

PreMed and PreDent 101 Info Session

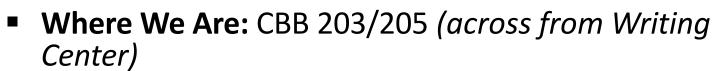
Kialyn Yendell

Director | Health Professions Advising

About Health Professions Advising

Mission: To assist UH students interested in healthcare careers.

- We offer guidance on:
 - Various healthcare career paths
 - Admission requirements
 - Application process and timelines
- Health Professions Advising vs.
 Major Academic Advisor



Website: www.uh.edu/hpa

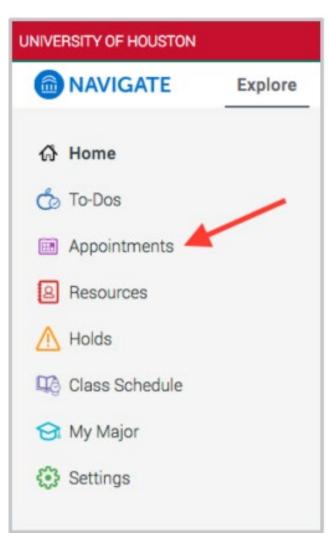
■ Email: prehealth@uh.edu



When should you meet with our office?

- Before making an appointment with our office, we recommend that you:
 - Meet with your major advisor to discuss your degree plan and projected graduation date.
 - Review the premed/predent information on our <u>website</u>.
- Actively enrolled students can schedule an appointment with our office in <u>Navigate</u>.

Quick question? Email us at <u>prehealth@uh.edu</u>. This is much quicker than waiting for an appointment!

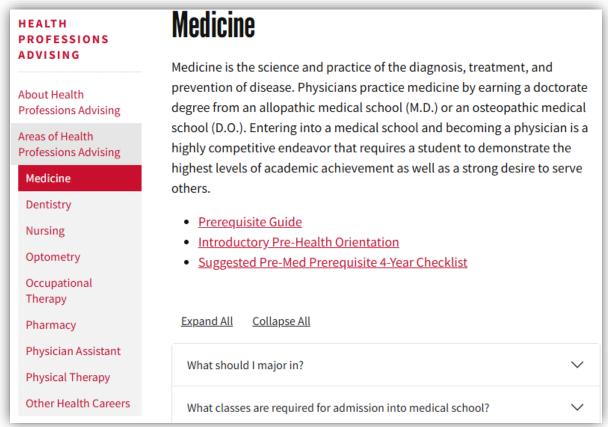


Important Steps for New Students!

1. Explore our website: www.uh.edu/hpa

Includes information on various career paths, required courses for admission, resources for building a strong application, and other information.

- What classes are required?
- What makes a competitive applicant?
- What is the MCAT/DAT?



Important Steps for New Students!

2. Check out our Resources page for templates, student org information, and university resources.



HEALTH PROFESSIONS ADVISING

About Health Professions Advising

Areas of Health Professions Advising

Health Professions Advisory Committee

Health Professions Fair

Health Professions Resources

Frequently Asked Questions

Application Information & Timelines

Join Health Professions Listserv

Health Professions Resources

Below are specific resources to assist you as you prepare and appl professional programs.

Campus Resources

- Health Professions Student Organizations
- University Writing Center
- University Career Services
- LAUNCH Tutoring Center
- · Joint Admission Medical Program (JAMP)

Before You Apply

- Activities & Experiences Log
- Health Professions Orientations
- Clinical & Community Volunteer Experience
- Research Experience
- Summer Research & Medical Fellowships
- Postbaccalaureate and Specialized Master's Programs (SMP)

Important Steps for New Students!

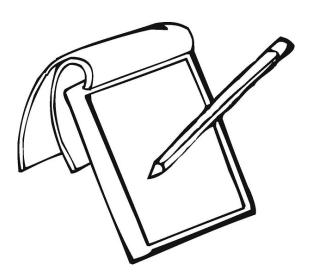
3. Join the <u>Health Professions Advising listserv</u> for your interest area to receive email updates from our office.





Orientation Outline

- What is does it mean to be pre-med or pre-dent at UH?
- Getting Started as pre-med or pre-dent at UH
- Medical & Dental Schools in Texas
- Admission Requirements
- Looking Forward
 - Timeline for Applications
 - MCAT and DAT
 - Health Professions Advisory Committee (HPAC)
- Major Takeaways



What does it mean to be "Pre-Med" or "Pre-Dent" at UH?

