

COMPARATIVE BIOSCIENCES (COMP BIO)

COMP BIO 500 – FUNDAMENTAL PRINCIPLES OF VETERINARY ANATOMY

5 credits.

A detailed consideration of gross anatomical structure with emphasis on major anatomical patterns present in species important to veterinary medicine. The dog is used as a model domestic mammal and comparisons with other species are considered. All body systems are dissected. Clinical implications of these dissections are emphasized.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2022

COMP BIO 501 – VETERINARY HISTOLOGY

5 credits.

Light and digital microscopy are used to study the anatomy of organs and tissues at the cellular level. Microanatomic features of all major organ systems are identified, and pertinent physiologic concepts are discussed to correlate structure with function. Mammalian systems are emphasized, and comparisons to non-mammalian species are considered. Direct applications to clinical medicine are included.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Repeatable for Credit: No

Last Taught: Fall 2022

COMP BIO 502 – MOLECULAR AND METABOLIC BASIS OF MEDICINE

3 credits.

Covers metabolism with a more advanced incorporation of concepts of chemistry, cell biology and physiology. Clinical correlations in veterinary medicine are also covered.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Repeatable for Credit: No

Last Taught: Spring 2023

COMP BIO 503 – VETERINARY DEVELOPMENTAL ANATOMY

2 credits.

Principles of development and organogenesis in domestic animals. Normal developmental patterns are related to adult anatomy. Clinical implications of common congenital defects are discussed.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Repeatable for Credit: No

Last Taught: Fall 2022

COMP BIO 505 – VETERINARY NEUROANATOMY AND NEUROPHYSIOLOGY

3 credits.

A comparative approach to the morphological and physiological properties of the central nervous system of animals, particularly those of veterinary importance.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

COMP BIO 506 – VETERINARY PHYSIOLOGY B

4 credits.

Covers comparative veterinary physiology covering digestive, endocrine, and reproductive systems.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2023

COMP BIO 550 – ANATOMY OF THE LARGE DOMESTIC ANIMALS

1-3 credits.

A dissection study of the horse and the ox with special emphasis on the anatomical specializations of these species. Extensive comparisons to the anatomy of the small domestic animals. Other large domestic animals will be considered as appropriate to demonstrate anatomical variation.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Repeatable for Credit: No

Last Taught: Spring 2023

COMP BIO 551 – VETERINARY PHYSIOLOGY A

4 credits.

Covers comparative veterinary physiology covering electrophysiology, and muscle, cardiovascular, respiratory, renal and acid-base physiology.

Requisites: Declared in Doctor of Veterinary Medicine with first year standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Fall 2022

COMP BIO 555 – VETERINARY TOXICOLOGY

2 credits.

Science of toxicology as it relates to veterinary practice. The principles of toxicology and the mechanism and treatment of toxicants commonly encountered in small and large animals will be presented.

Requisites: Declared in Doctor of Veterinary Medicine with second year standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: No

Last Taught: Spring 2023

COMP BIO 556 – VETERINARY PHARMACOLOGY

4 credits.

Basic pharmacology of various drug classes used in veterinary medicine together with examples of clinical drug use. Important species variations in drug use and drug response will be stressed.

Requisites: Declared in Doctor of Veterinary Medicine with second year standing

Repeatable for Credit: No

Last Taught: Spring 2023

COMP BIO 675 – SPECIAL TOPICS

1-5 credits.

Requisites: Declared in Doctor of Veterinary Medicine

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Fall 2022

COMP BIO 699 – DIRECTED STUDY

1-5 credits.

Projects in the laboratory and/or through library work in specific subject area under the direct guidance of faculty member.

Requisites: Consent of instructor

Course Designation: Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Summer 2023

COMP BIO 775 – EXTERNSHIP

1-24 credits.

Offers opportunities for faculty coordinated experience in the veterinary medical profession outside School of Veterinary Medicine.

Requisites: Declared in Doctor of Veterinary Medicine with fourth year standing

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Spring 2023

COMP BIO 990 – RESEARCH

1-12 credits.

Research.

Requisites: Consent of instructor

Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement

Repeatable for Credit: Yes, unlimited number of completions

Last Taught: Summer 2023