

UNIVERSITY of **HOUSTON**

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PRE-HEALTH ADVISING CENTER

# **Introductory Orientation**

**(for new Pre-Medical and Pre-Dental students)**

**Dr. Gregory Spillers**

Director | Pre-Health Advising Center

# About the Pre-Health Advising Center

- **Mission:** To assist UH students interested in healthcare careers.
  - This includes careers in medicine, dentistry, nursing, pharmacy, and allied-health.
- We can provide guidance on:
  - Various healthcare career paths
  - Admission requirements
  - Application process and timelines
- We also offer various Pre-Health events and workshops throughout the year.
- We are not a major/department and will not replace your major advisor.

# About the Pre-Health Advising Center

- We are located on the 2<sup>nd</sup> floor of CBB (across from the Writing Center).
  - Email: [prehealth@uh.edu](mailto:prehealth@uh.edu)
  - Website: [www.uh.edu/pre-health](http://www.uh.edu/pre-health)
- Appointments can be scheduled in [Navigate](#).
  - Formal appointments are restricted to currently enrolled students. Prospective students and alumni should contact us at [prehealth@uh.edu](mailto:prehealth@uh.edu)
- We also offer [walk-in sessions](#) each week for quick questions.
- Please sign-up to the [Pre-Health Email List](#) to receive emails from our office.

# Pre-Health Advising Center Staff

- Dr. Gregory Spillers—Director

- Dr. Spillers joined the Pre-Health Advising Center as Director in 2020. He previously served as the first full-time Director of Pre-Health Advising at the University of Georgia. In 2017, he became Associate Director of Academic Programs in the Department of Biomedical Engineering at the University of Houston.
- Dr. Spillers received his B.A. from the University of North Carolina-Greensboro and both his M.S. and Ph.D. from the University of Georgia.

- Mr. Ricardo Garza—Health Professions Advisor

- Mr. Ricardo Garza joined the Pre-Health Advising Center in 2021. Mr. Garza previously served as Health Professions Advisor at the University of Texas - Dallas. He has many years of experience assisting undergraduate students in Texas achieve their healthcare career goals.
- Mr. Garza received his B.S. from Prairie View A&M University and his M.A. from Texas State University.

# First Steps for New Students!

1. Join the [Pre-Health mailing list](#) to receive email updates from our office.

- We send regular emails about upcoming events and pertinent application information.

2. Explore our website: [www.uh.edu/pre-health](http://www.uh.edu/pre-health)

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

3. Download the *pre-Med or pre-Dent Quick Facts Handout and 4-year Plan*.

- These 1-page guides provide detailed overview of course requirements, application components, and overall timeline to get you started.

4. Bookmark the [Pre-Health Event Calendar](#)

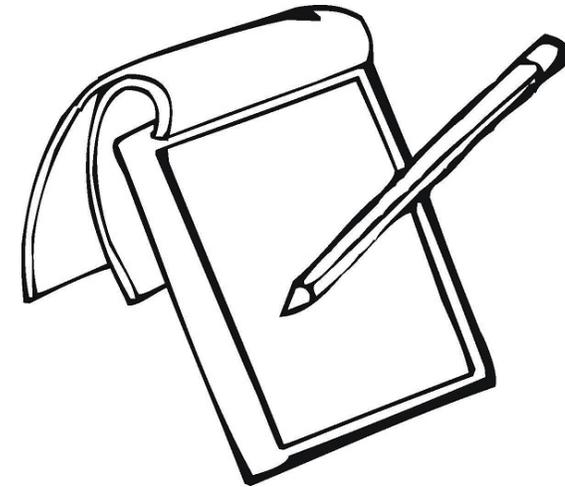
- Includes student organization meetings, events, and workshops!

# When should you meet with our office?

- Before making an appointment with our office, please ensure you have first:
  - Met with your major advisor to discuss your degree plan and course enrollment schedule.
  - Reviewed the information found in this orientation as well as on our [website](#).
  - Joined the [Pre-Health email list](#).
  - Considered submitting quick questions to [prehealth@uh.edu](mailto:prehealth@uh.edu) (usually much faster than scheduling an appointment).
- Actively enrolled Sophomores, Juniors, and Seniors can schedule an appointment with our office in [Navigate](#).
- Incoming Freshman are asked to wait until their second semester at UH to schedule an individual appointment with our office.
- Pre-Nursing students are required to meet with College of Nursing advisors, rather than our office.

