

Wildlife Techniques

WIS 4945 (3 Credits) Fall 2025

Class Times:

Wednesday: Period 8-10 3:00 PM – 6:00 PM Rinker 210 / NATL Pavillion

Instructor:

Dr. Matt Hallett

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Office: 2322 Mowry Road, IFAS Building 116,
<https://campusmap.ufl.edu/#/index/0116>

Office Hours: Tuesday 10am – 12pm (via Zoom), Thursday 10am – 12 pm (via Zoom), or in person / via Zoom by appointment

Website: www.rupununiwildlife.org

Research Gate: <https://www.researchgate.net/profile/Matthew-Hallett/research>

Teaching Assistant

Jana Malene

WEC Master's Student, UF D.E.E.R. (Lashley) Lab

Email: janamalene@ufl.edu

Office: Newins-Ziegler Hall Room 311

Office Hours: Monday 2pm-4pm or by appointment.

Field of Study/Research: Nesting ecology, predator-prey dynamics, spatiotemporal distribution, conservation biology, human-wildlife coexistence.

Course Info:

Course Website: UF Canvas

Lecture: Online lectures are available on Canvas. Each week's lectures must be viewed prior to the discussion period.

Discussion: Wednesday Periods 8-10 (3:00-6:00 PM), in person at Rinker Hall 210 or the Natural Areas Teaching Lab (NATL) Pavillion, unless otherwise instructed.

Communication with instructors: When you have questions, need further instruction, or have a problem, we encourage you to come to our office hours, talk with us after class, or set up an

appointment. The best way for you to arrange an appointment is via e-mail.

Graduate Teaching Assistant: The TA is a WEC graduate student assigned to this course. They are available both during and outside of class meetings to help administer the course (e.g., lecture, discussion, assignment development, and grading) and help you in any way. In addition to the office hours listed below, they are happy to set up special appointments to meet with you.

Teaching Assistant	Email	Office	Office Hours
Jana Malene	janamalene@ufl.edu	Newins Ziegler Hall	By request

Course Prerequisite: Wildlife of Florida (WIS 3402)

Course Description:

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

Course Goals & Objectives:

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. We will use a combination of lectures, readings, discussions, and presentations to accomplish this goal. There will be a strong emphasis on critical thinking and the applications of knowledge to novel situations.

By the end of this course, students will be able to:

- 1) Design a study for sampling wildlife and vegetation;
- 2) Summarize how to use passive monitoring techniques in wildlife ecology;
- 3) Explain the different methods of capturing and marking birds, mammals, fish, and herpetofauna;
- 4) Determine the sex and age of common wildlife species;
- 5) Evaluate the best method for estimating the size of a population;
- 6) Explain the theory and methodologies for tracking wildlife movement and other wildlife behaviors;
- 7) Describe how to quantify vegetation and habitat use by wildlife.

Required Text

None.

Recommended text:

Silvy, N. J., editor. 2020. The Wildlife Techniques Manual. 8th edition. The Johns Hopkins Press, Baltimore, Maryland. USA. ISBN # 13: 9781-4214-0159-1.

This book (2 volume set, we'll be using Volume 1 – Research) can be obtained through any major online bookseller (Amazon.com, etc.). I will make the readings from this book available on the course site.

Note: If you are a member of The Wildlife Society (TWS), you can receive 30% off the textbook if you buy it through their website. For more information, see <https://wildlife.org/bookstore/>. Also note that a 1-year student membership to TWS is \$46, and 30% off the book price is \$52. So, if you join TWS you save \$6 on the book and get access to all other resources that TWS has to offer.

Course Lectures & Reading: We use a “flipped” classroom for this course, where lectures and readings are on the course canvas website. Lectures, readings, and assigned text chapters must be reviewed prior to the weekly discussion group.

