Brief Course Descriptions:

<u>9480 Veterinary Service Learning and Outreach</u> – 2 hours, pass/fail. This course is designed to introduce the future veterinarian to the challenges and rewards associated with provision of veterinary health care to underserved communities. It will consist of didactic lectures intended to stimulate dialogue with key partners and with service experiences that will help the student progressively build the confidence, skills and knowledge necessary to provide veterinary services to underserved communities.

<u>9502-009 Gross Pathology</u> - 1 hour, pass/fail. Review of necropsy findings bases on clinical cases.

<u>9502-019 Foreign Animal Diseases</u> - 1 hour, pass/fail. This course will discuss information on those foreign animal diseases considered to be the greatest threat to the livestock and poultry industries in the United States.

<u>9502-022 Clinical Veterinary Parasitology</u> – 1 hour, graded. Clinical Veterinary Parasitology will provide second-year veterinary students with a case-based lecture format for expansion of foundational parasite knowledge gained in VMED 9200/9210, focusing on further discussions of the **diagnosis**, **treatment**, **and prevention** of common parasitic problems faced by general practitioners (small animal, large animal, and mixed) in the US. Hosts will include, but not be limited to: dogs, cats, horses, cattle, small ruminants, camelids, and swine.

<u>9502-035 Equine Veterinary Husbandry</u> - This course is designed to familiarize veterinary students with the basic principles of equine husbandry as related to veterinary medicine, including uses and medical conditions of certain breeds, biosecurity, infectious disease prevention, parasite control programs, dental and hoof care, transport, and nutrition. There are 15 scheduled classroom hours that will be devoted to lecture/discussions of the topics listed in the schedule.

<u>9502-036 Veterinary Pain Management</u> – (NEW Fall 2019; to be offered every other fall semester) 1 hour, pass/fail. The veterinary pain management course will serve to increase a student's knowledge base on many aspects of pain management of the veterinary patient. Subjects covered in this course will include in depth review of neuroanatomy and physiology of pain, pathophysiology of pain, pharmacology of medications used for pain management, non-pharmacologic treatments for pain, and specific pain management strategies for various domestic species, and exotic and zoo animals.

<u>9502-040 Practical Knowledge for Equine Practitioners-</u> To provide an opportunity to gain practical knowledge in a variety of areas of equine medicine and surgery. Topics are designed to supplement course work and range from suggestions on how to stock and organize an ambulatory truck, to principles of dentistry. Laboratories are incorporated to encourage hands on experience prior to entering the clinical year. These concepts will be useful for the professional student with plans to enter equine practice following completion of his or her veterinary studies.

<u>9502-049 Select Topics in Food Animal Medicine</u> – 1 hour, pass/fail. In depth discussion regarding select topics affecting the bovine, caprine, ovine, porcine, and camelid species.

- <u>9502-050 Small Oceanarium Medicine (Spring)</u> 1 hour, pass/fail. Introduction to the management of animals (other than cetaceans) in a small oceanarium. Course is taught at Gulf World in Panama City.
- <u>9502-050 Cetacean Medicine (Fall)</u> 1 hour, pass/fail. Topics include: Dolphin Anatomy, Cetacean Clinical Pathology, Cetacean Artificial Insemination, Cetacean Common Diseases. Course is taught at Gulf World in Panama City.
- <u>9502-051 Planning Your Financial Future</u> Guest speakers will lead informal discussions about common financial pitfalls and the opportunities new graduates will face in the future. The goal is to empower the student to make sound financial decisions.
- 9502-061 Using the Anatomy You Know (Problem-based lab) This lab course is conducted as a tutorial session in which each week we explore a region of the mammalian body, drawing heavily on the anatomy of the dog and horse. The anatomy emphasized will be that which is relevant to commonly performed procedures or commonly encountered disorders. Specimens will come from perfusion-fixed cadavers left from Fall semester gross anatomy and fresh, unfixed bodies or body parts collected from the Pathology service or from terminal surgery labs. Special effort will be made to acquire sexually intact female and male fresh canine specimens
- <u>9502-062 Advanced Equine Physical Diagnosis I</u> This 1 credit hour course is an introduction to basic physical examination techniques and procedures commonly used when examining horses clinically. This is the first part of a two part elective to introduce students to common procedures that may be encountered in clinical equine practice.
- <u>9502-063 Advanced Anesthesia and Pain Management</u> 1 hour, pass/fail. This course is intended to expand on the basic topics covered in the Introduction to Anesthesia course or cover topics that are beyond the scope of that class. The content will be selected by the participants on the first day and a syllabus generated based on a consensus of topics the group would like to discuss. All topics in the realm of anesthesia and pain management are within the scope of possibilities. This course is not designed to be a review of topics already covered in other classes, but to expand on those topics.
- <u>9502-064 Epidemiology and Biostatistics</u> This elective course will cover basic biostatistics and epidemiology that will be especially useful to students considering pursuit of an internship or residency. Epidemiologic techniques emphasized will be outbreak investigation, evaluation of diagnostic tests and disease surveillance. Students will become familiar with computer software (EpiInfoTM, Microsoft ExcellTM) useful for epidemiologic investigations.
- <u>9502-067 Professional Communication Skills</u> 1 hour, pass/fail. Students will develop skills in communication with colleagues, clients and staff through lecture and interactive laboratory sessions. Students will also improve their ability to give and receive feedback from peers. Professional presentation skills will be developed during the course with a final presentation given in laboratory setting.