- The University of Houston does not offer any formal premed or predental programs.
 - You cannot major or minor in premed, predent, or officially declare these paths.
- Being premed/predent means that you're focused on taking the appropriate steps to eventually apply to a professional program as a strong candidate.
 - Taking prerequisite courses
 - Participating in extracurriculars and experiences that will expose you to your chosen profession and increase the strength of your candidacy
 - Meeting with your academic advisor and Health Professions Advising to stay on track with your goals

Key Points To Consider As You Get Started

Major does not matter that much!

- You can apply to medical and dental school with any major.
- Though Biology may be more practical because of prerequisites embedded in degree requirements, any major is fine.
- Our office encourages you to pursue majors/minors that you enjoy and can see yourself utilizing professionally if you change your mind about pre-med/pre-dent.

Challenge yourself!

- Admissions committees appreciate well-rounded students who "love to learn" and do not simply look for the path of least-resistance to protect their GPA. A student with a 4.0 is not automatically better than a student with a 3.6.
- Try to take a full-load every semester (>12 credit hours/term), unless you are working full-time.

Key Points To Consider As You Get Started

Extracurriculars play a significant role.

- Pursue clubs, activities, minors/majors that you are <u>interested</u> in
 - A good rule of thumb for your first year is two student organizations- one professionally oriented, one just for fun
- Seek research and volunteer opportunities.
- Log your activities so you can refer to the log when applying! (Check out our resources page for a template!)

Overall GPA vs. Science GPA

- Science GPA for medical and dental school = BCPM (Biology, Biochemistry, Chemistry, Physics, Math)
 - Science GPAs can be calculated slightly differently depending on application service
- If you got a grade in it from a community college or university, it will count. (Each attempt counts, too.)
- Check out our resources page for a GPA calculator for overall/science GPAs!

Key Points To Consider As You Get Started

Build your story.

- Why do you want to be a physician or dentist?
- Outside of your professional interests/goals, who are you?
- How can you tailor your actions (outside of grades) to show who you are, your interests, and your strengths?

Your grades and MCAT score need to be strong to get you through the door. Your story, your experiences, and your actions are what gets an admissions committee interested in learning more.

First Step Recommendations

- Primary Focus of your first semester: Establish strong study habits and acclimate to university-life
 - Earn strong grades (A's/B's) in your first-year
 - Utilize campus resources, such as LAUNCH Tutoring/Academic Coaching and SEP Workshops in NSM
 - Join 1-2 student organizations to start building your support community on campus

In second semester (or first, if midterms go well!), we can explore next steps-volunteering, research, shadowing, etc. You need a firm foundation to get to professional programs, so academics first!

Medical Schools in Texas

There are currently 16 Medical Schools in Texas:

Allopathic Medical Schools (MD)

Public:

- UT Southwestern Medical Center
- McGovern Medical School
- UT Health San Antonio Long School of Medicine
- UT Medical Branch (Galveston)
- Texas A&M University College of Medicine
- Texas Tech UHSC School of Medicine (Lubbock)
- Texas Tech UHSC Paul L. Foster School of Medicine (El Paso)
- UT Austin Dell Medical School
- UT Texas Rio Grande Valley School of Medicine
- UT Tyler School of Medicine
- UH Tilman J Fertitta Family College of Medicine

Private:

- Baylor College of Medicine
- TCU Burnett School of Medicine

Osteopathic Medical Schools (DO)

Public:

- Texas College of Osteopathic Medicine/UNT
- Sam Houston State University

Private:

University of the Incarnate Word



Dental Schools in Texas

There are currently 4 Dental Schools in Texas:

- Texas A&M University School of Dentistry
- UT School of Dentistry at Houston
- UT School of Dentistry at San Antonio
- Texas Tech Woody L. Hunt School of Dental Medicine
- All Texas Dental Schools are public



Medical School Admission Requirements

- The minimum prerequisite courses for admission into medical schools include completing the following with a C or better:
 - **Biology I and II:** BIOL 1306/1106 and BIOL 1307/1107
 - General Chemistry I and II: CHEM 1311/1111 and CHEM 1312/1112
 - Organic Chemistry I and II: CHEM 2323/2123 and CHEM 2325/2125
 - **Biochemistry:** BCHS 3304
 - Physics I and II: PHYS 1301/1101 and PHYS 1302/1102, or PHYS 2325/2125 and PHYS 2326/2126
 - English: ENGL 1301 and ENGL 1302
 - Statistics: MATH 1342 or MATH 3339 or PSYC 2317
 - Additional Advanced (3000-4000 level) Biology Courses (at least 2): including BIOL 3301 (Genetics),
 BIOL 3324 (Human Physiology), BIOL 4323 (Immunology), BIOL 4374 (Cell Biology), etc.

