Pre-Pharmacy

Pharmacy is one of the fastest growing fields and is consistently ranked among the best jobs in the United States. Pharmacists are health professionals that are committed to public service. They dispense medications prescribed by physicians and other health practitioners on the selection, dosages, interactions and side effects of medications.

Pharmacists must understand the use, clinical effects and composition of drugs, including their chemical, biological and physical properties. Pharmacists are the medication experts. The goal of pharmacy is to maximize positive health care outcomes and improve patients’ quality of life with minimum risk.

Most pharmacists work in a community setting, such as a retail drug store, or in a hospital or clinic. Pharmacists are also employed by pharmaceutical industries where they conduct research, develop and market products, maintain quality control and administer programs. In addition, pharmacists may be employed by colleges or schools, government, and as patent lawyers or in pharmaceutical law.

**Becoming a Pharmacist**

There are currently 130 schools in the United States that grant the PharmD in pharmacy and seven of them are in the state of Ohio. To be a pharmacist, one must obtain a Doctor of Pharmacy (PharmD) and pass a state board of pharmacy licensure examination. This requires at least two years of college study prior to admittance. The majority of students enter pharmacy programs with three or more years of college and some programs require a Bachelor’s degree.

Students interested in laboratory research experience can continue their education by completing a Master’s or Ph.D. degree. These graduates usually go on to careers in research for a drug company or teaching at a university. Other options include one- or two-year residency programs or fellowships which provide additional specialized training.

### Core Pre-Requisites

- **Biology**
  - BIO 1120 & 1150
- **Chemistry**
  - CHM 1210 & 1220
- **O-Chemistry**
  - CHM 2110 & 2120
- **Microbiology**
  - BIO 3100 & 3110
  - or M&I 2200
- **Human A&P**
  - ANT 3100 & 3120
- **Physics**
  - PHY 1110 & 1120
- **English**
  - ENG 1100 & 2100
- **Calculus**
  - MTH 2240 or 2300
- **Statistics**
  - STT 2640 or 1600

### Possible Additional Requirements

- **Psychology**
  - PSY 1010
- **Public Speaking**
  - COM 1010
- **Biochemistry**
  - BMB 4210 & 4230/3220
- **Economics**
  - EC 2000

Some Pharmacy schools only require a minimum of 2 years of college level work while others require a baccalaureate degree before acceptance.
Why Choose Pharmacy?

- Pharmacy is the third largest health profession in the U.S.
- Pharmacist are considered to be the most accessible health profession in the U.S.
- Currently there are an estimated 7,000-10,000 unfilled pharmacy positions in the U.S.
- According to the Bureau of Labor Statistics, the median annual wage of pharmacists in 2014 was $120,950
- Employment surveys show that there is a projected growth of 3% for pharmacists from 2014-2015

Working conditions

Pharmacists normally work in clean, well-lit and well-ventilated areas. Many pharmacists spend most of their workday on their feet. Many community and hospital pharmacies are open for extended hours or around the clock, so pharmacists may work evenings, nights, weekends, or holidays. Consultant pharmacists may travel to nursing homes or other facilities to monitor patients’ drug therapy. About 1 out of 5 pharmacists worked part time in 2014. Most full-time pharmacists worked about 43 hours a week. Some, including many self-employed pharmacists worked more than 50 hours a week.

Is Pharmacy right for you?

If you are wondering in a career in pharmacy is right for you or if you are right for it, ask yourself the following questions:

- Do you want to help people get well?
- Do you like interacting with people and want to work directly with patients?
- Do you want a wide variety of career opportunities in a number of healthcare settings?
- Do you want to be a vital member of the healthcare team?
- Do you want job mobility, stability and flexibility?
- Do you want to be a part of innovations in medication therapies?
- Do you want to work with state-of-the-art technology?
- Do you want to have the skills to help defend against bioterrorism?
- Do you want to be a respected member of your community?

What is the PCAT?

The PCAT is required or highly recommended by most pharmacy schools. This national computer based test is administered several times a year (July, September, October, November, and January) and measures verbal and quantitative ability, reading comprehension, and biology and chemistry knowledge. Each pharmacy college designates an appropriate examination time(s) and students should visit with the Pre-Health Advisor for additional knowledge of pharmacy school admissions policies.