PRE-PHARMACY GUIDE

UT Austin
PAI 5.03
512-471-3172
Visit our Website
Preface

The information presented in this document provides important resources for UT Austin students planning on applying to Pharmacy School.

Additional Pre-Health Professions resources including prerequisites, time lines and application information for the following Health Professions: Dentistry, Physician Assistant Studies, Pharmacy, Occupational Therapy, Physical Therapy, Optometry and Veterinary Medicine can be found on the Health Professions website: http://cns.utexas.edu/health-professions
Doctor of Pharmacy (Pharm.D.)

Pharmacy is a doctoral health profession in which licensed professionals provide information about medications to patients and health care professionals. As "medication experts," pharmacists are concerned with safeguarding the public's health in matters relating to medication distribution and use and disease state management.

Pharmacists play a vital role in improving patient care through the medicine and information they provide. Pharmacists dispense medications prescribed by physicians and other health practitioners and monitor patient health. They advise physicians and other health practitioners on the selection, dosages, interactions and side effects of medications.

Individuals who hold a Pharm.D. can also be pharmaceutical scientists, who are expertly trained to discover, develop, test and manufacture new medications. Typical pharmaceutical scientists spend most of their time in a laboratory discovering and learning how different compounds interact with disease-causing cells and organisms. In addition, they investigate how these compounds interact with the human body to ultimately determine if they can become new drugs.

For more information on pursuing a degree in pharmacy, see the American Association of Colleges of Pharmacy website. For profiles of minorities in the pharmacy field, see AETNA's 2005 African Americans in History calendar.

Additional information: http://explorehealthcareers.org/en/Field/9/Pharmacy

Pharm.D./Ph.D. Dual Degrees

Some schools offer a dual degree program in which individuals earn both a Pharm.D. and a Ph.D. This program oftentimes combines the features of a professional Pharm.D. degree with the advanced training and research of a pharmaceutical sciences Ph.D. degree. Students who complete the Pharm.D./Ph.D. degree track will be uniquely qualified to translate basic pharmaceutical sciences research into clinical applications. Graduates of the Pharm.D./Ph.D. program will be well qualified to pursue careers in teaching and/or research in academia, industry, or in a variety of other settings.

The Pharm.D./Ph.D. program at the University of Texas at Austin is designed for highly motivated and qualified individuals who are seeking a combination program in the clinical and basic sciences that will prepare them for a career in academics, research, or other areas in which the ability to translate basic science research into clinical applications is sought. Students may complete the requirements for both the Pharm.D. and Ph.D. degrees in a shorter time than would be the case if the two degrees were obtained separately.

The Pharm.D./Ph.D. dual career is busy, challenging, rewarding, and offers opportunities to do good for many people by advancing knowledge, developing new treatments for diseases, and pushing back the boundaries of the unknown.
Selecting a Major

For many pharmacy school programs, a bachelor’s degree is not required; these schools only require the completion of the pre-pharmacy pre-requisites to apply. However, some schools may require a bachelor’s degree so check with the schools you wish to apply to beforehand.

If your pharmacy schools require a bachelor’s degree or if you want to complete one before applying to pharmacy school, what should you major in at UT? A common myth is that you have to major in a science degree as a pre-pharmacy student. We recommend that you choose a degree based on your interests. It is important to choose a major based on your academic interests rather than one that you think looks good to pharmacy schools. Choose a major that you are passionate about, whether it is a major in liberal arts, business, public health, or something else entirely. Completing the prerequisites for pharmacy school can be accomplished regardless of your major.

Pharmacy schools accept students who show broad interests in their academic coursework through a non-science major. Choose a major that may serve as an alternate career path in case you change your mind about pharmacy school.

Explore majors/health professions further at one or more of the following resources:

- Wayfinder http://www.utexas.edu/ugs/wayfinder/explore/path/index
- My Next Move http://www.mynextmove.org/

Pre-Pharmacy Self-Assessment

The assessment below is designed to assess pharmacy school application strengths. If you are a new Pre-Pharmacy student use this assessment as a planning guide for your Pre-Pharmacy Pathway. (Please check out the New-Pre Health Longhorn Information page at the Health Professions website: http://cns.utexas.edu/health-professions).

Are you working towards submitting a well-rounded application?

Start by Developing Your Personal Qualities

Individuals who are successful in their pursuit of a health care career possess qualities that they develop as young adults. These include: Good Judgment, Self-Discipline, Leadership/Accountability, Reliability, Motivation/Persistence, Honesty, Maturity, Compassion/Empathy, Integrity, Intellectual Curiosity, Strong Work Ethic, and Cultural Competency. Develop these qualities through the experiences and activities you choose to get involved with.

I want to develop my following qualities:

__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
How are you going to develop these qualities (be specific)?

__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

Here are some ideas to get you started:

Get Involved & Gain Experience

There are several ways you can get involved. Get involved in what you are interested in. This is key! There are many things you can do to build your application that include but are not limited to: volunteering, shadowing, studying abroad, and/or participating in a summer program. Get involved on campus, tutor, mentor, teach, participate in Rec Sports. The list goes on and on. If you are considering adding study abroad to your list, check out the study abroad section in this guide. Always remember to be yourself and do what you enjoy.

Volunteering

Experience giving back to the community will be looked upon favorably by professional school admissions committees. If some of your volunteering is in a pharmacy or other health care setting, you can combine volunteering with exposure to the field. A community service activity in which you are directly helping people face-to-face is of the most value, and making an ongoing commitment to that community service gives you time to grow and gain real value from the experience.

<table>
<thead>
<tr>
<th>Volunteer Experience</th>
<th>Dates (can list time period or individual dates)</th>
<th>Hours</th>
<th>Responsibilities</th>
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</tbody>
</table>

What have I learned about myself through these experiences?

__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

Have I involved myself in a diverse set of experiences? What skills have I enhanced/gained through these experiences? (For example: I have become a better communicator through my volunteering experiences at the local hospital – explain how you have done this.)

__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________


I want to explore the following volunteer activities:
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

**Shadowing**

Shadowing means working directly with a health care provider in their professional environment. You have the opportunity to observe how they plan their day, how they interact with their patients, how they chose their career, and how they feel about current events!

<table>
<thead>
<tr>
<th>Pharmacist Name or Name of Experience</th>
<th>Specialty</th>
<th>Hours</th>
<th>Type of Experience: Shadow/Volunteer/Paid</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

What have I learned from these experiences?
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

I want to reach out to the following pharmacists to inquire about shadowing:
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

**Quick Tip**

*Volunteering is required for some pharmacy schools. It is a good idea to balance your volunteering and make sure to have some of your volunteering in a health care setting. Track your volunteer hours, as most professional school applications will ask for details of the time you spent volunteering. Keep a record of your volunteer supervisor(s), including name(s) and title(s).*

*Quick Tip*

*Finding a health care provider who is willing to allow you to shadow can be a challenge, but it is worth the effort. Many students start with their own health care providers. You may also network with other pre-health students to see where they have shadowed.*
Direct Patient Care Experience – Getting Your Pharmacy Technician Certificate!
It can be good to gain some hands-on experience to add to your application. Obtaining your pharmacy technician certification can help you in many ways. It can help you to get a job in the pharmacy field and gain valuable experience. It can also open doors for shadowing opportunities and is a good option to explore if you are considering applying to pharmacy school.

Steps to getting your Pharmacy Technician Certification:

1) Prepare for and take the Pharmacy Technician Certification Exam (PTCE)
   • The Pharmacy Technician Certification Board (PTCB) has a national certification program that enables pharmacy technicians to work more effectively with pharmacists to offer safe and effective patient care and service. PTCB administers a nationally accredited certification examination for pharmacy technicians which tests knowledge in all practice settings.

2) Apply for Pharmacy Technician Certification through PTCB.

3) Apply to become a Registered Pharmacy Technician in the state of Texas.
   • Application for Texas State Pharmacy Technician Registration Application. Complete this if you are certified by Pharmacy Technician Certification Board (PTCB).