For some schools, minimum grade for prerequisites may be higher.

Dental School Admission Requirements

- The minimum prerequisite courses for admission into dental school include completing the following with a C or better:
 - Anatomy & Physiology: BIOL 3324/3224 and BIOL 4397 (Comparative Anatomy) strongly recommended;
 BIOL 2301/2101 and BIOL 2302/2102 accepted by most
 - Biology I and II: BIOL 1306/1106 and BIOL 1307/1107
 - General Chemistry I and II: CHEM 1311/1111 and CHEM 1312/1112
 - Organic Chemistry I and II: CHEM 2323/2123 and CHEM 2325/2125
 - **Biochemistry:** BCHS 3304
 - Physics I and II: PHYS 1301/1101 and PHYS 1302/1102, or PHYS 2325/2125 and PHYS 2326/2126
 - Microbiology: BIOL 2321 (lab not needed)
 - English: ENGL 1301 and ENGL 1302
 - Statistics: MATH 1342 or MATH 3339 or PSYC 2317
 - Additional Advanced (3000-4000 level) Biology Courses (at least 2): BIOL 3301 (Genetics), BIOL 4323 (Immunology), BIOL 4374 (Cell Biology), etc.

More on Prerequisites and Courses

- Additional information regarding course requirements can be found on our <u>website</u>.
- It is important you verify the specific course requirements of each medical and dental school in which you hope to apply, as they may vary. (Example- Baylor Medicine wants additional humanities/social sciences; A&M Dental prefers the upper level A&P courses over the lower level ones; TCU Burnett requires B- or better in all prereqs.)
- Please bear in mind that you can potentially increase your competitive status by taking more difficult classes beyond the minimum (like taking Calculus I, taking MATH 3339 instead of MATH 1342, taking additional upper level Biology courses).
- Please also remember: these are the minimums. C grades in prereqs are typically the minimum, but C grades will not get you close to competitive GPA levels. You should aim for primarily As with a few Bs to keep you in the competitive GPA range.

Is AP or IB credit accepted?

- Course credit earned by exams, such as AP or IB can sometimes be used for medical or dental requirements. However, these policies vary.
- You are not required to retake a course if you have earned AP or IB credit for a prerequisite. <u>However, we strongly recommend that you retake at least science and</u> <u>math AP at UH to better prepare you for your upcoming courses.</u>
- Most Texas medical schools and all Texas dental schools currently accept AP/IB credit if it is listed on the transcript (UH does this).
 - Baylor College of Medicine does not currently accept AP/IB credit for pre-med pre-reqs (Bio, Chem, Social Sciences, Math, Physics)
 - TCU Burnett does not accept AP/IB credits; courses must have a grade.

What about...

Retaking classes?

• If you find yourself regularly earning Bs and Cs in science and math courses, this may be a sign that the medical or dental school path may not be for you. If it goes this way for two semesters, you need to have a serious talk with yourself (and us). Retaking a singular class, maybe two, is fine, especially if you had a circumstance resulting a grade below your capabilities; but both attempts will count into GPA, and an A will be expected on your retake.

If I've been on Probation or Suspension?

 This makes for a more challenging path, and you'll need to be sure you have a an extremely strong academic record after this (and strong application in all areas) to show what you're capable of.

When would I apply to medical or dental school?

- For a traditional path, students apply in the Summer between Junior and Senior Year
 - This is the time to apply if you want to start medical school the fall after graduation.
 - Ex- apply in May/June 2025 to start med/dent school in Fall 2026.
 - You need to integrate your prereqs into first 2.5-3 years of your degree if you want to apply in this time frame!
- Importantly, your individual time-line may vary!
 - Your major, amount of AP/IB or transfer credit, academic performance, individual goals, plans of gap year, etc. can all affect when you are able to apply.
- Do not focus on when you can apply, but when you will be competitive!
 - Getting into medical or dental school is not a race. No one is admitted by accident.
- Taking an extra year or two before applying can be very beneficial.



