



BSc 337

Field Methods
in Wildlife
and Conservation Science

Dr. Jeff Kopachena

STC, Rm 258

(Phone 903 886-5395)

e-mail: Jeff.Kopachena@tamuc.edu

Office hours: MW 10:00 - 11:00, T 1:00 - 2:00

COURSE SYLLABUS

My Homepage Version of Syllabus with Complete Links Can Be Found at

<http://faculty.tamu-commerce.edu/jkopachena/bsc337.html>



Classes:

Note: This course emphasizes practical exercises. As such not all of the lecture sections will meet in a classroom, but will, instead be held at field study sites. Also please note that Thursday classes will frequently run continuously from 11:00 AM until 3:20 PM. For this reason you might need to bring a lunch or eat an early lunch.

Safety Contract:

All students must read and sign the attached field safety contract. [Field Safety Contract](#)

Lecture Sections: TR 11:00 - 12:15 Lab Sections: R 12:30 - 3:20

Textbooks:

None

Course Objectives:

- 1) To engage in some simple field techniques used in ecological and management studies to survey habitat and census plant and animal populations. This will provide an appreciation of the difficulty in obtaining precise and accurate data in field situations.
- 2) To develop a general understanding of the value of sample size and the need for statistics in field research.
- 3). To demonstrate some ecological principles using data collected in the field.

Student Learning Outcomes (SLO's)

Students will know how to capture and census plants and animals

Students will know the basic principles of field study design

Student will know how to



collect
appropriate
sample
sizes and
employ
appropriate
statistical
designs



Course Topics:

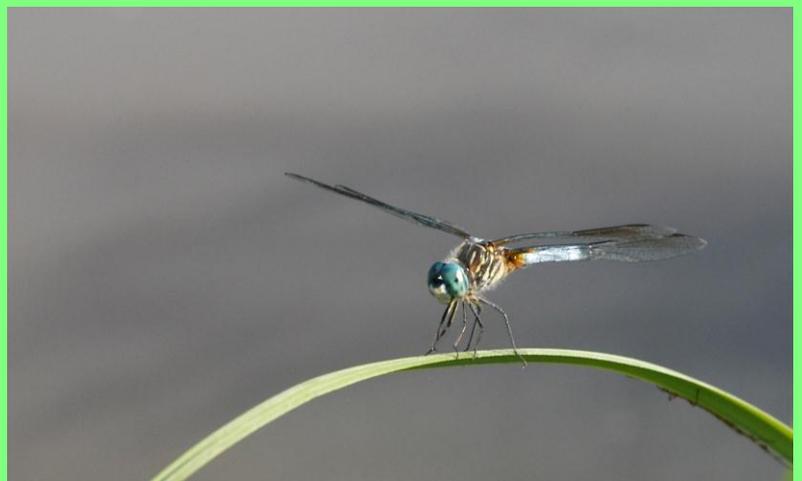
For a Class Schedule [Click Here](#)

The course will be organized into a series of lectures and a series of field exercises.

Lecture material will basically describe techniques, their underlying assumptions, advantages and disadvantages and basic statistical analysis.

Field exercises are as follows:

1. Mist netting and introduction to trapping
2. The point quarter technique for tree surveys.
3. Using nearest neighbor distances
4. Quadrat sampling to measure habitat
5. Multiple mark/recapture census technique
6. Line intercept technique
7. Drift fences and funnel traps for herp surveys
8. Using the removal method to census bait fish
9. Independent student research projects



Study Sites

All exercises will take place at one of the following study sites. Locations will be announced in class and we will meet for field activities at the designated study sites. Please download the attached maps to help find these study sites.

TAMU-C
Study
areas (line
map)

[Map](#)

TAMU-C
Study
areas
(photo
map)

[Map](#)

Agriculture
Pavillion
and Three-
acre Pond

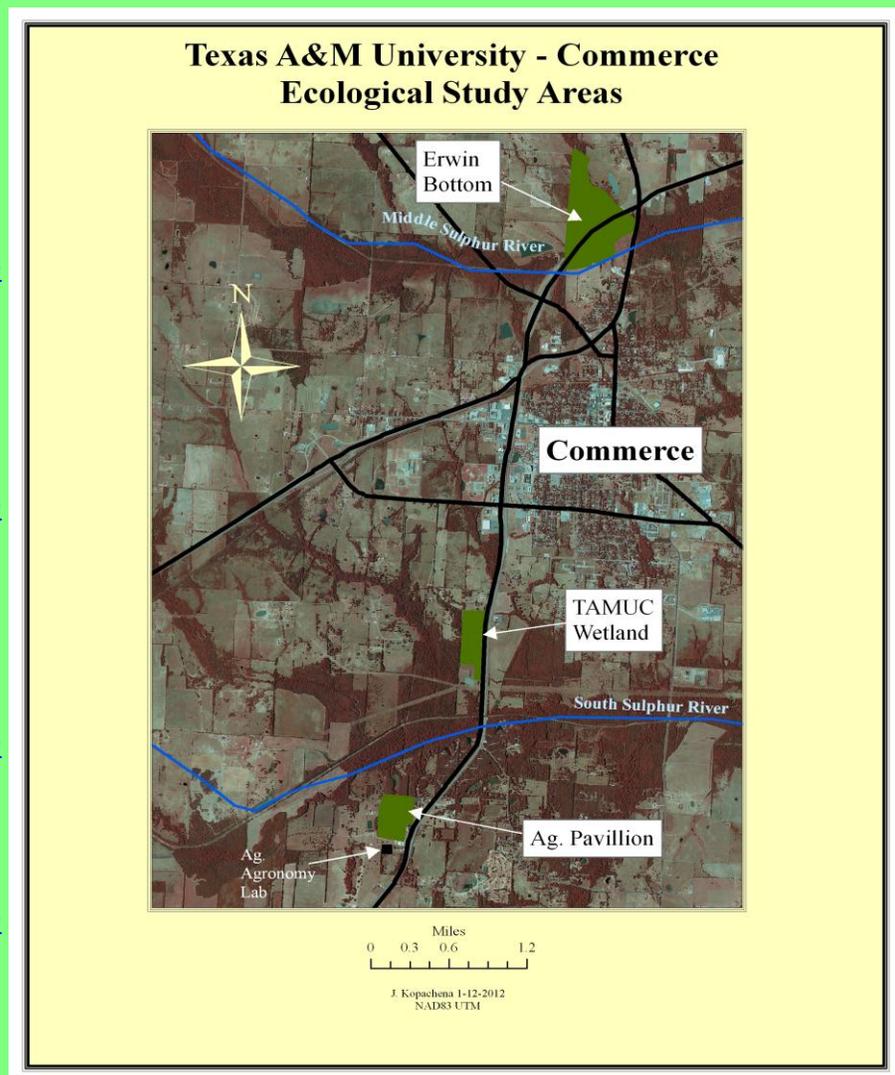
[Map](#)