Leadership
Leadership, which can be developed in many different ways, needs to be demonstrated. Think about how you are developing leadership qualities and skills. Here are some ideas to get you started:
• Tutoring
• Mentoring
• Teaching / TA a course
• Get involved in student organizational leadership

<table>
<thead>
<tr>
<th>Name of Organization</th>
<th>Position/Title (ex. Communication Director, President, Member, etc.)</th>
<th>Total participation time (ex. 2 years, 3 semesters, etc.)</th>
<th>Duties/Activities participated in with this organization/group</th>
</tr>
</thead>
</table>
What is the most important thing I have learned about myself from these experiences?
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

Brainstorm some specific ways you can develop your leadership skills:
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

**Student Org Involvement**
Extracurricular activities help you become a well-rounded student because you develop not only knowledge and thinking skills but also social skills, group work, empathy, team building, organizational and motivational skills.

I am a part of the following student orgs:
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

I want to join the following student orgs:
__________________________________________________________________________________
__________________________________________________________________________________
__________________________________________________________________________________

**Quick Tip:**
There are over 1000 registered student organizations on campus. There are close to 30 health-related organizations. Check the Office of the Dean of Students HornsLink website ([https://utexas.collegiatelink.net/Organizations](https://utexas.collegiatelink.net/Organizations)) for a searchable database of student orgs.

**Academics**
Academics include your overall and science GPA’s and PCAT Scores. How well are you doing? Are you taking between 14-17 credit hours per semester? Are you keeping your grades up? Use the GPA calculator in your UT Direct account to figure out your GPA.

Overall GPA* __________
*This includes all course taken at UT and other institutions

BCPM GPA (Biology/Chemistry/Physics/Math also includes Statistics) ____________

**Quick Tip**
To be competitive for pharmacy school, you will need average overall and science GPA’s of at least 3.5 or above, depending on the schools you plan on applying to. This means you need to be making A’s and B’s with more As than B’s. If you are behind in your classes, don’t wait until you get your first poor test score to ask for help. See the academic assistance section of this guide.
My PCAT Scale Score/Percentile Rank:

Writing/Mean ___/___ Verbal Ability ___/___ Biology ___/___ Chemistry ___/___
Reading Comprehension ___/___ Quantitative Ability ___/___ Composite___/___

Quick Tip
On the current 2014 PCAT, the average of matriculated students have a Composite Percentile Rank of 50-70%. While you should aim for a 70-80%, each school may have different averages. Please see the PSAR website for more information on each Pharmacy school’s requirements. Please see a Pre-Health Professions Coach if you have further PCAT questions, and check out the PCAT system on page 24 of this guide.

Get in the habit of personal reflection
Your insights about who you are as a person and how your experiences have shaped you will be of tremendous benefit when it is time to write your personal statement (a required part of your professional school application). Keep a journal handy so you can jot down your thoughts and observations!

Track Your Progress

Why do I want to be a pharmacist?

What characteristics do I have that I feel will help me be an excellent pharmacist?

Have I had experience working with people from backgrounds different from my own? What impact has it had on me?
**Evaluation**

Mark **Yes** or **No** for each question. This will allow you to identify areas in which you feel strongest and areas in which you wish to grow.

<table>
<thead>
<tr>
<th>Question</th>
<th>Y</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can you explain to someone why you want to be a pharmacist?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is your GPA above a 3.5?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have your grades improved over time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you shadowed more than one type of pharmacist?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your application reflect a diverse set of extracurricular activities over time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you shown consistency with your volunteer activities/community service?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Why Do I Want to Be a Pharmacist?**

*Can you go beyond loving science and wanting to help? Remember there are many helping professions out there? Why this one?*  
[http://www.youtube.com/watch?v=go1C7G6zlyU](http://www.youtube.com/watch?v=go1C7G6zlyU)
Get to know your faculty

This can be challenging at UT Austin—the campus is huge and most of the classes in your first year have large numbers of participants. Even though the professors can sometimes seem tough or intimidating, most of them are very approachable one-on-one. Visit your professors during office hours, even if you are doing well in their class. It will make your request for a future letter of evaluation much easier! Get to know your faculty, check out this quick video for some tips: http://www.youtube.com/watch?v=O7cPw8BUdpk

Who are your letter writers?

I would like to ask the following faculty for letters of evaluation:

1) ______________________________________________________
2) ______________________________________________________
3) ______________________________________________________

I would like to ask the following fourth individual for a letter of evaluation; this letter will add a different dimension to my application:

1) ______________________________________________________

***Once you have completed this self-assessment, if you have not spoken with a Pre-Health Professions coach either through attending drop in’s or during an appointment, we recommend that you do so in order to discuss these topics as well as your application strengths as a whole. Make sure to track your progress!

Notes:

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________
PHARMACY SCHOOL PREREQUISITES TIMELINE

This timeline is an example of how UT Austin students may complete the pre-pharmacy course requirements for the Texas pharmacy schools and is based on the usual three years that is needed to complete courses and experiential learning. Some students accelerate their program, take the PCAT in July or September after Year 1, and apply to start pharmacy school in Year 3. Many complete bachelor’s degree, apply in Year 4, and start pharmacy school in Year 5.

[Requirements can change at any time. Check often for updates and review application service and school web sites for changes that may occur between updates.]

FIRST YEAR

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differential Calculus</td>
<td>Integral Calculus</td>
<td>Physics 1</td>
</tr>
<tr>
<td>General Chemistry 1</td>
<td>General Chemistry 2</td>
<td>Physics Lab 1</td>
</tr>
<tr>
<td>Intro Biology 1</td>
<td>General Chemistry Lab</td>
<td>Prof’l Speaking</td>
</tr>
<tr>
<td>UGS 302 or 303</td>
<td>Intro Biology 2</td>
<td></td>
</tr>
<tr>
<td>Intro Psychology or Intro Sociology</td>
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</tbody>
</table>

SECOND YEAR

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics</td>
<td>Organic Chemistry 2</td>
<td>PCAT prep</td>
</tr>
<tr>
<td>Organic Chemistry 1</td>
<td>Organic Chemistry</td>
<td>PCAT in Jul or Sept</td>
</tr>
<tr>
<td>Genetics</td>
<td>Microbiology</td>
<td>Apply in Jul or Aug</td>
</tr>
<tr>
<td>Intro Microeconomics</td>
<td>Microbiology Lab</td>
<td></td>
</tr>
</tbody>
</table>

THIRD YEAR

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy</td>
<td>Physiology</td>
<td>Continue in gaining pharmacy experience and in other activities to become well-prepared for pharmacy school.</td>
</tr>
<tr>
<td>Philosophy (3 Hours)</td>
<td>Physiology Lab</td>
<td></td>
</tr>
<tr>
<td>Intro Computer Science</td>
<td>Medical Terminology</td>
<td></td>
</tr>
</tbody>
</table>

OTHER COURSE REQUIREMENTS:
You must complete Core Curriculum (General Education) requirements. The UT College of Pharmacy also requires a Global Cultures Flag course. See details and important footnotes on the Pharmacy School Prerequisite Courses pdf.

NOTES (Updated August 2014)

1. For individual school calculus requirements see the Pharmacy School Prerequisite Courses pdf.
2. See the Pharmacy School Prerequisite Courses pdf for other courses that satisfy this requirement.
3. UT College of Pharmacy requires BIO 326M. The other Texas pharmacy schools accept either BIO 326M or BIO 326R.
4. See page 1 of the Pharmacy School Prerequisite Courses pdf for details about when to take the PCAT and apply.
5. The Year 3 courses are specific requirements for UIW, TSU, and UNT System. Anatomy & Physiology (BIO 446L and 365S + 165U) are required by UIW, TSU, UNT System and most out-of-state pharmacy schools. The course work for UT, UH, TX Tech, and TAMU is covered in Years 1 & 2. See the Pharmacy School Prerequisite Courses pdf for details.
6. Pharm D. programs generally require all science courses to be completed by the end of the Spring semester prior to entering Pharmacy school in the Fall.
Pre-Pharmacy Activities and Application Timeline

First and Second Years

- Subscribe to HPOinfo: [http://cns.utexas.edu/health-professions](http://cns.utexas.edu/health-professions)
- Take an average to heavy course load: 14-16 hours is considered a normal pre-pharmacy course load. It is okay to take 12-13 hours your first semester at UT Austin.
- Get to know your professors. You will need faculty evaluations when you apply to pharmacy schools. Two from science faculty are recommended.
- Meet with a pre-health professions coach in the Health Professions Office to explore health professions and to discuss your goals and preparation, especially how to make the most out of your first two years.
- Declare a major by your second year on campus. Work with your academic advisor.
- Get involved in extracurricular activities (e.g., student organizations, volunteering, and shadowing in medical settings, community service).
- Attend the Health Professions Fair each year, generally held in February or March, to visit with representatives from pharmacy schools and other health professions programs.
- Keep viable career alternatives open.
- Visit pharmacy school web sites; decide where you will apply.

