This PRE-HEALTH STARTER KIT includes everything a UT Dallas student should know during their first semester if they hope to enter a health profession in the future.

**CONSIDER THIS YOUR FIRST TEST.**

Do you care enough about your future profession to read the Kit from cover to cover?

Finished reading but still have questions? Visit the Health Professions Advising Center at [www.utdallas.edu/pre-health](http://www.utdallas.edu/pre-health)

---

**Table of Contents**

- Getting Started
- Pre-Health Orientation Booklet
- Frequently Asked Questions
- AP Credit Decision Chart
- Applicant Rubric with Acceptance Rates
Register for **General Chemistry I**
- CHEM 1311  General Chemistry (lecture)
- CHEM 1111  General Chemistry Lab
- CHEM 1013  General Chemistry Exams

Register for the highest **Math** course for which you are eligible

Sign up for the **Pre-Health Email Listserv**. You will get information throughout the year about pre-health activities, opportunities, and other pre-health announcements.
- To join, simply send a blank email from whatever email account you use the most
- To: sympa@lists.utdallas.edu
- Subject: subscribe prehealth-info

Check out the **HPAC Website** for information on lots of topics
- www.utdallas.edu/pre-health
Pre-Health Orientation at UT Dallas

www.utdallas.edu/pre-health

FO 2.210    M-F 8:00-5:00PM
THINGS ANY PRE-HEALTH STUDENT MUST LEARN TO DO

- Make your own custom degree plan
- Use statistics and lab methods to solve real-life problems
- Meet people, form relationships
- Expand your comfort zone
- Take ownership of your time
- Create opportunities for yourself

HPAC SERVICES

- Provide advising and guidance
- Talk through your choice of major and electives
- Discuss study methods and academic resources
- Discuss personal issues that affect your pre-health career
- Help you choose test-prep methods for your learning style
- Collect your recommendation letters
- Support your application to professional schools through the Health Professions Evaluation process
The COMPETENCIES

The Association of American Medical Colleges (AAMC) lists 15 Core Competencies that students should demonstrate before entering medical school. (www.aamc.org)

Interpersonal Competencies

1. **Service Orientation**: Demonstrates a desire to help others and sensitivity to others’ needs and feelings; recognizes and acts on his/her responsibilities to society; locally, nationally, and globally.

2. **Social Skills**: Demonstrates awareness of others’ needs, goals, feelings, and the ways that social and behavioral cues affect peoples’ interactions and behaviors; treats others with respect.

3. **Cultural Competence**: Demonstrates knowledge of socio-cultural factors that affect behaviors; respects for multiple dimensions of diversity; informs own judgment; recognizes and appropriately addresses bias in themselves and others; interacts effectively with people from diverse backgrounds.

4. **Teamwork**: Works collaboratively with others to achieve shared goals; shares information and knowledge; puts team goals ahead of individual goals.

5. **Oral Communication**: Effectively conveys information to others; listens effectively; recognizes potential communication barriers and adjusts as needed.

Intrapersonal Competencies

6. **Ethical Responsibility to Self and Others**: Behaves in an honest and ethical manner; adheres to ethical principles; resists peer pressure; demonstrates ability to follow rules and procedures.

7. **Reliability and Dependability**: Consistently fulfills obligations in a timely and satisfactory manner; takes responsibility for personal actions and performance.

SUGGESTED ACTIVITIES

- Participate in student groups and cultural events.
- Engage with the local community through volunteering.
- Study abroad
- Develop confidence and speaking through Toastmasters.
- Seek classes in psychology, sociology, cultures, and languages.
8. **Resilience and Adaptability**: Demonstrates tolerance of stressful environments or situations and adapts effectively; is persistent, even under difficult situations; recovers from setbacks.

9. **Capacity for Improvement**: Sets goals for continuous improvement and for learning new concepts and skills; engages in reflective practice for improvement; solicits and responds appropriately to feedback.

**Thinking and Reasoning Competencies**

10. **Critical Thinking**: Uses logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

11. **Quantitative Reasoning**: Applies quantitative reasoning and appropriate mathematics to describe or explain phenomena in the natural world.

12. **Scientific Inquiry**: Uses scientific processes to integrate and synthesize information, solve problems and formulate research hypotheses; is facile in the language of the sciences and participates in scientific discourse; can explain how scientific knowledge is discovered and validated.

