**Syllabus/Detailed Policies**

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| **WILDLIFE MEDICINE CLINICAL ELECTIVE SAMS 5117****Class Syllabus****Updated July 2011**DEPARTMENT OF SMALL ANIMAL MEDICINE & SURGERY Course Description:Students will assume case responsibility for all wildlife presented to the hospital. Duties may include triage, morning and evening treatments, emergency care, maintenance of medical records, and diagnostic workup followed by medical or surgical treatment under supervision of the Zoological Medicine Staff. Please see attached protocol below for specific instructions. Grading System: S/U (Satisfactory/Unsatisfactory) Credit Hours:                         VariableCredit                                    0.5 to 1.5Lab (in clinic) hours            15 to 45You must be a primary student clinician for 3 patients and a secondary student clinician for 3 patients to receive 0.5 credit.You can receive 1.0 credit if you are primary clinician for 3 patients and secondary clinician for 3 patients AND commit to working for two weeks during the summer.You can receive 1.0 credit if you are primary clinician for 3 patients AND commit to being a supervisor for at least one 3 week shift. **If you fail to show up for your shift or “drop” a shift without finding a replacement** (this is your responsibility, not the supervisors’ or managers’), **you will receive an unsatisfactory for the course.** Objectives:1.     To encourage students to read the course outline, review the reference list, and investigate and research areas of wildlife medicine, specifically native Georgia mammals, birds, reptiles, and amphibians for discussion in rounds.2.  To prepare the student for senior clinical rotations and medical                  practice by teaching them the following:a) The correct husbandry and management of wildlife during hospitalization and treatment.b) Disease investigation including restraint and physical examination, diagnostic sampling and imaging.c) Medical and surgical approaches to a variety of conditions that afflict native wildlife.d) The appropriate format for presenting a case to colleagues in rounds.e) Legal and ethical issues. The goal for all injured or ill wildlife presented to the University of Georgia’s College of Veterinary Medicine is treatment, rehabilitation by licensed rehabilitators working with UGA, and eventual release in conjunction with the guidelines set forth by the U.S. Fish and Wildlife Service and Georgia Dept. of Natural Resources. In cases where the medical problem is so severe as to make eventual return to the wild unlikely or impossible the animal will be humanely euthanized. Keeping wildlife in captivity outside of educational or licensed rehabilitation facilities is prohibited by law in most cases. Therefore individuals bringing in injured wildlife cannot be allowed to retain legal ownership rights for the animals they rescue. **General Information** The Wildlife Service at UGA relies on the enthusiasm and motivation of students interested in wildlife patients. The following protocol has been formulated to instruct students who are enrolled in SAMS 5117 course for credit. The wildlife service aims to provide the general public with a place to bring injured wildlife for treatment, and is dedicated to the education of students. Information on the specifics of triage and emergency care of wildlife is available in the references found at the end of this syllabus. It is your responsibility to read any pertinent literature which will help you manage your case, as this is a major component of postgraduate medicine, especially when dealing with nondomestic species. Due to potentially serious zoonotic diseases that might be encountered when working with wildlife, strict sanitation should be practiced. Any potentially dangerous wild animals should not be handled without the instruction and supervision of the instructors. ALL VOLUNTEERS MUST BE VACCINATED FOR RABIES.**Schedule**             The semesters are divided into 3 week blocks, each with one supervisor.  Blocks are divided into “A” (slow) and “B” (busy) blocks; each student should sign up for one A and one B block.Wildlife volunteers are any student willing to commit to work with wildlife patients for at least two 3-week blocks. Volunteers may then be promoted to supervisors based on their performance, motivation and experience with wildlife and can gain class credit any semester from spring of freshman year until they are seniors. The promotion of volunteers will be decided by the current wildlife supervisors and the clinicians and will be done at the end of each semester. Wildlife supervisors taking the course for credit will inherently have more responsibility and are expected to participate in the instruction of wildlife volunteers.**Receiving patients**Receiving cases during normal business hours (Mon.-Fri. 6am-5pm)             The front desk calls the zoomed ward when a wildlife case is presented to the admissions desk. Someone from the zoomed ward will then call the supervisor for the block. If a wildlife volunteer is present, he/she is encouraged to take a detailed history from the person bringing in the animal. This should include the location it was found and how long the person has had it.  Explain that mission of the wildlife clinic is to return the animal to 100%  function. If this cannot be achieved, the animal may be euthanized. The only other option is the treatment of an animal so it can be released to an educational facility. Gently explain that it is illegal to keep wildlife as pets and only licensed rehabilitators can work with wildlife until they are released. Sometimes the Good Samaritan will want to know what happens with the animal. If you would like to give them an update, then tell them someone will call them at the resolution of the case (i.e. they might not get a call for several days). It is solely the responsibility of the wildlife students to call Good Samaritans.  