Third Year

- Complete and submit pharmacy school primary and secondary applications by fall of the last year of pre-pharmacy.
- Complete pre-pharmacy requirements by May of your third year.
- Ask faculty who know you well if they will write evaluations in support of your pharmacy school application; check your school’s entry on the PharmCAS Directory to see what types of evaluations are required, recommended and not accepted by each institution. A few schools prefer that applicants send references directly to the institution. This information will be included on their directory page.
- Attend the Health Professions Fair, generally held in February or March, to visit with representatives from pharmacy schools and other health professions programs.
- Continue gaining clinical experience for pharmacy school.
- Prepare for pharmacy school interviews starting in January through April of your third year.

Fourth Year

- If you have decided to complete your bachelor’s degree, continue gaining clinical experience.
- Complete and submit pharmacy school primary and secondary applications by fall of the last year of pre-pharmacy (if you plan on entering pharmacy school after you graduate).
- Most pharmacy school interviews take place during the early spring semester and end in April.
- Acceptance offers to pharmacy school begin in February of the spring semester through April.
- Complete UT Austin degree requirements necessary for graduation.
- Throughout your fourth year, continue in pre-pharmacy activities and additional courses to prepare for pharmacy school and to strengthen your application in case you need to apply again.
General information on the profession and a list of accredited programs in the United States are available at: American Association of Colleges of Pharmacy
http://www.aacp.org

There are six fully accredited schools in Texas where one can earn a Pharm. D. degree.

University of Texas at Austin
College of Pharmacy
Austin, TX

University of Houston
College of Pharmacy
Houston, TX

Texas Tech Univ Health Science Ctr
College of Pharmacy
Amarillo, TX

Texas A&M University
Irma Rangel College of Pharmacy
Kingsville, TX

University of the Incarnate Word
Feik School of Pharmacy
San Antonio, TX

Texas Southern University
College of Pharmacy & Health Sci.
Houston, TX

The UNT System College of Pharmacy welcomed its first entering class in the fall of 2013. As a new program they hold candidate accreditation status by the Accreditation Council for Pharmacy Education (ACPE). For details on the UNT System College of Pharmacy accreditation status and timeline, see the “Accreditation” page on their website.

Most Texas and out-of-state pharmacy programs use the Pharmacy College Application Service (PharmCAS) which usually opens during the summer. Students apply during the late summer and early fall, one year prior to starting pharmacy school. Application deadlines vary from school to school.

We recommend applying early in order to increase opportunities to be invited for interviews during the fall and spring semesters. Detailed application instructions and information about individual schools, including application deadlines and whether they require a supplemental application, can be found on the PharmCAS website. For schools that are not using PharmCAS, check their website for application and admissions information.

Plan to take the Pharmacy College Admission Test (PCAT) no later than September of the semester in which you plan to submit your application. We recommend taking the July PCAT if possible so that there is still time to retake the exam if necessary during September. Some schools with later application deadlines may accept scores from the October and November PCATs. Many students apply in the fall of Year 3 or later so they can be better prepared for the PCAT and pharmacy school, have more time for experiential learning, and possibly complete a bachelor’s degree.

Useful links:

Pharmacy Career Information
PharmCAS
Pharmacy College Admission Test (PCAT)
Pharmacy School Admission Requirements (PSAR)
UT College of Pharmacy Admission Statistics
Information for Foreign Students and Graduates
# Pharmacy School Prerequisite Courses

**AUGUST 2014**

[REQUIREMENTS CAN CHANGE AT ANY TIME. CHECK BACK OFTEN AND REVIEW SCHOOL WEB SITES FOR UPDATES AND CHANGES.]

All prerequisite courses must be completed with a letter grade of C or higher. C- is not accepted.

Course(s) listed in brackets are not required by the Pharm. D. program but are prerequisites for courses at UT Austin.

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>UT Austin</th>
<th>U of Houston</th>
<th>Texas Tech</th>
<th>T A&amp;M U</th>
<th>UIW</th>
<th>TX Southern U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Biology (BIO)</td>
<td>311C &amp; 311D</td>
<td>311C &amp; 311D</td>
<td>311C &amp; 311D</td>
<td>311C &amp; 311D</td>
<td>311C &amp; 311D</td>
<td>311C &amp; 311D</td>
</tr>
<tr>
<td>Gen Biology lab (BIO)</td>
<td>not required</td>
<td>206L or 325</td>
<td>206L or 325</td>
<td>206L</td>
<td>not required</td>
<td>206L</td>
</tr>
<tr>
<td>Genetics (BIO)</td>
<td>325</td>
<td>[325]</td>
<td>[325]</td>
<td>325 or 344</td>
<td>[325]</td>
<td>[325]</td>
</tr>
<tr>
<td>Microbiology w/lab</td>
<td>326M &amp; 226L</td>
<td>326M or 326R AND 226L</td>
<td>326M or 326R AND 226L</td>
<td>326M or 326R AND 226L</td>
<td>326M or 326R AND 226L</td>
<td>326M or 326R AND 226L</td>
</tr>
<tr>
<td>Anatomy w/lab &amp; Physiology w/lab (BIO)</td>
<td>not required</td>
<td>not required</td>
<td>not required</td>
<td>not required</td>
<td>446L AND 365S &amp; 165U</td>
<td>446L AND 365S &amp; 165U</td>
</tr>
</tbody>
</table>

Other Biology (BIO) | not required | not required | [Note b] | not required | not required | not required |

Gen Chemistry (CH) | 301 & 302 | 301 & 302 | 301 & 302 | 301 & 302 | 301 & 302 | 301 & 302 |

Gen Chem w/lab (CH) | 204 or 317 | 204 or 317 | 204 or 317 | 204 or 317 | 204 or 317 | 204 or 317 |


Math (M) | 408N & 408S or 408K & 408L or 408C & 408D | 408N or 408K or 408C | 408N or 408K or 408C | 408N or 408K or 408C | 305G AND 408N or 408K or 408C | 305G AND 408N or 408K or 408C |

Statistics | M 316 ... | M 316 ... | M 316 ... | M 316 ... | M 316 ... | M 316 ... |

Physics (PHY) | 302K & 102M | 302K or 317K or 1 year of HS physics | 302K or 102M or 317K & 117M | 302K or 102M or 317K & 117M | 302K or 102M or 317K & 117M | 302K & 102M or 317K & 117M |

Prof'l Speaking | not required | CMS 306M | CMS 306M | CMS 306M | not required | CMS 306M |

Medical Terminology | not required | not required | not required | not required | not required | CC 306M |

Other | [Note e] | PSY301 or SOC302 AND UGS 302 or UGS 303 | ECO 304L or ECO304K | PHL 301 AND Recommend: BCH 369 | CS 302 |

## Core Curriculum or General Education Requirements

**[Note h]**

### English

[Note i]

Complete UT Core Curriculum to satisfy these requirements AND take a Global Cultures flag course. [All other flag courses are included in UT's PharmD Curriculum.]

