BIOMEDICAL SCIENCES (MINOR)

College of Agriculture and Life Sciences

Program Website (https://www.vet.cornell.edu/departments-centers-and-institutes/microbiology-and-immunology/degrees-and-courses/undergraduate-minor-biomedical-sciences)

Program Description

The minor in Biomedical Sciences is designed for the life sciences major considering a pre-professional curriculum (pre-medical or pre-veterinary) or a career in biomedical research (graduate school). The minor comprises undergraduate courses taught primarily by faculty within the College of Veterinary Medicine in Animal Physiology and Microbiology and Immunology. The courses offered will provide depth and breadth in subject areas covered in the preclinical professional medical or veterinary curriculum. An important focus will be on animal and human disease processes, with an emphasis on animal physiology and infection biology.

All undergraduates focusing on life sciences (Biology majors are not eligible for this minor) are eligible to participate in this minor.

Minor Advisors will be available to provide guidance on career development of pre-professional undergraduates.

Academic Standards

Grade Requirements

Each course must be completed with a grade of C- or better to count toward the minor.

A cumulative GPA of ≥ 2.0 is required for all courses within the minor.

Program Information

- Minimum Credits for Minor: 12

Minor Requirements

Required Coursework

Code	Title	Hours
Select one of the following:		
BIOAP 3110	Principles of Animal Physiology	3
BIOMS 4150	Essential Immunology	3

Elective Coursework

Four additional courses must be taken; at least one course must be taken from each of the Core Groups.

Code	Title	Hours
Animal Physiology Core Group		
ANSC 3410	Biology of the Mammary Gland in Health and Disease	2
BIOAP 3110	Principles of Animal Physiology [1]	3
BIOAP 3160	Cellular Physiology	3
BIOAP 3190	Laboratory in Physiology	4
BIOAP 3200	Introduction to Veterinary Anatomy	4
BIOAP 4130	Histology: The Biology of the Tissues	4
BIOAP 4140	Principles of Pharmacology	3
BIOAP 4270	Endocrinology: Biology of Hormones	3
Microbiology and Immunology Core Group		
BIOMS 4150	Essential Immunology [1]	3
BIOMS 4250	Applied Immunology	3
BIOMI 3210	The Gut Microbiome	3
BIOMI 4040	Pathogenic Bacteriology	2-3
BIOMI 4090	Principles of Virology	3
BIOMI 4310	Medical Parasitology	2
BIOMS 4340	Cellular and Molecular Microbial Pathogenesis: The Host Pathogen Interplay	3

[1] If you take BIOAP 3110 Principles of Animal Physiology as your required course, you may elect to take BIOMS 4150 Essential Immunology as an elective course in the Microbiology and Immunology Core Group below. If you take BIOMS 4150 Essential Immunology as your required course, you may elect to take BIOAP 3110 Principles of Animal Physiology as an elective course in the Animal Physiology Core Group.