Remember to politely request a donation and explain that 100% of donations go directly towards animal care costs.  We have a very limited budget, and the amount and type of diagnostics and therapeutics we can offer depends largely on how much funding we raise.  If a wildlife volunteer is not present when a wildlife case presents to the zoomed ward, a senior student or clinician will perform the initial exam. If the case is stable, the clinician will wait until the paged student arrives to give you a chance to work up the case yourself.  If a case is critical, then the clinicians will start emergency care when the case arrives.The supervisor will call the next person on the list to be the primary student clinician, and the following person on the list to be the secondary student clinician.  The primary and secondary student clinicians and the supervisor will arrange the care of the patient. It is also the responsibility of the supervisor to check in before class to see if any cases came in on emergency the night before, and arrange for primary and secondary student clinicians. The senior student or clinicians will update you on the case and let you know what further treatment/diagnostics need to be done when you are done with class.Once you take in or are assigned a case, take the responsibility seriously.  You will be that animal’s most important advocate.  Students sometime complain that they feel like mere observers, as senior students and clinicians make decisions on their cases.  This will not be the case, however, if the clinicians see that you are actively involved in the case management and take responsibility for the animal’s care.  While you may not have the knowledge or skills yet to perform all the diagnostics and procedures, you will find that if you are reading about the case, researching it, and demonstrating compassion and interest, you will be increasingly involved in the case and will get a great deal out of the experience. Receiving cases “after-hours” (weekdays 5 - 10 p.m. and weekends)             Wildlife volunteers are responsible for any wildlife case that presents 5 - 10 p.m. on weekdays and all day on weekends and during the summer during their assigned weeks. The small animal intern will page the wildlife supervisor when they receive a call about wildlife or someone has brought in a wildlife case.  Some animals are critical so please be prompt in responding to pages. The same procedure is then followed, with the supervisor calling in primary and secondary student clinicians.  Students are encouraged to handle the case, but **may** **need to call the zoomed clinician on duty**.  Wildlife treatment crew members **cannot** anesthetize patients without clinician supervision (with the exception of gas anesthesia for euthanasia only). Please perform at least a cursory exam and formulate a plan in your mind before calling the clinician.  See the white board for information on which clinician is on duty and their respective pager/home numbers. **How to Handle a Wildlife Case**  There should always be a minimum of two people working with each patient – the primary student clinician and either the secondary student clinician or the supervisor.   Identify the species you are working with (there are field guides available in the ward).  A body weight should be obtained as soon as possible. Often, this can be accomplished in the transportation carrier (weighing the carrier later). Place the animal in a dark, quiet cage while you prepare equipment for the exam.  Remember, these are wild animals who will be extremely stressed by being held.  Perform a physical exam and determine a diagnostic and treatment plan.  Depending on availability, you can ask the senior students, technician, or doctors for help. The results of the physical exam and your plan should be discussed with the clinician on duty (ie; a bird with a fracture should receive supportive care including fluids, analgesics, and fracture stabilization). This will give you an opportunity to work directly with the clinician and receive some direct training. Clinicians must approve any diagnostics (i.e. rads, bloodwork, anesthesia) performed on a case.  Always ask for help handling a species you have not dealt with before, or at any time you are uncomfortable handling an animal. There is a wildlife reference sheet in the ward you can refer to for help with the initial management of the case. Once you have finished a quick exam, return the animal to a dark, quiet cage or carrier and prepare all the necessary equipment (warm fluids, injections, bandaging material, appropriate caging). This is an important step that will avoid undue stress to the patient. As a suggestion, one person can gather the treatment materials, while the other is preparing the cage. When preparing a cage for a wildlife case, remember the following (again, ask technicians if you have any questions at all; they are very nice and happy to help): 1. Cage w/ appropriate food and water (please refer to the available field guides in the zoo med ward, consult the web or consult a clinician or technician for the appropriate food and cage furniture necessary for each case) unless you know you the animal is to be anesthetized within a short period of time2.  Log the case in the wildlife spreadsheet “Wildlife Log 2013” on the computer in the exam room, and note the ID number (number in left-hand column).3. Write species, ID number, and your contact info on the dry erase board. Update the “Next Case” number on the white board. 