13. **Written Communication**: Effectively conveys information to others using written words and sentences.

**Science Competencies**

14. **Living Systems**: Applies knowledge and skill in the natural sciences to solve problems related to molecular and macro systems including biomolecules, molecules, cells, and organs.

15. **Human Behavior**: Applies knowledge of the self, others, and social systems to solve problems related to the psychological, socio-cultural, and biological factors that influence health and well-being.
# Pre-Health Classes

This chart reflects MINIMUM and RECOMMENDED classes for several health professions.

*no prerequisites – you can register for this class at any time

**required at some schools but not all

## Medical

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II
- Organic Chemistry I
- Organic Chemistry II
- Biochemistry I
- Physics I
- Physics II
- at least 2 upper-division BIOL or NSC
- Statistics

**Recommended**
- Genetics
- Additional advanced bioscience
- *Intro/Behavioral Neuroscience
- *Intro to Psychology
- *Intro to Sociology

Classes that support your personal medical interests

NOTE! Individual schools may require or recommend additional classes.

## Dental

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II
- Organic Chemistry I
- Organic Chemistry II
- Biochemistry I
- Physics I
- Physics II
- Statistics

**Recommended**
- Biochemistry
- Oral Histology
- Additional advanced bioscience
  Classes that support your personal dental interests

## Physician Assistant

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II
- Organic Chemistry I
- Microbiology with Lab
- A&P I
- A&P II
- *Intro to Psychology
- **Abnormal or Developmental Psych
- *Intro to Sociology
- *College Algebra
- Statistics

**Recommended**
- Biochemistry I
- **Genetics
- **Human Nutrition
- **Medical Terminology

PA schools also require significant patient care experience

## Pharmacy

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II
- Organic Chemistry I
- Organic Chemistry II
- Biochemistry I
- Microbiology with Lab
- Physics I
- Statistics
- Calculus
- **Genetics
- **A&P I
- **Macroeconomics

## Physical Therapy

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II
- A&P I
- A&P II
- *Intro to Psychology
- *Intro to Sociology
- Developmental Psychology
- Physics I
- Statistics
- *College Algebra
- Statistics
- **Calculus
- **Medical Terminology

## Optometry

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II
- Organic Chemistry I
- Physics I
- Physics II
- Statistics
- *Intro to Psychology
- Microbiology
- **A&P I
- **A&P II
- **Biochemistry I
Experiences

All professions expect you to do some hands-on career exploration. Meet different sorts of practitioners, find out what they do and don’t like about their jobs.

Based on your experiences, your healthcare interests will naturally become more focused over time. When applying to profession schools, you’ll be asked, “What have you learned from your experiences?”

<table>
<thead>
<tr>
<th>Setting</th>
<th>Date</th>
<th>Hours</th>
<th>Notes to Remember (what you did, what you learned)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Admission Tests

All health professions have admissions tests.

<table>
<thead>
<tr>
<th>Profession</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine, Podiatry</td>
<td>MCAT – Medical College Admission Test</td>
</tr>
<tr>
<td></td>
<td>students-residents.aamc.org</td>
</tr>
<tr>
<td>Dentistry</td>
<td>DAT – Dental Admission Test</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>PCAT – Pharmacy College Admission Test</td>
</tr>
<tr>
<td></td>
<td>pcatweb.info/</td>
</tr>
<tr>
<td>Optometry</td>
<td>OAT – Optometry Admission Test</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.ada.org/en/oat">www.ada.org/en/oat</a></td>
</tr>
<tr>
<td>All other Masters and Doctoral Programs</td>
<td>GRE – Graduate Record Exam</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.ets.org/gre/">www.ets.org/gre/</a></td>
</tr>
</tbody>
</table>

“When Should I start preparing for admissions tests?”

- You are already preparing!
- You’ll take another very important step in years 1 and 2 of college: master basic sciences and learn to apply them.
- In the year of your professional school application, begin to study the test itself: the format, the timing, and how the right and wrong answers are phrased. You’ll take practice tests. You may choose to take a prep course. Discounted prep courses are available through HPAC.

Recommended Preparation for Admission Tests (by Year)

Year 1
Master basic sciences and labs. Tutor and teach others if you can. Apply your lessons by doing projects.
Read some technical journals to practice detailed comprehension.
Read extensively for pleasure—any content you prefer.

