Doctor of Veterinary Medicine
Professional Program

Fourth Year Professional Program
Fourth-year students must complete required and elective rotations that vary depending on the students’ selected focus area. Students must complete 43 credits in the senior year: 40 credits of clinical rotations and three credits in Clinical Conference. The clinic year consists of 24 blocks, two-to-three weeks in length, with up to four vacation blocks and three extramural experiences (Food Animal-focused students are required to take four extramural experiences). A total of 168 credit hours are required for graduation. Clinical Conference presentations are required of each senior.

The clinic scheduling process begins in fall of third year with information sessions with senior clinicians and/or clinical coordinators, Academic Affairs, and Students Services. Watch the module for the clinic scheduling process for more details: DVM Fourth Year Modules.

Fourth Year Professional Courses

VMC 996 - Advanced Avian Clinical Medicine - Students will work with teaching birds to develop skills in avian handling, diagnostic sample collection, anesthesia and radiology. Cadavers will be used to teach orthopedic and soft tissue surgical procedures. Students and faculty will spend approximately 5 days in the field working with psittacine birds, waterfowl, and raptors at Sylvan Heights Waterfowl Park in Scotland Neck, NC, and at the Carolina Raptor Center in Charlotte, NC. Prerequisite: VMC 991 Basic Companion Avian Medicine Selective or VMC 991 Advanced Avian Medicine Selective.

VMC 959 - Advanced Primate Medicine - This rotation is designed to provide senior veterinary students with clinical experience in nonhuman primate medicine. Students will gain practical experience in the diagnosis, treatment, and prevention of disease in captive research primates maintained in research facilities. Students participate in formal rounds, autodidactic exercises, and case management at the Primate Center at Wake Forest University in Winston-Salem, NC. Housing is the student's responsibility - see Student Services for contact info. Prerequisite: VMC 991 Primate Selective. Must have instructor's approval.

VMC 958 - Advanced Prosimian Medicine - This rotation is designed to provide senior veterinary students with clinical experience in prosimian medicine. Students will gain practical experience in the diagnosis, treatment, and prevention of disease in captive prosimians maintained in research facilities. Students participate in formal rounds, autodidactic exercises, and case management at the Duke Lemur Center. Prerequisite: VMC 991 Primate Selective. Must have instructor's approval.

VMC 986 - Advanced Small Animal Medicine – This course provides a higher level of experience for the diagnosis and management of companion animals with complex medical problems. Students may choose to concentrate on particular aspects of internal medicine. Students are not required to participate in emergency/intensive care unit duty. Prerequisite: VMC 971 Companion Animal Medicine or VMC 954 Companion Animal Medicine for Food Animal/Equine Students.

VMP 975 - Advanced Topics in Veterinary Anatomic Pathology – This is a senior veterinary clinical rotation
that provides students with additional focused experience in veterinary anatomic pathology. Students have the option of rotating through necropsy service and surgical biopsy service for two weeks to gain additional experience in pathology similar to VMP 977. Students have the option of designing a specialized pathology experience with the guidance of an approved pathology faculty member. **Prerequisite:** VMP 977 Clinical Laboratory/Necropsy.

**VMC 987 - Aquatic Medicine** – This course is designed as an elective clinical block rotation in field services. Students electing the course would have successfully completed the two theoretical/laboratory courses in special species medicine, providing the foundation for participation in this course. It is the only clinical course offering hands-on experience with medical care delivery to aquatic species.

**VMC 972 - Cardiology** – This course will provide training in obtaining a thorough history and performing a complete examination, with particular emphasis on the cardiovascular and respiratory systems. Students will gain experience in identifying, defining, and prioritizing health problems. They will learn to develop and initiate rational diagnostic and therapeutic plans, communicating these plans and results to the client. Students will also perform various diagnostic procedures (e.g., blood pressure measurement, ECG, thoracic radiographs, transtracheal aspiration, etc.). Students will learn to interpret results of diagnostic tests and determine their importance to the patient and client; they will also communicate with clinicians, clients, veterinary technicians and staff, fellow students, and referring veterinarians in appropriate and effective manner. In addition, this course will provide the opportunity to learn the presenting signs, historical findings, breed predilections, methods of diagnosis, and medical and surgical interventions for the most commonly seen cardio respiratory conditions.

