

BSC 337 Field Methods

I. <u>General Information</u> Course syllabus: Summer I 2023 Credits: 4 sch Instructor of record: Johanna Delgado Acevedo, Ph.D. Office: Science Building (STC) 262 Office hours: online Phone: 903.468.3333 Fax: 903.886.5997 Email: johanna.delgado-acevedo@tamuc.edu

Book: Braun, C.E., editor. 2005. Techniques for wildlife investigations and management. Sixth edition. The Wildlife Society, Bethesda, Maryland, USA. (<u>Not</u> required)

II. <u>Course Description</u>

This course provides students with practical training in the methods used to collect quantitative data on plant and animal populations, animal movements and home ranges, habitat associations, and animal behavior. Field exercises are integrated with lecture material emphasizing study design, statistics, and data interpretation.

III. <u>Student Learning Objectives</u>

To understand techniques used in the field for the study of wildlife.
To understand and apply basic concepts from Wildlife Management and sampling techniques.
To collaborate and work on teams.
To develop a reading tradition.
To develop communication skills and clarity to present ideas and explain them in public.

- IV. <u>Learning strategies</u> Reading assignments Analysis of scientific literature Individual work, analysis of free reading Written synthesis of information
- V. <u>Assumptions, Expectations, Philosophy</u> University students are a select group of students soon to be professionals. Instructors can have high expectations of student performance. Demanding courses benefit students more than easy courses. Assignments are due on time unless you have made a prior arrangement with me (only granted for unusual or extenuating circumstances and in case of health issues proper medical excuse is required.



Reading and assimilating information is a critical part of your current and continuing education. This will help you become a better writer, a more rounded individual, and expose you to subjects outside of your immediate knowledge

VI. Tentative schedule

Date	Topic
WEEK 1	Design and Analytical Techniques
	Research and Experimental Design
	Analysis of data in Wildlife Biology
	Estimating the Numbers in Wildlife Populations
	Population Analysis in Wildlife Biology
WEEK 2	Wildlife Investigational Techniques
	Care and Use of Wildlife in Research
	Wildlife Heath and Disease Investigations
	Identify and Handling Contaminant-related
	mortality/Morbidity
	Capturing and Handling Wildlife Animals
	Chemical Immobilization
	Criteria for Gender and Age
	Wildlife marking Techniques
	Radiotelemetry
	Spatial Technologies
	Radar Techniques
	Measuring Availability and Vertebrate Use of Terrestrial
	Habitats and Food
	Habitat Evaluation
	Ecological Impact Assessments and Habitat Conservation
	Plans
	Vegetation Sampling and Measurement
	Wildlife Nutritional Ecology
	Reproduction and hormones
	Animal Behavior
	Conservation Genetics
WEEK 3	Wildlife Management techniques
	Harvest Management
	Ecology and managements of Small Populations
	Managing Urban Habitats and Wildlife
	Identification and Management of Wildlife Management
WEEK 4	Wildlife Habitat Management
	Assessment and Management of Wildland Recreational
	Disturbance
	Wetlands
	Farmlands and Rangelands
	Forestlands
WEEK 5	Overall review



VII. <u>Course Requirement and Evaluation Method</u> Assignments, quizzes, and research paper are required. I encourage student contribution to the overall progress of the group. I encourage interactive participation even though is an online class. It is necessary that students have a professional and ethical behavior through the entire course.

Homework, quizzes, exams, concept implementation project and term paper are required.

It is necessary that students have a professional and ethical behavior through the entire course.

Grade basis: 5 Short exams (500 points) 5 assignments (50 points) 1 research project (60) Laboratory (500) Total 1110 points

Penalty enforcement (I reserve the right to adjust your grade for violation of the minimum expectations).

Make-up quizzes will only be given if arrangements are made with the instructor before missing the scheduled quiz. A documented excuse will be required. Otherwise, missing quizzes will be counted as zeroes in the overall grade computation.

<u>Grading Scale</u>: 90.0 - 100% = A 80.0 - 89.9% = B 70.0 - 79.9% = C 60.0 - 69.9% = D <60.0% = F

Short exams (5) Short exams will cover material discussed each week. Each exam will be conducted Monday of the following week.

Assignments (5) Iournal articles

Reading and assimilating information is a critical part of your current and continuing education. For each assign date, a journal is named in the right column of the table, choose and read a paper from that journal that you find interesting or relevant. These journals are available in our library (online resources). On that date, provide me a citation and a short description of the paper (10 sentences). Each summary will follow the format of The Journal of

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Wildlife Management.

Date	Journal
WEEK 1	The Journal of Wildlife Management
WEEK 2	Wildlife Society Bulletin
WEEK 3	Wildlife Research (open source)
WEEK 4	European Journal of Wildlife Research
WEEK 5	The Wilson Bulletin

Research project and presentation:

You will develop a research project (literature review) on a specific technique or set of techniques to study Wildlife. You should include an introduction, methodologies used to study your topic, results, and discussion. The research project will have at least 2,500 words including references. The project will be due the last day of class. You will present your research project in a 5-minutes presentation and submit it in the assigned dropbox along with the written part.

VIII. <u>Course and University and Policies</u>

Responsible Use of Technology — It is expected that all students will only use cellphones, PDAs, laptop computers, MP3 players and other technology outside of class time or when appropriate in class. Answering a cell phone, texting, listening to music or using a laptop computer for matters unrelated to the course may be grounds for dismissal from class and/or other penalties. Students are not allowed to use image, video, nor audio recording devices of any kind during class time without prior consent of the instructor.

University Specific Procedures:

ADA Statement-Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services Texas A&M-Commerce

Gee Library Room 132 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 <u>StudentDisabilityServices@tamuc.edu</u>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related



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retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to ((http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rul esProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.