# Orientation Outline

- What does it mean to be pre-Med or pre-Dent at UH?
- Medical & Dental Schools in Texas
- Applications and Timeline
- Admission Requirements
- MCAT and DAT
- Health Professions Advisory Committee (HPAC)



# What does it mean to be “Pre-Med” or “Pre-Dent” at UH?

- The University of Houston does not offer any *formal* pre-Med or pre-Dental programs.
  - You cannot major in pre-Med, pre-Dent, nor can you officially declare that you are Pre-Health.
  - You are not required to meet with our office—though we strongly encourage you to.
  - Our office will not replace your major advisor—you will still need to meet with them every semester.
- Once you have decided to pursue the pre-Med/pre-Dental pathway, you may work with our office to learn about admission requirements as well as the preparation and application process.
- Recommended first steps as a new pre-Med/pre-Dental student at UH:
  - Focus primarily on establishing strong study habits and acclimating to university-life
  - Earn strong grades (A’s/B’s) in your first-year
  - Utilize campus resources, such as LAUNCH Tutoring and SEP Workshops in NSM
  - Utilize the resources available on our website: [www.uh.edu/pre-health](http://www.uh.edu/pre-health)

# 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 or other NSM majors may be more practical—they are not required.
  - Our office encourages you to pursue majors/minors that you think you would really enjoy.
- **Challenge yourself! Explore what UH has to offer you!**
  - Avoid thinking there's only one path to medical or dental school.
  - Pursue clubs, activities, minors/majors that you are interested in (*not what you think looks better*)
  - Try to take a full-load every semester (>12 credit hours/term), unless you are working full-time.
  - 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.
- **Overall GPA vs. Science GPA**
  - Science GPA for medical and dental school = BCPM (Biology, Chemistry, Physics, Math)

# Medical Schools in Texas

- There are currently 15 Medical Schools in Texas:

## Allopathic Medical Schools (MD)

### *Public:*

- The University of Texas Southwestern Medical Center
- The University of Texas Medical Branch at Galveston
- McGovern Medical School
- Long School of Medicine
- Texas A&M University College of Medicine
- Texas Tech UHSC - School of Medicine in Lubbock
- Texas Tech UHSC - Paul L. Foster School of Medicine in El Paso
- The University of Texas at Austin - Dell Medical School
- The University of Texas Rio Grande Valley - School of Medicine
- University of Houston - College of Medicine

### *Private:*

- Baylor College of Medicine
- TCU and UNTHSC 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 College of Dentistry
  - The University of Texas School of Dentistry at Houston
  - The University of Texas School of Dentistry at San Antonio
  - Woody L. Hunt School of Dental Medicine
- All Texas Dental Schools are public and use the TMDSAS application



# Medical School Admission Requirements

- **The minimum pre-requisites for admission into medical schools include:**
  - **Biology:** BIOL 1306/1106 and BIOL 1307/1107
  - **General Chemistry:** CHEM 1311/1111 and CHEM 1312/1112
  - **Organic Chemistry:** CHEM 2323/2123 and CHEM 2325/2125
  - **Biochemistry:** BCHS 3304
  - **Physics:** 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 Biology Courses (at least 2):** BCHS 3305 (Biochemistry II), BIOL 3301 (Genetics), BIOL 3324 (Human Physiology), BIOL 4323 (Immunology), BIOL 4374 (Cell Biology), etc.
- Additional information regarding course requirements can be found on our [website](#).
- It is important you verify the specific course requirements of each medical school in which you hope to apply, as they may vary.

# Dental School Admission Requirements

- **The minimum pre-requisites for admission into dental school include:**
  - **Anatomy & Physiology:** BIOL 3324/3224 and BIOL 4397
  - **Biology:** BIOL 1306/1106 and BIOL 1307/1107
  - **General Chemistry:** CHEM 1311/1111 and CHEM 1312/1112
  - **Organic Chemistry:** CHEM 2323/2123 and CHEM 2325/2125
  - **Biochemistry:** BCHS 3304
  - **Physics:** PHYS 1301/1101 and PHYS 1302/1102 or PHYS 2325/2125 and PHYS 2326/2126
  - **Microbiology:** BIOL 2321
  - **English:** ENGL 1301 and ENGL 1302
  - **Statistics:** MATH 1342 or MATH 3339 or PSYC 2317
  - **Additional Advanced Biology Courses (at least 2):** BIOL 3301 (Genetics), BIOL 4374 (Cell Biology), etc.
- Additional information regarding course requirements can be found on our [website](#).
- It is important you verify the specific course requirements of each dental school in which you hope to apply, as they may vary.

# 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 automatically required to retake a course if you have earned AP or IB credit for a pre-requisite. Instead, please consult with our office as well as the specific medical or dental schools in which you hope to apply.
- Medical and dental schools that use the TMDSAS application currently accept AP/IB credit if the credit is clearly defined in the transcript (as is true at UH).
- Baylor College of Medicine does not currently accept AP/IB credit.

# What is the MCAT?

- MCAT is the test that you will need to complete to apply to medical school
- Currently, 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 500 is ~50<sup>th</sup> percentile
  - The score for the average accepted applicant in Texas is ~511.
- The MCAT takes ~7 hours and 30 minutes to complete and costs \$310

# What courses will I need to prepare for the MCAT?

- Take the MCAT no later than May 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:** BIOL 1306/1106 and BIOL 1307/1107
  - **General Chemistry:** CHEM 1311/1111 and CHEM 1312/1112
  - **Organic Chemistry:** CHEM 2323/2123
  - **Biochemistry:** BCHS 3304
  - **Physics:** 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, 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.
- Currently, the DAT consists of 4 sections:
  1. *Survey of the Natural Sciences (Biology and Chemistry)*
  2. *Reading Comprehension*
  3. *Quantitative Reasoning*
  4. *Perceptual Ability*
- DAT scores range from 1-30.
  - Each section is scored 1-30. A score of 18 is ~50<sup>th</sup> percentile.
  - Two scores are provided: Academic Average (AA) and Perceptual Ability (PA)
  - Competitive Texas applicants score: AA – 21 /PA - 20
- The length of the DAT is 4-hours and 30-minutes and costs \$445.

