



**COWLEY COLLEGE  
& Area Vocational Technical School**

**COURSE PROCEDURE FOR**

**Pasture and Range Management  
AGR1279 4 Credit Hour**

**Student Level:**

This course is open to students on the college level in either the Freshman or Sophomore year.

**Catalog Description:**

**AGR1279 Pasture and Range Management (4cr)**

This course will provide the student with the introductory knowledge of pasture and range land utilization and problems that comes with managing pasture and range lands. This will include ecology, stocking rates, rotational grazing, plant identification, reseeding, control of outside plant invaders, and the response of plants to grazing. This course is comprised of lecture (3cr) and lab (1cr).

**Prerequisites:**

None

**Co-requisites:**

None

**Controlling Purpose:**

The purpose of this this course is to provide the student with the knowledge of introductory knowledge of pasture and range land utilization and problems that comes with managing pasture and range lands

**Learner Outcomes:**

Upon completion of the course, the student will:

1. Demonstrate knowledge of stocking rate computations.
2. Design rotational grazing systems
3. Demonstrate knowledge of range and pasture problems
4. Demonstrate knowledge of ecology and ecosystems
5. Demonstrate knowledge of plant growth and forage production.

**Units Outcomes and Clock Hours of Instruction for Core Curriculum:**

The following outline defines the minimum core content not including the final examination period.

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DISCLAIMER: THIS INFORMATION IS SUBJECT TO CHANGE. FOR THE OFFICIAL COURSE PROCEDURE CONTACT ACADEMIC AFFAIRS.

Instructors may add other material as time allows.

Evaluation Key:

- A = All major and minor goals have been achieved and the achievement level is considerably above the minimum required for doing more advanced work in the same field.
- B = All major goals have been achieved, but the student has failed to achieve some of the less important goals. However, the student has progressed to the point where the goals of work at the next level can be easily achieved.
- C = All major goals have been achieved, but many of the minor goals have not been achieved. In this grade range, the minimum level of proficiency represents a person who has achieved the major goals to the minimum amount of preparation necessary for taking more advanced work in the same field, but without any major handicap of inadequacy in his background.
- D = A few of the major goals have been achieved, but the student's achievement is so limited that he is not well prepared to work at a more advanced level in the same field.
- F = Failing, will be computed in GPA and hours attempted.
- N = No instruction or training in this area.

UNIT 1:						
Outcome: Demonstrate knowledge of stocking rate computations.						
A	B	C	D	F	N	Specific Competencies: <i>Students will be able to</i>
						Demonstrate proper calculation of forage production.
						Demonstrate proper calculation of animal intake.
						Illustrate plant production across varies growth stages production.
						Describe grazing lengths and rotations for various livestock.
						Demonstrate proper calculation of fertilizer rates according to production outcomes.
						Compare Total Digestible Nutrients across plant species.

UNIT 2:						
Outcome: Design rotational grazing systems						
A	B	C	D	F	N	Specific Competencies: <i>Students will be able to</i>
						Demonstrate proper calculation of stocking rates and duration of grazing.
						Describe animal forage utilization.
						Examine animals habits across species.

							Describe water and supplement needs of pastures.
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<b>UNIT 3:</b>							
Outcome: Demonstrate knowledge of range and pasture problems.							
A	B	C	D	F	N	Specific Competencies: <i>Students will be able to</i>	
						Identify invader and toxic plant species and control methods.	
						Analyze need for reseeded and proper management.	
						Identify methods of brush control and burning.	

<b>UNIT 4:</b>							
Outcome: Demonstrate knowledge of ecology and ecosystems.							
A	B	C	D	F	N	Specific Competencies: <i>Students will be able to</i>	
						Illustrate how the components of the environment works together	
						Explain growth and forage production process	
						Illustrate how the live forms within the environment have to work together	
						Define ecological niche	
						Define an ecological indicator	
						List the components of ecosystem	

<b>UNIT 5:</b>							
Outcome: Demonstrate knowledge of plant growth and forage production.							
A	B	C	D	F	N	Specific Competencies: <i>Students will be able to</i>	
						Illustrate the differences in plants and plant species	
						Demonstrate the process of photosynthesis and dark reactions	
						Apply the law of Tolerance	

**Projects Required:**  
Varies, refer to syllabus.

**Textbook:**  
Contact Bookstore for current textbook.

**Materials/Equipment Required:**

None

**Attendance Policy:**

Students should adhere to the attendance policy outlined by the instructor in the course syllabus.

**Grading Policy:**

The grading policy will be outlined by the instructor in the course syllabus.

**Maximum class size:**

Based on classroom occupancy

**Course Time Frame:**

The U.S. Department of Education, Higher Learning Commission and the Kansas Board of Regents define credit hour and have specific regulations that the college must follow when developing, teaching and assessing the educational aspects of the college. A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work for approximately fifteen weeks for one semester hour of credit or an equivalent amount of work over a different amount of time. The number of semester hours of credit allowed for each distance education or blended hybrid courses shall be assigned by the college based on the amount of time needed to achieve the same course outcomes in a purely face-to-face format.

**Refer to the following policies:**

[402.00 Academic Code of Conduct](#)

[263.00 Student Appeal of Course Grades](#)

[403.00 Student Code of Conduct](#)

**Disability Services Program:**

Cowley College, in recognition of state and federal laws, will accommodate a student with a documented disability. If a student has a disability which may impact work in this class and which requires accommodations, contact the Disability Services Coordinator.