Course Materials: The course syllabus and lectures will be available on the Canvas course website. Lectures are in .mp4 format and 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: We meet weekly in a discussion period. These discussions 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 readings and relevant chapter(s) prior to each week's discussion. Most weeks (see schedule) students will be asked to submit answers on the course website to questions from the readings and lecture prior to the discussion session. Students should be prepared to talk and interact with their classmates during this session and will be graded on their ability to do so.

Grading:	Exam 1 (50 pts) & Final (75 pts)	125 pts
	Discussion questions (13 @ 20 pts each)	260 pts
	Class Snapshot USA Project	40 pts
	Participation	50 pts
	<u>Techniques project presentation</u>	<u>125 pts</u>
	Total	600 pts

Grades: A (≥540 pts), B (539-480 pts), C (479-420 pts), D (419-360 pts), & E (≤359 pts).

Grading and Make-up Policy: If there is a summation error for points on any assignment, contact us so we can correct your total score/points. In such cases, the entire assignment will be reevaluated, and a new grade assigned for the entire assignment. Please regularly check the

grades for attendance & participation and assignments on the course website, and notify us immediately if a grade is incorrectly recorded. Requirements for class attendance & participation and make-up assignments are described below with each section, and are consistent with university policies at <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>. For info on UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Exams (Timed assessments): There will be two written (timed) exams through the Canvas platform. 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 and other readings (including the internet). 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 and third exams will emphasize material covered since the previous exam, but by the very nature of the course, will be comprehensive. Each exam will be opened for a 72-hour block. Students are allowed to use any materials (be smart here, it is not appropriate and is also against the UF honor code to use answers or social network platforms that your classmates or other students have put together) to help them answer questions on the assignments, but the exams will be timed (45 min – 1:20 hour) to ensure that students have absorbed and retained the information for the course. An effective strategy would be to thoroughly review course materials (i.e., studying) prior to starting the timed exam. Otherwise, you'll likely run out of time if you try to look up all of your responses during the timed period. 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). As always, accommodations will be made for those that need them (please see section below "Services for Students with Disabilities").

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 questions online **prior** to the discussion group. Any submission after class begins will receive a zero (0).

Class Snapshot USA Project: We will be conducting a camera trap survey of UF campus Conservation Areas ([calmh-2-con_areas_map.jpg \(2550×1650\)](#)) as a class and sharing the data with Snapshot USA's annual nation-wide camera trap survey (<https://www.snapshot-usa.org/>). Pairs of students will be responsible for monitoring, checking, and processing data from a single camera set on campus. Each pair will receive the same grade based on whether their camera was checked, data uploaded and processed to the Snapshot USA 2025 project on Wildlife Insights (<https://www.wildlifeinsights.org/>).

Techniques project assignment:

Due to the amount of material we cover in the course, we will only touch on a variety of topics that may interest you. For this assignment, you or your group will come up with a question or a problem pertinent to how we conduct wildlife research or management. Some examples are as follows: 1) what is the most effective way to catch feral hog? 2) How can you get movement data from marine animals? 3) What is the best way to estimate gopher tortoise populations?

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 several steps that are detailed on the course website and is worth 150 pts. Group members will share the grade.

- 1) Identify if you are working in a group or alone (Weds 20 Sep, no points)
- 2) Summary-One page (max) detailing question, listing all group members (Weds 10 Oct, 10 pts)
- 3) Provide an outline with at least 5 peer-reviewed references (Weds 8 Nov, 15 pts)
- 4) Poster Draft (Weds 19 Nov, 20 pts)
- 5) Presentation session - present to class/judges (Weds 3 Dec, 80 pts)

Participation and attendance: Attendance and participation in discussions are imperative for successful completion of the course. Therefore, participation and attendance are a vital part of your grade (50 points). Participation points will be given for asking/answering questions, expressing opinions, and otherwise physically and verbally engaging in discussions. We will also give participation points based on your engagement with your classmates' project presentations. We will record attendance during discussion sessions. If you miss 3 or more discussion periods you will receive no participation points for the entire course. Also, be on time. If you are late more than 2 times, 5 points off each time!

