

Northwood University
Department of Biology
Course Catalog - Fall 2025

Department Overview:

The Department of Biology explores the science of life, from the molecular level to entire ecosystems. We offer courses that prepare students for careers in healthcare, research, environmental science, and education.

Course Listings

Course Code: BIO 110

Course Title: Principles of Biology I

Credits: 4 (including lab)

Description: The first part of a two-semester introductory sequence, this course covers fundamental principles of cell biology, genetics, and molecular biology. Topics include cell structure and function, energy metabolism, DNA replication, and gene expression. The lab component provides hands-on experience with basic laboratory techniques.

Prerequisites: None

Instructor: Dr. Rosalind Franklin

Schedule: Tue/Thu 10:00 AM - 11:15 AM, Wed 2:00 PM - 4:50 PM (Lab)

Course Code: BIO 350

Course Title: Introduction to Computational Biology

Credits: 3

Description: This interdisciplinary course explores the application of computational and statistical techniques to biological data. Students will learn to analyze genomic sequences, predict protein structures, and model biological systems. The course will involve significant programming assignments, so comfort with a programming language like Python is highly recommended.

Prerequisites: BIO 110, CS 101

Instructor: Dr. Francis Collins

Schedule: Mon/Wed 3:00 PM - 4:15 PM