<table>
<thead>
<tr>
<th>Course(s)</th>
<th>UT Austin</th>
<th>U of Houston</th>
<th>Texas Tech</th>
<th>T A&amp;M U</th>
<th>UIW</th>
<th>TX Southern U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government (GOV)</td>
<td>310L &amp; 312L</td>
<td>315K &amp; 315L</td>
<td>310L &amp; 312L</td>
<td>315K &amp; 315L</td>
<td>310L &amp; 312L</td>
<td>315K &amp; 315L</td>
</tr>
<tr>
<td>History (HIS)</td>
<td>3 hrs from UT Austin Core Curriculum</td>
<td>3 hrs from: ART or MUS or TD</td>
<td>3 hrs from: ART or ARH or MUS or TD</td>
<td>ARH 301 or MUS 302L or TD 301</td>
<td>Not Required</td>
<td></td>
</tr>
<tr>
<td>Visual and Performing Arts</td>
<td>E 316K, L, M, N, or P</td>
<td>15 hrs in Humanities and Social Sciences easily satisfied by GOV and HIS and PSY or SOC</td>
<td>4 - 6 hrs</td>
<td>Not Required</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soc/Behav Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP/IB/CLEP Credit</td>
<td>Use caution; Not bio/chem</td>
<td>Prefer not in math/science</td>
<td>Yes, if on transcript</td>
<td>Accepted</td>
<td>Accept AP, CLEP, DANTES</td>
<td>Contact TSU for approval</td>
</tr>
</tbody>
</table>

**Volunteer or Paid Pharmacy Experience**

Highly recommended

**Medical Terminology**

Viewed very favorably

**Medical Terminology**

Viewed very favorably

**Medical Terminology**

Viewed very favorably

**Medical Terminology**

80 hrs [Note k] Viewed very favorably

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**SEE NOTES a through k ON NEXT PAGE**
Important Notes for Pharmacy School Prerequisites

a BIO 205L, offered for the last time in 2012, also satisfies this requirement.

b 3rd or 4th year Human-Based Science Course – 3 to 4 hours credit is required; see the school web site for subject options.
http://www.ttuhs.edu/sop/prospective/prereq3000hbs.aspx

c CH328M + CH128K and CH328N + 128L (for chemistry majors) also satisfy this requirement.

d Some topics required by UTCOP have been moved from M408C to M408D effective Fall 2014.
M 408C taken prior to Fall 2014, satisfies the requirement by itself. If M 408C is taken in Fall 2014 or later, M 408D is also required. If you have any questions about acceptable courses, contact the UTCOP admissions office.

e For approval of a statistics course other than those listed here, contact the admissions office of the individual program.

All the Texas schools represented by this document, except TSU, have approved the following UT Austin statistics courses. M 316, SDS 302, SDS 303, SDS 304, SDS 305, SDS 306, SDS 325H, SDS 328M, EDP 371, PSY 418, SOC 317L, STA 309, STA 309H, SW 318.

TSU has approved the following. M 316, SSC 318, SSC 325H

NOTE: Prior to Fall 2014 SDS course number prefixes were SSC which also satisfy the statistics prerequisite.

The UT College of Pharmacy typically accepts any statistics course that covers [a] descriptive stats [mean, median, mode, standard deviation, standard error] and [b] some form of inferential stats [ANOVA or simple regression].

f Each of the following first semester physics courses will satisfy this requirement.

PHY 302K & PHY 102M, PHY 317K & PHY 117M, PHY 303K & PHY 103M, PHY 301 & PHY 101L

Some majors require a calculus-based physics sequence. Check with your academic advisor.

g Students admitted to UT Austin with a high school foreign language deficiency (i.e., less than two years in a single language) must remove it prior to enrolling in the College of Pharmacy. Check with your academic advisor about satisfying this requirement.

h These courses should be included in or taken in addition to your UT core curriculum to satisfy individual Texas pharmacy schools prerequisites. Questions about these requirements and course substitutions should be directed to the pharmacy schools. If you have questions about core curriculum at UT Austin, check with your academic advisor.

If you **complete the University of Texas core requirements** http://www.utexas.edu/ugs/core, you will have met the core requirements for UT http://www.utexas.edu/pharmacy/admissions/curriculum_ss.html, UH, and TAMU pharmacy schools.

If you **complete a bachelor’s degree before entering pharmacy school**, you will have met the core or general education requirements at Texas Tech, TAMU, UH, and UT.

TSU does not use core complete status as a factor in admissions. Having a bachelor’s degree or higher does not exempt students from any TSU requirements.

i In Fall 2014, E316K will be separated into individual course numbers. This is a course number change, NOT a course content change. E 316L and E 316N are Global Cultures flag courses. The UT College of Pharmacy prerequisites include completion of a Global Cultures flag course.

TSU does not accept RHE309K. They require a more traditional Composition course rather than a “topics” course. ENGL 1302 from a community college is acceptable. Check with their admissions office for options at other schools.

j Take total of 4 – 6 hours in HUM, Literature, PHL, Modern or Classical Lang/Lit, ANT, GRG, or Cultural Studies

k Observation experience in a licensed pharmacy in the US or Canada under direct supervision of a licensed/registered pharmacist.

**UNT SYSTEM COLLEGE OF PHARMACY PREREQUISITE COURSES ON NEXT PAGE.**
## Pharmacy School Prerequisite Courses

### UNT System College of Pharmacy
Fort Worth, Texas

[Requirements can change at any time. Check back often and review school web sites for updates and changes.]

All prerequisite courses must be completed with a letter grade of C or higher. C- is not accepted.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Biology (BIO)</td>
<td>311C &amp; 311D</td>
</tr>
<tr>
<td>Gen Biology lab (BIO) [Note a]</td>
<td>206L</td>
</tr>
<tr>
<td>Genetics (BIO)</td>
<td>325</td>
</tr>
<tr>
<td>Microbiology w/lab (BIO)</td>
<td>326M or 326R</td>
</tr>
<tr>
<td>Human Anatomy w/lab OR</td>
<td>446L</td>
</tr>
<tr>
<td>Human Anatomy &amp; Physiology w/lab (BIO)</td>
<td>226L</td>
</tr>
<tr>
<td>Other Biology (BIO)</td>
<td>not required</td>
</tr>
<tr>
<td>Gen Chemistry (CH)</td>
<td>301 &amp; 302</td>
</tr>
<tr>
<td>Gen Chem w/lab (CH)</td>
<td>204 or 317</td>
</tr>
<tr>
<td>Organic Chemistry w/lab (CH) [Note b]</td>
<td>320M &amp; 320N</td>
</tr>
<tr>
<td>Math (M)</td>
<td>408N, 408K or 408C</td>
</tr>
<tr>
<td>Statistics [Note c]</td>
<td>M 316</td>
</tr>
<tr>
<td>Physics (PHY) [Note d]</td>
<td>302K &amp; 102M</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>CMS 306M</td>
</tr>
<tr>
<td>Medical Terminology</td>
<td>not required</td>
</tr>
<tr>
<td>General Education Requirements [Note e]</td>
<td></td>
</tr>
<tr>
<td>Freshman English I &amp; English Literature</td>
<td>RHE 306 &amp; RHE 309K &amp; E 316K, L, M, N, or P</td>
</tr>
<tr>
<td>Government (GOV)</td>
<td>GOV 310L</td>
</tr>
<tr>
<td>History (HIS)</td>
<td>315K &amp; 315L</td>
</tr>
<tr>
<td>Fine Arts &amp; Humanities</td>
<td>3hrs from: ART or ARH or MUS or TD</td>
</tr>
<tr>
<td>Social/Behavioral Sciences</td>
<td>3 hrs from: PSY or SOC or ECO</td>
</tr>
<tr>
<td>AP/IB/CLEP Credit</td>
<td>Accepted if appear on college transcript</td>
</tr>
<tr>
<td>Volunteer or Paid Pharmacy Experience</td>
<td>Viewed very favorably</td>
</tr>
</tbody>
</table>

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a BIO 205L taken prior to Fall 2012 is no longer offered and does satisfy this requirement.

b CH328M + CH128K and CH328N + 128L (for chemistry majors) also satisfy this requirement.

   CH310M, CH310N, CH210C AND CH318M + CH118K and CH318N + CH118L (for chemistry majors) are older course numbers that also satisfy this requirement.

c These statistics courses taught at UT Austin will satisfy this requirement. M 316, SSC 302, SSC 303, SSC 304, SSC 305, SSC 306,. SSC 325H, SSC 328M (formerly BIO 318M), EDP 371, PSY 418, SOC 317L, SW 318 (SSC courses change to SDS in Fall 2014)

d Each of the following first semester physics courses will satisfy this requirement.