4. Record samples submitted (bloodwork, cytology etc) on the “tests pending” board5. Complete progress notes, PE forms, and treatment sheets. (All treatment sheets must be approved by a doctor.) **Special Species** The UGA VTH policy regarding rabies vectors species does not allow these species to be admitted as patients, except under approval by a zoo med doctor. These species include: bats (all species), skunks and raccoons. However, there are other species that can be considered rabies vectors, but have a lower potential of presenting with rabies, ie, foxes, bobcats. Should you be contacted about one of these species, please inform the Good Samaritan of the policy at UGA and that they need to contact Animal Control, the Department of Natural Resources, or a Wildlife Nuisance Service. If a Good Samaritan drops one of these animals off without prior arrangement, please contact the clinician on duty immediately and do not attempt to handle the case yourself. Also, never handle any animal that you feel may cause you injury. **Euthanasia** If at any point you feel your patient is suffering, euthanasia might be its best option. Should you have any doubt, contact the clinician on duty. If you are comfortable deciding that the patient needs to be euthanized, and the patient is NOT a federally endangered species (bald eagle, peregrine falcon etc) you can do so at your own discretion. The preferred method of euthanizing wildlife patients is to administer inhalant anesthesia (isoflurane) and intravenous KCL. This avoids the handling of controlled substances (pentobarbital) by the wildlife volunteers. Potassium chloride should not be administered to animals that are not anesthetized. Alternatively, contact the clinician on duty to provide you with pentobarbital.  Until you are comfortable doing it on your own, have a senior student, technician, or clinician help you set up the anesthesia machine properly and administer the IV injection.**Daily Treatments**            Treatment crew volunteers are responsible for morning and evening treatments (and others if possible) Monday-Friday and all treatments for Saturday and Sunday. Morning treatments must be completed **BEFORE** 8:00 a.m. The student who is primary on each case must discuss the case with the assigned senior student so that the senior can present the case in rounds at 8am.  Remember, although wildlife have no owners, they are just as important as any other patient in the hospital and are entitled to the same level of care. Therefore, the clinical team requires a daily update prior to rounds so that the diagnostic and therapeutic plan for the case can be updated.  The time when volunteers are to report to the ward is dependent on the number of cases needing treatment. This time should be pre-arranged by primary student clinicians on each case, in concert with the supervisor. The wildlife supervisor will meet with you every morning to help with treatments and confirm the treatment schedule for the day. Evening treatments can be done between 4-6pm, or when indicated by their treatment sheet (e.g. an animal may need antibiotics at 7am and 7pm). It is not necessary for both the primary and secondary student clinician to personally perform every single treatment on their patients, but it IS necessary for each student to ensure that their patients’ treatments get done.  Every patient must be evaluated every day.  Additional treatments can be split up among students if necessary to accommodate class and exam schedules.  However, for the most part, treatments will be done as a team (one person to restrain, one to perform treatments, one to clean cage while the animal is being treated).             Occasionally, we have patients that need treatments during the day or later at night. If you cannot do some of the day treatments because of class conflicts, ask a technician or senior student to help.  Again, it is not necessary for you to do every treatment, just to make sure that every treatment gets done!  Your role is to be the advocate for your patient.             Even if there are no patients in the hospital, check in with the wildlife supervisor before class to see if anything came in on emergency. If so, it is the responsibility of the supervisor to update the student clinicians and decide on treatment times.  Each wildlife case will be assigned a senior student.  Consider this person as a mentor and make sure you keep them apprised of any changes in status of your patient.  The seniors are a great resource for you as you learn to form diagnostic and treatment plans, and practice writing medical records.  Make sure you discuss the progress of the case with the assigned senior student each morning so that the senior can present the case at rounds.  You are welcome to join us for rounds if you don’t have class at 8am.  Likewise, you can call the ward and ask when afternoon rounds will be (the time varies) and can join us if your class schedule permits.Treatments include the administration of medications, provision of appropriate food/water, obtaining a daily body weight, monitoring food consumption, and cleaning cages. Medications should be kept in a labeled container in the food run.  When treatments are completed, CLEAN UP AFTER YOURSELF.   Our technicians and assistants are very helpful and accommodating, so it is particularly unfair to take advantage of them.  They are here to assist you with restraint, treatment, and care of your patients, NOT to clean up your mess!             If a patient requires anesthesia for treatment, this will be performed by the clinicians, technicians, and/or senior students.  At no time will wildlife treatment crew anesthetize a patient without clinician supervision. The only exception to this is patients who are being anesthetized after hours prior to KCL euthanasia. However, we will attempt to time anesthetic procedures so that you can be present.                         It is most desirable for each student clinician to continue with their case for as long as that animal is a patient in the hospital.  