## **SECTION HEADING**

# **AGRI 2214: Machinery Principles and Management**

## Description

Machinery Principles and Management will cover the utilization of farm equipment from the purchasing of equipment and managing the costs to the operation and maintenance of agricultural equipment.

#### **Credits**

3

#### **Prerequisite**

None

#### Corequisite

None

### **Topics to be Covered**

- 1. Machine Performance
- 2. Power Performance
- 3. Machine Costs
- 4. Grain Harvesters
- 5. Forage Harvesters
- 6. Tillage Operations
- 7. Seedbed Preparations
- 8. Chemical Applications
- 9. Grain Dryers
- 10. Material Handling

### **Learning Outcomes**

- 1. Calculate machine capacities
- 2. Calculate horse power performance of tractors
- 3. Calculate fuel efficiency or tractors.
- 4. Identify the parts and explain the functions of grain harvesters.
- 5. Complete the settings on a combine.
- 6. Calculate field loss
- 7. Explain the functions of forage harvesters.
- 8. Compare tillage operations and advantages/disadvantages
- 9. Describe the different types of chemical/fertilizer applicators.
- 10. Calculate chemical applications
- 11. Calculate drying efficiency
- 12. Calculate auger efficiency

#### **Credit Details**

Lecture: 3

Lab: 0

OJT: 0

MnTC Goal Area(s): None