9502-070 Advanced Equine Physical Diagnosis II - This 1 credit hour course is a continuation of physical examination techniques and diagnostic procedures used when examining horses clinically. This is the second part of a two part elective to introduce students to common procedures that may be encountered in clinical practice of equine medicine and focuses on the gastrointestinal and neurological body systems. [Registration preference will be given to those students who have completed the spring course, Advanced Equine Physical Diagnosis I.]

<u>9502-071 Clinical Anatomy and Intro to Aquatic Animal Medicine</u> - Fish and aquatic animal medicine represent the largest untapped aspect of veterinary medicine, with AVMA surveys showing fish as the most common pet (kept in the United States) in addition to serving as research animals and for public display. This course will focus on the clinically relevant anatomy of aquatic organisms, specifically marine and freshwater aquarium fish and marine invertebrates including Gastropods (Snails and bivalves), Cephalopods (Octopus, Squid, and Cuttlefish), Arthropods (shrimp and horseshoe crabs), corals, and sponges. Aspects of husbandry and physical examination of these organisms will also be presented along with an introduction to common disease conditions

9502-074 One Health: Animals, People and the Environment- In this course we will take an ecological approach to traditional microbiology and parasitology involving the application of the principles of population biology to understand disease dynamics in individuals, populations, and ecosystems, and develop new perspectives on epidemiology and eco health. During this course, students will learn to take an ecological approach to understanding infectious diseases. We will begin by classifying infectious disease causing agents, their lifecycles, and transmission patterns. Then we will discuss disease dynamics at the individual and host levels (what makes an individual susceptible to disease, how diseases move through host populations). We will then discuss ecologically informed strategies to control human, veterinary, and wildlife diseases. We will also look at the role of parasites in the ecosystem and how the environmental changes affect parasite transmission. At the finer level we will examine how host-parasite interactions and multiparasite species infections are modulated by host immunity and what may cause rapid changes in infectiousness or the evolution of virulence. We will touch on a range of current issues that include pandemic outbreaks, bio-terrorism, One Health, emerging diseases and the role of parasites in ecosystem functioning. This course is designed for graduate students from all disciplines, to obtain insights into the broad reaching impacts of disease and the conservation, public health, and environmental consequences of neglecting an ecological approach to disease dynamics.

<u>9602 Research Problems in Biomedical Science</u> – 1 hour, pass/fail. Student will meet with specific faculty and decide on a topic for retrospective study.

<u>9720 Disaster Medicine for Veterinarians</u> – 2 hours, pass/fail. The course will emphasize the role of the veterinarian in preparing and responding to natural and man-made disasters. Community emergency response team (CERT) training will be included.

<u>9750 Diagnostic Veterinary Ultrasound</u> – 2 hours, graded. Basic physics, instrumentation, and scanning techniques of ultrasonography. Normal sonographic anatomy correlated with the cross sectional anatomy of body structures and organs.

<u>9790 Small Animal Wound Management and Surgery</u> – 1 hour, pass/fail. The goal for this course is to expose you to various types of wounds and reconstructive problems in small animals and to give you a working knowledge base that will allow you to treat wounds appropriately and to be able to develop multiple plans for reconstruction.

<u>9840 Wildlife Diseases</u> - Approaches to wildlife management for the control of diseases and the role of the veterinarian in prevention and control of diseases of wild animals will be emphasized in this course. Some class contact time will involve independent work on a research paper on a wildlife disease topic selected by each student. The course will cover basic information related to infectious and parasitic diseases of wildlife and their zoonotic and epidemiologic importance to wildlife management. Wild animal species indigenous to the United States will be stressed.