



COLLEGE OF GRADUATE STUDIES

PROGRAMMATIC STUDENT LEARNING OUTCOMES

The College of Graduate Studies seeks to produce graduates prepared to solve complex, real-world problems and to succeed as leaders in their discipline. The College provides a quality education to enhance students' understanding of fundamental science and research concepts to create skilled graduates for the biotech, nutraceutical, and pharmaceutical industries.

Goals

1. Provide an industry-relevant curriculum to prepare graduates with the skills and knowledge needed for employment in the biotech, nutraceutical, and pharmaceutical industries or further educational pursuits.
2. Promote an educational environment focused on collaboration, research, and learning.
3. Enhance students' understanding of scientific principles and topics to create industry leaders.
4. Encourage mentoring and connections between industry professionals and students for employment opportunities and enhanced learning experience.
5. Support faculty in providing exceptional education and creating well-rounded graduates.

Upon satisfactory completion of the MSPS Program, Graduates should be able to:

Knowledge

- Apply a broad knowledge of pharmaceutical sciences and human disease in scholarly activity in the field.
- Use advanced pharmaceutical science knowledge to understand and investigate questions that improve human health.
- Utilize knowledge of the principles and processes of the basic sciences and the scientific method in their completion of basic science courses, and apply this to the research process.

Skills

- Demonstrate the ability to critically evaluate scientific literature.
- Apply fundamental concepts in the core areas of pharmaceutical sciences to a research problem in their chosen area of research.
- Demonstrate the ability to formulate adequate scientific questions to solve specific research problems.
- Apply laboratory skills such as planning of experiments, data acquisitions, data management, analysis and interpretation to a specific research problem.
- Demonstrate the ability to accurately record and manage research data
- Demonstrate the ability to effectively communicate both verbally and in a written format with peers, researchers, and other scientists.
- Demonstrate biostatistical, research design, and program evaluation skills.



Attitudes

- Demonstrate a commitment to the highest level of ethical standards and scientific practices in the conduct of pharmaceutical research.
- Demonstrate an appreciation for the role of the research discipline in improving health outcomes.
- Engage in collaborative and interdisciplinary approaches and teamwork through team-based coursework and research learning.

Upon completion of the MBS program, students will have proven knowledge, skills, and attitudes to:

Knowledge

- Apply a broad knowledge of biomedical sciences and human disease in scholarly discussions and collaborations with colleagues across biomedical science.
- Use advanced biomedical science knowledge to understand and investigate disease processes.
- Integrate new biomedical knowledge and emerging technologies in their professional practice.

Skills

- Demonstrate the ability to critically evaluate the scientific literature.
- Apply fundamental concepts in the core areas of biomedical sciences to a research problem in their chosen area of research.
- Demonstrate the ability to formulate adequate scientific questions to solve specific research problems.
- Apply laboratory skills such as planning of experiments, data acquisitions, data management, analysis and interpretation to a specific research problem.
- Demonstrate the ability to accurately record and manage research data.
- Demonstrate the ability to effectively communicate both verbally and in a written format with peers, researchers, and other scientists.

Attitudes

- Demonstrate a commitment to the highest level of ethical standards and scientific practices in the conduct of biomedical research.
- Demonstrate an appreciation for the role of the research discipline in the achievement of health equity.