Year 2
Master your sciences and labs. Tutor and teach others if you can. Apply your lessons by doing projects.
Read some technical journals to practice detailed comprehension.
Read extensively for pleasure—any content you prefer.

Year 3
Master advanced sciences. Tutor and teach others if you can. Apply science through research or ind. study.
Read journals in your field. Consider subscribing to a trade publication (JAMA, NEJM, JADA, etc.)
FOCUSED PREP TIME! Review basic material. Consider prep course to aid your self-study. Take practice tests.
Take the test. In early summer, apply to profession schools.

Year 4
Take extension sciences to apply your basics.
Synthesize your understanding through applied research or by creating an honors thesis.
If necessary, approach prep using new methods, then re-test to support a re-application.
Health Professions Evaluation

HPAC supports professional school applicants through the Health Professions Evaluation (HPE) Process.

Services include:

1) A Prewrite to make the process quicker and easier
2) A Biographical Form that mimics Texas medical and dental applications
3) A Personal Statement Workshop to help you create strong application essays
4) Revision of your Biographical Form and essays with an assigned HPAC advisor
5) Free businesslike portraits for use in your medical or dental application
6) An Interview Skills Workshop to help you prepare for various interview styles
7) Interviews with UT Dallas faculty/staff
   - HPE interviews are limited to students who meet the minimum criteria for Committee evaluation:
     - >3.35 UTD GPA
     - >6 credits of O.Chem or upper-division BIOL at UTD
     - >3.35 UTD Science GPA
     - >15 credits at UTD
8) Collection and distribution of up to 5 recommendation letters to medical or dental schools
9) A Committee Letter added to your individual letters of recommendation
   - Student must complete HPE interviews.
   - Student must earn at least a 502 MCAT or 17 DAT.
10) An Application Workshop to help you navigate the medical and dental applications.

HPE services begin at a GENERAL APPLICATION ORIENTATION
http://www.utdallas.edu/pre-health/apply-to-schools
Resources

At UT Dallas

Health Professions Advising Center
FO 2.210; www.utdallas.edu/pre-health
Pre-professional guidance and services
Study area, med journals, computers
Explore professions, connect with peers, volunteer,
enjoy guest speakers and events

Pre-Health Student Organizations
www.utdallas.edu/pre-health/student-organizations
www.utdallas.edu/soc/

Other Student Organizations
www.utdallas.edu/library/

McDermott Library
www.utdallas.edu/studentsuccess

Student Success Center
www.utdallas.edu/volunteer/
www.utdallas.edu/ic/ea/

Office of Student Volunteerism
www.utdallas.edu/career/

Education Abroad
www.utdallas.edu/veterans/

Career Center
www.utdallas.edu/gendercenter/

Veteran Services Center
www.utdallas.edu/multicultural/

Gender Center
www.utdallas.edu/studentwellness/

Multicultural Center
www.utdallas.edu/counseling/

Wellness Center

Academic Advising
<by major>

CommLab

Dedicated study group, including a paid expert
Science lectures re-taught by student instructors
1-on-1 help with difficult subjects
1-on-1 coaching for time mgmt., test anxiety, etc.
Improve oral and group presentations
Improve your writing

Writing Center

Connect with the community
Create a Study Abroad opportunity
Career counseling and aptitude tests
Address concerns of student veterans
Gender advocacy, services, counseling, and events
Cultural advocacy, services, counseling, and events
Promote health, fitness and responsible choices
Achieve emotional well-being and manage life
**Includes emergency contact line
www.utdallas.edu/counseling/now
972-UTD-TALK
Register for classes, plan your degree

More than 18 Dallas-area hospitals

Dozens of clinics and therapy centers

Hundreds of health professions offices

Countless venues for hands-on experience, including long-term care, veterans, teen health, public health, home care, and many others.

Off Campus

ExploreHealthCareers
http://explorehealthcareers.org/
Info about health career earnings, requirements, and applications.
Searchable database of summer programs.
Navigate your journey, pre-med through residency

AAMC
students-residents.aamc.org

Richardson Public Library
cor.net/departments/public-library
10 min from campus, open to Richardson residents
What do medical schools look for?  
Applicants must show academic discipline, personal integrity, empathy, industry, and understanding of professional healthcare, and often takes steps to expand their comfort zones to include new subjects, viewpoints, and cultures. Each school may emphasize different factors. For details, see the AAMC Pre-Med Competencies.

