Be sure to meet with your advisor to plan your schedule. Below is a list of biology-related classes that will be offered in the SPRING 2017 semester:

**BIOLOGY SPRING 2017 COURSES**

BIOL 110 (GN) BIOLOGY: BASIC CONCEPTS AND BIODIVERSITY (4) A study of the evolution of the major groups of organisms including the fundamental concepts of biology.

BIOL 220W (GN) BIOLOGY: POPULATIONS AND COMMUNITIES (4) A study of the structures and functions of organismic interactions from simple populations to complex ecosystems.

Prerequisite: BIOL 110

BIOL 240W (GN) BIOLOGY: FUNCTION AND DEVELOPMENT OF ORGANISMS (4) A study of development and physiological processes at the organismic level.

Prerequisite: BIOL 110, CHEM 110

BIOL 222 GENETICS (3) Variation and heredity in plants and animals, including man; relationships of genetical knowledge to evolution and breeding practices.

Prerequisite: 3 credits in biological sciences

BIOL 297A HEALTH CARE ISSUES READING SEMINAR (1) Objective: to encourage reading, critical evaluation, reflection, and discussion using historical and current issues in the health professions. Students read and discuss 3-4 books of creative nonfiction that address issues in the health professions. Topics may include disease transmission, ethics, patient care, healthcare, diseases, or historical events.

Prerequisite: 2nd semester standing

BIOL 413 CELL SIGNALING AND REGULATION (3) This course examines the mechanisms cells employ to communicate with each other through extracellular signaling molecules (e.g., hormones and neurotransmitters, and receptors, G-proteins, protein kinase cascades, cell cycle regulation, and apoptosis). Classes will consist of formal lectures as well as student-led reviews of pertinent primary literature.

Prerequisite: BIOL 240W

meets the Animal Physiology requirement for the General option

meets the Physiology requirement for the Vert Phys option

BIOL 427 (GEOSC) EVOLUTION (3) Evolution aims to familiarize students with basic principles of biological evolution. These principles include natural selection, speciation, adaptation, population genetics, molecular evolution, and systematics. This course will be taught primarily in a lecture/discussion format. A variety of field trips, guest lectures, and some films are also used.

Prerequisites: BIOL 220W, BIOL 230W (or concurrent)

meets the Evolutionary Biology requirement for all options
BIOL 429 ANIMAL BEHAVIOR (3) Physiological mechanisms, ecological relevance, and adaptive significance of animal behavior.
Prerequisite: BIOL 110, BIOL 220W
meets the Ecology requirement for the General option
meets the Evolutionary Biology requirement for the Vert Phys option
meets the Population/Community Ecology requirement for the Ecology option

BIOL 430 DEVELOPMENTAL BIOLOGY (3) Molecular and genetic analyses of mechanisms involved in differentiation and determination in biological systems.
Prerequisite: Biol 222, Biol 230W, or BMB 252
meets the Genetics or Animal Physiology requirement for the General option
meets the Physiology requirement for the Vert Phys option

WFS 430 CONSERVATION BIOLOGY (3) The application of biological principles to issues in the conservation of biodiversity.
Prerequisite: Biol 220W
meets the Ecology requirement for the General option
meets the Evolutionary Biology requirement for the Vert Phys option
meets the Population/Community Ecology and Evolutionary Biology requirement for the Ecology option

B M B 402 GENERAL BIOCHEMISTRY 2 (3) This course continues the exploration of biological molecules through a comprehensive survey of the pathways and regulation of intermediary metabolism. Building on BMB 401, this course will expand on the biochemical pathways that control everyday bodily functions, both when the body is healthy, and what goes wrong to create a diseased state.
Prerequisite: BMB 401
required for the Vert Phys option

MICRB 201 INTRODUCTORY MICROBIOLOGY (3) Elementary principles of microbial and viral interrelationships, morphology, and physiology; relation to food, water, soil, industry, and disease processes.
Prerequisite: CHEM 110

MICRB 202 INTRODUCTORY MICROBIOLOGY LABORATORY (2) Qualitative and quantitative techniques with regard to recognition of bacteria and their processes on a microscopic, colonial, and physiological basis.
Prerequisite or concurrent: MICRB 201
Non-Majors Courses

The following courses can count for credit towards graduation, but do not count toward the biology degree:

BIOL 120A (GN) Plants, Places, and People (3) Useful and dangerous plants; historical (archaeological), cultural (ethnological), and economic (anthropocentric) aspects, including structural and chemical characteristics of botanical importance.

BIOL 127 (GN) Introduction to Plant Biology (3) Cellular structure and organization; physiological processes; classification; reproduction and development; relationship of plant groups.

BIOL 129 (GN) MAMMALIAN ANATOMY (4) Anatomy of a mammal, with special reference to that of man.

BIOL 133 (GN) Genetics and Evolution of the Human Species (3) Human heredity and evolution, individual and social implications.

BIOL 141 (GN) INTRODUCTORY PHYSIOLOGY (3) Explanation of the normal structure and function of the animal body, with special emphasis on human body systems.

BIOL 142 PHYSIOLOGY LABORATORY (1) Experiments demonstrating basic physiological principles, with special reference to man.

VB SC 211 (GN) THE IMMUNE SYSTEM AND DISEASE (3) Introduction to the immune system that emphasizes the immune response to infection and consequences of a defective immune response.

The following courses may not be used for credit (not even as electives) toward a degree in biology and will not be counted toward graduation:

BI SC 001 (GN) STRUCTURE AND FUNCTION OF ORGANISMS (3)
BI SC 002 (GN) GENETICS, ECOLOGY, AND EVOLUTION (3)
BI SC 003 (GN) ENVIRONMENTAL SCIENCE (3)
BI SC 004 (GN) HUMAN BODY: FORM AND FUNCTION (3)
*MICRB 106 (GN) ELEMENTARY MICROBIOLOGY (3)
*MICRB 107 (GN) ELEMENTARY MICROBIOLOGY LABORATORY (1)
*Both MICRB 106 and MICRB 107 must be completed to fulfill the general education (GN) requirement.