

PROPOSED PROGRAM SUMMARY

Institution: University of Kentucky
Program Name: Pharmaceutical Science
Degree Destination: Bachelor of Science

CIP Code: 51.2010

Credit Hours: 120

Implementation Date: 8/16/2025

Program Description

The pharmacy sciences area encompasses a broad array of areas of study, including pharmacy practice, pharmaceutical sciences, and pharmaceutical outcomes and policy. Students graduating from the proposed program will be prepared to enter the workforce as clinical trial managers and certified pharmacy technicians, as well as pursue professional degrees within the medical sciences, such as the PharmD, MD, or DVM, or enter graduate training programs. Each year, more than 300 incoming freshmen indicate an interest in pre-pharmacy on their undergraduate application. The proposed program will provide primary training in clinical and basic sciences with the opportunity for students to diversify their studies with the use of elective courses tailored to their interests.

As a result of this program, graduates will be able to:

- integrate and apply knowledge of the biomedical and pharmaceutical sciences to explain and predict drug actions and effects;
- demonstrate proficiency in the use of modern pharmaceutical technologies and instrumentation for drug discovery, formulation, and delivery;
- critically analyze and integrate scientific research;
- communicate in multiple modalities with multidisciplinary research stakeholders, such as members of the scientific community, healthcare providers, and business professionals.

Connection to Other Programs

Anchored in the basic sciences, students will complete a series of non-pharmacy courses. The College of Arts and Sciences will provide instruction in mathematics, statistics, biology, and chemistry.

For the last 30 years, the University's College of Pharmacy has been consistently ranked as one of the top 10 pharmacy schools in the nation. The proposed program will serve as a pipeline to the College's professional (PharmD) and graduate (MS and PhD) programs.

Student Demand

Initial estimates of enrollment are:

Year 1 – 40

Year 2 – 77

Year 3 – 111

Year 4 – 145

Year 5 – 145

Employment Demand

Pharmaceutical Sciences is a growing major with high employer demand. Careers in this field are projected to grow at a rate faster than the average for all occupations. Salaries for pharmaceutical sciences positions begin at \$42,000 annually for entry-level roles, such as pharmacy technicians. More advanced positions, such as pharmaceutical sales and medical research, offer salaries of \$97,000 and higher. Of the 278,225 unique job postings for baccalaureate-prepared positions, approximately one-quarter preferred candidates with a bachelor's degree or higher.

Budget

Previous year fund balances will be utilized to provide startup support and allow the proposed program to grow and earn tuition revenues.

It is important to note that the College of Arts and Sciences is expected to receive over \$500,000 in tuition revenue each year due to the use of its courses in the proposed program.

Projected Revenue over Next Five Years (\$): \$ 2,100,000
Projected Expenses over Next Five Years (\$): \$ 2,100,000