

BIOL 263: Research Tools for Studying Diseases II

This course is the continuation of Research Tools for Studying Diseases I and is designed to help students gain an appreciation of essential scientific approaches and techniques in studying various human diseases and biological disorders. A variety of techniques are discussed, including molecular, cellular, biochemical, genetic, imaging, computational, and high-throughput screening approaches. Students will learn applications and recent advances for each approach as well as gain a historical perspective on the development of each technique. Emphasis will be placed on the appropriate application of each technique, with a focus on the exploration of the progression and therapeutic effects of treatments to various diseases. The course provides individuals of all backgrounds and levels of experience with the opportunity to become knowledgeable in a wide variety of scientific approaches in biomedical research.

Learning Objectives

- Introduce various approaches to biomedical and translational research
- Provide fundamental knowledge of various scientific techniques essential for conducting research
- Develop critical-thinking and problem-solving abilities and learn about practical applications of research techniques covered in this course
- Learn about various diseases and how research leads to better therapeutic applications

Credits: 1

Class Type: Graduate Course

Prerequisites:

BIOL 262

The above course(s) or permission from the instructor.

Program: Biology, Genetics, and Medicine

Availability Currently Not Available