**VMB 977 - Clinical Anesthesia** – **This is a core course and required for all seniors.** Students engage in the daily clinical service responsibilities of the CVM-VTH Anesthesia Section in the role of anesthetists assigned to the care of client-owned animals. The objective of this clinical course is to enable each student to achieve their maximum potential as neophyte anesthetists having limited experience. Student activities are supervised and conducted by CVM faculty anesthesiologists and VTH staff anesthesia technicians. Supporting activities related to delivering clinical service include attending clinical rounds and case discussions, as well as oral presentation of a critical review of a recently published research paper relevant to anesthesia and its supporting basic sciences.

**VMB 978 - Clinical Behavior and Nutrition** - This clinical rotation will provide interested students with the opportunity to gain experience in both behavior and nutrition. During the week spent at the Behavior Medicine Service, students will participate in the diagnosis and treatment of behavior problems in companion animals. During the week spent at the Nutrition Service, students will develop and initiate nutrition support plans for hospitalized and healthy companion animals. Relevant nutrition support skills will be practiced.

**VMC 995 - Clinical Conference** – Each senior student is required to do a 25-minute presentation during their senior year. The presentation may involve a case report, series of cases, or epidemiological study. Retrospective study of a disease or syndrome, including data drawn from other institutions or published findings, may be used, as well as topics of general interest to veterinary medicine of an innovative nature. Will be registered for in the summer, fall, and spring.

**VMP 977 - Clinical Laboratory and Necropsy** – **This is a core course and required for all seniors.** Each student will learn to perform a systematic post-mortem examination on each of the common domestic species of animals, distinguishing between normal, autolytic, and pathological changes. Students will also properly collect and handle for analysis, specimens of exudates, gastrointestinal contents, tissue, and fluids obtained from both live and dead animals. Students will gain experience in how to properly conduct and evaluate clinical laboratory tests on specimens from clinical and necropsy laboratory cases. They will also be able to use diagnostic bacteriology, mycology, virology, surgical pathology and pharmacology services effectively; i.e., to: select laboratory services intelligently, (b) collect and care for specimen properly for submission to specific laboratories or for evaluation, (c) microscopic evaluation of specimens and interpretation, (d) understand selected laboratory techniques and how they are used for future application, and (e) interpret laboratory results correctly.

**VMP 978 - Clinical Pathology, Parasitology, and Immunology** – **This is a core course and required for all seniors.** This course is a predominantly practical-based approach to more in-depth learning of the above subjects in a clinical setting. There will be different instructors for each subject area, with corresponding syllabi. General expectations for the course are that the student will have thoroughly reviewed (prior to class) and will understand any and all notes that were received in previous courses, e.g., sophomore hematology, cytology, enzymology, etc. The
student will be building upon this knowledge base, not re-learning it.

**VMC 967 – Clinical Veterinary Dentistry – Effective December 2012: Not Available Until Further Notice.** Students in this course will participate in examination, admission, diagnosis, treatment, discharge, and follow-up of patients in dentistry service. Students will take a clinical history, perform a physical examination, develop appropriate diagnostic plan, discuss the plan with the service’s clinicians, and participate in formulation of treatment protocol. The service treats patients Monday through Thursday. Friday is reserved for overflow, emergencies, research, and teaching. Students are given prepared lectures on dental procedures and diseases and will be allowed to perform supervised procedures on cadavers. (No animals are euthanized for this purpose.)

