each student is different, with unique circumstances, but we can generalize to this extent: taking prehealth science requirements in the summer is generally not encouraged. Health professional schools prefer that you complete your required prerequisite science courses at your home institution (Princeton) in conjunction with a full course load during the academic year. This method of completing the courses best simulates what the heavy load of science course work in health professions school will be like.

Taking non-science courses in the summers is more acceptable, though this may take away from your ability to pursue health-related activities and to simply take some time to have a break from academics.

That said, there are certainly compelling reasons for moving some course work to the summer, such as a semester study abroad. If you have specific reasons for taking some of your sciences in the summer, please consult with HPA to discuss your specific situation.
Other Considerations: Glide Years

Alum Advice: Michael Chang, ’16 (MOL)

Pursuing an MD at Harvard Med School.

Significant college activities: Thesis with the Ploss Lab, Breakout Trip Leader, Dana-Farber Cancer Institute intern, E-Waste Service Project in Ghana, Oxford-Princeton Biochemistry Exchange, Bermuda Institute of Ocean Sciences internship, Let’s Get Ready, TropicalClinics, UMCP & Hospice volunteer

Post-college activities: Lab Research at The Rockefeller University in New York, writing therapy volunteer at Memorial Sloan Kettering Cancer Center

Especially after being away from Princeton for the past year, I’ve come to realize how special this institution is in terms of the opportunities it affords its students, especially those who are premed. At times it may feel a bit disappointing not having a medical school or academic hospital on campus, but I think that this encourages premeds here to develop an intimate community and to also explore interests in activities and hobbies that may or may not be related to medicine. To that end, find time to pursue opportunities at Princeton in research, service, athletics, arts, or whatever else that speaks to you. My most valuable growing experiences as an undergrad were all supported by the university because they allowed me to connect with people from different parts of the US and in several countries abroad. I highly encourage premed students, especially, to spend at least a semester, summer or glide year experiencing a culture different from their own—not only are your college years the best time to do this, but these intangible learning experiences will stick with you for the rest of your life and shape how you view the world.

I also want to highlight that the path to becoming a doctor is a long one and that there are bound to be challenges along the way. Please don't be discouraged if you feel like school-work can be overwhelming. It takes time to adjust to Princeton’s academic demands, and I certainly struggled with classes as an underclassman. As long as you continue to do your best and work hard, that is what is most important at the end of the day—and not just for your medical school applications. And remember to rely on your friends; Princeton is filled with wonderful people. Striking a balance and finding your niche within this space is hard at first, but it is important and will ultimately allow you to be your best self.

Glide Years

If you plan for a glide year, you can spread out the rest of your candidacy preparation (classes, activities, standardized tests, potential letters of recommendation) over four years instead of three. In the glide year, most students focus on the area of their candidacy that they are most eager to improve: this could mean taking classes, extending research or service commitments, and/or gaining additional clinical exposure. The year also provides more time for reflection and a chance to refresh before the rigors of graduate education. We work with alums no matter how many years they take between graduation and application. Learn more: hpa.princeton.edu/pre-health-after-princeton/glide-year
The Health Professions School Application Process

You will prepare for health professions school throughout your time at Princeton by engaging in activities, taking classes, fostering supportive relationships with faculty, and ensuring that you really want to become a health professional. The preparation for and the actual application for medical and dental school begins about two years before you want to matriculate (the timeline differs for other professions). This is an overview of what you will need to do once you have decided to apply.

Year 1: Preparation and Reflection

Oct-Dec: Attend HPA Applicant Workshop  
Read HPA Applicant Handbook  
Submit HPA Applicant Intake Form  
Applicant Intake meeting with HPA  
Prepare HPA pre-application materials

Jan-Apr: Request letters of recommendation  
Finalize HPA pre-application materials  
Craft school list  
Attend relevant HPA workshops

Feb-Apr: Pre-application interview with HPA

By May: Take MCAT (score release takes 30 days)

May: Primary application opens: prepare application  
Confirm receipt of letters of recommendation

Year 2: Application

June: Submit primary application

Jul-Aug: Secondary applications released: try to complete and return within two weeks of receipt

Aug-Mar: Interviews

Sept-June: Stay engaged in activities, send updates to schools that accept them

Oct-Apr: Regular cycle acceptances (wait list offers can run through the day before a school begins orientation)

April 30: Last day to hold multiple acceptance offers

June-September: Medical school orientation begins
The MCAT: The Standardized Test

Medical College Admissions Test (MCAT)

Pre-medical students will take the MCAT. The test will be approximately 7.5 hours including time for breaks. Cost and exact dates of the test are released about a year in advance. The MCAT is divided into four sections and assesses a combination of science and non-science content divided between ten Foundational Concepts.

Dental Admissions Test (DAT)

Pre-dental students will take the DAT. The test will take approximately five hours, and is offered year-round. The DAT is divided into four sections: Survey of Natural Sciences, Perceptual Ability Test, Reading Comprehension Test, and Quantitative Reasoning Test. Questions are drawn from Biology, General and Organic Chemistry, and math (through algebra). The Perceptual Ability test is unique; it tests your visual and spatial skills, and is not based on subject knowledge. Additional information about the DAT may be found online in the ADA Resources for the DAT.

