

# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

## COURSE OUTLINE

**DEPT. AGRI**

**COURSE NUMBER: 2216**

**NUMBER OF CREDITS: 3**

**Lecture: 3 Lab: 0 OJT: 0**

<b>Course Title:</b>
Introduction to Meat Science

<b>Catalog Description:</b>
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.

<b>Prerequisites or Necessary Entry Skills/Knowledge:</b>
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:

<b>Topics to be Covered</b>
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

<b>Student Learning Outcomes</b>
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.

<b>Is this course part of a transfer pathway:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Revised Date: 6/2021