Course Title:
Introduction to Meat Science

Catalog Description:
Introduction to Meat Science evaluates the principles of conformation, quality, and finish of animal carcasses. A comprehensive look at the meat industry. Studies include muscle structure, composition of meat animals, product identification, microbiology of meat, nutrient values, pricing and marketing.

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**

Muscle Structure  
Carcass Development  
Muscle to Meat  
Properties of Meat  
Meat Processing  
Microbiology of Meat  
Nutritive value of Meat  
Grading  
By-Products  
Wholesale and Retail Identification

**Student Learning Outcomes**

Identify and describe the structure and composition of muscle tissue.  
Explain how a carcass develops and changes through the growth process.  
Describe the processes of muscle contraction.  
Describe the chemical and physical changes during conversion of muscle to meat.  
Identify quality concerns in antemortem and postmortem conversion.  
Identify factors which influence consumer’s view of quality in fresh meat.  
Evaluate meat carcasses  
Identify sources of microorganisms that affect meat safety and their environment.  
Identify wholesale and retail meat cuts.  
Explain the meat processing system.

**Is this course part of a transfer pathway:** Yes ☐ No ☒

Revised Date: 6/2021