

Texas A&M University
Office of Professional and Graduate School Advising

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Pharmacy

WHAT? Pharmacists dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. They advise physicians and other health care providers on the selection, dosages, and side effects of medications. Pharmacists must understand the use, composition, and effects of drugs. Compounding the actual mixing of ingredients to form powders, tablets, capsules, ointments and solutions is only a small part of a pharmacist's practice, because most medicine is produced by pharmaceutical companies in a standard dosage and form.

Pharmacists in community (retail) pharmacies answer customers' questions about prescription drugs, such as possible adverse reactions and interactions. They answer questions about over-the-counter drugs and make recommendations after asking a series of health questions, such as whether the customer is on any other medication. They also give advise about durable medical equipment and home health care supplies. Those who own or manage community pharmacies may buy and sell non-health-related merchandise, hire and supervise personnel, and oversee the general operation of the pharmacy.

Pharmacists in hospitals and clinics dispense medications and advise the medical staff on the selection and effects of drugs, in some cases making rounds with them. They may make sterile solutions and buy medical supplies. They also monitor drug regimens, advise patients on the use of drugs when they are discharged from the hospital, and evaluate drug use patterns in the hospital.

Pharmacists who work in home health care prepare medications for use in the home and monitor drug therapy.

Most pharmacists keep computerized records of patients' drug therapies to insure that harmful drug interactions do not occur. They may also teach health professions students. Some pharmacists specialize in specific aspects of drug therapy, such as drugs for psychiatric disorders, intravenous nutrition, or the diagnostic use of radiopharmaceuticals.

About 1 out of 7 pharmacists worked part-time in 1998. Most full-time salaried pharmacists worked about 40 hours a week. Some however, worked more than 50 hours a week. Most self-employed pharmacists worked more than 50 hours a week. Pharmacist held about 230,000 jobs in 2004. Sixty one percent of pharmacists work in community pharmacies, either independently owned, part of a drug store chain, or part of a grocery store or department store. Most community pharmacists were salaried, but a substantial number were self-employed. More than one quarter worked in hospitals, and some worked in health maintenance organizations (HMO's), clinics, nursing homes, and the Federal Government. The median salary for full-time pharmacists, in the United States, in 2004 was \$84,900, depending on the type of practice, responsibilities, and geographic local. (Adapted from *1998-99 Occupational Outlook Handbook*, U.S. Department of Labor, Bureau of Labor Statistics.)

HOW? Texas A&M does not offer a degree in Pharmacy nor does it have a Pre-Pharmacy degree program. Students may choose to pursue a degree in their chosen area while completing the required courses listed on the opposite side of this handout. Students may elect to enter Pharmacy School without having completed their Bachelor's Degree, depending upon the school they choose to attend. Texas has six pharmacy schools: University of Texas, University of Houston, Texas Tech University (located in Amarillo and Abilene, Texas), Texas A&M HSC - Kingsville, University of the Incarnate Word and Texas Southern University. Completion of the professional program may take between three and five years depending upon how many prerequisite courses have been completed and at what point the student enters pharmacy school. Students also have the option of completing their Bachelor's Degree at Texas A&M University and then continuing in pharmacy school to complete the professional requirements.

General Info: To enter pharmacy school, students should 1) At minimum, complete the recommended courses listed below as part of their chosen degree plan. 2) Obtain knowledge of the work environment. 3) Register for and take the Pharmacy College Admission Test (PCAT), which includes sections on the following: Verbal Ability, Quantitative Ability, Biology, Chemistry, and Reading Comprehension. Students should test the summer before they plan to apply. 4) Complete the application to their chosen schools. Deadlines vary, so students should always check with the institutions.

Selection Criteria: 1) *Academic Performance:* Overall academic performance is considered (including transfer hours), especially grades in the prerequisite course work. Accepted students typically have a minimum 3.0 or above. The average accepted GPR into pharmacy schools in Texas for 2006 was 3.5. 2) *Semester Course Load:* Withdrawals, frequent Q-Drops and low course loads are reason for concern with admissions committees. 3) *Test Scores:* Students should achieve competitive scores on the PCAT. 4) *Letters of Recommendation:* Students are typically required to submit three evaluations that address a student's motivation, leadership potential, dedication and integrity. One of these must be from a pharmacist. 5) *Interview:* Applicants may be invited for an interview in which personal characteristics such as maturity and communication ability are measured.

Course	U of Houston	Texas Tech	Texas	TAMHSC K	UIW	TSU
Biol	111/112 8 hours	111/112 8 hours	111/112 8 hours	111/112 8 hours	111 4 hours	111/112 8 hours
Micr	351	351	351	351	351	None req'd
Chem	101/102 8 hours	101/102 8 hours	101/102 8 hours	101/102 8 hours	101/102 8 hours	101/102 8 hours
Ochem	227/237 228/238 8 hours	227/237 228/238 8 hours	227/237 228/238 8 hours	227/237 228/238 8 hours	227/237 228/238 8 hours	227/237 228/238 8 hours
Math	131or171or151 3 hours	131or171or151 3 hours	131or171or151 3 hours	131or171or151 3 hours	150 or 131 and 171or151 7 hours total	150 and 131or171or151 6 hours total
Stat	302 or 303 (302 rec'd)	302 or 303 (302 rec'd)	302 or 303 (302 rec'd)	302 or 303 (302 rec'd)	201 or 302 (302 rec'd)	None req'd
Physics	201 or 1 yr HS	201	201	201	218	6 hours
Speech	203	203	None req'd	203	None req'd	203
Engl	*104 210 and 203	* 104 and 203 and 210	104 and 203	104 and 203 and 210 or 301	104 and 203 and 210 or 301	104 and 203 and 210 or 301
Social Behavior Science	3 hours Psysc 107 or Soci 205	* see note ** see note	None req'd	3 hours (psyc, soci or econ)	3 hours (econ, psyc, soci and pols count)	3 hours (psyc, soci or econ)
Gene	None req'd	None req'd	302 preferred, 301/320 okay 3 hours	301 4 hours req'd	None req'd	None req'd
Fine arts	*see note Vis/perf 3hrs	None req'd	None req'd	4 to 6 hours Vis/perf	3 hours Vis/perf	3 hours
History	*6 hours	*see note **see note	6 hours	6 hours	3 hours	6 hours
Pols	*6 hours	*see note **see note	6 hours	6 hours	None req'd but can count for Soc/Behav req.	6 hours
Anatomy	None req'd	None req'd	None req'd	None req'd	319 and 320 req'd	4 hours

UIW also requires 3 hrs of Philosophy and 1 hr of Physical Education.

TSU also requires 1 hr of Medical Terminology, 3 hrs of Computer Science and 3hrs of NUTR

Tech also requires 3 hrs of Economics (this will also count for UIW's Soc/Beh requirement)

****Tech also requires** (baccalaureate exempt) 15 hours of Humanities and Social Science, this 15 hours can be Political Science, Sociology, Psychology, History, Philosophy, and others.

***Baccalaureate exempt.**

Please Note: All prerequisites and information are subject to change at any time without notice. It is the responsibility of the applicant to remain up-to-date on all requirements. The required prerequisite courses also vary according to whether or not you will have a bachelor's degree upon entrance into pharmacy school.