RWM 4334
Big Game Ecology and Management

Instructor: Mr. Ruben Cantu
Email: ruben.cantu@angelo.edu
Phone: c 325 656-1817
Office: VIN 218

Office Hours: MW 9-11am, T 9-4pm, Anytime my office door is open

Course Information

Course Description
This course is designed to provide a study of the distribution and life histories of North American big game species with a focus on those major game species found in Texas, i.e., white-tailed deer, desert mule deer, pronghorn antelope, desert bighorn sheep, and javelina. Additional information as time permits, will be provided to students covering exotic game animals, life history, economic significance, genetics, human values and management (habitat management, harvest strategies, population survey and harvest data analysis) as well as major game bird species. This class will also include discussion of management strategies employed by the Deer Breeding industry and impacts on traditional wildlife management. Lab will consist of field work consistent with lectures as well as data analysis work and may at times utilize guest speakers with expertise in various subject matter.

Prerequisite and Co-requisite Courses
None, however, it is advisable but not necessary that students take RWM 4333 and RWM 4331 as prerequisites for this course.

Prerequisite Skills
None
Student Learning Outcomes

Upon completion of this course, students will be able to:

● 1. Understand Big Game ecology and management with emphasis on those habitats and species found in Texas.
● 2. Understand different variations in deer management as it pertains to the deer breeding industry and the public policy issues involved.
● 3. Develop a comprehensive wildlife management plan for a big game species whose habitat is in Texas.

Course Delivery

This is a face-to-face course with online components that students are expected to access in Blackboard.¹

Required Texts and Materials

None. There will be assigned required reading assignments throughout the course from the book *Ecology and Management of Large Mammals in North America* edited by Stephen Demarais and Paul R. Krausman as well as materials found in a number of single species management books and publications. This book is an indispensable reference book for any big game manager and it is recommended that any student wishing to pursue wildlife management as a career consider purchasing this book.

Technology Requirements

None

Communication

I will respond to email and/or telephone messages usually within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Exams, Four per semester</td>
<td>60%</td>
</tr>
<tr>
<td>Lab Exams, Two per semester</td>
<td>20%</td>
</tr>
<tr>
<td>Assignment</td>
<td>Percentage</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Reading Summaries, Five per semester</td>
<td>10%</td>
</tr>
<tr>
<td>Management Plan</td>
<td>10%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Grading System**

Course grades will depend on completing course requirements and meeting the student learning outcomes.

This course uses the following grading scale:

- **A** = 90.00-100 points
- **B** = 80.00-89.9 points
- **C** = 70.00-79.9 points
- **D** = 60.00-69.9 points
- **F** = 0-59.9 points

**Assignment and Activity Descriptions**

**Lecture:**
During the lecture component of this course, students will be provided background information on the life history and management practices currently in use for select Big Game species found in Texas and even more locally in the Concho Valley.

**Lab:**
The lab component of this course will focus more on hands-on work conducting habitat evaluation techniques, survey opportunities, survey data analysis, harvest recommendations, post season harvest data analysis, aging and scoring Big Game...all experience that is invaluable to graduating students that wish to pursue a career in wildlife management. Guest speakers/presenters on various subject matters may be a part of class and labs as available and the information provided can be used in tests/quizzes.

**Exams:**
Exams will/may cover all material up to the date of the exam, i.e., tests are cumulative. It is important that you study all material and develop good study habits rather than trying to cram new material for a test. Repetition of notes and materials is key to effective studying.

**Readings:**
There will be assigned required readings throughout the course. These readings address issues that are relative to our lectures. Students are expected to read these
prior to class and prepare a discussion summary (one page per reading) to be turned in at the beginning of class. In class, we will have group discussions to address specific questions posed by the instructor and followed by a class discussion. Appropriate readings for the topic material covered in lecture will be handed out to students during lecture and must be turned in (typed) on the assigned date as instructed by the Mr. Cantu. These will be graded on a point system of up to 20 points each. These are easy points to attain and almost the equivalent of one exam grade.

If you do not turn your discussion summary in on the assigned date, you will have one week to complete the assignment for no more than 70% credit.

The most efficient way for students to learn is through participation in class especially during discussion periods. There is something to be said about taking notes and you will have ample opportunity to do so and will be encouraged to do so.

Big Game Management Plan:
You be assigned a big game species and you will prepare a management plan for that species on a fictitious property with a scenario provided. You should cover all aspects of a management plan from baseline data, survey efforts, harvest rates, data collection, and livestock and rangeland improvements for the benefit of the species and ranch operation as a whole.

Attendance:
Each student will have the opportunity to have three unexcused absences in lecture or lab with no negative consequences. Official school trips or otherwise advising the instructor ahead of time that you will not be in attendance do not count toward your three absences. Coming to class and sleeping through class counts as an absence...stay awake. If you have three unexcused class periods, know that on your fourth unexcused absence you will lose five points from your final calculated grade and each absence thereafter will cost you one additional point off your final grade. For example, a total of six unexcused absences during the course of the semester will result in seven points off your final grade.