Source: Texas Medical and Dental School Application Service Data Report

- Average GPAs of students accepted into Texas medical schools for Fall 2024
- 6472 applied; 2595 students were accepted (40% acceptance rate)



Source: Texas Medical and Dental School Application Service Data Report

- Average GPAs of students accepted into Texas dental schools for Fall 2024
- 1172 applied; 408 students were accepted (35% acceptance rate)

Extracurricular Portions of Application

- Healthcare Activities/Dental Experience (shadowing, scribing, employment/participation in clinical setting)
- Community Engagement (volunteering)
- Leadership
- Research

REMINDER: Activity Log available on our website under "Resources"!

What are Healthcare Activities/Dental Experience?

- Shadowing: hands-off observation of physicians or dentists providing care to patients.
 - Variety is strongly encouraged; 3 separate shadows with 3 different professionals of 30 hours each is generally stronger than 90 hours with only one physician.
 - Most schools do not require a set minimum—although ideally 100+ is encouraged
- Scribing: A scribe provides written documentation (usually electronic) of patient history, physician visit, physician findings.
 - Typically a paid position
 - Not a substitute for shadowing, but still excellent exposure to the medical field
- Volunteering in hospital, clinic, etc.
- Keep a record of your experiences/activities (dates, locations, responsibilities).
 - This will make completing your eventual application much easier

Important: you must not engage in any activity that could be considered the practice of medicine or dentistry. This is especially important for medical and dental mission trips abroad.

How Do I Find Shadowing Opportunities?

UH, like most universities, does not provide shadowing matches. The responsibility is on the student.

- ■Start with your family physician or dentist, or the physician/dentist of family members.
- Campus organizations are also a great way for connecting and networking with potential clinical opportunities.
- ■Reach out to the physician/dentist (email is good if you don't know them) and share how you learned of them, what you're seeking, and a little about yourself.
 - Above all, be courteous and respectful of their time!

What is Volunteering?

- Volunteering (Community Engagement) involves doing work that gives back to your community.
 - You want to be a doctor or dentist to help people? This shows the passion for helping!
- Importantly, volunteer experiences <u>do not</u> have to be medical or clinical in nature.
 - Volunteering in a hospital could be healthcare exposure or community service
 - Volunteering through nonprofit organizations or student organizations is often more directly related to working with the community
- No minimum hours, but strong applicants show consistent engagement.
 - Try to find activities where you are regularly involved, rather than one-offs.
- Keep a record of your experiences/activities (dates, locations, responsibilities).
 - This will make completing your eventual application much easier

How Do I Find Volunteering Activities?

- Student Organizations
- Metropolitan Volunteer Program
- Houston Third Ward Initiative
- Common Volunteer Organizations among UH students:

Houston Food Bank

Texas Mission of Mercy (dental)

Hearts for the Homeless

Habitat for Humanity

The Beacon

American Red Cross

American Cancer Society

What is Research?

- Participating in a research lab is recommended, but not required.
 - You may participate in a lab for pay, or as a volunteer. (Academic credit is also acceptable
 if it's not a required lab course.)
 - Very important for dual-degree programs (e.g., MD/PhD) or research-focused schools
 - Most students begin looking for research opportunities in spring of freshman year or start of sophomore year.
 - Less critical for dental
- Only do research if you are truly interested in it.
- Plan to be involved in a lab or project for at least a year.
 - You must be able to discuss the research (goals, results, your role) in-depth.
 - Does not have to be medical or translational.
- Talk to your advisor, your professors, and review departmental websites.

How to Get Involved in Research?

- Can start as early as second semester!
- Talk to your academic advisor, your professors, and review <u>departmental</u> <u>websites</u>.
- Office of Undergraduate Research and Major Awards (<u>OURMA</u>)
 - List of researching faculty
 - Getting Started
 - Research Programs at UH (<u>HERE, PURS, SURF</u>)

What is Leadership?

- Get involved in <u>student organizations</u> and the community
 - Admissions committees like to see applicants who impact change and guide others in the activities in which they are most passionate.
- Leadership is indicated by what you do in an organization, not just by membership in an organization.
 - You do not need to be President, but an executive or advisory role is helpful.
- Leadership can also be indicated through community/volunteer activities (training others, schedule coordinator, etc) or through employment (team lead, assistant manager, etc.)

What is the MCAT?

- The MCAT is the test that you will need to complete to apply to medical school. At this point, you don't need to focus on the MCAT!
- The MCAT consists of 4 sections:
 - 1. Biological and Biochemical Foundations of Living Systems
 - 2. Chemical and Physical Foundations of Biological Systems
 - 3. Critical Analysis and Reasoning Skills (CARS)
 - 4. Psychological, Social, and Biological Foundations of Behavior
- MCAT scores range from 472-528
 - Each section is scored 118-132.
 - A score of 501 is ~50th percentile
 - The score for the average accepted applicant in Texas last year was 511-512 (83rd percentile)
- The MCAT takes ~7 hours and 30 minutes to complete and costs \$345

What courses will I need to prepare for the MCAT?