   PHY 302K & PHY 102M | PHY 317K & PHY 117M | PHY 303K & PHY 103M | PHY 301 & PHY 101L

   Some majors require a calculus-based physics sequence. Check with your academic advisor.

e If you complete a bachelor’s degree before entering pharmacy school, you will have the option to be exempt from the general education prerequisites at UNT System College of Pharmacy. If you choose to be exempt, they will only consider your Math and Science Prerequisites. Before making this decision, consider the impact on your application GPA.

See the UNT System College of Pharmacy admissions web site for additional information and details.
Can I take Courses Away From UT?

Completing your coursework at UT (your home institution) is considered best preparation for health professions schools. For students who find it necessary to take courses away from UT, we offer the following recommendations.

KEY: UT: Take classes at UT Austin
4YR: If necessary, okay to take class at other 4 year institution
CC: If necessary, okay to take class at community college

<table>
<thead>
<tr>
<th></th>
<th>Pre-Medical</th>
<th>Pre-Dental</th>
<th>Pre-Veterinary</th>
<th>Pre-Optometry</th>
<th>Pre-Pharmacy</th>
<th>Pre-Physician Asst</th>
<th>Pre-Physical Therapy</th>
<th>Pre-Occupational Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology &amp; Chemistry</td>
<td>UT</td>
<td>UT</td>
<td>UT</td>
<td>UT</td>
<td>UT</td>
<td>UT</td>
<td>UT</td>
<td>UT</td>
</tr>
<tr>
<td>Physics</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR or CC</td>
<td>Not Required</td>
<td>4YR or CC</td>
<td>4YR or CC</td>
</tr>
<tr>
<td>Statistics, Calculus</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR or CC</td>
<td>4YR or CC</td>
<td>4YR or CC</td>
<td>4YR or CC</td>
</tr>
<tr>
<td>English &amp; Rhetoric</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR</td>
<td>4YR or CC</td>
<td>4YR or CC</td>
<td>4YR or CC</td>
<td>4YR or CC</td>
</tr>
<tr>
<td>Other Pre-requisites</td>
<td>Generally, it seems to be okay to take other prereqs away from UT Austin, if needed; however, students should contact individual professional schools’ admission offices for questions about specific courses.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

General Recommendations:
1. Taking courses away from UT can give the impression that the student is avoiding UT Austin’s rigorous courses; therefore, it is important to earn excellent grades at both community colleges and other four-year institutions.
2. It generally appears to be okay with professional schools to take government and history requirements at other four-year institutions or community colleges.
3. For other general requirements students can check with professional schools’ admission offices.

Studying Abroad?

Most health professions schools require that prerequisites be taken at U.S. accredited schools, and some will accept credits from Canadian accredited schools.

Although exchange program courses and some affiliated program courses are counted as in-residence credit by UT Austin, according to Texas state law, foreign course work cannot be counted in the GPAs for application to graduate and post-baccalaureate professional schools. The rules and policies can vary among the professional schools. Students who plan to study abroad should research this carefully for the schools and application services they plan to apply to. Look in the education requirements, transcripts, and FAQ sections of their web sites for information about foreign course work and study abroad. [See example on next page.]

UT Austin faculty-led courses are “in-residence” courses as well as U.S. credits, and so courses like Organic Chemistry II (CH 320N) taught in Spain by UT Austin faculty can be used to satisfy a prerequisite; however, for many students taking these rigorous courses in only 5 weeks may not be recommended. It is important that pre-health professions students master these courses and retain this knowledge for success in entrance exams and in advanced studies.

The UT Austin Health Professions Office very strongly recommends that our students satisfy their health professions prerequisites at UT Austin. Use the study abroad opportunity to study the culture and language of that country and to satisfy general education requirements if approved by your academic advisor. Science courses that are not considered direct preparation for the health professions can be considered as well. (Examples: research, ecology, environmental science; but NOT cell, molecular, micro, anatomy, physiology
which figure heavily into your preparation and readiness for professional school and the admissions committee’s assessment of your application).

EXAMPLE: from PharmCAS (Pharmacy College Application Service)

STUDY ABROAD
If you participated in a “Study (Education) Abroad” program under the auspices of a US institution and the international course work appears on the U.S. transcript as regular itemized credit, only list the US institution on your PharmCAS application. Do NOT list the international (foreign) institution. Arrange for only the US transcript to be sent to PharmCAS. PharmCAS will process study-abroad course work in the same manner as US coursework.

OVERSEAS US INSTITUTIONS
PharmCAS recognizes “overseas US institutions” that are:
1. Located outside US borders,
2. Accredited by a regional institutional accrediting agency recognized by the US Department of Education, and
3. Use English as the primary language of instruction and documentation.

If you attended an overseas US institution listed below, report it to PharmCAS in the same manner as your US institutions by sending an official transcript to PharmCAS and listing all coursework on your PharmCAS application. US institutions with campuses overseas (such as the University of Maryland at Munich) are also considered US colleges for which transcripts are required and all coursework must be listed. Please note that this list of overseas institutions is not all-inclusive. Contact PharmCAS if you have questions.

For full content on the PharmCAS website see:
http://www.pharmcas.org/preparing-to-apply/what-youll-need-to-apply/transcripts/

What about Claiming AP/IB Credit for Prerequisites?

While we generally recommend that as a pre-health professions student you not “claim” AP/IB credit for prerequisite courses such as biology, chemistry, English, physics, and mathematics, these are important decisions that you must make and that require your careful consideration.

It may seem like a convenient way to eliminate hours from your degree plan and accelerate your path to professional school, but claiming credit can actually be detrimental to your preparation for success on entrance exams and in professional studies. Advanced Placement and International Baccalaureate courses vary in rigor, and they are generally not equivalent to the rigor of UT Austin courses. However, your AP/IB courses can be very good preparation for taking these courses at UT Austin, providing the opportunity to master that material, become better prepared, enhance your GPA, and demonstrate your academic ability and readiness for advanced study in health professions schools.

Unless you are academically very well prepared, it is best to start with the introductory courses. Please consult with your academic advisor for help in determining your readiness for higher level science courses. Most schools that accept AP/IB credit will expect you to take additional upper-division course work in that area of study.

Some specific recommendations are offered on the next page.
Science Courses

Biology and Chemistry

If you claim credit in courses like BIO 311D and BIO 311C you may not be adequately prepared for the rigorous next course here at UT Austin, BIO 325 (Genetics). If you claim credit for CH 301 and CH 302, your first college level chemistry course at UT Austin will be CH 310M (Organic Chemistry I).

Honors students in biology and chemistry may claim test credit, register in the honors sequence for biology or chemistry, and will take additional upper-division credits in those areas, making up for the lack of first-year hours in those disciplines.

Your UT Austin faculty will expect you to be prepared to learn and understand the material conceptually and theoretically in order to understand test questions well enough to earn A's on your exams. They will teach material beyond the textbook that was not presented in your high school courses. You will be in second year courses with many students who took General Biology and General Chemistry here and are well prepared to handle the exams in the more advanced courses. They will set the standard for the grade scale or curve in your classes.

Physics

Physics is required to prepare for some health professions schools. In some cases, you will be tested on physics in your professional school entrance exam. We strongly recommend taking physics at the college level if you are preparing for a professional school that requires physics.

Calculus and Statistics

For the Texas medical schools, if you take statistics in the classroom here at UT Austin, you can use statistics to satisfy the math prerequisite. Then if your degree plan or any of your science courses require calculus, you can decide with your academic advisor whether to use credit-by-exam or take the course(s) in the classroom.

For all health professions schools, both in Texas and out-of-state, it is important to check their admissions websites for any restrictions and preferences on credit-by-exam.

Non-Science Courses

It is usually acceptable to claim credit-by-exam for general education or core curriculum requirements such as history and government. Claiming this type of credit may give you time to take the courses that will prepare you for professional school and school entrance exams. On the other hand, critical thinking skills and an understanding of ethics, society, community, cultures, history, and human behavior are important for your success now and throughout your professional and personal life. Taking college level courses is a good way to develop these areas of knowledge.