Privacy and the online format: At some times, our class sessions may be audio-visually recorded. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To

“publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Plagiarism: As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writing etc., which belong to another. As per UF Honor Code (see Academic Honesty below): A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

1. Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.
 - a. Note that quoting material is reserved for very specific occasions when the way something was originally written is essential to its meaning. In all other cases, quoting, even if a citation is provided, is inappropriate. This applies to the textbook, and concepts/definitions from the textbook should never be copied word-for-word.
2. Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student – even If permission from the original author was granted
3. Copying answers word for word directly from textbook or the internet, or other resources including other classmates.

Canvas has some handy applications for faculty to determine whether plagiarism or cheating has occurred. 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. Cheating of any type will also not be tolerated in this course.

Software Use: All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Technology issues: Technology issues happen, and it is your responsibility to have the latest software (especially Zoom) on your computer and to troubleshoot any problems you have accessing and using the course website. If you are having any technology-related issues, contact UF tech support at 352-392-4357. We might be able to troubleshoot during class, but your instructors and TA may be limited as to what they can do. Please be respectful and don’t send text messages, use your phone, or use your computer for things unrelated to class.

Our entire class revolves around Canvas, and class assignments must be submitted to that platform. As you know by now, technology isn't always our friend, so saying that you submitted a project to the website, but it did not get posted, is not an acceptable excuse for a late assignment. Check, double check, and check again that your assignment was posted. 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.

Class Demeanor: Please be professional in all facets of this course. Disruptive or rude behavior will not be tolerated. Please be respectful and mute your phones, and don't talk on phones or to other students in the class when it is not part of a class-related discussion. The instructor reserves the right to remove anyone from the class if they do not conduct themselves in a professional manner. If you are removed from the class, 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.

Services for Students with Disabilities: Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services, and mediating faculty-student disability related issues. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Academic Honesty: You are expected to become familiar with and follow current University Policy (see <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>). Just for fun, another reminder there will be no cheating of any type tolerated in this course.

Course evaluation: As a student, you are expected to provide feedback on the quality of instruction in all the courses you take, including this one. We, as instructors, can't improve our teaching or know what we did right unless you tell us. These evaluations are conducted online via GatorEvals. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluer.com/ufl/. Summaries of course evaluation results are available to students here: <https://gatorevals.ua.ufl.edu/public-results/>.

Campus Helping Resources: We are all currently facing difficult times, and we all handle things differently. If you (or a friend) are experiencing crises or personal problems that interfere with your general well-being, *please* look into UF counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. Below we've added links that can help with a variety of topics.

Health and Wellness

U Matter, We Care (<http://www.umatter.ufl.edu/>): If you or a friend is in distress, please contact umatter@ufl.edu or 352-392-1575 so that a team member can reach out to the student.

University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575,

<https://counseling.ufl.edu/>

Counseling Services

Groups and Workshops

Outreach and Consultation

Self-Help Library

Wellness Coaching

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit <https://shcc.ufl.edu/>

Sexual or Physical Assault Services: <https://umatter.ufl.edu/concern/assault/>;

<https://police.ufl.edu/services/victim-services/services-provided/>

University Police Department: 352-392-1111 or 9-1-1 for emergencies. <http://www.police.ufl.edu/>.

COVID Resources:

You are encouraged to wear approved face coverings at all times within buildings on the UF campus. Following these policies and requirements are all of our responsibility. Failure to do so will lead to a report to the Office of Student Conduct and Conflict Resolution.

If you are experiencing COVID-19 symptoms ([Click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms](#).

Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. [Find more information in the university attendance policies](#).

Academic Resources

E-learning technical support: 352-392-4357 or e-mail to helpdesk@ufl.edu;

<https://elearning.ufl.edu/student-help-faqs/>; <https://helpdesk.ufl.edu/>

Career Connections Center: First Floor JWRU, 352-392-1601. Career assistance and counseling.

