# AGRICULTURAL MECHANICS (AGMC)

#### AGMC 170 Introduction to Agricultural Mechanization 2 Hours

The topics studied in this course will be electrical power, land surveying and building construction.

Corequisite(s): AGMC 171

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; fall 2022; fall

2023

#### AGMC 171 Introduction to Agricultural Mechanization Laboratory 1

Hour

A laboratory course correlated with AGMC 170.

Corequisite(s): AGMC 170

Course Fee: \$10

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; fall 2022; fall

2023

#### AGMC 176 Agriculture Safety 2 Hours

Topics include the safe handling of hand tools, power tools, agricultural machinery, farm animals, pesticides, and fertilizers, with emphasis on hazxard awareness, workplace regulations, and basic intervention strategies. Students will be trained in CPR (not certified) and other quick response first aid techniques.

Recent Term(s) Offered: spring 2021; fall 2021; winter 2022; spring 2022; fall 2022

#### AGMC 270 Turf Mowing Equipment Maintenance 2 Hours

Instruction in the use of modern machines and techniques to maintain cutting equipment used in the turf industry. Techniques for precision maintenance are studied.

Corequisite(s): AGMC 271 Recent Term(s) Offered: None

#### AGMC 271 Turf Mowing Equipment Maintenance Laboratory 1 Hour

A laboratory course correlated with AGMC 270.

Corequisite(s): AGMC 270 Recent Term(s) Offered: None

#### AGMC 272 Turf Equipment Management and Operation 2 Hours

Instruction in the selection, economic management and operation of turf equipment. Included are safety, pesticide certification, adjustments, basic operation, and cost analysis.

Recent Term(s) Offered: spring 2021; spring 2023

## AGMC 273 Turf Equipment Management and Operation Laboratory 1 Hour

A laboratory course correlated with AGMC 272.

Corequisite(s): AGMC 272

Recent Term(s) Offered: spring 2021; spring 2023

#### AGMC 326 Precision Agriculture 3 Hours

Utilization of remote sensing, soil sampling and information management tools to increase agricultural production, optimize returns, and preserve natural resources. Satellite, informational and geospatial technologies are examined within the context of production agriculture. Note: Permission of instructor may be required.

Prerequisite(s): AGRO 350

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022

## **AGMC 371 Agricultural Mechanics 1 Hour** (repeatable max of 2 hrs) The major focus of this course will be metal work, welding and basic metallurgy.

Corequisite(s): AGMC 372

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; fall 2022; spring 2023; fall 2023

#### AGMC 372 Agricultural Mechanics Laboratory 2 Hours

A laboratory course correlated with AGMC 371.

Corequisite(s): AGMC 371 Course Fee: \$125

Recent Term(s) Offered: spring 2021; fall 2021; spring 2022; fall 2022; spring

2023; fall 2023

#### AGMC 373 Farm Power-Mechanical and Machinery 2 Hours

The student will learn basic engine principles used on farm equipment and accessory systems. Basic principles of machinery management as applied toward proper machinery use and adjustment in the field will be addressed. Note: Permission of instuctor may be required.

Prerequisite(s): (AGMC 170 (may be taken concurrently) and AGMC 371

(may be taken concurrently))

Corequisite(s): AGMC 374

Recent Term(s) Offered: spring 2021

### AGMC 374 Farm Power—Mechanical and Machinery Laboratory 1

The student will disassemble and reassemble engines and machinery components.

Corequisite(s): AGMC 373
Recent Term(s) Offered: spring 2021

#### AGMC 377 Farm Machinery 2 Hours

The design principles, operation, selection and management of Lecture two hours. Field trips as needed. Note: Permission of instructor may be required.

Prerequisite(s): AGMC 170 (may be taken concurrently)

Corequisite(s): AGMC 378
Recent Term(s) Offered: spring 2022

#### AGMC 378 Farm Machinery Laboratory 1 Hour

A laboratory course correlated with AGMC 377.

Corequisite(s): AGMC 377

Recent Term(s) Offered: spring 2022

#### AGMC 392 Turf Irrigation 2 Hours

Instruction in the selection, care, operation and management of irrigation systems specifically designed for commercial, industrial and residential turf settings. Special emphasis given to the unique circumstance of golf courses. Field trips required.

Prerequisite(s): (MATH 116 (may be taken concurrently) or MA 116C (may be taken concurrently) or MATH 116E (may be taken concurrently)) or (MATH 115 or MATH 115E or MA 115C) and AGRO 110

Corequisite(s): AGMC 393 Recent Term(s) Offered: fall 2021

#### AGMC 393 Turf Irrigation Laboratory 1 Hour

A laboratory course correlated with AGMC 392.

Corequisite(s): AGMC 392 Recent Term(s) Offered: fall 2021

#### AGMC 425 Applied Hydraulics and Pneumatics 3 Hours

Study of the fundamental principles of hydraulic and pneumatic systems and their application to mobile and stationary agriculture and construction machinery.

 $\mbox{\bf Prerequisite(s):}$  (MATH 115 or MA 115C or MATH 116 or MATH 116E or MATH 115E or MA 116C)

Recent Term(s) Offered: fall 2022

#### AGMC 475 Selected Topics in Agriculture 3 Hours

Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content. Note: Consent of instructor required. Recent Term(s) Offered: None