MAJOR IN BIOMEDICAL SCIENCES

The interdisciplinary Biomedical Science major (BMS) is designed to provide students in-depth training in the applied life sciences. The program prepares students for employment by public sector and government agencies, private industry, academic institutions, as well as graduate study in medicine, veterinary medicine, and related biomedical and health fields. Students will begin their studies with foundational science courses including biology, physics, general chemistry, organic chemistry, math, and statistics, and then choose an area of concentration (anatomy and physiology, environmental public health or microbiology and infectious disease) to tailor their educational experiences to specific career objectives.

The basic science curriculum meets many requirements for entrance into professional schools. Experiential learning opportunities are encouraged and could include participating in laboratory research, teaching/tutoring in selected courses, volunteer experiences and leadership positions within student club(s), study abroad, internships, and honors curriculum. These opportunities are encouraged with the student's interests and career goals as the focus.

Learning Objectives

1. Obtain a foundational knowledge in math and science, and be able to integrate knowledge from the molecular to the systemic level.
2. Demonstrate critical thinking and the ability to analyze scientific data to solve complex problems as an individual and as a member of a team.
3. Demonstrate effective organization, leadership, and laboratory skills.
4. Demonstrate strong writing and oral communication skills necessary to communicate scientific knowledge to a range of audiences.

Potential Occupations

A Bachelor of Science degree in Biomedical Sciences will provide students with a variety of opportunities for further study or employment in the broad area of biomedical sciences. The coursework is designed to prepare students for health-related graduate and professional programs. Post-graduate opportunities will include additional studies in specialty areas of physiology such as neuroscience, reproductive endocrinology, cardiopulmonary, and patho-physiology. Employment opportunities can be found in government at the local, state, and national levels; research in a variety of settings such as university, industry, and private laboratories; education; administration and management; and industry such as biotechnology, pharmaceuticals, and medical devices. Students will be exposed to skill sets which are necessary in a competitive, ever changing job market.

Concentrations

- Anatomy and Physiology (https://catalog.colostate.edu/general-catalog/colleges/veterinary-medicine-biomedical-sciences/biomedical-sciences/biomedical-sciences-major-anatomy-physiology-concentration/)
- Environmental Public Health (https://catalog.colostate.edu/general-catalog/colleges/veterinary-medicine-biomedical-sciences/environmental-radiological-health-sciences/biomedical-sciences-major-environmental-public-health-concentration/)
- Microbiology and Infectious Disease (https://catalog.colostate.edu/general-catalog/colleges/veterinary-medicine-biomedical-sciences/microbiology-immunology-pathology/biomedical-sciences-major-microbiology-infectious-disease-concentration/)