The learning experience is greatly enhanced by seeing a case from start to finish.  If a patient is a long-term case and this will cause an undue burden on the assigned student, you are permitted to transfer the case to another student when your three-week block is up.  A case summary must be written for the receiving student. The supervisor for the week will need to meet the new group the following Monday to transfer cases to the new supervisor.**Rounds**Wildlife supervisors and student clinicians are welcome and encouraged to come to 8am rounds, or afternoon rounds (variable times) whenever they do not have class. Regardless, the primary student clinicians should discuss the progression of their cases with a clinician or a senior student daily.  It will not be possible to round about cases with the clinicians or seniors at the same time each day. You are encouraged to evaluate the patient and continuously update the plan based on your assessment, but do not make changes to treatments without discussing it with a senior student or clinician. Likewise, the senior student will make every effort to inform you of changes in the plan as soon as possible. The clinicians will make an effort to be in the zoomed ward during at least one of the two daily treatment times, so that you can discuss any concerns with them. If it is after hours, you may page the on-call clinician with any questions. If the case you are working with was scheduled for diagnostic or treatment procedures during the day while you were in class (ie: radiographs, surgery) the clinician or senior student will likely want to update you before any treatments are performed. If he/she is not present, check the record, as they would have updated what procedures were performed and the new plan for the case. **We also have mandatory monthly rounds, where everyone will be required to present a case during the semester. We may also have guest lecturers to discuss wildlife topics.****Paperwork**            Records should be kept daily on each patient. Senior students will write a SOAP for each case.  However, you are encouraged to use the SOAP format in your progress notes. These should include: problem list, overall assessment, diagnostics, test results, current treatments, and your plan for further treatment and diagnostics. Senior students are available if you need guidance on how to write a SOAP.  It is the responsibility of the wildlife supervisor to check that all the records have been updated for each case at the end of the day.   **Discharging patients**             Upon the resolution of the case, there might be two outcomes: 1) euthanasia or death of the patient, 2) discharge of the case to a licensed rehabilitator for further care prior to release. Either case requires a discharge so that the hospital has records of what happened to every animal.            When it is decided that a case is ready to go to rehab, the primary student clinician will, working with the supervisor and ZooMed staff, identify an appropriate rehabilitator.  The primary student clinician contacts the rehabber and makes arrangements for transfer.  The rehabber should be noted in several places: the wildlife log, the discharge, and the original donation form in the wildlife binder. At the time of discharge:1. Write and print three copies of discharge instructions (one for rehabilitator, one for the black wildlife binder, and one for medical records). The discharge instructions should include any further medical treatment that this animal may need (medications, bandage changes etc), the expected outcome and in some cases, a schedule for rechecking the case. Senior students can help you determine what needs to be included in the discharge instructions.2. Complete records (ask for help if you are not sure how to do this) and have them signed by the doctor.3. Update the wildlife spreadsheet with the disposition of the case and the date.4. Update UVIS with discharge, diagnosis, and the doctors on the case.5. Clean cage (ask a technician if you do not know what to use).6. Call the Good Samaritan who brought the case in (optional). Please let the clinicians know if you have any comments or suggestions about the program.  Your feedback will help us improve the program and make it as useful for both the students and patients as possible.  **Your time is greatly appreciated and the clinic could not see wildlife without your help!** **Course Evaluation**Please be sure to turn in your course evaluations at the end of your rotation. Your feedback is important to us as we’ve worked really hard to put this course together for you. Please be professional in your comments and constructive in any criticism. The course is updated regularly as we obtain useful feedback from the participants – yes we do pay attention to your comments! Your final grade cannot be released until you have turned in your time sheets and course evaluations to Brooke (SAMS office, room H-385). **Recommended Reading in Wildlife Medicine**Journals:Journal of Wildlife Diseases Journal of Wildlife ManagementJournal of Zoo and Wildlife Animal Medicine Books:Davidson, W.R. and V.F. Nettles. 1988. Field Manual of Wildlife Diseases in the Southeastern United States. Southeastern Cooperative Wildlife Disease Study, AthensDavis, J.W., Karstad, L.H. and D.O. Trainer (eds.). 1981. Infectious Diseases of Wild Mammals, 2nd edition. Iowa State University Press, Ames, IA. Wobeser, G.A. 1981. Diseases of Wild Waterfowl. Plenum Press, New York. Wobeser, G.A. 1994. Investigation and Management of Disease in Wild Animals. Plenum Press, New York. Mader, D.R. (ed.). 2006. Reptile Medicine and Surgery. W.B. Saunders, Philadelphia. Ritchie, Harrison, G. and L. Harrison (eds.). 1994. Avian Medicine:Principles and Application. Wingers Publishing, Lake Worth, FL. Gage L. Hand rearing of wild and domestic animals. Iowa State Press. 2002. |