

# Wildlife Techniques/WIS 4945 & 6934 (4 Cr.) Spring 2018

**Instructor:** Dr. Robert McCleery  
**Office:** 314 Newins-Ziegler Hall  
**Office Hours:** Wednesday, 8:00-9:00 am, Friday 10:00-11:00 am and by appointment  
**Phone:** 352-846-0566  
**Course Website:** UF Canvas  
**Lecture:** lectures will be placed on Canvas and should be viewed prior to the discussion group  
**Discussion Groups:** Thursday 4-5, (10:40 -12:35), **Newins-Zeigler Hall 222**  
**Lab:** Friday, Periods 7-11 (1:55-7:05), **Newins-Zeigler Hall 219**

## Communication with instructor

When you have questions, need further instruction or have a problem I would strongly encourage you to come to my office hours, talk with me after class, or set up an appointment. The best way for you to arrange an appointment is via e-mail (ramccleery@ufl.edu). **Please do not email me through Canvas.**

**Graduate Teaching Assistants:** These are Wildlife Ecology & Conservation graduate students who have been assigned to the course as part of their graduate program requirements. They are available both during and outside of class meetings to help administer the course (e.g., lecture, labs, discussion, assignment development, and grading) and help you in any way. Please use them as much as needed, but recognize that I am always available to assist you. In addition to the office hours listed below, they are happy to setup special appointments to meet with you.

<b>Teaching Assistants</b>	<b>Email</b>	<b>Office</b>	<b>Office Hours</b>
Catherine Frock	cffrock@ufl.edu	Newins-Zeigler B3	W 9:30 – 11:30
Alex Potash	apotash@ufl.edu	Newins-Zeigler B3	Th 8:30 –10:30

**Course Description:** In this course, we will examine the techniques used by managers and researchers when working with wildlife. We will evaluate the theories and the strengths and weakness behind the use of wildlife techniques. We will apply these techniques during class labs and field trips. Some of the major topics covered in the course include: study design, radio telemetry, passive monitoring techniques, animal capture and handling, population estimation, and quantifying vegetation and habitat usage.

**Course Goal:** The goal of this class is to provide students with a strong practical background in wildlife management and research techniques and to prepare them to become wildlife professionals. To accomplish this goal we will use a combination of lectures, reading, discussions, labs and field trips. There will be a strong emphasis on hands on learning opportunities through labs and field trips.

# Wildlife Techniques/WIS 4945 & 6934 (4 Cr.) Spring 2018

## Course Objectives:

Specific objectives are for students to:

- 1) be able to use maps, compasses, pacing, and GPS for orienteering and navigation
- 2) have the ability to design a study for sampling wildlife and vegetation
- 3) know and use passive monitoring techniques in wildlife ecology
- 4) know how to capture, handle and mark birds, mammals and herpetofauna
- 5) determine the best method for estimating the size of a population
- 6) understand the theory and methodologies for wildlife radio-telemetry
- 7) know how to quantify vegetation used by wildlife

**Prerequisite:** Course: Wildlife of Florida (WIS 3402) or Graduate Student Status

**Textbook:** Silvy, N. J. (Ed.). 2012. The Wildlife Techniques Manual. 7th edition. The Johns Hopkins Press, Baltimore, Maryland. USA. ISBN # 13: 9781-4214-0159-1

**Course Lectures & Reading:** Course lectures and reading will be available online or through the course website (see below). Lectures, readings and assigned text chapters, must be reviewed prior to the week discussion group.

**Course Materials:** The course syllabus and lecture will be available on the course website. Lectures are in .mp4 format and can be viewed best with the latest version of QuickTime (available free of charge at <http://www.apple.com/quicktime/download/>). Written materials require Adobe Acrobat Reader (free at <http://www.adobe.com/products/acrobat/readstep2.html>), MS Word, and/or MS PowerPoint to access and print.

**Discussion groups:** Weekly discussions will give students a chance to evaluate, critique, and apply the materials presented in lectures and readings. Students are expected to have viewed lectures and read all the course reading and relevant chapter(s) prior to each week's discussion. Most weeks (see schedule) students will be asked to submit answers to questions from the readings and lecture *prior to* class on the course website. Students should be prepared to talk and interact with their classmates during discussion groups and will be graded on their ability to do so.

