

# Certificate in Biomedical Sciences

---

This 16-credit hour online undergraduate certificate is intended to better prepare pre-professional students planning a career in veterinary medicine or allied biomedical sciences. The courses required encompass biomedical terminology, cell biology, anatomy, and physiology.

For more information about this program and application instructions, please visit: <https://online.missouri.edu/degrees-programs/mu/veterinary-medicine/biomedical-sciences/undergrad-cert> (<https://online.missouri.edu/degrees-programs/mu/veterinary-medicine/biomedical-sciences/undergrad-cert/>)

## Requirements

A total of 16 credit hours in online BIOMED courses are required. Thirteen credit hours are core courses and 3 credit hours are selected from the list of elective courses.

### Required Core Courses (13 Hours)

BIOMED 2110	Biomedical Terminology	3
BIOMED 3219	Elements of Comparative Anatomy	3
BIOMED 4333	Veterinary Cell Biology	4
BIOMED 4335	Comparative Physiology of Health and Disease	3

### Electives (3 Hours)

The list of elective courses is subject to change.

BIOMED 1010	Biomedical Career Explorations	1
BIOMED 2111	Veterinary Medical Terminology	1
BIOMED 2120	Essentials of Animal Handling and Physical Restraint	2
BIOMED 2130	Introduction to Veterinary Anatomy and Physiology	3
BIOMED 2230	Farm Animal Sanitation and Disease Prevention	3
BIOMED 3100	Biomedical Pathophysiology	3
BIOMED 3300	Animal Welfare and Ethics	3
BIOMED 3400	Domestic Animal Behavior in Veterinary Practice	2
BIOMED 4110	Veterinary Cytology	2
BIOMED 4420	Canine and Feline Nutrition	3
BIOMED 4120	Principles of Toxicology	3
BIOMED 4210	Animal Issues in Disasters	1
BIOMED 4250	Human-Animal Bond in Veterinary Practice	3
BIOMED 4320	Fundamentals of Small Animal Emergency and Critical Care	3
BIOMED 4500	Equine Critical Care and Nursing	3
BIOMED 4510	Equine Clinical Anatomy: Forelimbs	1

Minimum Academic Standards: Satisfactory completion of a certificate requires a grade point average of at least 3.0 in BIOMED courses and no grade less than a C in all courses.