English Literature, Rhetoric, Writing

If you claim credit for freshman writing and literature courses, we recommend taking additional courses in the classroom at the college level. Even if your high school verbal skills were strong, this type of academic skill weakens over time if you do not use it.
Verbal skills are extremely important to your success in your undergraduate course work, your entrance exams, in professional school, and as a health care professional. You must be able to read efficiently, at a good rate, with high comprehension and critical thinking skills. You must develop and maintain a good vocabulary, not just for the sciences but also for social and behavioral sciences, ethics, policies and regulations, and procedural information. Many admissions deans recommend reading well-written novels in addition to your textbook material.

ADDITIONAL COMMENTS

Although the pharmacy schools accept AP credit for admission, some out-of-state schools do not. These schools vary in their policies and perspectives on credit-by-exam. For example, Texas pharmacy schools may recommend taking additional upper-division courses in the same subject area to make up for using AP credits for prerequisite courses. The credit-by-exam policies vary among the health profession disciplines and from school to school within each professional area.

Review the information on our prerequisite courses lists and check individual school admissions websites or contact their admissions offices to be sure about each school’s expectations. Taking courses in the college classroom will help you to compete for admission and to succeed in professional school. We strongly recommend that you use these courses as building blocks that will be the foundation for your future career.

To Q or Not to Q (or to switch to pass/fail)

No admissions committee for any health professional school likes to see “Q drops” on a transcript. This is an indication that something became too much for you to handle and that you chose to drop the course rather than see it through. There are times when the Q-drop is the best course of action, however, keep reading to see how your choice may affect your competitiveness for professional school.

More of a problem if:
1. Q-dropping is a pattern on your transcript. Two Q-drops can signal a possible pattern; three Q-drops create a definite pattern.
2. It occurs in a context of inconsistent grades. To be competitive for professional school, you should be making A’s and B’s with more A’s than B’s. If you have semesters which include B’s and C’s – even one or two C’s, your grades are inconsistent by a professional school’s standard.
3. It’s one of your prerequisite courses for professional school. In this case, you might consider sticking with the class on a pass/fail basis. Then you only need to earn a D to earn credit. Check with your academic advisor about whether you can use the pass/fail option.
4. It’s any science-based course, since the bulk of professional school curriculum will be science based.

Less of a problem if:
1. It’s the only Q-drop on your transcript at time of application to professional school. You will want to choose wisely however, depending on the course. If you are taking a lower division or introductory course, keep in mind that upper division courses will be more challenging. You may want to hold on to that “one and only Q-drop” for later.
2. It’s a non-science course. While professional schools want you to do well in all classes, they are likely to be less concerned if you dropped a sociology or business class.
What if there are non-academic reasons for needing to Q-drop?

Sometimes personal or family emergencies and other special circumstances make it difficult to find time for and focus on your studies. Sometimes for new students it is difficult to make the transition to UT. If you are dealing with something that is getting in the way of your school work, it is very important that you get help.

1. Talk to your academic advisor and/or an advisor in your college student division office.
2. Check out the support services at the Counseling and Mental Health Center.

When is switching to pass/fail a better option?

This should really only be undertaken when you are reasonably certain that you can pass the class, in other words, earn at least a D. An F from a pass/fail course is just the same as an F from a letter grade course. If you are taking a pre-requisite course that you must repeat (and you meet the above criteria of being reasonably sure you can pass), you should consider the pass/fail option. This will allow you to continue your exposure to the material for the entire semester. This will create a much stronger foundation when you repeat the course.

What if I keep the class and then I make a C or lower?

No one wants to explain a poor grade in a class, but there is actually much to be learned about being responsible for your grades (see exercise below). Talking about how you might change your strategy going forward can be not only a sign of maturity and integrity, it can also demonstrate your resilience. All of these qualities are important to future health professionals.

What did you learn from this experience?

While it can be tempting to blame others for the need to Q drop a class, you must understand that the responsibility is 100% yours. To help you identify your responsibility, ask yourself these questions.

1. Could I have met with the professor to see what I could do to improve my understanding?
2. If my professor was difficult to understand or hard for me to follow, did I look for other sections of the courses to sit in on so that I could learn the material in a different way?
3. Could I have identified that I needed assistance earlier in the semester? (In time to have possibly salvaged my grade)
4. Could I have managed my time better so that I had appropriate time to devote to the class?
5. Could I have checked out resources for tutoring through the Sanger Learning Center?
6. Could I have adjusted my priorities (lowering especially those which are non-academic) to allow focus on my studies?

Preparing for the possible professional school interview question

You will want to spend some time reflecting on what you could have done differently so that you did not have to drop the class (see above). If you are asked about the Q-drop, you should be able to explain where things went wrong, what you learned from the experience, and how you might choose differently in the future. Remember the Health Professions Office does mock interviews and can help you practice your response.
Academic Assistance

Academic Support

*Sanger Learning Center’s* resources can help you achieve your academic goals. You can get help with course content. You can make an appointment to meet one-on-one with a tutor for an hour-long session. Together, you and your tutor will tackle difficult homework problems and review course concepts. You can also receive coaching on how to understand and work those science exam questions that you need to earn an A. Visit JES A315A for drop-in tutoring for mathematics, physics, and chemistry courses. It is a great way to study alone or in groups and is especially good for completing homework assignments. Attend free classes for calculus refreshers and exam reviews.

Utilize Faculty Office Hours

Your grades in a given course will ultimately be determined by the professor who is teaching it. If you are struggling in a course, your first request for help should go to the professor. Not only are they experts in the content being taught, but they also have established the method by which you will be evaluated. Be prepared to explain to the professor what you have been doing to grasp and retain the content and where you believe you are falling short. This not only communicates your commitment to learning, it also gives the professor a starting point for your discussion.

Visit With Your Teaching Assistants (TAs)

These students are hired to help expand the reach of the professor, providing another source of assistance. While they don’t have the expertise of a professor, they have mastered the course previously, often with the same professor. TAs are great for quick questions and – depending on their skill level and availability – can be great “tutors”, explaining concepts in a way that may be easier for you to grasp.

Improve Your Study Skills

Visit the Sanger Learning Center in JES A332 to speak with a learning specialist about your study-related questions and concerns. Meet weekly with a peer academic coach to develop and implement study strategies to help you succeed at UT Austin. Attend monthly workshops on study strategies and time management.

Attend Course-specific Study Groups

The Sanger Learning Center is housed in undergraduate studies and is main resource for academic support. Supplemental Instruction offers optional weekly discussion sections for students enrolled in some historically difficult, large-format courses, including calculus. The PLUS program provides peer-led study groups for a number of difficult, upper-division courses. Visit the Sanger Learning Center website for additional academic support resources.

The Vick Center for Strategic Advising and Career Counseling is housed in undergraduate studies and serves students across campus who are exploring majors and careers, as well as undeclared students enrolled in the School of Undergraduate Studies. If you need help finding a major, connect with the Vick Center.
Applicants for the Entering Year 2016 and Later

The PCAT is a specialized test that helps identify qualified applicants to pharmacy colleges. It measures general academic ability and scientific knowledge necessary for the commencement of pharmaceutical education. The PCAT is constructed specifically for colleges of pharmacy.

The Pharmacy College Admission Test (PCAT®) is administered in a computer-based test (CBT) format. For the 2014-2015 testing cycle, the standard administration of the PCAT will occur on one or more dates in July, September, October, November, and January.

PCAT Preparation

The PCAT is divided into six sections: Biology, Chemistry, Reading Comprehension, Verbal Ability, and Quantitative Ability are multiple-choice subtests, and the Writing subtest gives you a topic.