**Labs:** A substantial amount of time has been allotted to conducting laboratory activities. Most weekly labs include local field trips and outdoor activities (see schedule). Therefore, students should plan accordingly and wear proper field clothes to each lab (i.e. no shorts, tennis shoes, etc.). You should also be prepared to go the field in inclement weather including, but not limited to, excessive heat or cold, rain, or wind.

# Wildlife Techniques/WIS 4945 & 6934 (4 Cr.) Spring 2018

**Field Trips and Weekend Activities:** Each student is required to attend the weekend field trip at the Ordway-Swisher Preserve. This field trip will be offered on the weekend of **March 16th**. The trip will start on Friday afternoon and end Sunday afternoon. For those students who are interested there is an opportunity to camp at the preserve. For students who chose to commute there will be class activities from 6:00 am to midnight each day. This field trip will allow us to perform those techniques and methodologies that are more time intensive or can only be conducted at night or in the early morning. For students that are unable to attend there will be alternate assignments to the journal.

<b>Grading 4945:</b> Exam 1 (150 pts), Exam 2 (150 pts), & Lab practical (100 pts)	400 pts
Discussion questions (10 @ 20 pts each)	200 pts
Lab assignments (7 @ 20 pts each)	140 pts
Field Journal	40 pts
Participation	50 pts
<u>Techniques Poster</u>	<u>170 pts</u>
<b>Total</b>	<b>1000 pts</b>

**Grades:** A (900 pts), B (800-899 pts), C (700-799 pts), D (600-699 pts), & E ( $\leq 599$  pts).

<b>Grading 6934:</b> Exam 1 (150 pts), Exam 2 (150 pts), & Lab practical (100 pts)	400 pts
Discussion questions (11 @ 20 pts each)	200 pts
Lab assignments (7 @ 20 pts each)	140 pts
Teaching a field technique	50 pts
Field Journal	40 pts
<u>Techniques presentation assignments</u>	<u>170 pts</u>
<b>Total</b>	<b>1000 pts</b>

**Grades:** A ( $\geq 900$  pts), B (800-899 pts), C (700-799 pts), D (600-699 pts), & E ( $\leq 599$  pts).

**Grading Policy:** If there is a summation error for points on any exam, quiz, or assignment, see me immediately so I can correct your total score/points. If you believe that an exam or lab question, exam or lab overall, or other assignment was improperly graded, please bring it to me for reevaluation **within 1 week** of the time that the grade was returned or posted. In such cases, the entire exam, quiz, or assignment will be reevaluated, and a new grade assigned for the entire exam, quiz, or assignment. Please regularly check the grades for exams, quizzes, and other assignments on the course website, and notify me immediately if a grade is incorrectly recorded.

Information on the UF grading policy for assigning grade points can be found at:

<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

# Wildlife Techniques/WIS 4945 & 6934 (4 Cr.) Spring 2018

**Exams and Practical:** There will be 2 written exams and a lab practical. The written exams will focus on the information presented in reading, lectures, and discussions; however, you are **responsible for all material covered in assigned text chapters, readings** (including the internet), and labs. Exams will consist of a combination of short answer, graphics/models (e.g., diagrams) and essay questions that will allow you to demonstrate your knowledge and ability to synthesize, integrate, and apply knowledge and skills. The second exam will emphasize (>50%) material covered since the previous exam, but will be comprehensive. The lab practical will be used to evaluate your ability and knowledge of the techniques covered in laboratory assignments. If you do not complete an exam during the assigned period, you will receive a grade of zero (0) for that exam. Make-up exams will only be given if you have an approved absence (i.e., arranged before the absence and you have a note from a medical doctor or an appropriate University official). Exams are closed book. No books, notes, papers, computers or other electronic devices (headphones, earpieces, and other listening devices) are allowed and maybe in sight during an exam. Students must work alone.

**Discussion questions:** Each week prior to the meeting for discussion group sections students will be given a series of questions on the course website that are based on the week's readings, lectures, and discussion topics. Students will submit their answers to these question online prior the discussion group. **Any submission after class begins will receive a zero (0).**

**Labs and Lab assignments:** Prior to each week's lab meeting students are required to download lab materials and assignments from the course website to bring with them to lab. Lab assignments will specify if they should be turned in at the end of lab or the following week. Late labs will have 5 point deducted and an additional 5 for every 24 hours the assignment is late. All lab assignments should be written in Journal of wildlife Management format and style unless otherwise specified. Labs assignments must be done individually, even if lab activities were conducted in groups. Each assignment will be worth 20 points each, **students who do not attend lab and do not have an approved absence (i.e., arranged before the absence and you have a note from a medical doctor or an appropriate University official) will automatically receive a zero (0) on lab assignments.**