# 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:** BIOL 1306/1106 and BIOL 1307/1107
  - **General Chemistry:** CHEM 1311/1111 and CHEM 1312/1112
  - **Organic Chemistry:** 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!

# When would I apply to medical or dental school?

- UH students typically apply in the Summer between Junior and Senior Year.
- Importantly, your individual time-line may vary!
  - Your major, amount of AP/IB or transfer credit, academic performance, individual goals, 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.

# What is Shadowing?

- Shadowing involves observing physicians or dentists providing care to patients.
- Most schools do not require a set minimum—although 50-100 is recommended.
  - Shadowing (Exposure to “doctor-patient” interaction)
  - Variety is encouraged if possible.
- Start with your family physician or dentist.
  - Campus organizations are also a great way for connecting and networking with potential clinical opportunities.
- Importantly, 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.

# What is Volunteering?

- Volunteering involves doing good work and giving back to your community.
  - You want to be a doctor or dentist to help people? Well, prove it!
- Importantly, volunteer experiences do not have to be medical or clinical in nature
- 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

# What is Research?

- Participating in a research lab is recommended, but not required.
  - You may participate in a lab for course-credit, for pay, or as a volunteer.
  - Very important for dual-degree programs (e.g., MD/PhD).
  - Most students begin looking for research opportunities in their sophomore year.
- 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.
  - All it takes is a few emails to prospective professors to become a research assistant.

# What is Leadership?

- Get involved in student organizations and the community
  - Admissions committees prefer applicants who take charge in the activities in which they are most passionate.
- Attending organization meetings is helpful but leading one is better!
  - Who cares if you are a member of 10 clubs? Active involvement is what matters!
  - You do not need to be President, but some executive or advisory role is helpful.
- Check our website for a [list of student organizations](#) to get started

# What is HPAC?

- Health Professions Advisory Committee (or HPAC)
  - 18 UH faculty from various colleges across campus
  - Meet to review and discuss applicants to Medical and Dental School
  - Provides committee recommendation letter to accompany application
- Am I required to complete an HPAC review?
  - Only if you are applying to medical and dental school from UH
- When do I begin the HPAC application?
  - During the Spring semester before you plan to apply to medical/dental school

# Overall aspects to building a competitive application

## ■ **Academics**

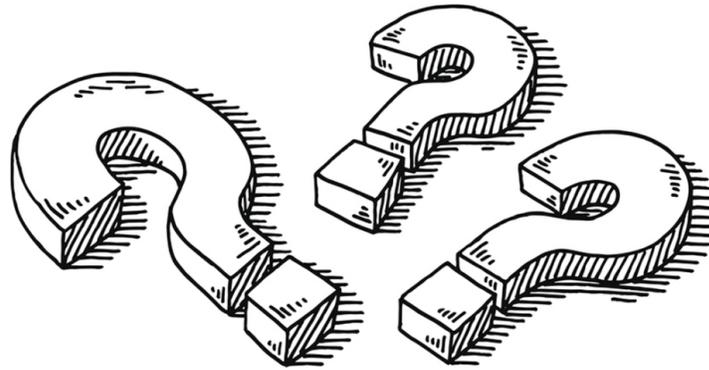
- Strong performance in pre-requisite courses (C or better required—A or B preferred)
- Limit withdrawals (W's) and number of courses taken outside of UH.
- Challenge yourself! Try taking science classes concurrently. (>12 hours/semester)
- Not all about 4.0. Admissions committees review your academic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

## ■ **Extracurricular activities**

- Shadowing (Exposure to “doctor-patient” interaction)
- Volunteering (Commitment to helping others and community involvement)
- Leadership (Extracurricular engagement)
- Research (does not need to be medical or clinical)

# Major Takeaways!

- Major/minor in whatever you are most interested.
  - Biology and other “science” majors are a practical fit—but not necessarily the best choice!
  - Do not worry about what you think medical or dental schools want to see.
  - Seek out activities and organizations that you are passionate about—even if non-medical.
- Your primary focus in your first year should be on strong grades (A’s/B’s)
  - Do not stress about the MCAT/DAT, when to apply, or other application components
  - The best thing you can do to prepare as a Freshman/Sophomore is get good grades!
- Utilize the resources available in the Pre-Health Advising Center!
  - Join our [Pre-Health listserv](#) for email updates
  - Review our website: [www.uh.edu/pre-health](http://www.uh.edu/pre-health)
  - Contact us with questions: [prehealth@uh.edu](mailto:prehealth@uh.edu)



**Thank you! Questions?**

**Feel free to contact our office at [prehealth@uh.edu](mailto:prehealth@uh.edu)**

**Visit our website at [www.uh.edu/pre-health](http://www.uh.edu/pre-health)**