COMPARATIVE MEDICINE - MD (CMED)

CMED 501: Biology and Care of Laboratory Animals
3 Credits
Presentation of the anatomic and physiologic characteristics of the commonly used laboratory animal species and their relation to biomedical research.

CMED 503: Laboratory Animal Genetics
3 Credits
Genetic principles applied to laboratory animals used for investigations of diseases that may be controlled or influenced by genetic factors.

CMED 507: Techniques of Laboratory Animal Experimentation
3 Credits
Techniques of drug administration, infusion, and collection of body fluids and materials; gnotobiology; use of radioisotopes and bioinstrumentation.

CMED 515: Experimental Surgery of Laboratory Animals
3 Credits
Surgical techniques, including nephrectomy and Goldblatt clamp, bladder and gastric pouches, bile duct cannulation, intraventricular operation, cardiac and cerebrovascular catheterization.

CMED 530: Diseases of Laboratory Animals I
3 Credits
Physiological and pathological expressions of both infectious and metabolic degenerative diseases of rodents, with emphasis on diagnostic and control methods.

CMED 531: Diseases of Laboratory Animals II
3 Credits
Physiological and pathological expressions of both infectious and metabolic degenerative diseases of nonhuman primates and other species of animals.

CMED 535: Comparative Pathology
3 Credits
Comparative pathologic characteristics of infectious and metabolic diseases of animals and man.

CMED 590A: Colloquium
1-3 Credits/Maximum of 9
Continuing seminars which consist of a series of individual lectures by faculty, students, or outside speakers.

CMED 590B: Contemporary Topics in Laboratory Animal Science Colloquium
1-3 Credits/Maximum of 3
Continuing seminars that consist of a series of individual lectures by faculty, students, or outside speakers. This colloquium is specifically focused on recent literature in the field of Laboratory Animal Medicine.

CMED 596: Individual Studies
1-9 Credits/Maximum of 9
Creative projects, including nonthesis research, which are supervised on an individual basis and which fall outside the scope of formal courses.

CMED 597: Special Topics
1-9 Credits/Maximum of 9
Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or term.

CMED 600: Thesis Research
1-15 Credits/Maximum of 999
No description.

1 Credits
This course uses a problem-based learning approach to develop the ability to interpret and apply laws and regulations that pertain to the humane care and use of laboratory animals. In particular, students will learn how to critically evaluate an Institutional Animal Care and Use Committee (IACUC) protocol for compliance with laws, regulations, guidelines and position statements that pertain to laboratory animal care and use. Licensed veterinarians enrolled in the Laboratory Animal Medicine Master's degree training program are the target audience.

Recommended Preparation: Previous experience in basic science research using animals, and/or familiarity with regulations that govern animal care and use would provide good preparation for this course.

CMED 810: Management of Animal Care and Use Programs in Biomedical Research
1 Credits
This course will provide opportunities for students to apply knowledge and skills needed for administration and management of an animal resources program in biomedical research. Using active learning practices, students will explore topics specific to housing and caring for research animals. Topics include animal facility design, disaster planning, personnel management, waste management, fiscal management, process management concepts (LEAN, Six Sigma, Systems Approaches), and strategic planning.