The PCAT web site has a lot of very helpful information about preparation and planning for the test. The Official PCAT Practice Test™ is now out and can be bought through AAMP’s PCAT exam prep page. The guide includes:

- **PCAT Multiple-Choice Practice Tests** — Three complete sets of five multiple-choice subtests include items like those you will find on the actual test, provide explanations for each item, and allow you to print out a diagnostic score report with your results. A timer is provided if you choose to simulate timed conditions like the actual PCAT.
- **PCAT Writing Practice Tests** — Four different writing prompts allow you to compose essays on topics like you will find on the PCAT, have your essays scored electronically, and immediately receive a score report with your results. A timer is provided if you choose to replicate the time limit of the exam.
- **PCAT Study Guide** — This 150-page booklet contains detailed information about the structure and contents of the PCAT, scoring information, and sample items for the five multiple-choice subtests (formerly on Practice Test 1) and the Writing subtest.

PCAT Scoring

Your score report will contain six separate scores (one for each section of the test) and a composite score. The five multiple choice sections—Verbal Ability, Biology, Chemistry, Reading Comprehension, and Quantitative Ability—are scored based on the number of correct answers. Your initial “raw score” is then converted to a scaled score ranging from 200-600. Your composite score is calculated by taking the average of your scaled score on each multiple choice section. Pharmacy schools will see both your individual section scores and your composite score. Your Writing Sample will also be scored, but separately. Your essay is reviewed by two graders, whose scores are averaged. You will then receive a score on a scale from 1-6.

In addition to your scaled scores, you will receive your percentile rank for each section and for your composite score. For example, if your percentile score is 60, this means that you scored higher than 60 percent of the other test takers. The composite percentile rank is frequently the number students use when discussing their PCAT scores.

Within 5 weeks following the end of the testing window, your Official Score Report will be available online for 1 year from the date of your test administration, and official transcripts will be sent by the U.S. Postal Service to the institutions you designated to receive your scores. Beginning with the July 2012 PCAT administration, all percentile ranks are based on 2011 norms. Pharmacy schools will only accept official transcripts.
Need a GPA Booster?

For some students, taking additional courses could help prepare for pharmacy school and strengthen their application in case they need to apply again. This could mean instead of applying for pharmacy school in the third year, students stay for their fourth year and pursue graduating with their bachelor’s degree. This gives them the opportunity to take more courses or retake their pre-requisites for pharmacy school. Another option for students who have already completed an undergraduate degree and/or need to improve their academic standing for a more competitive professional school application is to pursue a graduate degree before pharmacy school.

What are the Different Options?

Essentially there are two different options for students hoping to attend pharmacy school:

Completion of Bachelor’s Degree: This option may be for students who want to stay in undergraduate school for their fourth year and graduate with their bachelor’s degree instead of applying for pharmacy school during their third year. Students may want to continue taking advanced science courses to strengthen their GPA or continue gaining clinical or volunteering experience.

Completion of Graduate Degree: If students graduate with their bachelor’s degree but wish to continue improving their GPA, a master’s degree in science is also an option. These are for students who:

- Want to stay academically engaged during a gap year while applying to pharmacy school.
- Need to raise their GPA to become a more competitive medical school applicant. Research programs and find out what schools need for the application. This may require taking other standardized tests such as the GRE. Some programs of interest to pre-pharmacy students could include:
  - Master of Science in Pharmacotherapy (UT Austin)
  - Master of Science in Pharmacy Administration and Leadership (UHouston)
  - Master of Science in Pharmacology and Neuroscience (UNT)
Thinking about what type of pharmacy school you are looking for? Not sure what you want in a school? Check out the following possible criteria for evaluating a pharmacy school’s fit for you!

1. Size of your cohort
2. Prestige of the institution
3. Training facilities / Hospital affiliation
   **Examples:** Seton Healthcare System (Austin)
   Baylor St. Luke’s Medical Center (Houston)
   VA North Texas Health Care System (Tech)
   San Antonio Military Medical Center (Incarnate Word)
   San Jose Clinic (TX Southern)
4. Opportunity to do research
5. Support programs – tutoring, counseling, student health services, childcare
6. Community building – student organizations
7. Options for financial aid/scholarship
8. Outreach/Service to Community
   **Examples:**
   - Youth Outreach (Austin)
   - San Jose Clinic (TX Southern)
9. Combined degree programs (PharmD + PhD, MS)
10. Family/Friends (Support in close proximity)
11. Lifestyle – outdoorsy, athletic, cultural arts, etc.
12. Centers/Institutes/Programs that align with your Medical School Goals

**Other Resources to explore:**

**Pharmacy School Admissions Requirements (PSAR)**

Written and published by the Association of American Colleges of Pharmacy. This guide is packed with crucial information on applying about how to make yourself a better prepared and stronger applicant, and everything about the entire admissions process. You get details about the PCAT exam, how admissions decisions are made, and information on diversity in pharmacy schools, financing, applicant and matriculant data, and more.

**My Top Ten Schools Are:**

1) ________________________________________________________________
2) ________________________________________________________________
3) ________________________________________________________________
4) ________________________________________________________________
5) ________________________________________________________________
6) ________________________________________________________________
7) ________________________________________________________________
8) ________________________________________________________________
9) ________________________________________________________________
10) ________________________________________________________________
# Follow the Timeline for Applying to Pharmacy School

## Spring Semester/Summer
- Begin compiling list of experiences; include details such as dates, hours, tasks and responsibilities
- Attend personal statement workshop presented by a Pre-Health Professions Coach
- Begin drafting personal statement and optional essays
- Attend peer mentor panel discussions about application process
- Ask evaluators for letters of evaluation
- Set up an Interfolio account
- Pharmacy applicants: Purchase Pharmacy School Admissions Requirements guide online through www.aacp.org/ Click on “Publications”
- Research schools to determine where to apply
- Attend application and personal statement Q&A sessions presented by a Pre-Health Professions Coach; several Q&A sessions offered throughout Spring semester
- Attend Health Professions Fair, usually held in February or March to visit with professional schools and have a professional headshot taken for your application

## August/September
- For those that are ready, take the PCAT; we recommend taking these exams no later than September and after taking Organic Chemistry and Microbiology
- For some PharmCAS schools, Early Decision Deadline is around early September, submit all materials by then.

## Fall Semester
- Send friendly reminder to recommenders at the end of the month if haven't already submitted letters of evaluation
- Schedule mock interview with Health Professions Office
- Interviews begin in January
- Attend interview workshop presented by a Pre-Health Professions Coach

## Nov/Dec
- Deadline to submit PharmCAS for many schools (Check with individual schools on PharmCAS website)
- Interviews begin in January and some interviews will occur in Sept/Oct so make sure to turn in your applications early

## June/July
- **PharmCAS Applications open**
- Obtain official transcripts from all institutions attended. Review for accuracy of information and use as reference for completing application
- Print and read application service instructions; Make a plan or “to do” checklist
- Be sure to read instructions about score reporting; these vary year-to-year and by schools
- Request transcripts from all institutions attended to be sent to application services
- Schedule a personal statement review
- Finish personal statement and write optional essays
- Submit when application is complete (this includes your spring grades) and you are confident you’ve done your best! *(Earlier is better)*

## Jan/April
- Interviewing continues until March
- Schedule a mock interview with the Health Professions Office, if you haven’t done so yet.
- Offers go out starting in February through April
Pharmacy College Application Service

PharmCAS is the only application service for Texas and most out-of-state schools. It is the application service you will use to apply to the 6 public and 1 private pharmacy schools in Texas.

Texas Pharmacy Schools

The University of Texas at Austin College of Pharmacy
Texas Tech University Health Sciences Center School of Pharmacy (Lubbock)
University of Houston College of Pharmacy
University of North Texas Health Science Center System College of Pharmacy (Denton)
Texas A&M Health Science Center Irma Rangel College of Pharmacy (College Station)
Texas Southern University College of Pharmacy and Health Sciences
University of Incarnate Word Feik School of Pharmacy (San Antonio)

For more tips watch this quick application video: http://www.youtube.com/watch?v=uaDlookWUMA

PharmD/PhD Applicants

If you are applying to Texas schools and PharmD/PhD programs you will complete both the PharmCAS application and the application for the individual graduate program. Texas schools that offer the PharmD/PhD program do not participate in PharmCAS for the PhD portion of the application, so check with the individual schools for their graduate school application process.

Check with PharmCAS here to see if PhD programs participate in PharmCAS.

