COURSE TITLE  Principles of Agronomy

CATALOG DESCRIPTION Explores the principles and practices of plant and related sciences as applied to increasing productivity and improvement of field crops. Emphasis is on crop selection and improvement through the breeding of crop varieties, seeds and seedlings, crop growth and development, crop production hazards, and the harvest and storage of field crops.

AUDIENCE  Agriculture Students - Transfer & Technical

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)

PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE:

LENGTH OF COURSE 1 semester

THIS COURSE IS USUALLY OFFERED:
Every other year □ fall ☒ spring □ summer □ undetermined □

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

1) ACADEMIC CONTENT:
1. To develop an understanding of principles of plant, soil and related sciences underlying technological practices used in the production and improvement of field crops.
2. To develop problem solving ability through the application of principles of plant, soil and related sciences to problems likely to be encountered under field conditions in the production and improvement of field crops.

2) THINKING SKILLS:
1. Researching materials and assembling a term paper.
2. Using classroom information and applying that knowledge to the principles and practices of crop production.
3. Solving problems of varietal selection and improvement.

3) COMMUNICATIONS SKILLS:
1. Writing and presenting a term paper
2. Taking notes
3. Written tests
4. Classroom discussion

4) HUMAN DIVERSITY:
1. Recognition of starvation in Third World countries
2. The role that crop production plays in providing healthy diets to humans throughout the world.

TOPICS TO BE COVERED:
1. Plant Science and Human Welfare
2. Origin and Classification of Field Crops
3. Adaptation and Distribution of Field Crops
4. Varietal Selection and Improvement
5. Crop Propagation
6. Crop Nutrition
7. Maturation, Harvest and Storage

LIST OF EXPECTED COURSE OUTCOMES: See above under goals

LEARNING/TEACHING TECHNIQUES used in the course are:
- Collaborative Learning
- Problem Solving
- Interactive Lectures
- Individual Coaching
- Films/Videos/Slides
- Other (describe below)

LAB

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
- Reading
- Tests
- Oral Presentations
- Individual Projects
- Textbook Problems
- Collaborative Projects
- Group Problems
- Portfolio
- Other (describe below)
- 4-6 page paper dealing with the production of a crop

EXPECTED STUDENT LEARNING OUTCOMES:

GRADING POLICIES AND EVALUATION PROCEDURES (include attendance policy):

Unit tests, daily tests, final examination and class problems and exercises will be the basis for grading with points totaled at the end of the quarter. Letter grades will be given for a final grade as follows:

A = 90% and up
B = 80-89%
C = 70-79%
D = 60-69%
F = Below 60%

Attendance is utilized in grading.

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.

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