- Plan to take the MCAT no later than April of the year you plan to apply
 - Offered in January and March-September each year.
 - Registration opens in October for Jan-June dates and in February for July-September dates.
- Courses you need before the exam:
 - Biology I and II: BIOL 1306/1106 and BIOL 1307/1107
 - General Chemistry I and II: CHEM 1311/1111 and CHEM 1312/1112
 - Organic Chemistry I: CHEM 2323/2123
 - **Biochemistry:** BCHS 3304
 - Physics I and II: PHYS 1301/1101 and PHYS 1302/1102 or PHYS 2325/2125 and PHYS 2326/2126
 - English: ENGL 1301 and ENGL 1302
 - Recommended: Statistics, Psychology, Genetics, Organic Chemistry II, Human Physiology, Cell Biology
- You can study for the MCAT on your own or take an MCAT prep-course
 - Key is to make a study plan and take at least 5-6 full-length practice tests!

What is the DAT?

- DAT is the test that you will need to complete to apply to dental school. At this point, you don't need to focus on the DAT!
- Currently, the DAT consists of 4 sections:
 - 1. Survey of the Natural Sciences (Biology and Chemistry)
 - 2. Reading Comprehension (dental and basic sciences)
 - 3. Quantitative Reasoning (math: algebra, numerical calculations, conversions, etc)
 - 4. Perceptual Ability (2D/3D problem solving)
- New DAT scoring system implemented this year; range from 200-600.
 - Each section is scored 200-600. A score of 400 is ~53rd to 55th percentile.
 - Two major scores: Academic Average (AA) and Perceptual Ability (PA)
 - Average score for accepted Texas applicants last year: AA 22 (88th)/PA 20.4 (76th)
- The length of the DAT is 4-hours and 15-minutes and costs \$560.

What courses will I need to prepare for the DAT?

- Take the DAT no later than May of the year you plan to apply
 - Offered nearly year-round.
 - Must wait 90-days before you can retake
- Courses you need before the exam:
 - Biology I and II: BIOL 1306/1106 and BIOL 1307/1107
 - General Chemistry I and II: CHEM 1311/1111 and CHEM 1312/1112
 - Organic Chemistry I and II: CHEM 2323/2123 and CHEM 2325/2125
 - English: ENGL 1301 and ENGL 1302
 - Recommended: Biochemistry, Genetics, Physiology, Anatomy, Art/3-D Design
- You can study for the DAT on your own or take a DAT prep-course
 - Key is to make a study plan and take at least 5-6 full-length practice tests!

What is HPAC?

- Health Professions Advisory Committee (or HPAC)
 - 18 UH faculty from various colleges across campus that review a "rough draft" of medical/dental school application
 - Provides committee recommendation letter to accompany application
- Am I required to complete an HPAC review?
 - No- but it's strongly recommended if you meet eligibility requirements
- When do I begin the HPAC application?
 - During the fall semester before you plan to apply to medical/dental school. Not something to worry about now!

Building A Competitive Application

Academics

- Strong performance in pre-requisite courses (C or better required—A or B preferred)
- Limit withdrawals (W's) and number of courses taken outside of UH.
- Challenge yourself! Try taking science classes concurrently. (>12 hours/semester)
- Not all about 4.0. Admissions committees review your academic history/transcript.
- Strong scores on admissions exams (MCAT/DAT)

Extracurricular activities

- Experience in healthcare/dentistry (shadowing, clinical volunteering, RDA, scribing,)
- Community Engagement (consistent commitment to helping community)
- Leadership (showing involvement and proactivity)
- Research (does not have to be medical or clinical)

Major Takeaways!

- Know that this path is a significant amount of work with no guarantees; you need to be passionate about medicine or dentistry to carry through.
- The best thing you can do to prepare as a Freshman/Sophomore is get good grades and work on connecting into student organizations, community engagement, and healthcare experiences!
- Remember that there is not a checklist or guaranteed path to medical or dental school- everyone's journey is different. The journey takes time, and there are no shortcuts.





Thank you!

Office email: prehealth@uh.edu

Website: www.uh.edu/hpa



Join our Listserv



Areas of Health Professions



Health Professions Resources