**Field Notebook:** For your time at the Ordway you will have 2 equally important types of entries into you notebook. The first types of entries will detail your experiences and organized lab exercises. The second type of entry will detail all of the observation, interpretation and reflections that you have outside of organized activities. This is a 40 point assignment. You can receive up to 20 points for lab assignment entrees and 20 points for informal observation. Each section will be graded for 3 categories: content (10 points), interpretation (5 points), and clarity (5 points). A detailed description of this assignment is posted on the course website.

## **Participation and attendance:**

Attendance and participation in discussion groups, labs, and field trips is imperative for successful completion of the course. Because of this, participation and attendance are a vital part of your grade for WIS 4945 (50 pts). Participation points will be given for answering questions, expressing opinions, asking questions and otherwise physically and verbally engaging in

## Wildlife Techniques/WIS 4945 & 6934 (4 Cr.) Spring 2018

discussions and labs. Attendance will be taken for labs, field trips and discussion groups. It is not possible to participate in class if you are absent. If you miss our weekend field trip you will receive loss 25 participation points. Additionally, if you are in 4945c and you miss 3 of any combination of discussions groups, labs, or field trips you will receive 50% of the participation points you have accrued. If you miss 4 or more discussions groups, labs, or field trips combined you will receive no participation points. *If you are in 6934* and you miss 4 of any combination of discussions groups, labs, or field trips your will receive grade will be reduce by a full letter grade.

**Teaching a field technique:** *As a graduate* student you are expected to have, or to quickly develop a set of skills to help you in the field. One of the best ways to perfect and refine your skill set is to teach it to others. For this assignment you will work with the instructor to identify an area of expertise that you can present to the class during one of the class labs or during a field trip. This presentation can be a show and tell or it can actively engage the students in an exercise. You will be graded on the content of your presentation (20 pts), your ability to engage the class and answer questions (20 pts) and the supplemental material you use presentation (i.e. handouts, power points, etc.; 10 pts). Schedule a meeting with the instructor within the first 3 weeks of class, so you can do develop your presentation.

### **Technology issues:**

It is your responsibility to have the latest software on your computer and to troubleshoot any problems you have accessing and using the course websites. If you are having any technology related issue contact UF tech support at 352-392-4357. I do not allow laptop computers in discussion group and at no time is it acceptable to send text messages or to use internet accessible devices in the class room. If you do text or use an electronic device without permission you will be asked to leave the classroom.

Many of our class assignments will be submitted via Canvas. Saying that you submitted a project to the website but it did not get posted is not an acceptable accused for a late assignment. It is your responsibility to make sure that you check Canvas and insure that your assignment was posted. Whenever you turn in an assignment to Canvas you should receive an email verifying that you have turned in your assignment. Additionally, I would recommend you take a screen shot of the verification page after the assignment has been submitted. In this way, if there is any question about your assignment you will have 2 forms of proof that your assignment was submitted in a timely manner.

### **Behavior in class:**

Students are required to be professional in all facets of this course. Disruptive or rude behavior will not be tolerated. Instructors and TAs reserve the right to remove anyone from the classes, labs, discussions, or field trips if they do not conduct themselves in a professional manner. If you are removed from an activity you will not receive any credit associated with it. We consider texting, talking while others are speaking, surfing the web on handheld devices, mocking other students, and inappropriate comments all grounds for dismissal from class.

# Wildlife Techniques/WIS 4945 & 6934 (4 Cr.) Spring 2018

## Techniques posters:

Due to the amount of material covered in the course it will only be possible to touch on many subjects that interest you. For the project your group will have to come up with a question or a problem pertinent to how we conduct wildlife research. Some examples are as follows: 1) what is the best way to catch feral hogs in a live trap? 2) How can you radio-tag a sea turtle and get movement data? 3) What is the best way to estimate gopher tortoise populations? 4) What is the most humane way to reduce feral cat populations? 5) How can I catch and tag deer without chemical sedation? Groups will consist of 2 people; however, if you want to do the project by yourself you can, but you will not receive any additional credit. This assignment will be accomplished in 4 steps that are detailed on the course website and it is worth 170 pts. Group members will share the grade. There will be no individual grading for the group.

