Pre-Professional Advising Guide

A. Overview: Competitive applicants to health-related professional schools usually possess the following record:

- High overall and science (BCPM: biology, chemistry, physics, and mathematics) GPA
- High score on standardized entrance exam
- Extensive record of relevant extracurriculars, including volunteering and/or working in clinical or research settings
- Demonstrated leadership activities

If students’ records are strong in all of these categories, they will be strong candidates. Students should plan their academic course work as early as possible to prepare for their chosen programs. Students can major in almost any subject and attend professional school in the health sciences. However, they must complete and perform well in the required math and science course work for the specific schools to which they apply. When they select a major, students should consider if it will be suitable if they do not attend professional school.

Students’ undergraduate curricula are partly intended to prepare them for the challenging course work of professional schools. Retention of the material is essential. Retention is not achieved by cramming but by consistent studying over an academic term. They should study three hours outside of class for every hour in class; for each three credit hour lecture, they must devote ninety minutes per day six days per week outside of class to that course. If they take a full load of science courses and their accompanying laboratories, they should spend eighty hours per week on their course work.

B. Professional school organizations: These are resources for information in health profession education.

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<tr>
<th>Physician (MD)</th>
<th>Association of American Medical Colleges (<a href="http://www.aamc.org/">http://www.aamc.org/</a>)</th>
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<tr>
<td>Physician (DO)</td>
<td>American Association of Colleges of Osteopathic Medicine (<a href="http://www.aaom.org/">http://www.aaom.org/</a>)</td>
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<tr>
<td>Dentist</td>
<td>American Dental Education Association (<a href="http://www.adea.org/">http://www.adea.org/</a>)</td>
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<tr>
<td>Optometrist</td>
<td>Association of Schools and Colleges of Optometry (<a href="http://www.opted.org/">http://www.opted.org/</a>)</td>
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<tr>
<td>Veterinarian</td>
<td>Association of American Veterinary Medical Colleges (<a href="http://www.avma.org/">http://www.avma.org/</a>)</td>
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<tr>
<td>Pharmacist</td>
<td>American Association of Colleges of Pharmacy (<a href="http://www.aacp.org/">http://www.aacp.org/</a>)</td>
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<tr>
<td>Podiatrist</td>
<td>American Association of Colleges of Podiatric Medicine (<a href="http://www.aacpm.org/">http://www.aacpm.org/</a>)</td>
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C. Timing: To have the best chance of being accepted and starting medical/professional school in the fall after graduation, students should take the appropriate entrance exam near the end of their junior year or early in the summer following their junior year (May/early June). This means most of the critically relevant scientific coursework (material covered on the exam) should also be completely by this time. While most deadlines for professional school aren’t until the fall (varies by school, ranging from September 30 to December 31), applications can be submitted to most programs starting in June. Your application will not be reviewed until all of your material is submitted (including test scores and recommendation letter). Applications are typically reviewed in the order they are received, so it is advantageous to apply as early as possible. For example, if two students with similar records apply at different times in the admissions process, the student who applies earlier is more likely to be admitted.

D. Course work: The following courses are typical core requirements of many professional schools in the health sciences, including medicine, dentistry, optometry, pharmacy, and veterinary medicine. Students should check recognized resources of general information (e.g., a current edition of Medical School Admission Requirements) for each type of program (medicine, pharmacy, etc.). Information of each school of interest (e.g., Florida College of Medicine, Auburn College of Veterinary Medicine) also must be checked. All core science courses listed below must be completed with their accompanying laboratories (if one is offered). Ideally students should complete these core courses before the start of their junior year by taking course loads of about 15-18 credit hours per semester. Summer school may be necessary. Students should realize that certain professional schools may not recognize credits earned from AP exams or community colleges, especially if higher-level coursework in that discipline was not taken at a four-year college or university.

<table>
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<tr>
<th>Biology</th>
<th>Chemistry</th>
<th>Physics</th>
<th>Mathematics</th>
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<tr>
<td></td>
<td>CHE 232 Organic Chem. I</td>
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<td>CHE 234 Organic Chem. II</td>
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Pre-Health Professional Committee 2013-2014
In many instances, specific programs require additional courses. Students should check with individual schools regarding requirements (and other courses that are strongly recommended to give the applicant the best opportunity to be competitive for admission). For example, the Colleges of Medicine at University of Florida and Florida State University (and many others) require biochemistry; CHE 320 satisfies this requirement. Both of these schools also highly prefer/recommend taking CHE 320L. Available advanced elective courses at UT that may be of interest include, but are not limited to, the following:

- BIO 220 Behavioral Bio.
- BIO 300 Gen. Genetics
- BIO 320 Molecular Genetics
- BIO 370 Molecular Bio.
- CHE 325 Biochem. Metab.
- BIO 227 Ecosystems
- BIO 307 Microbio.
- BIO 330 Gen. Physiology
- BIO 390 Electron Micros.
- BIO 230 Biostats
- BIO 350 Cell Bio.
- BIO 400 Evolution
- CHE 470 Tissue Culture
- BIO 317 Parasitology
- BIO 360 Immunology
- CHE 320 Biochem (+lab)
- BIO 408 Bioinfo/Genomics

Most math and science classes have prerequisites. In addition, many courses are only offered during one term of the academic year. If students have a major outside of biology or chemistry, they may want to consult with a faculty member in one of those departments for advice in scheduling math and science courses.

**E. Standardized tests:** Students should be sure to take relevant coursework to prepare them for the standardized test for their discipline. Of note, the MCAT test for medical schools is being revamped considerably starting in 2015. Because of changes in science and health care, areas of emphasis are being reshaped in the new MCAT. Specifically, emphasis on sociology, psychology, and biochemistry will be added. Courses at UT that should help students prepare for these changes are SOC 100, PSY 200, and CHE 320. For more information on the MCAT 2015, please see: https://www.aamc.org/students/download/266006/data/2015previewguide.pdf.

**F. PHPC letter:** Students attending the University of Tampa who intend to pursue professional doctoral studies in any of the health professions (medicine, dentistry, veterinary medicine, optometry, podiatry, and pharmacy) are required to request a letter of recommendation from the University’s Pre-Health Professional Committee. This letter should be requested at least 60 days prior to the date it is needed. Most students should turn in the letter request form by May of their junior year to ensure the letter is prepared in time to apply to schools in June. Please note that the PHPC does not typically write letters for students with BCPM GPA’s below 3.2. Students with a BCPM GPA below 3.2 are urged to contact the Co-Chairs of the PHPC for advising.

**G. Student organizations:** The on-campus organizations Skull and Bones and Alpha Epsilon Delta (AED) are for students intending to pursue a career in the health sciences. The groups hold joint meetings with a primary goal of educating their members about professional schools and providing relevant volunteer activities. Interested students may contact their faculty advisors, Dr. Rebecca Bellone, or Dr. Ann Williams.

**H. Independent Research:** Students interested in professional schools in the health sciences should be encouraged to engage in undergraduate research projects if that is where their interests lie. These can be performed during the school year for credit (BIO 440, BIO 450, BIO 495, or CHE 451) or during the summer. In addition, competitive summer research fellowships are available through both the Biology and Chemistry departments. Students should discuss interest in research with a faculty member early for the best opportunity to secure a research project.

**I. Questions:** Feel free to contact a member of the Pre-Health Professional Committee. They are a resource for students interested in the health professions.

Dr. Ann Williams (co-chair)  
Dr. Scott Withrow (co-chair)  
Dr. Eric Freundt  
Dr. Michael Carastro  
Dr. Padmanabhan Mahadevan