**VMC 983 - Clinical Veterinary Dermatology** – Dermatological disease will represent a significant proportion of your case load, particularly in companion animal practice. Most of the patients that you will see have chronic relapsing disease that can be frustrating and often costly for the owner. Therefore, whilst an accurate diagnosis represents the first step in dealing with a case, the challenge in this field of medicine is to successfully manage cases in the long term. This requires good and open communication with the client as well as regular patient evaluation. Most of the diagnostic techniques employed in dermatology are very simple and do not require expensive equipment or excessive amounts of time. The key to successful dermatological practice is to use these tools appropriately to recognize conditions such as parasitic infestations and bacterial or yeast infections, for which there is a specific course of treatment. It specializes in the diagnosis and management of chronic ear disease and immunological dermatoses such as autoimmune skin diseases, food reactions, and atopic dermatitis. The good practitioner, however, recognizes that cutaneous manifestations may be a reflection of internal disease, and a thorough systemic evaluation is also required. When studying the skin there is one big advantage: it is on the outside.

**VMC 982 – Clinical Veterinary Ophthalmology** – The ophthalmology course will acquaint the student with examinations, diagnostics and therapeutic practices, and principles of clinical veterinary medicine. There will be direct supervision by faculty and house officers. Attendance is required at weekly clinical rounds, general medicine rounds, and the patient rounds and mini-seminars conducted within the service. Irregular and/or long hours may be required. Students will be expected to be neatly dressed, well groomed, and conduct themselves in a professional manner at all times.

**VMB 962 – Clinician Scientist Research Experience** – This research rotation is designed to continue the research training and experience that Clinician Scientist Focus Area students have gained during their summer research experience and any other additional research they have done during the first three years of their DVM curricular experience. Since the students taking this rotation will be doing independent research, albeit under the direction of a faculty principal investigator, the particulars of the course syllabus will vary for each student. However, the students will all be expected to perform independent, guided research projects, which involve some type of wet lab experience or statistics/bioinformatics approaches. The students will also be intimately involved in the design, execution and interpretation of laboratory experiments, and/or in the design and implementation of any retrospective clinical studies.

**VMC 971 – Small Animal Internal Medicine** – 1. Obtaining a thorough history and performing a complete physical examination. 2. Identifying, defining, and prioritizing problems. 3. Developing and initiating rational diagnostic and therapeutic plans. 4. Performing certain diagnostic and therapeutic procedures. 5. Interpreting results of diagnostic tests, and determining their importance to the patient. 6. Verbal and written communication with clinicians, clients, veterinary techniques, fellow student veterinarians, and referring veterinarians. 7. Determining the point at which it is time to refer a case to a colleague for “another look”, or to a referral center for specialized diagnostic testing or treatment. 8. Understanding how cases management in private practice compares with referral practice. 9. Approaching issues regarding euthanasia; your decision-making, assisting the owner. This course is a two-block rotation and only begins on odd blocks.

**VMC 973G – Small Animal General Surgery** – The student will be provided an opportunity to apply and practice skills, techniques and principles learned in pre-clinic courses by: 1. Obtaining histories and performing physical examinations on animals with surgically related diseases. 2. Deciding an appropriate objective database for diagnosis and therapy reasons. 3. Participating in and performing surgery on routine and complex surgical cases commensurate with the animal’s condition and the student’s ability. 4. Participating in the communication process with the client and referring veterinarian. 5. Demonstrate the ability to research a surgical disease, define a treatment for the disease, decide if the treatment can be performed in a practice setting or if referral is indicated, and give a prognosis for the disease. This skill must be demonstrated in the SOAP for all referral cases. Additional diseases may be assigned.
**VMC 973O - Small Animal Orthopedic Surgery** - The primary objective is to develop the skills and knowledge that are necessary for the diagnosis and management of orthopedic problems in your patients. Because it is not possible to cover all this in two weeks, the focus will be on developing your communication and diagnostic skills, and your alternatives for their management. An understanding of the anatomy, sterile technique, and the surgical procedure will be expected when assisting. You will be expected to formulate management plans for the postoperative period. You will have primary responsibility for case management, client communication, discharge orders and, in select cases, communication with the referring DVM.