Expectations of you:
I expect your full attentiveness in this course, no sleeping in class, and to show up on time prepared to learn and take notes and to participate in discussions. I expect you to study the material each and every day…it is my experience that those students who study well do well in class and your grade generally reflects the effort put forth in studying.
Expectations of me: Expect me to cover lots of material but also expect me to slow down if asked…I have no problem doing so. I will listen to you and try to address any questions you may have and provide as much information as possible and make clear any aspect of lecture or lab that is not understood.

General Policies Related to This Course
All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Academic Integrity
Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities
ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford
Director of Student Disability Services
Incomplete Grade Policy
It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Plagiarism
Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.

Student Absence for Observance of Religious Holy Days
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Title IX at Angelo State University
Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault,
sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: Incident Reporting Form
Face to Face: Mayer Administration Building, Room 210
Phone: 325-942-2022
Email: michelle.miller@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State’s policy please visit the Title IX website.

**Information About COVID-19**
Please refer to ASU’s COVID-19 (Coronavirus) Updates web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

**Modifications to the Syllabus**
This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

**Course and Lab Schedule**

*Spring Semester 2022*
*RWM 4334 Big Game Ecology and Management*

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Subject</th>
</tr>
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<tbody>
<tr>
<td>1-19</td>
<td>Introduction, Syllabus, and Overview</td>
</tr>
<tr>
<td>1-24</td>
<td>Taxonomy, Conservation and Hybridization</td>
</tr>
<tr>
<td>1-26</td>
<td>Holiday</td>
</tr>
<tr>
<td>1-31</td>
<td>Values of large mammals to humans, Carrying Capacity,</td>
</tr>
</tbody>
</table>
Nutrition and Management
2-2 Population Regulation and Harvest Management Goals
2-7 History of Big Game Management
2-9 Exam #1
2-14 White-tailed Deer
2-16 White-tailed Deer
2-21 White-tailed Deer
2-23 White-tailed Deer
2-28 White-tailed Deer / Mule Deer
3-2 Desert Mule Deer
3-7 Desert Mule Deer
3-9 Exam #2
3-21 Pronghorn Antelope
3-23 Pronghorn Antelope
3-28 Desert Bighorn Sheep
3-30 Desert Bighorn Sheep
4-4 Javelina
4-6 Exam #3
4-11 Feral Hog
4-13 Predator Management for Big Game
4-18 Predator Management for Big Game
4-20 Deer Hunting Industry
4-25 Deer Breeding Industry
4-27 Exotics
5-2 Supplemental Feeding
5-4 Human Dimensions and Conflict Resolution
5-11 Final Exam #4 (10:30am - 12:30pm)

IMPORTANT: Lecture topic by date is subject to change at any time.

Spring Semester 2022
### RWM 4334 Big Game Ecology and Management
#### Laboratory Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expectations for the class, safety orientation and management plan</td>
</tr>
<tr>
<td>2</td>
<td>Identification of key plants used by big game species</td>
</tr>
<tr>
<td>3</td>
<td>Identification of key plants and browse surveys</td>
</tr>
<tr>
<td>4</td>
<td>Population Survey Interpretation and Harvest Strategies</td>
</tr>
<tr>
<td>5</td>
<td>Diseases in Big Game</td>
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<tr>
<td>6</td>
<td>Deer Health Check</td>
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<tr>
<td>7</td>
<td>Food Habits</td>
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<tr>
<td>8</td>
<td><strong>Lab Quiz #1</strong></td>
</tr>
<tr>
<td>9</td>
<td>Aging and Scoring Big Game Animals</td>
</tr>
<tr>
<td>10</td>
<td>Aging Big Game and Harvest Data Analysis</td>
</tr>
<tr>
<td>11</td>
<td>Harvest Data Analysis</td>
</tr>
<tr>
<td>12</td>
<td>Wildlife Habitat Management  Pronghorn restoration lunch webinar</td>
</tr>
<tr>
<td>13</td>
<td>Wildlife Habitat Management  Bighorn sheep restoration webinar</td>
</tr>
<tr>
<td>14</td>
<td>Predator management DVD and Role of Predator management with Tomacek and Bodenchuck you tube video, Episode 414 Predator Management you tube video</td>
</tr>
<tr>
<td>15</td>
<td><strong>Lab Quiz #2 Final (5/4)</strong></td>
</tr>
</tbody>
</table>

Labs for this class are designed as an extension of various lecture periods whereas at other times the material/topics covered will serve as standalone topics and may be subject to change.

**IMPORTANT:** Lab topic by date is subject to change at any time.

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1. [https://blackboard.angelo.edu/](https://blackboard.angelo.edu/)
2. [https://www.angelo.edu/current-students/student-handbook/](https://www.angelo.edu/current-students/student-handbook/)
3. [https://www.angelo.edu/academics/catalog/](https://www.angelo.edu/academics/catalog/)
5. [https://www.angelo.edu/current-students/disability-services/](https://www.angelo.edu/current-students/disability-services/)
6. [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
8. [https://www.angelo.edu/current-students/writing-center/academic_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)
9. [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)
10. [https://www.angelo.edu/incident-form](https://www.angelo.edu/incident-form)