Agriculture (AGRI)

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# **AGRICULTURE (AGRI)**

### AGRI 1005 Intro to Ag & Natural Resources 3.0 credit hours

45.0 Classroom Hours = 45.0 Lecture Hours

A survey course that provides an overview of historical development of agriculture, its present status and future challenges. The course will also evaluate the relationship and importance of educational programs to agriculture. Educational and career opportunities and objectives will be studied.

### **AGRI 1015 Animal Agriculture**

### 3.0 credit hours

45.0 Classroom Hours = 45.0 Lecture Hours

The uses of animals and animal products, the structure of the industry as well as trends and current issues related to production and consumption of animal products.

### **AGRI 1030 Introduction to Plant Science**

### 4.0 credit hours

75.0 Classroom Hours = 45.0 Lecture Hours + 30.0 Lab Hours
This course will cover plant physiology and morphology and its
relationship to growth, development and reproduction of crop and forage
plants. Seed identification, is also included.

### AGRI 1031 Intro to Plant Science Lab

### 0.0 credit hours

0 Classroom Hours

This course is a lab that is required to be taken concurrently with AGRI 1030 Introduction to Plant Science.

## AGRI 1410 Intro to Ag-Economics

### 3.0 credit hours

45.0 Classroom Hours = 45.0 Lecture Hours

The purpose of this introductory course is for students to develop a basic understanding and appreciation for the role of economics in agriculture at the (1) firm, (2) national, and (3) international levels. The main focus of this course will be directed at the firm level or the study of microeconomics. Students will learn to apply various economic principles and concepts relating to production agriculture, business management, consumer behavior, market price analysis and equilibrium, and public policy formation. An overview of the structure and scope of the U.S. food and fiber sector and its current trends/implications for the national economy will also be presented. Additional course topics will include rural development, natural resources, world food economics, international trade and policy, market structure and competition, and monetary/fiscal policies as time permits during the semester.

## **AGRI 1540 Introduction to Soil Science**

### 4.0 credit hours

75.0 Classroom Hours = 45.0 Lecture Hours + 30.0 Lab Hours Introduction to the study of soil science, including the development, physics, chemistry, biology, and classification of soils. Emphasis is placed on the role of soils in the growth of plants. Prerequisite: high school chemistry or one semester of college chemistry, sophomore standing, or permission of instructor.

## AGRI 1541 Intro to Soil Science Lab

### 0.0 credit hours

0 Classroom Hours

This is a lab course that is to be taken concurrently with AGRI 1540 Introduction to Soil Science.

## AGRI 1745 Agribusiness & Food Marketing 3.0 credit hours

45.0 Classroom Hours = 45.0 Lecture Hours

This course is an introductory course in agribusiness an food products marketing offered for students interested in the marketing of ag commodities and food products in the agribusiness industry as it relates to the Food and Fiber Sector of the U. S. economy. This course will acquaint students with the workings of the U.S. food marketing system and enable them to examine how this system affects farm producers, middlemen (processors, wholesalers, retailers, and food services) and consumers. Students will gain an understanding how food products move through a food marketing channel to the final point of consumption (i.e. at home or away from home). The course will also illustrate how consumer demand, marketing, and information technology as well as political forces have shaped the agricultural food marketing industry over time.

## **AGRI 1850 Gold Medal Management**

#### 4.0 credit hours

60.0 Classroom Hours = 60.0 Lecture Hours

This course is designed to fulfill Farmer's Home Administration requirements for production and financial management training. The overall objective of the course is to improve the students' understanding of production and financial management techniques and enable the students to better analyze and manage their farming operations.

## AGRI 2040 Farm & Ranch Management

### 4.0 credit hours

75.0 Classroom Hours = 45.0 Lecture Hours + 30.0 Lab Hours
The purpose of this course is to develop an understanding of the various business management decisions involved in the organization and operation of a farm or ranch firm for continuous profit and efficiency.
Students will acquire knowledge and proficiency in applying the various economic principles and business management analysis concepts which aid a farm/ranch operator in the decision making process for a farm/ranch business operation.

# AGRI 2041 Farm & Ranch Management Lab 0.0 credit hours

0 Classroom Hours

This is a lab course that is to be taken concurrently with AGRI 2040 Farm and Ranch Management.