<http://www.career.ufl.edu/>

Student Success Initiative, <http://studentsuccess.ufl.edu>

Center for Undergrad Research. <https://cur.aa.ufl.edu/>

Library Support: <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>.

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>.

Student complaints on campus: <https://sccr.dso.ufl.edu/>

Online student complaints: <https://distance.ufl.edu/getting-help/student-complaint-process/>

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 report sex discrimination and sexual harassment. Any employee, co-worker, or student who has knowledge of sexual harassment is strongly encouraged to report it promptly:

<https://hr.ufl.edu/forms-policies/policies-managers/sexual-harassment/>

Tentative Schedule for Wildlife Techniques/WIS 4945 Fall 2024

Week	Week of	Topic	Online Lectures	Discussion	Assigned Reading	Assignment
Wk 1	Aug 25-29	Introduction to the course	Introduction, Snapshot USA, Wildlife Insights	27 Aug	n/a	Quiz (getting to know you)
Wk 2	Sep 1-5	Human Dimensions, Extension, & Outreach	Human Dimensions, Communications & Outreach, In practice	3 Sep	Silvy Ch 28 & 29	Discussion questions 1
Wk 3	Sep 8-12	Research and Design	Study design 1, Study design 2, Study design 3, In practice	10 Sep	<i>Anderson 2001. The need to get basics right.</i> Silvy, Ch 1	Discussion questions 2
WK 4	Sep 15-19	Collecting, managing, and interpreting data	Data management, Displaying data, Data interpretation 1, Data interpretation 2, In practice	17 Sep	Silvy, Ch 2	Discussion questions 3, Project group members
Wk 4	Sep 22-26	Passive Techniques I	Introduction, Sign, Dogs, Genetics, In practice	24 Sep	Silvy, Ch 5 & 9	Discussion questions 4
Wk 5	Sep 29-Oct 3	Passive Techniques II	Cameras, Bioacoustics, UAV, In practice	1 Oct	Silvy Ch 15, 17, & 25	Discussion questions 5
Wk 6	Oct 6-10	Capturing & Handling Wildlife	Overview, Mammals, Birds, Herps, In practice	8 Oct	Silvy Ch 3	Discussion questions 6, Project summary
Wk 7	Oct 13-17	Marking & Collaring	Marking I, Marking II, Marking III, In practice	15 Oct	Silvy, Ch 8	Discussion questions 7
Wk 8	Oct 20-24	Sex & Age Determination & Exam Prep	Overview, Aging, Sexing, In practice	22 Oct	Ch 8	Midterm Exam
Wk 9	Oct 27-31	Fisheries Methods	Fisheries Overview, Passive/Active Gear, In practice	29 Oct	Silvy Ch 10	Discussion questions 8,

Wk 10	Nov 3-7	Tracking Wildlife: Radio Telemetry & GPS	Telemetry I, Telemetry II, Telemetry III, Telemetry IV, In practice	5 Nov	Silvy, Ch 11, Kays et al. 2015, Beyond GPS (online)	Discussion questions 9, Project Outline
Wk 10	Nov 10-14	Wildlife Behavior	Behavior I, Behavior II, Behavior III, In practice	12 Nov	Silvy Ch 23	Discussion questions 10
Wk 12	Nov 17-24	Assessing Vegetation/Habitat Selection	Habitat Selection, Veg Assessment I, Veg Assessment II, In practice	19 Nov	Silvy, Ch 19, McDonald et al. 2012 (pages 416 - 419)	Discussion questions 11, Poster Draft
Wk 14	Nov 24-28	NO CLASS	THANKSGIVING BREAK	n/a	Extra credit: Silvy Ch 12, USGS occupancy models Schmidt et al. 2007	n/a
Wk 15	Dec 1-3	Wildlife Data to Management	Final Exam Prep, Project Showcase	3 Dec	Silvy Ch 26 & 31	Final project, Project Showcase
Final Exam – Online, available the week of Final Exams						