**VMC 954 – Small Animal Medicine for Food Animal Students** – Small animal medicine clinical rotation emphasizing the disciplined detection, prioritizing and planning for therapy of medical diseases in small companion animals. Development of medical judgment and the use of the problem oriented medical record is stressed. This course is intended for DVM students in the food animal focus area.

**VMC 976 – Veterinary Critical Care** – This is an elective clinical rotation in the small animal hospital, available at select times in the year. This service will give senior students the opportunity to assess and treat after-hours emergencies in cats and dogs. The students will also be responsible for communications with clients and referring veterinarians. **This elective is available only for fourth year students in the small animal focus area.**

**VMP 979 - Epidemiology** – The main goal is to provide senior veterinary students with the opportunity for pursuing a focused research topic in the area of veterinary epidemiology and population medicine under the direction of consenting faculty. The exact direction and scope of the topic is agreed upon between the instructor, the student, and the course coordinator. This course is offered only by the permission of the participating instructor(s) and the course coordinator. The instructor and the student will work out the type of project, what exact objectives are to be met, and how the success of obtaining those objectives will be evaluated. The objectives and methods of evaluation of performance will be negotiated between the veterinary student and the instructor and put into writing in the form of a Plan of Action PRIOR to course permission being granted by the course coordinator. No one textbook is required for this course.

**VMC 966 – Equine Emergency and Critical Care** – This course is an elective rotation for 4th year veterinary students only. The elective is designed as an intensive learning experience and skill development in the assessment and management of equine emergency patients. Students will participate in daily topic rounds discussions about critical care topics. Students will participate in the evaluation and monitoring of in-house critical care patients as well as in the admittance of new emergencies. Students will participate in the medical and surgical management of these patients.

**VMC 978 - Equine Lameness** – Development and use of problem-solving skills in the diagnosis, treatment, and management of lameness and related topics, e.g., farriery, orthopaedic surgery, diagnostic imaging, race training, etc., in the performance horse. Overnight/weekend field trips may be included in course requiring fees other than, or in addition to, laboratory and computer course fees.

**VMC 979 - Equine Medicine** – Students are responsible for all aspects of patient care and are expected to be dedicated to their patients. Frequent and careful observation of the patients, attention to detail, diligent record keeping, accuracy in formulating and carrying out a treatment plan, and use of common sense are expected. The earlier you note potential problems, the earlier and easier they can be resolved.

**VMC 968 – Equine Orthopedic Surgery and Lameness** – Application of problem solving skills and the art, science, and practice of equine orthopedic surgery and lameness in the veterinary teaching hospital setting.

**VMC 977 - Equine Preventative Health Care** – The overall objective of this course is for students to become more comfortable with preventative health care and common problems in equine practice. This will be accomplished by performing the preventative health care and routine work for state-owned horses at the NCSU Equine Educational Unit, Veterinary Equine Research Center in Southern Pines, Caledonia, and TAU, and for horses owned by clients who have agreed to participate in the rotation. In addition, we may spend some time at the State Fair Horse Show.

**VMC 993 - Equine Special Topics** – The course is designed to give additional experience in equine-oriented clinical services at NCSU. Students will not be able to participate in this block off campus, unless working directly with a NCSU.
faculty mentor. A faculty mentor must be identified within one month of signing up for this course and a written proposal of activities planned submitted to Dr. Sam Jones. **Prerequisites:** Any 2 of the following courses: Preventative Health Care, Equine Medicine, Equine Surgery, or Equine Theriogenology. **Instructor Permission Required**

**VMC 975 - Equine Surgery** – Application of problem solving skills and the art, science, and practice of equine surgery, including lameness, in the veterinary hospital setting. 1. Conduct a comprehensive physical examination of the horse, including examinations for lameness. 2. Formulate plans for the use of ancillary diagnostic procedures for the diagnosis of the common surgical diseases of the horse. 3. Select routine preoperative, intraoperative, and postoperative treatment procedures for horses with surgical diseases. 4. Perform routine radiographic and ultrasonographic examinations of the forelimbs and hind limbs for diagnosis of lameness in the horse. 5. Develop client communication skills needed for the practice of equine surgery.

