



**COWLEY COLLEGE  
& Area Vocational Technical School**

**COURSE PROCEDURE FOR**

**ANIMAL NUTRITION  
AGR1250 3 Credit Hours**

**Student Level:**

This course is open to students on the college level in either the freshman or the sophomore year.

**Catalog Description:**

**AGR1250 - ANIMAL NUTRITION (3 hrs)**

The purpose of Animal Nutrition is to familiarize students with the principles of nutrition as they pertain to farm animals and the life process. This is a basic course giving an overview of animal nutrition, nutrient requirements, and balances for farm animals.

**Prerequisites:**

None

**Controlling Purpose:**

The purpose of Animal Nutrition is to familiarize students with the principles of nutrition as they pertain to farm animals and the life process. An introduction of nutrient digestion, absorption and metabolism; Physiological aspects of digestion and absorption; nutrient content of livestock feeds and methods of analysis; methods of determining nutrient value of feeds; nutrient requirements of different animals; and the application of current concepts in nutrition to formulation of rations and feeding program. This is a basic course giving an overview of animal nutrition and nutrient requirements and balances for farm animals.

**Learner Outcomes:**

The learner outcomes of Animal Nutrition are to help the student develop a basic understanding of basic animal nutrition, livestock digestive systems, nutritive requirements, feed utilization and maintenance, growth and reproduction and lactation. Diseases associated with nutrition, specific nutrient requirements for swine, beef, poultry, horses, sheep, and pets will be reviewed. Students will evaluate rations for farm livestock considering requirements and economy.

**Units Outcomes and Criterion Based Evaluation Key for Core Content:**

The following defines the minimum core content not including the final examination period. Instructors may add other content 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.

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

- 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: Introduction to Animal Nutrition**

Outcomes: Upon completion of this unit, the students will be able to define, identify, and describe the basic components of the digestive systems and processes, nutrient classifications, and the importance of the nutrients to the various livestock

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Identify the basic digestive anatomy and processes of various livestock
						Identify different nutrient classifications
						Identify the basic requirements and deficiencies of each nutrient classification

## Unit 2: Feeds for Livestock

Outcomes: Upon completion of this unit, the students will be able to define, identify, and describe the various feedstuff, identify their importance to livestock, the reasons for feed additives, processing, and how they all combine together to create a diet

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Identify high energy sources of feeds
						Identify protein source feeds
						Know various roughages and problems associated with feeding to certain livestock classifications
						Identify mineral and vitamin Sources
						Knowledge of various feed additives and the reasons for using them
						Know general feed laws and labeling instructions
						Identify various feed processes and identify the common feeds and livestock that utilizes those processes
						Knowledge of basic ration formulization

### Unit 3: Livestock Species

Outcomes: Upon completion of this unit, the students will be able to define, identify, and describe the basics to developing a diet for swine, poultry, dairy cattle, and beef cattle.

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Understand the basics to creating a diet for the swine species
						Understand the basics to creating a diet for the poultry species
						Understand the basics to creating a diet for the dairy cattle species
						Understand the basics to creating a diet for the beef cattle species
						Identify key nutritional components important to the various species
						Identify areas to focus on when creating diets for the various species

### Unit 4: Feeding other Domesticated Species

Outcomes: Upon completion of this unit, the students will be able to define, identify, and describe the basics to developing a diet for horses, sheep, goats, and other various species

A	B	C	D	F	N	Specific Competencies
						Demonstrate the ability to:
						Understand the basics to creating a diet for the horse
						Understand the basics to creating a diet for the sheep
						Understand the basics to creating a diet for the goats
						Understand the basics to creating a diet for other zoological and companion species
						Identify key nutritional components important to the rabbits

#### **Projects Required:**

To be announced

#### **Textbook:**

Contact Bookstore for current textbook.

**Materials/Equipment Required:**

Computers and nutrient programs

**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 Timeframe:**

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 which requires accommodations, contact the Disability Services Coordinator.