

## **Courses**

**NOTE:** Active immunization against tetanus (available through the Student Health Service) is a prerequisite for registration in any laboratory course in agriculture and for any student employment on the College Farm.

### **AGRICULTURAL MECHANICS**

**AgM 15a-b. Agricultural Mechanics (2-2) F and S** **C. Jensen-DeTar**

(a) Mechanical skills in field of agriculture; selection, care and use of common farm tools; projects of wood and metal in farm appliances. (b) Advanced work in mechanical skills; projects for home or on the farm. (1 lecture, 3 lab hours)

**AgM 17. Farm Tractors (2) F and S (Former AgM 124)** **DeTar**

Operation and maintenance of farm tractors; operation of farm tractor under field conditions; service, maintenance and minor repair of gas, diesel, and butane type engines of wheel and crawler type. (1 lecture, 3 lab hours; and total of five hours of field operation.)

**AgM 18a-b. Agricultural Welding (2-2) F-S** **C. Jensen**

Prerequisite or concurrently: AgM 15a. (a) Arc and oxyacetylene welding as a tool of construction and repair in the farm shop; brazing; building up worn parts; burning with hand torch. (b) Hard facing by arc and gas welding; AC and DC welding and application to farm construction and repair; welding projects and farm appliances. (1 lecture, 3 lab hours)

**AgM 25. Agricultural Drafting (2) F** **Keck**

May be taken concurrently with AgM 15a. Use of drafting instruments, lettering, dimensioning, scale drawings and working drawings of projects in agricultural mechanics; elementary plan and perspective drawings of small buildings. (1 lecture, 3 lab hours)

**AgM 81. Farm Structures (3) F and S** **DeTar**

Prerequisite: AgM 15a. Construction and repair of farm structures and equipment; farm carpentry and construction principles; engineering principles, codes; farmstead layouts and basic requirements of farm structures. (2 lecture, 3 lab hours)

**AgM 91. Farm Surveying (2) F and S** **Keck**

Prerequisites: algebra, geometry, sophomore standing; or permission of instructor. Chaining; use of level and transit; land surveying, leveling, terracing, and mapping. (1 lecture, 3 lab hours)

**AgM 111. Rural Electrification (2) S** **Keck**

Prerequisite: junior standing. Fundamentals of alternating current, wiring practices, circuit layouts and problems, motor and branch circuit protection; safe use of electricity; wiring of farmstead.

**AgM 115a-b. Farm Machinery (2-2) F-S** **Keck**

Prerequisite: AgM 15a. Selection, operation, service, and major repair of tillage, planting, and haying machinery; field adjustment, operation, and service of harvesting machinery; engineering principles and practical solutions to problems. (1 lecture, 3 lab hours).

**AgM 121. Advanced Agricultural Welding (2) S** **C. Jensen**

Prerequisites: AgM 18a-b. Arc and gas welding processes in construction and repair of farm equipment; inert arc welding; radiograph and shape burning; aluminum and stainless steels; welding tests and design of welded structures. (1 lecture, 3 lab hours)