**VMP 976 - Food Animal Pharmacology** – This course will outline the basic principles of pharmacology and therapy of the major diseases of ruminants, swine and poultry. Students will be expected to develop a thorough understanding of how properly to use drugs in food animal species and should be able to develop a treatment program for most of the major livestock diseases. The course will be restricted to students in the Food Animal and Mixed Animal focus areas.

**VMP 974 - Food Supply Veterinary Medicine** - This course provides exposure to the clinical principles of food supply veterinary medicine. It is primarily intended for individuals who are not in the Food Animal Focus Area.
Ruminant, swine and poultry faculty provide an overview of the animal industries and production practices, as well as exposure to basic veterinary knowledge and clinical skills. **Prerequisites** may include consent of instructor.

**VMP 939 - General Limited Small Animal Practice** - Will expose clinical year veterinary students to a general small animal veterinary practice. There will be several areas of focus: learning clinical skills relevant to a general veterinary practitioner; developing strong problem solving abilities; developing the strong communication skills necessary to interact effectively with clients, colleagues and staff; incorporating; and conducting behavior evaluations of pets during wellness examinations. Enrollment in this course is limited to students in the DVM professional program.

**VMP 982 - Poultry Health Management I** – This is a clinical rotation elective for 4th year veterinary students with an interest in poultry health management or food animal production. This course is offered 4 times each year. Diseases of turkeys and chickens will be discussed. Basic concepts in poultry disease diagnosis, prevention and treatment will be emphasized. The course will consist of lectures, laboratory and field experiences.

**VMP 983 - Poultry Health Management II** – Poultry Health Management II is a clinical rotation elective for 4th year veterinary students with a commitment to pursuing a career in poultry health management or food animal production. This course is offered throughout the year and may be repeated with permission of the instructor. The course will consist of laboratory and/or field experiences designed to meet the student’s career goals. A list of available externships in poultry health management, which may be applicable for this course can be found on the Association of Avian Pathologists web site: [http://www.aaap.info/index.html](http://www.aaap.info/index.html), under Educational Opportunities, Senior Veterinary Student Externships approved by the Kenneth Eskelund Preceptorship Committee. Funds to help pay for travel expenses may be available through the Kenneth Eskelund Preceptorship; see information at the web site listed above. **Instructor Permission Required.**
VMB 976 – Radiology - Every senior must take this core course. This rotation will provide practical training in the production of quality radiographic examinations and will help develop interpretation skills in diagnostic radiology. Students are expected to be familiar with material covered in the junior radiology course (VMB 960), as it will be incorporated into this rotation. Review of the auto-tutorial teaching cases, located in the “Star Wars” room, is suggested. The radiology rotation is oriented toward teaching and service. Learning experiences result from a combination of direct contact with the faculty, residents, technicians, and classmates. You will make diagnostic quality radiographs, participate in morning rounds and review didactic material, VMB 960 teaching files, and ask questions.

VMC 997 - Raptor Medicine and Rehabilitation - This elective senior year rotation allows students to obtain clinical experience in raptor medicine and rehabilitation at Carolina Raptor Center in Charlotte, NC. Students will develop skills with species identification, capture and handling, physical examination, bandaging, diagnostic sample collection and interpretation, emergency stabilization and treatment techniques, necropsy, anesthesia and surgery assistance, and captive management and husbandry issues. A maximum of two students will be permitted in each clinical rotation. Instructor Permission Required

VMP 970 - Ruminant Health Management I – This is a two-week block considering health management of ruminant species. During the two-week period, students accompany faculty on visits to farms to deliver health management programs, to investigate health problems, or to consider approaches to enhance productivity. A portion of the course also involves experience in providing individual animal health management and addressing medical/surgical disorders.