Letters of Reference

Letters are key pieces to your professional school application. You can have a maximum of four (4) references on your PharmCAS application. Do NOT send more than four references to PharmCAS. Send any additional references directly to your designated pharmacy schools. Pharmacy schools may not consider extra references. Check your school’s entry on the PharmCAS Directory to see what types of evaluations are required, recommended and not accepted by each institution. A few schools prefer that applicants send references directly to the institution. This information will be included on their directory page.

Check out these tips for getting to know your faculty (video)
http://www.youtube.com/watch?v=O7cPw8BUdpk&feature=youtu.be
- How to Request Letters using Interfolio http://tinyurl.com/RequestingLettersInterfolio
- Interfolio’s Help FAQ for Letter Writers http://tinyurl.com/LetterWritersGuideInterfolio
- Review resources on HPO’s Application Resources webpage: http://cns.utexas.edu/health-professions/pre-health-profession-services/application-resources

Writing Your Personal Statement

Please watch the Personal Statement Video and then you are welcome to meet with a Pre-Health Professions Coach to discuss your ideas before starting your personal statement. We will help you brainstorm ideas and help you stay on track. http://www.youtube.com/watch?v=go1C7G6lyU
It is important to professionally and properly represent yourself to an admissions committee. From what to wear, to anticipating what questions you might be asked, our Pre-Health Professions Coaches are here to help you prepare for your professional school interview. Find valuable information by visiting the Interviewing Tab on the HPO Application Resources Page: [http://cns.utexas.edu/health-professions/pre-health-profession-services/application-resources](http://cns.utexas.edu/health-professions/pre-health-profession-services/application-resources)

**Interview Video**
[https://cns.utexas.edu/health-professions/pre-health-profession-services/application-resources#interviewing](https://cns.utexas.edu/health-professions/pre-health-profession-services/application-resources#interviewing)

**Dress Professionally:**
- View our Dressing Guide [http://tinyurl.com/interviewdressguide](http://tinyurl.com/interviewdressguide)

**Practice Improving Your Interview Skills:**
- Schedule a one hour Medical School Mock Interview/Feedback session with a Pre-Health Professions Coach by using the online scheduling system or calling our front desk 512-471-3172.

**Prepare & Practice**

Be prepared to discuss your strengths and weaknesses, obstacles and inspirations, current events and personal attributes. The following sample questions are meant to provide you with a better understanding of why the interviewer might be asking the questions that they do. By asking you certain questions, interviewers are attempting to gain a better understanding of your personality.

- What kind of community/volunteer work have you done?
- What is the most rewarding experience of your life?
- Who is your favorite author?
- Have you worked while you have been in school?
- Have you had the opportunity to travel abroad?
- What accomplishment are you most proud of?
- Tell me about the most difficult period of your life. How did you deal with this?
- What are your strengths? What are your weaknesses?
- What is the most difficult decision that you’ve had to make?
- How do you plan to finance your pharmacy school education?
- How are you going to decide which pharmacy school to attend?
- How do you handle adversity?
- Why should we pick you instead of someone else?
- Why do you want to be a pharmacist?
- What will you do if you are not accepted to pharmacy school?
• When did you first decide that you wanted to pursue pharmacy as a career? Was there a specific cause for your decision? Has anything happened since that time to strengthen or weaken your decision?
• Can you see other careers in which you could achieve the same goals or meet the same needs?
• What steps have you taken to find out more about pharmacy as a career?
• How do you study? How do you manage your time?
• What courses do you find most enjoyable, most difficult? Why?
• Describe your hobbies and interests.
• Describe your best/least favorite course at UT and why it falls into that category.
• Why did you choose ____________ as your major?
• Are there any questions you would like to ask me?
• Describe a situation where you've worked with people from different backgrounds.
• What type of person do you enjoy being with? What type of person irritates you most and how have you dealt with these types of people?
• What about yourself would you most like the interviewer to know?
• Do you have any particular populations you would like to work with? Have you worked with this type of population in the past?
• How do you handle stress?
• What characteristics does a good pharmacist possess?
• What current event in pharmacy have you heard about or been following?
• What are the advantages and limitations that you see going into pharmacy? (Be specific)
• What problems do you predict that pharmacy will face in the next decade?

Research Current Events in Pharmacy & Health care

AMERICAN PHARMACIST ASSOCIATION
www.pharmacist.com/

PHARMACY CHOICE
www.pharmacychoice.com

DRUG TOPICS
www.drugtopics.com

TEXAS STATE BOARD OF PHARMACY
www.tsvp.state.tx.us

TEXAS PHARMACY ASSOCIATION
www.txpharmacy.com

ANALYSIS OF HEALTH CARE REFORM LEGISLATION
http://www.aamc.org/reform/start.htm

KAISER FAMILY FOUNDATION
http://healthreform.kff.org/

AMERICAN MEDICAL NEWS
www.ama-assn.org/amednews/
Published by the American Medical Association

THE AMERICAN JOURNAL OF BIOETHICS
www.bioethics.net
Published by MIT Press and Bioethics Education Network

THE HASTINGS CENTER
www.thehastingscenter.org/
Ethical and social issues of medicine and medical science

35 QUESTIONS I WISH I HAD ASKED
Published by AAMC
http://www.aamc.org/students/applying/about/35questions.htm

HEALTH RESEARCH FINDINGS
healthlibrary.stanford.edu
Stanford Medical Health Library

NATIONAL PUBLIC RADIO ARCHIVES
www.npr.org

To find out about tuition and fees at specific pharmacy schools, consult the Pharmacy School Admissions Requirements (PSAR).

FAFSA: https://fafsa.ed.gov/

AACP Financial Aid & Scholarships: http://www.aacp.org/resources/student/financialaid/Pages/default.aspx

Armed Forces Health Scholarships: http://www.goarmy.com/amedd/education/hpsp.html

National Health Service Corps: http://nhsc.hrsa.gov/

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Pre-Health Professions Services

Applying to Professional School? We are here to guide you!
Our Pre-Health Professions Coaches will meet with any UT student, alumni or prospective interested in applying to dental, medical, occupational therapy, optometry, pharmacy, physician assistant, physical therapy, veterinary schools or other related health professions programs. We are more than happy to help you explore other health profession that you are interested in. Check out our application process resources http://cns.utexas.edu/health-professions/pre-health-profession-services/application-resources

Schedule an Appointment using our online scheduling system:
http://cns.utexas.edu/careers/health-professions

Specific services provided by the Health Professions Office include:

**Pre-Health Professions Coaching**
Schedule a Pre-Health Professions Coaching session to meet with a Pre-Health Professions Coach. These appointments cover: school admission requirements, professional school application processes, speak about health career options and alternatives, and how to find up-to-date information about professional schools in Texas, across the country, and around the world.

**Progress Checks**
Check in with a Pre-Health Professions Coach and review your progress towards a successful application to professional school. Discuss and review what makes up your application. It is most beneficial to check in about 1x per school year

**TO Q or NOT TO Q Discussions**
Not sure what to do? Thinking of dropping a course? Then you can schedule an appointment with a Pre-Health Professions Coach about deciding on Q dropping or the pass/fail option. Check out our TO Q or NOT TO Q guide on page 21 before your appointment.

**Personal Statement Brainstorming & Development**
Come speak to a Pre-Health Professions Coach to discuss your ideas before starting your personal statement. We will help you brainstorm ideas for the content of your essays. Check out our personal statement video and resources on page 28.

**Essays & Personal Statement Reviews**
Have you been reading your application essays over and over and need a new pair of eyes? A Pre-Health Professions Coach can provide you with that second set of eyes. They can give you feedback on content, tone, and how well your message is getting across to a reader. The [Undergraduate Writing Center](http://cns.utexas.edu/health-professions/) is also an excellent resource to utilize when writing application essays. Their consultants can provide help with structure, punctuation, grammar, and other technical matters.

**Interview Practice**
Practice your interview skills with us! You will practice with a Pre-Health Professions Coach and receive feedback to help you in your professional school interview. Dressing up for your HP Mock Interview is optional, if you would like feedback on your clothing choice and you want to test whether it will be comfortable, or they can just discuss appropriate attire with you.