What do dentistry, pharmacy, optometry, and other health professions schools look for?  
Most professions ask for qualities similar to medical schools, but with important differences. Pre-dental students, for example, may also need to show perceptual ability and fine-motor dexterity. Ask a pre-health advisor for details.

Where do I find reliable information about getting in to professional school?  
NOT from internet forums: the information is mostly wrong or overly simplified. NOT from individual doctors: a small sample is never a reliable source.

UT Dallas provides free pre-health advising for its students at HPAC: full-time advisors who are constantly in touch with professional schools, have resources not available to students, and provide customized, individual advising. Students with professional advising gain admittance to medical schools at more than double the rate of students who self-advis.

Current, accurate information can also be found at national profession education sites like AAMC.org and ADEA.org.

Can I take community college courses?  
Yes, though HPAC recommends taking university sciences if possible. Ask a pre-health advisor for details. Students beginning at community college should take advantage of Comet Connections.

What courses are required by professional schools?  
Minimum prerequisites vary by school. An overview is included in the Pre-Health Orientation Booklet.

What's the best major?  
Students should major in an area about which they're passionate, then use their electives to study healthcare-related sciences and non-sciences. Seeking your personal interests is important preparation for your future career. Professional schools regularly accept students from all majors. Note: dental schools often ask for a substantial number of biology classes beyond their minimum requirements, making Biology an especially popular major for pre-dental.

Should I get a minor? A double major?  
Minors and double majors do not especially qualify you for professional school admission, but may be appropriate if your interests are split between multiple fields.

What is HPAC?  
The Health Professions Advising Center helps students prepare to enter health professions. HPAC is many students’ first contact at UT Dallas and supports students throughout their training for and application to professional schools. HPAC advisors teach classes and help students explore their interests, select classes and experiential learning, find summer experiences and internships, and revise professional school applications. Contact HPAC

What is HPE?  
The Health Professions Evaluation process is a suite of support services for health professions applicants. It includes seminars, workshops, and application and essay revisions. HPAC also collects and distributes
recommendation letters for medical and dental applicants. Qualifying applicants can also receive faculty interviews and a committee evaluation that help admissions departments get to know you better. An overview is included in the Pre-Health Orientation Booklet.

What is JAMP?
A state program to help high-performing socioeconomically disadvantaged pre-med students. Interested students should inquire during their freshman year at UT Dallas and apply for JAMP at the beginning of their sophomore year.

How do I gain healthcare experience?
Usually by donating your time in hospitals, clinics, and community settings. You can supplement that experience by observing practitioners (shadowing) or by working in healthcare—as a pharmacy tech, EMT, Physician Scribe, clinical research assistant, etc.

How do I gain research experience?
Usually by identifying research projects to which you'd like to contribute, then donating your time. Approach the professor or researcher respectfully to discuss your interests and how many hours you want to commit.

When should I take an MCAT/DAT/PCAT/OAT/GRE?
"As soon as you're ready, but not until." Most students take an admissions exam after 2 or 3 years of college. Ask an advisor which exam you'll need and what material will be covered. An overview is included in the Pre-Health Orientation Booklet.

When do I apply for professional school?
Traditional students apply after their junior year. Non-traditional students should ask an advisor. In 2020, over 60% of students admitted to medical schools were non-traditional.

How will I pay for professional school?
Financial aid is widely available, mostly in the form of low-interest government loans. Programs like the Native American Health Service and the Uniformed Services may pay for your professional school in exchange for service after you graduate.
CONGRATULATIONS ON YOUR AP CREDITS--THEY PREPARE YOU EXCELLENTLY FOR COLLEGE.

AS A PRE-HEALTH STUDENT, ASK YOURSELF:

- Is it a Math or Science course?
  - Yes: Consider taking it in college.
  - No: Instead of taking a math for which you have credit, take the next level of math or a different course related to your interests.

- Math?
  - Yes: Did you score a 5 on the AP test?
    - No: Consider taking it in college.
    - Yes: As a pre-health student, you need to master science courses, not just pass them. If you haven't already mastered the material, taking the course in college would be a very good idea.