VMP 972 - Ruminant Health Management II - This course is intended to allow students with a strong interest in ruminant health management to obtain advanced training. Specialty courses in beef, dairy, small ruminant, pharmacology and embryo transfer will be offered. Prerequisite: VMP 970 or Instructor Permission Required.

VMC 950 – Sea Turtle Medicine & Rehabilitation – This course provides practical experience in husbandry and disease diagnosis and treatment in rehabilitating sea turtles at the Karen Beasley Sea Turtle Rescue and Rehabilitation Center (KBSRRC) in Topsail Beach, NC. Skills to be acquired in clinical and didactic settings include sea turtle husbandry and rehabilitation techniques, diagnostic sample collection and interpretation, physical examination and safe handling, medication delivery, wound treatment, and necropsy protocols.

VMC 960 – Small Animal Emergency Service – This is an elective in the small animal hospital, available throughout the entire year. This service will give senior students the opportunity to assess and treat after-hours emergencies in cats and dogs and possibly some avian and exotic species. When applicable, the students will also be involved in any communications with clients and referring veterinarians.

VMC 988 - Special Species – This senior year two-week clinical course (half CVM-based, half private practice) provides practical experience in the diagnosis, treatment and prevention of disease in privately owned fish, amphibians, reptiles, birds, rodents, lagomorphs, and other small mammals. This rotation is designed to combine clinical training in avian and herptile medicine at the CVM with clinically based special species medicine and surgery in private practice. Students will normally spend the first week at the CVM (3 days avian; 2 days herptile). During the second week students will split and visit different practices in the Triangle area. Case responsibility will be assigned to individual students by the course instructor(s) as appropriate in the practice setting. In some cases students will also be seeing pet domestic mammals, depending on the clinic and case load for the particular day. Irregular and/or long hours are not expected but may be required in unforeseen circumstances. Weekend duties are not routinely required.

VMP 973 - Special Topics in Epidemiology – The main goal of this course is to provide senior veterinary students with the opportunity for pursuing a focused research topic in the area of veterinary epidemiology and population medicine under the direction of consenting faculty. The exact direction and scope of the topic is agreed upon between the instructor, the student and the course coordinator. The course is offered only by the permission of the participating instructor(s) and the course coordinator. The instructor and the student will work out the type of project, what exact objectives are to be met and how the success of obtaining those objectives will be evaluated. The objectives and methods of evaluation of performance will be negotiated between the veterinary student and the instructor and put into writing in the form of a Plan of Action PRIOR to course permission being granted by the course coordinator. The Plan of Action must be signed by both the instructor and the course coordinator at least 8 weeks prior t the beginning of the rotation. No one textbook is required for this course. Instructor Permission Required.
**VMP 987 - Ruminant Special Topics** – This elective allows goal-directed educational enrichment in Ruminant Practice under the direction of consenting faculty. Formats include clinical experiences, clinical and applied investigations, etc. Topics and times are arranged by the student and consenting faculty. Available to 3rd and 4th year veterinary students only upon consent of faculty. Prerequisite: VMP 970 or VMP 972 or Instructor Permission.

**VMC 940 - Theriogenology** – This course is designed to instruct students in clinical theriogenology. It will be primarily oriented toward equine and canine species; however, cases and problems from other species will be seen and included as teaching materials. The students will improve upon the skills learned in VMF 951 and will be expected to use these skills in dealing with clinical cases and laboratory type situations. Transabdominal, vaginal, and rectal examination of the reproductive tract, semen collection, and evaluation will be taught during this course. This course may be repeated as many times as a student wishes during their senior year.