Other Standardized Exams

Links to information about the optometry, pharmacy, and other standardized exams for health professions school are available on the HPA website.

Study Materials

About half of Princeton applicants choose to take a commercial prep course, and the other half study on their own. Sample prep materials are available to browse and borrow in the HPA office library.
Suggestions for Getting Started

WHAT YOU NEED TO KNOW NOW

Preparing for and applying to health professions school are long, detail-oriented processes, and HPA is here to help you navigate them! Our general advice for your first two years:

Find your niche. Get involved, but don’t overload! Pursue your interests in the classroom and beyond, but be careful not to overcommit. In high school, you might have found time for a long list of activities. College rigor and expectations are different, so be careful with your time commitments. Try one or two activities in your first semester, and if you find that you have time for more, go for it.

Learn to navigate academic expectations. As a prehealth student, you have to prove that you’ll be able to survive the rigors of professional school. It is essential for all prehealth students to develop good study habits and a college lifestyle that is conducive to academic success. Try to diagnose and treat difficulties early and remedy them. If you need help, many resources are available to you on campus including professors and preceptors, Deans/Directors of Studies, peer advisers, and McGraw Center and Writing Center staff.

Get to know your faculty. Members of the faculty and your preceptors are a great resource. They will not only help you academically, but will also provide you with letters of recommendation when you apply to health professions school. Stop in to meet some of your faculty during their office hours, even if you are in a large course. You do not have to have a significant question to ask as a pretense to visiting with a professor; gaining clarification about course content, discussing of study strategies, or asking about a professor’s research interests are a few legitimate reasons for attending office hours (or requesting an appointment if you have a time conflict). The earlier you learn to communicate with faculty, the easier it will become later when you’re looking for research opportunities, asking for letters of recommendation, and otherwise developing these relationships later on.

Get to know your peers. Studies have shown that students who have a "support groups" in multiple avenues on campus do better academically. You can't get through the prehealth courses alone—study groups, friends who will help you maintain a balanced lifestyle, older students who can provide advice—all of these are critical in doing well at Princeton. Start with classmates, attend a study group, join a prehealth student organization, meet your HPA Peer Advisers in your residential college.
Final Words of Advice from Princeton Alums

Gaby Joseph ’18 (MOL with Engineering Biology certificate)

Pursuing an MD at Stanford Medical School

**Significant college activities:** Executive Leader in PFA, Men’s Varsity Soccer, Athletes in Action, Thesis in Shenk Lab, HPA Peer Adviser, Princeton Varsity Club Community Service

*My biggest advice to those pursuing medicine at Princeton is to always be looking at what you can learn about yourself through a challenge, a success, or an otherwise mundane experience! This powerful skill of reflection and processing the things you have experienced will equip you with the skills necessary to articulate your ambition to pursue a career in medicine very well. Don’t just take the classes you’re interested in or that meet requirements—find a few that will test new interests, challenge strengths (or weaknesses) of yours, and don’t stress too much about the result. Find ways to discover something new about yourself that you didn’t know before and always remember that such reflection will help you to keep things in perspective, and remain passionate and excited.*

Nicole Hung ’14 (EAS)

Pursuing an MD at UCSF School of Medicine

**Significant college activities:** Co-captain Varsity Basketball, medical/teaching mission trips to China, Camp Wonder volunteer, Chinese American Princeton Siblings Program

**Post-college activities:** Princeton in Asia Teaching Fellow at Mae Fah Luang University, STEM Tutor at Atelier Tutors in Los Angeles, ABC Day Health Center (volunteer), Research Assistant in Emergency Medicine at Harbor-UCLA Medical Center, Premedical Intern at Stetson Powell Orthopedics

*During my time at Princeton, I felt unsure about being premed: I lacked true, personal motivation to pursue a career in medicine. Playing Varsity Basketball left me with limited free time for introspection about my career path or for exploration of other interests. Rather than rushing to apply, I did a post-grad teaching fellowship in Thailand through Princeton in Asia, which helped solidify my decision to pursue medicine. This brings me to my first piece of advice: take the necessary time to figure out your own motivation to pursue medicine. Take advantage of all of the incredible resources at Princeton (OIP, PiA, PiLA, P55, and more) to explore your other interests and discover new ones. You'll learn more about yourself as a person, which will in turn provide clarity for your career path. Secondly, get to know your professors. Starting freshman year, I made a goal to get to know at least one professor each semester. I'm still in touch with many, including my freshman seminar instructor, who have all been incredibly supportive. Go to office hours, ask questions, follow up on interesting lectures -- the faculty support system that you create will be influential for your Princeton career and beyond. Good luck!*
Use this grid to sketch out your plans for classes and activities leading up to your application. An HPA adviser can help you determine where to schedule the prehealth prerequisites.

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frosh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soph</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postgrad</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Health Professions Advising (HPA) supports Princeton students and alumni as they consider careers in and prepare for admission to medical, dental, veterinary, and other health professions schools.

Updated 27 August 2018