Erwin
Bottom

[Map](#)

TAMU-C
Created
Wetland
and Prairie

[Map](#)





Grading Scheme

Participation and Attendance	20%
Point Quarter Nearest Neighbor	10%
Small mammal habitat (quadrats)	10%
Multiple mark/recapture	10%
Removal method	10%
Research Project	10%
Herp habitat (Line intercept)	10%
Final Exam	10%
Total	100%

Participation and attendance

Twenty percent (yes, that's two letter grades) of your class grade will be based on participation and attendance. Participation and attendance is more than just showing up. It involves helping set up exercises, collecting data, participation in planning sessions, participating in class discussions and helping your fellow students. Just having perfect attendance will only result in a score of only 15 of the 30 possible points. You must demonstrate



active involvement in class activities in order to receive full points. This also means being available at times other than scheduled class and lab periods in order to monitor trapping locations and participate in other activities.

The assignment of points will be the result of a combination of observations made by your instructors and the observations and input of your fellow classmates.

Reports

Sixty percent of your grade will come from written reports. These reports will be based on the activities that you conduct in the field.

Reports should be written in scientific format. They should start with a Title page, followed by: Abstract, Introduction, Methods, Results, Discussion, Figures and Tables. For instructions on how to write a report please visit the following link:

[REPORT LINK](#)

Please keep these reports simple, but



thorough (ie. be succinct).
The introduction should briefly introduce the purpose of the exercise and should only be about 1/2 page long.
The methods section should briefly describe all the important equipment, techniques, and measurements made. This section will be about 1 page long.
The results section should be about 1 page long (not including figures and tables), should briefly describe the data obtained, any major trends in the data, and should provide quantitative

summaries in the form of figures and tables. Please put all of your figures and tables on separate pages and append them to the back of your report. Number and label the figures and tables so that you can refer to them in the text of your report. The discussion should also be about a page long and should briefly describe the important findings and how they relate to the underlying ecology of the study site and/or study species.

Following this format each report should be 3 to 4 pages long

(not including figures and tables). The best reports will be those that are concise and well written. Long-winded descriptions and discussion should be avoided. Zero in on the pertinent details and avoid extraneous or redundant information.

Research Project

Ten percent of your grade will be based on a research project that you conduct by yourself or in a group.

The topic is open, but needs to be approved by your instructor. In considering your project pay attention to logistics and time constraints.

Research projects can be descriptive (easiest), comparative, or experimental (most difficult) and must involve statistical analysis. You cannot use data from any of the field exercises, it must be your own data. You are allowed to work in groups of up to four individuals.

In designing your research make full use of your instructors and local resources. The university farm has 1300 acres that you can use, the study sites mapped for this class encompass 260 acres. With permissions, you can also access area WMA's and preserves. Also, find a suitable subject on your own property or on campus.

The easiest projects involve habitat measurements. Some examples of projects you might do:



Final Exam

The final exam is worth 10% of your total grade. It will be based on all of the information presented during the course, including practical exercises. Questions will include those about statistical techniques, assumptions, sampling procedures, sampling bias, etc..



Obligatory Statements:

Plagiarism is a criminal activity. You must cite all sources of information. Copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles, will result in a score of zero for your assignment and can result in further disciplinary action.

Collusion: Is intentionally aiding or attempting to aid another in an act of scholastic dishonesty, including but not limited to, providing a paper or project to another student; providing an inappropriate level of assistance; communicating answers to a classmate during an examination; removing tests or answers from a test site, and allowing a classmate to copy answers.

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 fo their disabilities. If you have a disability requiring an accommodation, please contact:

**Texas A&M University-
Commerce
Gee Library, Room 132
Phone (903) 886-5150 or (903)
886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-
commerce.edu**

All student enrolled at the University shall follow the **tenets of common decency** and acceptable behavior conducive to a positive learning environment. See Student's Guide Handbook, Policies and Procedures, Conduct.

Students who are disruptive to class activities will be dropped from the class and may face further disciplinary action.

[Top](#)

[Courses](#)

[Home](#)

[TAMU-C Home](#)