**VMC 941 - Special Topics/Theriogenology Advanced** – The primary objective of this course is to provide additional information and training to veterinary students who have taken the VMC 940 Theriogenology senior clinical rotation. Specifically, emphasis is directed to acquaint students with modern and current practices of clinical theriogenology. Various aspects of assisted reproductive technology available to domestic animals will be discussed. It is expected that the majority of the information and activities offered in this course will involve equine species (80%) and, to a lesser extent, canine (10%) and bovine species (10%). Teaching and client-owned animals are available for the rotation. Although emphasis is given on hands-on activities, didactic instruction of selected topics in clinical Theriogenology will be discussed. Instructor Permission Required.

**VMP 984 - Swine Medicine & Production I** – This course will provide senior veterinary students with techniques and expertise to approach a clinical swine problem. Students will evaluate clinical signs, analyze production records, assess facilities and management, institute a diagnostic plan and establish an economically feasible solution to the clinical problem. The outline for this course may vary slightly from year to year, but the following topics will be covered: necropsy procedures/sample techniques; interpreting serologic/virologic results; farm visits – review building/equipment designs; practical swine reproductive management; practical bacteriology; practical swine nutrition/rations; swine record systems/PigChamp.

**VMP 985 - Swine Medicine & Production II** – This course will provide senior veterinary students with the opportunity to utilize the techniques and expertise gained in VMF 984. Students will evaluate clinical and production problems on a variety of swine farms. Practicum/field work and independent study will be conducted on commercial swine farms, usually with a veterinary practitioner or faculty member. Instructor Permission Required.

**VMB 976A – Ultrasound** – The objective of the block is to provide fundamental practical training in small animal abdominal sonography. The rotation is oriented towards teaching primarily through the clinic caseload with as much “hands on” opportunity as is practical. There will be minimal didactic teaching material, some required reading and a brief case report to complete. At the completion of the rotation, students are expected to know the basic physics of diagnostic ultrasound, be able to explain common artifacts and to be able to recognize and obtain diagnostic images of the major abdominal organs.

**VMC 984 - Veterinary Clinical Neurology** – This service provides diagnosis and management of nervous system disorders in animals, including nuclear imaging, myelography, CT scans, electromyography, neurosurgery, and postoperative patient rehabilitation including hydrotherapy and treadmill training. Attendance is required at weekly clinical rounds, general medicine rounds, and the patient rounds and mini-seminars conducted within the service. Irregular and/or long hours may be required.

**VMP 999 - Veterinary International Field Studies** – This course will provide students with practical experience in a foreign country working on a veterinary medicine-related project being conducted in that country. Projects may focus on production medicine, occupational safety, zoological medicine, or basic research. Contact Dr. Michael Levy if interested in this experience.

**VMC 998 - Wildlife Rehabilitation Medicine** – Wildlife rehabilitation medicine, the delivery of health care and management to free-ranging native wildlife with the goal of re-release, is an important component of clinical veterinary medicine. Students will apply practical medical and surgical techniques and methods for diagnosing disease, delivering health care, and implementing appropriate triage for injured and ill North Carolina native wildlife. Must have approval of course coordinator. Prerequisite.
**VMC 964 - Zoological Husbandry and Nutrition** - This course is designed to provide senior veterinary students with husbandry and nutrition of zoo animals while learning the importance of prevention of disease in captive wildlife. Students participate in formal rounds, autodidactic exercises, and hands on animal care delivery. Successful completion of three Zoological Medicine Selectives or course coordinator's permission. [Prerequisites](#)

**VMC 989 - Zoological Medicine** - This course is designed to introduce the senior veterinary students to clinical zoological medicine. Students will gain practical experience in the diagnosis, treatment, and prevention of disease in captive, zoological specimens maintained in zoos. Students participate in formal rounds, autodidactic exercises, and case management at the N. C. Zoological Park. Must have approval of course instructor. [Instructor Permission Required](#) [Prerequisites](#)

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