Pre-Health Starter Kit at UT Dallas

www.utdallas.edu/pre-health
Section 1:
Becoming “Pre-Health” at UT Dallas
1, 2, 3...Health Career
Using AP Credits
4-Year Plan Template

Section 2:
Your Pre-Health Journey
Minimum Classes, by Profession
Preparing for Admissions Tests
Building Your Competencies
Resources On and Near UT Dallas
Journal of Experiences

Section 3:
Evaluating Your Candidacy
HPAC Support for Applicants
Medical Admissions Rubric

Frequently Asked Questions
SECTION 1: BECOMING “PRE-HEALTH” AT UT DALLAS

- 1, 2, 3…HEALTH CAREER
- AP CREDITS
- 4-YEAR PLAN

“PRE-HEALTH” IS NOT A DESIGNATION OF WHAT YOU ARE, BUT A DESIGNATION OF WHAT YOU ARE BECOMING.

- Doyen Rainey, Director of HPAC
1, 2, 3... Health Career

**Step 1** START

1. Apply to UT Dallas [www.applytexas.org/](http://www.applytexas.org/)
2. Select a major. There is no best major; choose one that you love. You can change it later if necessary.
3. Join Collegium V Honors if eligible. [honors.utdallas.edu/cv](http://honors.utdallas.edu/cv)
4. Join a Living and Learning Community if eligible. [livinglearning.utdallas.edu](http://livinglearning.utdallas.edu)
5. Register for classes:
   a. See pg. 5: Using AP Credits
   b. See pg. 6: 4-Year Plan Template
   c. View available classes on Coursebook [coursebook.utdallas.edu](http://coursebook.utdallas.edu)
   d. Register with your Academic Advisor

**Step 2** PLAN

1. Join the HPAC Mailing List at [utdallas.edu/pre-health](http://utdallas.edu/pre-health)
2. Locate campus support services:
   - Student Success Center [studentsuccess.utdallas.edu](http://studentsuccess.utdallas.edu)
   - Health Professions Advising Center [utdallas.edu/pre-health](http://utdallas.edu/pre-health)
   - Your Academic Advisor – varies by major
   - Career Center [career.utdallas.edu](http://career.utdallas.edu)
   - Counseling Center [counseling.utdallas.edu](http://counseling.utdallas.edu)
3. Join student groups: [utdallas.edu/pre-health/student-organizations](http://utdallas.edu/pre-health/student-organizations)
4. Meet with HPAC to customize your 4-Year Plan

**Step 3** EXECUTE

1. Embrace the joy of helping others
   - Volunteer in your community
   - Volunteer with healthcare providers and patients
2. Embrace the joy of learning
   - Seek mastery in your coursework, not merely “A’s”
   - Solve unknown problems through research
   - Apply for growth opportunities: summer programs, jobs, study abroad, independent studies, etc.
3. Maintain your ethics
4. Explore new communities, cultures, and hobbies: new understanding

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**You want to help people for a living? Don’t wait!**

- Doyen Rainey, Director of HPAC
Using AP Credits

Can I safely apply all my AP Credits? **YES**
Should I take the UT Dallas course even though I have AP Credits? **MAYBE**

Ask yourself, “Is my AP credit for...”

- **Biology I**
  - HPAC recommends taking this class at UT Dallas unless you have a compelling reason not to.

- **Chem I or II, Phys I or Phys II, Biology I, Biology Lab**
  - Are you in a science major? Have you mastered the material? Did you get a 5 on the AP test?
  - YES, to all three

- **Calculus or Statistics**
  - Move on toward STAT 2332 Statistics for Life Sciences, which by itself meets the math requirement for most professional schools.
  - “Can I use STAT 1342 or my major’s statistics course instead?” See HPAC.

- **English or Rhetoric**
  - Nearly all UT Dallas students fulfill professional schools’ English requirements by taking writing-intensive core courses.

- **Any other non-science**
  - Rather than take this class at UT Dallas, move on to advanced classes or an interesting elective.
### Pre-Health 4-Year Plan Template

**THIS IS NOT YOUR 4-YEAR PLAN.**

You will create a *unique, customized* plan with your HPAC advisor, taking into account your pre-college credits, college major, target health profession, goals within that profession, and life circumstances.

