Faculty are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Collegewide Curriculum Committee.

DEPT. Agriculture                              COURSE NO.  2201

NUMBER OF CREDITS:  3

COURSE TITLE: Principles of Animal Nutrition

CATALOG DESCRIPTION: Covers the classification and function of nutrients, digestion, and utilization of feeds. This includes nutrient requirements for livestock and poultry, nutrient composition, and feeding standards.

AUDIENCE: Post Secondary Agriculture Students

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
Area : by meeting the following competencies:
Area : by meeting the following competencies:
Area : by meeting the following competencies:

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE: AGRI 1101 or consent of instructor

LENGTH OF COURSE: 1 semester

THIS COURSE IS USUALLY OFFERED:
Every other year [ ] fall [ ] spring [x] summer [ ] undetermined [ ]

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT:
   1. To acquaint the student with the classification, utilization and functions of nutrients.
   2. To enlarge upon the students’ knowledge of the nature and magnitude of nutrient requirements of animals.
   3. To demonstrate the capacity of common feedstuffs to supply nutrients required by farm animals and poultry.
   4. To familiarize the student with the roles of feed additives and to point out possible sources of additives and nutrients required in supplemental amounts.
   5. To develop the students’ ability to integrate information relative to requirement for nutrients and their sources in the formulation of nutritionally adequate diets and supplements.

2) THINKING SKILLS:
The student’s thinking will improve from the work involved in building the correct rations (nutrients) for the animal.
3) COMMUNICATIONS SKILLS:
The student will be able to communicate better about nutrients needed by different animals studied in this course.

4) HUMAN DIVERSITY:
The student will understand that all animals need the 6 basic nutrients in their ration; some need more of certain proteins than others which depends on whether they are ruminant or non-ruminant.

TOPICS TO BE COVERED:
1. What makes up feed nutrients and their functions
2. How feed is analyzed
3. The digestion, absorption, and transportation of feed through the digestive tract
4. Study of proteins and carbohydrates
5. Study of Macro and Micro minerals
6. Study of roughages and concentrations
7. Completion of rations for beef animals
8. Completion of rations for dairy animals
9. Completion of rations for swine
10. Completion of rations for sheep and horses

LIST OF EXPECTED COURSE OUTCOMES: See above under goals

LEARNING/TEACHING TECHNIQUES used in the course are:

☐ Collaborative Learning ☑ Problem Solving
☐ Student Presentations ☐ Interactive Lectures
☐ Creative Projects ☐ Individual Coaching
☒ Lecture ☐ Films/Videos/Slides
☒ Demonstrations ☐ Other
☐ Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
☒ Reading ☒ Tests ☐ Individual Projects
☒ Oral Presentations ☒ Worksheets ☐ Collaborative Projects
☒ Textbook Problems ☐ Papers ☐ Portfolio
☒ Group Problems ☐ Term Paper
☐ Other – Computerized account entries

EXPECTED STUDENT LEARNING OUTCOMES:
Tests and worksheets are used to determine the student’s grade.

1. Students who are caught cheating on a test will receive a grade of zero for that test.
2. Attendance is taken and students are expected to be in class every day with their assignments done.
   A = 90% or above
   B = 80-89%
   C = 70-79%
   D = 60-69%
   F = 59% or less

Plagiarism will not be tolerated.
Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

The information in this course outline is subject to revision

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

A Member of the Minnesota State Colleges and Universities System
An Affirmative Action Equal Opportunity Educator/Employer