

BIOL 385: The Biology of Aging

The process of aging is fascinating because it is one that we all expect to experience, if we are fortunate. It is natural to wonder if the decline of aging can be avoided. Through research into the biological underpinnings of the aging process, scientists are beginning to understand how aging may be evolutionarily programmed, including the cellular pathways that promote it. In this course, students will discuss these exciting findings. With an emphasis on primary literature and discussion, students will critically consider factors that affect the aging process. The course will also touch on mechanisms behind diseases associated with aging, such as Alzheimer's disease and Parkinson's disease. Finally, the course will review prospects for the extension of healthy lifespan in humans.

Learning Objectives

- Describe the evolutionary theories that explain aging
- Outline the cellular pathways that influence the aging phenotype
- Understand factors that influence the aging process
- Gain fluency with reading and interpreting primary literature

Credits: 2

Class Type: Graduate Course

Prerequisites:

cell biology.

Program: Biology, Genetics, and Medicine