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**How much do you enjoy teaching? Leadership? Pure science? Activism?**

**What classes do you find most easy and most challenging?**

**Are there particular healthcare tasks or populations that you find rewarding?**

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**Your answers to these and other questions affect your plan.**

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**Pre-College:**

<table>
<thead>
<tr>
<th>Credits</th>
<th>14-16 credits</th>
<th>15-18 credits</th>
</tr>
</thead>
</table>

**Fall 1**

- Chem I
- MATH (by major)
- -
- -

**Spring 1**

- Chem II
- STAT
- -
- -

**Study abroad?**

**Volunteer? Work?**

**Participate in summer programs?**

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**Meet new friends and faculty**

**Participate in campus organizations.**

**Perfect your college study skills**

**Enjoy cultural events on campus and around the DFW Metroplex.**

**Develop healthy life habits**

**Explore multiple health careers and venues.**

**Apply to special programs: JAMP, SHPEP, Emerge, Collegium V, and others.**

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**Fall 2**

- O.Chem I
- Bio I
- Phys I
- -
- -

**Spring 2**

- O.Chem II, O.Chem Lab
- Bio II, Bio Lab
- Phys II
- -
- -

**Prepare for entry exam (i.e. MCAT)?**

**Study abroad?**

**Volunteer? Work?**

**Participate in summer programs?**

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**Diversify healthcare experiences through volunteering, observation, or work in multiple venues.**

**On campus, gain experience with teaching, research, and/or leadership.**

**Focus on building your Competencies (pg 9-10).**

**Apply to summer programs**

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**Fall 3**

- Biochem I
- Advanced Bioscience
- Advanced Bioscience
- -
- -

**Spring 3**

- Advanced Bioscience
- Advanced Bioscience
- Advanced Bioscience
- -
- -

**May-June: take entry exam (i.e. MCAT) if you haven’t yet**

**May-June: apply to professional schools**

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**Take on new responsibilities in your current positions, or try new positions.**

**Oct 1: initiate HPAC support services for applicants (pg 14)**

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**Fall 4**

- -
- -
- -
- -

**Spring 4**

- Honors thesis? 😊
- -
- -
- -

**Graduate from UT Dallas. Whoosh!**

**May-June: re-apply to professional schools if necessary**

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*Note the large number of open spaces. Use these to complete your major and pursue elective interests.*
SECTION 2:
YOUR PRE-HEALTH JOURNEY AT UT DALLAS

• Minimum Classes, by Profession

• Preparing for Admissions Tests

• Building your Competencies
Pre-Health Classes

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

You can register for this class as early as your first semester

**required at some schools but not all**

### Medical

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II, Bio Lab
- Organic Chemistry I
- Organic Chemistry II, O.Chem Lab
- Biochemistry I
- *Physics I
- Physics II
- Statistics

at least 2 upper-division BIOL or NSC

**Recommended**
- 2-6 additional advanced biosciences
- *Intro to Neuroscience
- *Intro to Psychology
- *Intro to Sociology

*Classes that support your personal medical interests*

### Dental

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II, Bio Lab
- Organic Chemistry I
- Organic Chemistry II, O.Chem Lab
- Biochemistry I
- *Physics I
- Physics II
- Statistics

Microbiology (with or without lab)
at least 2 upper-division BIOL or NSC
- **A&P I
- **A&P II

**Recommended**
- Oral Histology
- 2-6 additional advanced biosciences

*Classes that support your personal dental interests*

### Physician Assistant

**Required**
- *Chemistry I
- *Intro to Psychology
- Biology I
- Biology II, Bio Lab
- Organic Chemistry I, O.Chem Lab
- Statistics
- Intro to Microbiology
- Intro to Microbiology lab
- A&P I
- A&P II
- **Chemistry II
- **Biochemistry I
- **Genetics
- **Human Nutrition
- **Medical Terminology

**Recommended**
- 2-6 additional advanced biosciences

*PA schools also require significant patient care experience*

### Pharmacy

**Required**
- *Chemistry I
- Chemistry II
- Biology I
- Biology II, Bio Lab
- Organic Chemistry I
- Organic Chemistry II, O.Chem Lab
- Biochemistry I
- Intro to Microbiology
- Intro to Microbiology Lab
- *Physics I
- Statistics
- Calculus
- **Genetics
- **Molecular Biology
- **A&P I
- **A&P II
- **Speech Communications
- **Macroeconomics
- **Computer Science

### Physical Therapy

**Required**
- *Chemistry I
- *Intro to Psychology
- Chemistry II
- Biology I
- Biology II, Bio Lab
- A&P I
- A&P II
- *Physics I
- Physics II
- Statistics

**Developmental Psychology
**Medical Terminology
**Advanced Physiology

### Optometry

**Required**
- *Chemistry I
- *Intro to Psychology
- Chemistry II
- Biology I
- Biology II, Bio Lab
- Organic Chemistry I, O.Chem Lab
- *Physics I
- Physics II
- Statistics
- Intro to Microbiology
- Intro to Microbiology lab
- A&P I
- **A&P II
- **Biochemistry I

NOTE! Individual schools may require or recommend additional classes.
When should I start preparing?

