## MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE COURSE OUTLINE

Faculty members 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 Academic Affairs and Standards Council.

**DEPT.** LWMP

## COURSE NUMBER: 2101

# NUMBER OF CREDITS: 2 Lecture: 0 Lab: 0 OJT All Management

#### **Course Title:**

Developing a Genetic Improvement Plan

#### **Catalog Description:**

Developing a genetic improvement plan that describes the fundamental concepts of sheep genetics that are helpful in planning an effective selection and breeding program.

## **Prerequisites or Necessary Entry Skills/Knowledge:**

None

## FULFILLS MN TRANSFER CURRICULUM AREA(S)

Goal 1: Communication: \_\_\_\_\_ by meeting the following competencies:

Goal 2: Critical Thinking: \_\_\_\_\_ by meeting the following competencies:

Goal 3: Natural Sciences: \_\_\_\_\_ by meeting the following competencies:

Goal 4: Mathematics/Logical Reasoning: \_\_\_\_\_ by meeting the following competencies:

Goal 5: History and the Social and Behavioral Sciences: \_\_\_\_\_ by meeting the following competencies:

Goal 6: The Humanities and Fine Arts: \_\_\_\_\_ by meeting the following competencies:

Goal 7: Human Diversity: \_\_\_\_\_ by meeting the following competencies:

Goal 8: Global Perspective: \_\_\_\_\_ by meeting the following competencies:

Goal 9: Ethical and Civic Responsibility: \_\_\_\_\_ by meeting the following competencies:

Goal 10: People and the Environment: \_\_\_\_\_ by meeting the following competencies:

#### **Topics to be Covered**

- Monitoring genetic progress for desired traits
- Genetic improvement plans
- Breeding strengths and weaknesses
- Effect of cross-breeding
- Production records
- Selection programs

## **Student Learning Outcomes**

- 1. Describe benchmark evaluation methods for monitoring genetic progress.
- 2. Design a flock specific genetic improvement plan.
- 3. Identify breeds that are strong for traits desired.
- 4. Describe cross-breeding's effect on selection.
- 5. Describe types of production records.
- 6. Identify traits that are economically important.
- 7. Identify types of selection programs.
- 8. Explain selections importance in genetic improvement.
- 9. Develop genetic progress monitoring plan.

Is this course part of a transfer pathway: Yes  $\Box$  No  $\boxtimes$ 

Revised Date: 7/2020