

# RWM 4336

## Rangeland Inventory and Analysis

### Online and Data Collection at ASU Ranch

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**Instructor: Ruben Cantu**

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Phone: 325 656 1817

Office: VIN228

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

## Course Information

### Course Description

The purpose of this course is to explore steps in designing and conducting vegetation monitoring projects from understanding the concept of ecological site delineation, to the various techniques used in sampling as well as how to set priorities and avoiding pitfalls and problems within the monitoring processes.

### Prerequisite and Co-requisite Courses

“None.”

### Prerequisite Skills

“None.”

### Student Learning Outcomes

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

Understanding the techniques for measuring (1) basal cover, (2) canopy cover, (3) species composition, and (4) above ground forage production.

## Course Delivery

This is a mostly online course with lessons and assignments that will be delivered via Blackboard and email. There will be opportunities to participate as a group to collect rangeland data at the ASU Ranch with times and dates scheduled shortly after the start of the semester.

## Required Texts and Materials

“none”

## Technology Requirements

Since this is an online course, students need to have access to the internet for course study materials (see Assignment and Activity Description) and to check Blackboard for reading assignments and to check email.

## Communication

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

**Written communication via email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

**Virtual communication:** Office hours and/or advising may be done with the assistance of the telephone, Collaborate, etc.

## Grading

### Evaluation and Grades

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

Assessment	Percent of Total Grade
Ecological Site Descriptions	20
Description of Methods	50
Data Collection	20

Reading Summaries (5)	10
Total	100%

## 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:

There are two primary units to study and complete during the course of the semester. It is important that you study these and understand the components of the lessons and what is being presented. A report of each is required and no later than the deadline given. For the most part, this course is self-paced. Students however, must be aware of deadlines for report submissions and reading summaries.

## Understanding Ecological Site Descriptions:

<https://www.youtube.com/watch?v=76pfB5eA0po&feature=youtu.be>

1. Watch the YouTube video on Ecological Site Descriptions with Lamar Smith (23:44). Type a brief 1-2 page description of Ecological Site Descriptions and submit by 5PM February 21st to me via email. I do not accept summaries in google docs, please submit as a word document.

## Description of Methods for Vegetation Sampling:

<https://learn.landscapetoolbox.org/course/vegetation-measurement-and-monitoring/?tab=tab-curriculum>

Review online information from website above on (1) Introduction, (2) Sampling Principles, (3) Sampling Procedures, (4) Sampling Design, (5) Monitoring and Indicators, (6) Density, (7) Frequency, (8) Cover, (9) Height and Structure, (10) Biomass, and (11) utilization.

2. By 5PM on May 2nd, submit a typed paper to me by email describing the best methods to measure (1) herbaceous biomass production, (2) basal cover of grasses, (3) canopy cover of shrubs, (4) species composition. Paper should be no longer than five pages and describe in detail how each method is appropriately used. I do not accept summaries in google docs, please submit as a word document.

### **Data Collection:**

We will try to meet at the MIR Center on at least three occasions during the semester for the purpose of collecting rangeland information. This may be to discuss and practice the techniques learned, it may be to help a graduate student(s) with their field work on the ASU Ranch or it might be to listen, watch and learn from NRCS rangeland management specialists discuss how they perform grazing land inventories. Efforts on my part will be made to find a date and time (need two hours) to accommodate as many students in the class as possible. Hopefully, we can have three dates selected for field visits shortly after the semester starts. The number of points earned from this portion of your total grade is dependent on your attendance and participation.

### **Reading Summaries:**

There will be five readings that you will be assigned to read and prepare a one page summary for submission to me via email. I do not accept summaries in google docs, please submit as a word document. These readings will be on topics that support the information regarding vegetation sampling or provide you additional information regarding collection techniques. A deadline will be given, usually a week, from the time a summary is provided to you via email or blackboard. **NO** late reading summaries will be accepted after 5PM the day of the dateline. These are easy points to accumulate so do not let this simple assignment affect your grade.

### **Late Work or Missed Assignments:**

Know the deadlines. If you are late in submitting your reports on the two major writing assignments, i.e., ecological sites and description of methods, your grades will be penalized as follows: one day late 90% of initial grade for the report, two – seven days, 70% of the initial grade for the report, eight – 14 days, 50%. You get a zero if your report is later than 14 days. The overall grade will be based on how well the report is written and presented, this includes spelling, flow of information, complete sentences, etc. For example, if you turned in your report on time and it was good let's say you made a 92. If you turned it in one day late, your grade is now an 83. If you turned it in two – seven days after the deadline, your grade is now a 64 and so on...you can do the math. Be on time with your reports.

# 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](#)<sup>1</sup>
- [Angelo State University Catalog](#)<sup>2</sup>

## 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](#).<sup>3</sup>

## 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](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#).<sup>4</sup> The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
[dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)  
Houston Harte University Center, Room 112

## **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](#)<sup>5</sup> for more information.

## **Plagiarism**

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)<sup>6</sup> 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](#).<sup>7</sup>

## **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](#)<sup>8</sup> 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](#)<sup>9</sup>

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: [michelle.miller@angelo.edu](mailto: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](#).<sup>10</sup>

## Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)<sup>11</sup> 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.

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<sup>1</sup> <https://www.angelo.edu/current-students/student-handbook/>

<sup>2</sup> <https://www.angelo.edu/academics/catalog/>

<sup>3</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

<sup>4</sup> <https://www.angelo.edu/current-students/disability-services/>

<sup>5</sup> <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

<sup>6</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

<sup>7</sup> [https://www.angelo.edu/current-students/writing-center/academic\\_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)

<sup>8</sup> <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>

<sup>9</sup> <https://www.angelo.edu/incident-form>

<sup>10</sup> <https://www.angelo.edu/title-ix>

<sup>11</sup> <https://www.angelo.edu/covid-19/>