

BIOL 2534 Cell Biology

Catalog Description: An introduction to cell structure and function. Three hours lecture and three hours laboratory weekly.

Prerequisites: At least one semester of college biology and one semester of college chemistry.

Credit hours/ Contact hours/ Load hours: 4/6/5

Target Audience/Transferability: A laboratory science course intended for science majors and students interested in a more detailed treatment of cell structure and function. BIOL 2534 is a transferable biology course and supports students seeking admission to a variety of professional programs as well as those seeking a bachelor's degree in biological sciences.

Student Learning Outcomes: Students completing this course will:

- Examine concepts of cell structure and function.
- Evaluate current scientific methodologies.
- Demonstrate cellular and molecular laboratory methods and techniques.
- Develop writing and research skills.

Topics:

- Overview of Cell Structure and Function
- Membranes and cell signaling
- Energy Flow in Cells
- Information Flow in Cells
- The Cytoskeleton and Cell Mobility
- Development of Cancer

Forms of Assessment: Required forms of assessment include written examinations, formal laboratory journal, and demonstration of understanding of the principles presented in lecture. Also, students will be required to demonstrate proficiency in applying core laboratory skills and practices used in the study of cells.