- You are already preparing!
- In UTD years 1 and 2: **master basic sciences and learn to apply them.**
- In the year before your professional school application, **learn the test:** the format, the timing, and how the right and wrong answers are phrased. Take **practice tests.** You may choose a **prep course.** Discounted prep courses are available.

### Recommended Test Preparation (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 stoke your curiosity and practice detailed comprehension.

**Year 2**  
Master basic sciences and labs. *Tutor and teach others if you can. Apply your lessons by doing projects.*  
Read some technical journals to stoke your curiosity and practice detailed comprehension.

**Year 3**  
Master advanced sciences. *Tutor and teach others if you can. Apply science through research or ind. study.*  
**FOCUSED PREP TIME!**
- Study the test content and format. Plan your studies. – usually 1 week
- Review basic material – usually 4-6 weeks
- Work LOTS of practice passages and **read the answer explanations** – usually 8-10 weeks

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, re-approach prep using new methods, then **re-test** to support a **re-application.**
The Association of American Medical Colleges (AAMC) lists these **15 Core Competencies** that students should demonstrate before entering medical school.

https://www.aamc.org/services/admissions-lifecycle/competencies-entering-medical-students

### Pre-professional 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.

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.

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.

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**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

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**SUGGESTED ACTIVITIES**

- NEVER fudge on your ethics!
- Carefully attend to rules and guidelines.
- Make do lists.
- Meet deadlines.
- Seek the joy of rising to challenges.
- Maintain your health.
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.

**SUGGESTED ACTIVITIES**

- Do an independent study. Do an honors thesis.
- Attend presentations and conferences
- READ science publications to stay current, but also books for pleasure

**NOTE THESE THREE CLEARLY NECESSARY COMPETENCIES NOT SPECIFIED BY AAMC:**

16. **STUDY SKILLS**: Thrives under heavy loads of challenging science classes.

17. **TEST PREP SKILLS**: Prepares effectively for tests like MCAT (and later, Board Exams).

18. **INTEREST IN HEALTHCARE**: Understands the rewards and challenges of a health career through quality experiences with patients and healthcare providers. May have deep understanding of particular tasks or populations. Develops mature ideas of how he or she wants to practice.

- Doyen Rainey, Director of HPAC
Health Professions Advising Center
FO 2.210; www.utdallas.edu/pre-health
Pre-professional guidance and services
Resource Room
FO 2.204
Study area, med journals, computers

Pre-Health Student Organizations
www.utdallas.edu/pre-health/student-organizations
Explore professions, connect with peers, volunteer,
organizations
enjoy guest speakers and events

Other Student Organizations
www.utdallas.edu/soc/
Explore professions, connect with peers, volunteer,
organizations
enjoy guest speakers and events

Student Success Center
www.utdallas.edu/studentsuccess
Pre-Health Student Organizations
www.utdallas.edu/pre-health/student-organizations
Explore professions, connect with peers, volunteer,
enjoy guest speakers and events

Resource Room
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Study area, med journals, computers

Pre-Health Student Organizations
www.utdallas.edu/pre-health/student-organizations
Explore professions, connect with peers, volunteer,
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Academic Advising
<by major>

Office of Student Volunteerism
www.utdallas.edu/volunteer/
Connect with the community
Education Abroad
www.utdallas.edu/ic/ea/
Create a Study Abroad opportunity
Career Center
www.utdallas.edu/career/
Career counseling and aptitude tests
Veteran Services Center
www.utdallas.edu/veterans/
Address concerns of student veterans
Gender Center
www.utdallas.edu/gendercenter/
Gender advocacy, services, counseling, and events
Multicultural Center
www.utdallas.edu/multicultural/
Cultural advocacy, services, counseling, and events
Wellness Center
www.utdallas.edu/studentwellness/
Promote health, fitness and responsible choices
Counseling Center
www.utdallas.edu/counseling/
Achieve emotional well-being and manage life

More than 16 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.
Based on your experiences, your healthcare interests will naturally become more focused over time.

When you apply to profession schools, they ask, “What have you learned from your experiences?”