- Did you score a 5 on the AP test?
  - No: Consider taking it in college.
  - Yes: Are we talking about Bio I?
    - Yes: At UT Dallas, Biology I focuses on molecular biology and has a chemistry prerequisite. It differs significantly from AP Biology.
    - No: Jumping into advanced courses may disadvantage you relative to students who have already developed collegiate skills in processing lectures, self-study, and time management. Introductory courses allow you to learn alongside peers who are also making the important transition to college.

- Are we talking about Bio I?
  - Yes: Consider taking it in college.
  - No: Are you comfortable in class with sophomores, juniors, and seniors?
    - No: Consider taking it in college.
    - Yes: Move on to advanced courses in the same field.

- Are you comfortable in class with sophomores, juniors, and seniors?
  - Yes: Consider taking an elective related to your personal interests, or to broaden your understanding.
  - No: Move on to advanced courses in the same field.

NOTE: a small number of medical and dental schools DO NOT accept credit-by-exam for prerequisite classes.
This rubric resembles those used by medical and dental schools nationwide, and by UT Dallas’s Health Professions Evaluation (HPE) Committee.

Through the HPE process at UT Dallas—usually during your junior year—your advisor will discuss where on this rubric you might be rated by admissions deans, based on your grades, test scores, experiences, and interviews.

<table>
<thead>
<tr>
<th></th>
<th>Exceptionally Qualified</th>
<th>Strongly Qualified</th>
<th>Probably Qualified</th>
<th>Possibly Not Qualified</th>
<th>Not Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal</td>
<td>Oral communications skills exceptional.</td>
<td>Excellent interpersonal and teamwork skills, including interactions serving in unfamiliar cultures or groups.</td>
<td>Sometimes shows professionalism, empathy, answering/listening skills, and self-confidence.</td>
<td>Occasionally shows professionalism, empathy, answering/listening skills, and self-confidence.</td>
<td>Limited rapport with interviewer. May have difficulty communicating in English.</td>
</tr>
<tr>
<td>Experience</td>
<td>Exceptional, mature knowledge of the profession, as shown by extensive experience and research.</td>
<td>Realistic, professional, and confident about professional future, as shown by quality experience and research.</td>
<td>Confident in abilities as professional based on occasional quality experience. May not have researched all options.</td>
<td>General understanding of profession. Some healthcare exposure but minimal research or clinical exposure.</td>
<td>Idealistic understanding of profession. Minimal healthcare experience; has not considered other health professional options.</td>
</tr>
<tr>
<td>Study Skills</td>
<td>GPA &gt;3.8 including heavy course loads. Evidence of seeking challenge and personal interests. Test scores indicate mastery in all sections.</td>
<td>GPA &gt; 3.65 or very strong recent trend at full course loads. Significant depth in bioscience OR breadth across disciplines. Test scores indicate strength in all sections.</td>
<td>GPA &gt; 3.5 or positive recent trend. Some education beyond prerequisites. Record lacks strong performance under heavy loads. Test scores above average may be weak in sections.</td>
<td>GPA &lt; 3.5. Record may include weak periods, multiple drops/repeats, or consistent light loads. Test scores weak overall, suggesting holistic weakness.</td>
<td>GPA &lt; 3.0 with no strong performance at full loads. Test scores unacceptable in one or more sections.</td>
</tr>
<tr>
<td>Committee’s</td>
<td>“Recommended with Enthusiasm”</td>
<td>“Recommended with Confidence”</td>
<td>“Recommended”</td>
<td>“Recommended with Reservations”</td>
<td>“Not Recommended.”</td>
</tr>
<tr>
<td>Recommendation</td>
<td>100% admitted</td>
<td>~90% admitted</td>
<td>~50% admitted</td>
<td>~30% admitted</td>
<td>~0% admitted</td>
</tr>
<tr>
<td>Level</td>
<td>% accepted to medical or dental schools</td>
<td>% accepted to medical or dental schools</td>
<td>% accepted to medical or dental schools</td>
<td>% accepted to medical or dental schools</td>
<td>% accepted to medical or dental schools</td>
</tr>
</tbody>
</table>

Evidence for each category is gathered from the candidate’s:

- **Academic Record**: classes, grades, loads, trends, choice of classes, and test scores.
- **Activities since college**: healthcare, research, teaching, community service, and extracurricular
- **Essays** written by the candidate, describing their background and motivations
- 3-5 **Recommendation Letters**
- **Interviews**