## **AGRI 2100 Animal Products**

### 3.0 credit hours

45.0 Classroom Hours = 45.0 Lecture Hours

This course will provide knowledge of edible animal products with particular emphasis to meat products from livestock and poultry. Course material will include all aspects of the meat industry from slaughter to consumption. Methods of slaughter and fabrication, conversion of muscle to meat, processing techniques, preservation and storage and consumer related topics will be discussed and demonstrated.

### **AGRI 2500 Animal Management**

### 3.0 credit hours

72.0 Classroom Hours = 40.0 Lecture Hours + 32.0 Lab Hours
Principles of managing animals in typical production systems. Emphasis
is to provide the basics of managing beef, dairy, horses, poultry, sheep
and swine through the life cycle for economic and efficient production.

### AGRI 2560 AG Law

### 3.0 credit hours

45.0 Classroom Hours = 45.0 Lecture Hours

An introduction to the legal aspects of agriculture: contracts, property rights, buying and selling real estate, leases, co-ownerships, business entities, land use regulations, taxation, estate planning, water law, animal law, and agricultural regulations.

## AGRI 2620 Intro to Pest Management 4.0 credit hours

90.0 Classroom Hours = 45.0 Lecture Hours + 45.0 Lab Hours
This course will teach proper methods for pesticide application and
safety, and preparation for commercial pesticide applicator certification
and relevant pesticides, their different forms, types, and modes of
action. Identification of plant pests, including morphology and life
cycles of selected insects, weeds and diseases of horticultural plants
will be included. Pest control methods will include chemical, physical,
mechanical, cultural, and biological techniques. Application of integrated
pest management will be stressed.

# AGRI 2910 Agribusiness Internship 3.0 credit hours

180.0 Classroom Hours = 180.0 Lab Hours

On-the-job training through a cooperative arrangement with business, and industrial organizations. Students work a minimum of 180 hours under the direction of a sponsoring manager or supervisor to apply classroom knowledge and training. Emphasis is placed on the application of technical knowledge, communication skills, and relationships with others. This class is designed for the Associate of Applied Science Degree in Business or interested in transferring for a degree in Agribusiness at a larger institution. Prerequisite: C average and 30 hours of program course work with at least 15 hours from MPCC. Application for an internship at least one semester before the internship is to begin.

# AGRI 2920 Agriculture Education Internship 3.0 credit hours

400.0 Classroom Hours = 400.0 Lab Hours

On-the-job training through a cooperative arrangement with business, and educational organizations. Students work a minimum of 400 hours under the direction of a sponsoring manager or supervisor to apply classroom knowledge and training. Emphasis is placed on the application of technical knowledge, communication skills, and relationships with others. Students will also be required (part of the 400 hours) to observe two different agriculture based classes. This class is designed for students interested in transferring to a larger institution to pursue a degree in agriculture education. Prerequisite: C average and 30 hours of program course work with at least 15 hours from MPCC. Application for an internship at least one semester before the internship is to begin.

### **AGRI 2930 Diversified Agriculture Internship**

### 3.0 credit hours

400.0 Classroom Hours = 400.0 Lab Hours

On-the-job training through a cooperative arrangement with business, and industrial organizations. Students work a minimum of 400 hours under the direction of a sponsoring manager or supervisor to apply classroom knowledge and training. Emphasis is placed on the application of technical knowledge, communication skills, and relationships with others. This class is designed for the students interested in a career with production agriculture. Prerequisite: C average and 30 hours of program course work with at least 15 hours from MPCC. Application for an internship at least one semester before the internship is to begin.

### **AGRI 2950 Vocational Career Tour**

### 1.0 credit hours

15.0 Classroom Hours = 15.0 Lecture Hours

Career exploration into various vocational areas relating to skills, management, labor, experience, and educational requirements pertaining to employment salary and advancements. This unit consists of a 3-4 day field trip in the Midwest. Students participating must be members of a vocational organization. Note: This course may not transfer toward degree and/or program requirements at a four-year college. Contact transfer college for information.

### **AGRI 2980 Directed Study**

### 3.0 credit hours

0 Classroom Hours Directed Study

## AGRI 2990 Special Topics

3.0 credit hours

45.0 Classroom Hours = 45.0 Lecture Hours Special topic course description upon request.