### Journal of 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>
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</tbody>
</table>
SECTION 3: EVALUATING YOUR CANDIDACY

- HPAC SUPPORT
- ACCEPTANCE RUBRIC
During the year before your application to professional schools, follow these steps in order...

1. **Brainstorm** [complete this early to speed up every step of the process](#)
2. **Personal Statement Workshop** [use this to quickly write optimized application essays](#)
3. **Register Online** (3 min) to receive:
   - a Biographical Form to pre-create your application.
   - e-mail updates from HPAC
   - free businesslike portraits
   - “clearinghouse services” for medical and dental applicants:
     - HPAC compiles a “letter packet” of up to 5 recommendation letters (bypassing the usual limit of 3)
     - Packets are usually uploaded next-day to schools you designate
     - “Why only med/dent?” Other professions only accept letters directly from the writers
4. E-mail your **completed Biographical Form** to [prehealth@utdallas.edu](mailto:prehealth@utdallas.edu) to receive
   - Assigned HPAC advisor
   - Professional revisions of your Bio Form and essays
   - Professional assessment of your candidacy
   - Guidance on selecting rec letter writers
   - Guidance on optimizing your candidacy
5. E-mail your **fully advisor-revised Biographical Form** to your HPAC advisor to receive
   - HPE interviews
   - **Committee Evaluation** (aka “committee letter”, “HPE”, “Health Professions Evaluation process”)
     - A committee evaluation helps professional schools to evaluate you by adding UT Dallas context and multiple viewpoints on your candidacy. Nearly all medical schools prefer a committee evaluation. However, evaluations take time and do not benefit all students equally. Your advisor will tell you if evaluation or earlier application would benefit you more.
       - To receive a committee evaluation further requires
         - UTD GPA >3.4, UTD science GPA >3.4
         - Oct 1-Feb 28 : revise Bio Form with advisor
         - Feb 1-May 27: Interview with UTD faculty/staff
         - May 15-May 30: Bio Form updated to include spring classes/activities
         - May 1 (of previous year)-July 15: all rec letters received by HPAC
         - May 1 (of previous year)-July 15: MCAT or DAT score received by HPAC
           - MCAT minimum: 504, with no subscore under 124
           - DAT minimum: 18 Academic Average, with no subscore under 16.

Interviews and HPE process have limited seats and **rolling admissions** – just like professional schools! Early submitters will fill the seats – just like professional schools!
<table>
<thead>
<tr>
<th><strong>Acceptance Rubric (Medical)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exceptionally Qualified</strong></td>
</tr>
<tr>
<td>A “bonus” category. Students at this level are often exceptionally smart but also uniquely accomplished, with long records of kindness, altruism, and experience in healthcare.</td>
</tr>
<tr>
<td><strong>Interpersonal</strong></td>
</tr>
<tr>
<td><strong>Intrapersonal</strong></td>
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<tr>
<td><strong>Experience</strong></td>
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<tr>
<td><strong>Study Skills</strong></td>
</tr>
<tr>
<td><strong>Committee’s Recommendation Level</strong></td>
</tr>
<tr>
<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:** describing their background and motivations
- **3-5 Recommendation Letters,** including from **two science professors**
- **Interviews**
What do medical schools look for?
The Competencies (pg. 9-10). Individual schools will emphasize different competencies.

What do dentistry, pharmacy, optometry, and other health professions look for?
The Competencies (pg. 9-10) apply to all health professions, with some important differences. For example, dental applicants also need to show perceptual ability and fine motor dexterity. Ask a HPAC advisor for details.

Where do I find reliable information about getting into 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 professional advisors who are constantly in touch with professional schools, have resources not available to students, and provide customized, individual advising. Students who use professional advising gain admittance to medical schools at more than double the rate of students who self-advise.
Current, accurate information can also be found at national profession education sites like TXHES.com, AAMC.org, or 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's the best major?
Seeking your personal interests is important preparation for your future career. Professional schools regularly accept students from all majors.
If the major you’re most passionate about doesn’t require you to take all the classes required for your chosen health profession, use electives to take those classes.
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 dual-major? 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.

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.
“Virtual” experiences count too, for the same reason that “telemedicine” counts as “medicine.”

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." Preparation begins from semester 1 (see pg. 9), though most students take their admissions exam after 2 or 3 years of college.

When do I apply for professional school?
Traditional students apply after their junior year. Non-traditional students should ask an advisor. In 2021, over 60% of students admitted to medical schools were non-traditional.

How can 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.