- 1) One page (max) detailing the question/ problem, listing all group members (Feb 23, 30 pts)
- 2) Provide an outline with at least 5 peer-reviewed references (March 30, 40 pts)
- 3) (Optional) Send a draft of your poster to Dr. McCleery (any time before April 11)
- 4) Present poster to class (April 20, 100 pts)

**Plagiarism:** As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writing etc., which belong to another. In accordance with this definition: **THE STUDENT IS COMMITTING PLAGARISM IF HE OR SHE COPIES THE WORK OF ANOTHER PERSON AND TURNS IT IN AS HIS OR HER OWN, EVEN IF PERMISSION BY THAT PERSON HAS BEEN GRANTED.** Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. Plagiarism will not be tolerated in this course. Offenders of this policy will be punished according to University policies. In addition, there will be no cheating of any type tolerated in this course.

**Academic Honesty:** You are expected to become familiar with and follow current University Policy (see <http://www.dso.ufl.edu/scctr/>).

**Counseling:** If you are having class-related problems, please regularly meet with me, or the TAs during office hours or make special appointments. Additionally, there are resources on campus if you are having various personal, career, or academic problems: <http://www.counsel.ufl.edu/> & <http://www.hsc.ufl.edu/shcc/>.

**Students with Disabilities:** Every possible accommodation will be made to allow students with disabilities to successfully complete the course (see <http://www.dso.ufl.edu/drc/>). Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this to me when requesting accommodation.

**Sexual Harassment:** It is the policy of The University of Florida to provide an educational and working environment for its students, faculty, and staff that is free from sex discrimination and sexual harassment. In accordance with federal and state law, the University prohibits discrimination on the basis of sex, including sexual harassment. Sex discrimination and sexual harassment will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. The University encourages students, faculty, staff, and visitors to promptly

## **Wildlife Techniques/WIS 4945 & 6934 (4 Cr.) Spring 2018**

report sex discrimination and sexual harassment. If you believe you have been subjected to sex discrimination or sexual harassment please report the incident to me or any University official, administrator, or supervisor. **The Office of Human Resource Services investigates all complaints.** Incidents should be reported as soon as possible after the time of their occurrence ([larry-ellis@ufl.edu](mailto:larry-ellis@ufl.edu)).

## Wildlife Techniques/ WIS 4945c (4 Credits) Spring 2016

Week	Lecture	Readings	Ch.	Discussion	Discuss. Assign.	Lab	Place	Assign
8-Jan	Introduction/ scientific writing	1) Jack Thomas 2) Scientific writing 3) Plagiarism		Syllabus/ Course expectations	pretest-website	compass, map, pacing, GPS	Lab	Assign. 1
15-Jan	Research and Design		1	Study design	quest 1	Excel / stats	lab	Assign. 2
22-Jan	Design/ Analysis	Getting the basics right	2(- p55)	Design, analysis	quest 2	camera/ sent station	NATL	
29-Jan	passive techniques I camera/ scent/ dogs		5,12	Technology in wildlife	quest 3	occupancy/ Acoustics	NATL	Assign.3
5-Feb	passive techniques II acoustic/radar Occupancy/dogs	1) Acoustic 2) Occupancy		Technology & Occupancy	quest 4	Acoustic data Identification/Dog	Lab	Assign.4
12-Feb	Capture and handling		3	Capture	quest 5	Capture lab	B.way	
19-Feb	Marking and animal care		9	Marking	quest 6	Distance lab	Lab	Assign. 5
26-Feb	Population 1		11(p306)	populations	quest 7	<b>Exam 1</b>		
5-Mar	<b>Spring Break</b>							
12-Mar	Population estimation 2	Cat Densities	from306	Picking the best method	quest 8	<b>Ordway</b>	B.way	notebook
19-Mar	Gender and ageing/			Aging/gender		Problem solving ATV, boat, vehicle	Lab	
26-Mar	Radio telemetry		10	Telemetry	quest 9	Telemetry	B.way	Assign. 6
2-April	Veg. assess/habitat use		16, 17	Vegetation sampling	quest 10	Veg/survey	NATL	Assign. 7
9-Apr	Presenting Posters			Making effective posters		Lab Review		
16-Apr				<b>Lab Exam -</b>		<b>Poster Presentation</b>	Lab	

SECOND EXAM 12:30 to 2:30 on April 27th NZ 219