

# Course Descriptions

## **AGRIBUSINESS (AB)**

### **AB 2225**

#### ***Agricultural Economics***

The purpose of the course is to provide a basic understanding of microeconomic principles relating to the production, processing, distribution and utilization of agricultural commodities. The course includes basic concepts relating to the management of agribusiness enterprises and agricultural resources allocation. 3 hours Lecture and Discussion — 3 credits

### **AB 3115**

#### ***National Agri-Marketing***

A team training experience structured to develop creativity, communication and presentation abilities as well as interpersonal skills. Students working throughout the year preparing a marketing plan, conducting market research and developing financial projections, then present their work during the National Agri-Marketing Association Conference in April. A GPA of 2.2 must be maintained. May be repeated for a maximum of 3 credits. 1 to 4 hours Participation — 1 credit per year

### **AB 3126**

#### ***Agricultural Marketing***

The course is designed to provide students with a comprehensive view of the marketing of agricultural commodities, foods, fibers, and agricultural supplies. The course emphasizes concepts relating to preparation for careers in agri-marketing. Basic principles of advertising and retailing are included. Prerequisite: AB 2225. 3 hours Lecture and Discussion — 3 credits

### **AB 4113**

#### ***Farm Management***

A study of the efficient management and operation of the farm for profit. Farm planning, record keeping, budgeting, finances, partnership agreements, pricing, marketing and other physical, economic and social factors affecting the farm business are considered. Prerequisites: AB 2225 and BA 2123, 2224 for Majors or BA 2225 for Non-Majors or Permission of Instructor. 3 hours Lecture and Discussion — 3 credits

### **AB 4242**

#### ***Food and Agricultural Policy***

Develops basic understanding of the role of government in the development of domestic farm policy, policies affecting food and consumers, also international trade in food and agricultural products. Emphasis is placed on contemporary issues which include the structure of agriculture, nutrition policies, food safety, resource preservation and utilization, and price support programs. Prerequisites: AB 2225, AB 3126 and Junior or Senior status. 3 hours Lecture and Discussion — 3 credits

### **AB 4243**

#### ***Agribusiness Management***

Agribusiness Management skills are developed through course work and association with professionals in marketing, distribution, sales, production and international business. Emphasis is placed on developing decision-making abilities, communication skills, and intrapersonal competence. Prerequisite: AB 2225, AB 3126 and Junior or Senior Status. 3 hours Lecture and Discussion — 3 credits

## Course Descriptions

### Employment Program

#### AB 2370

##### Employment Program

Each student in Agribusiness is required to spend 500 hours in approved jobs related to the student's major. Registration for each Employment Program must occur prior to the beginning of a relevant experience.

## Agronomy and Environmental Science

#### AE 1120

##### Sustainability: Saving the Earth and Feeding the People

Environmental issues facing the rural and urban environment are discussed. Addressing environmental issues requires interaction between technical, economic, and social forces. This course will ask the student to consider these forces on a local and global basis as well as the knowledge base. 3 hours Lecture — 3 credits

#### AE 2004

##### Soils

An introductory course in soils. This course deals with the concepts and terminology to understand soil development, soil formation and composition, the physical, chemical and biological properties and processes in soils. Soil classification, soil conservation, and nutrient systems are also introduced. Chemical and physical properties as they relate to environmental concerns are reviewed. Laboratory demonstrations and exercises parallel selected portions of the lecture material. Prerequisite: General Chemistry or Permission of Instructor. 2 hours Lecture and 3 hours Laboratory — 3 credits.

#### AE 2007

##### Feed Grains and Forages

This course covers the establishment, production, harvesting, uses and management of the main feed grains and forage crops with special emphasis on the crops grown in the northeastern region of the United States. Prerequisites: General Chemistry II or Biological Science II. Required for Large Animal Science and Dairy Science Majors. 2 hours Lecture and 3 hours Laboratory — 3 credits

#### AE 2013

##### Agricultural Machinery

This course covers the use, care, operation and adjustment of the most common equipment and machinery

used in agriculture. Special emphasis is placed on the actual operation of equipment. This course may be applied toward secondary teaching certification in vocational agriculture. Offered in alternate years. 2 hours Lecture and 3 hours Laboratory — 3 credits

#### AE 2017

##### Topographical Surveying

This course includes land surveying principles, use of survey instruments, field methods, data collection, and an introduction to Geographical Information Systems. 2 hours Lecture and 3 hours Laboratory — 3 credits

#### AE 2100

##### Agricultural Building Practices and Materials

This course stresses construction practices and skills particularly applicable to agriculture. Included are reading and interpreting building plans, estimating and selecting materials, hand and power tool use, carpentry, plumbing, electrical and masonry skills, and agricultural construction projects. This course may be applied toward secondary teaching certification in vocational agriculture. Offered in spring in even numbered years. 2 hours Lecture and 3 hours Laboratory — 3 credits

#### AE 2201

##### Agricultural Engines and Power Application

This course focuses on the study of gasoline and diesel internal combustion engines and two- and four-stroke cycle small engines with emphasis upon agricultural applications. This course may be applied toward secondary teaching certification in vocational agriculture. Offered in alternate years. 2 hours Lecture and 3 hours Laboratory — 3 credits

#### AE 2202

##### Field Crops I

Agronomic crops are those that produce fiber, vegetable oils, animal feed, processed human foods, and industrial raw materials. This course provides students with an overview of the production, regionalism, and uses of agronomic crops, particularly those grown in North America. All steps in the production of crops are covered, however, spring-season management practices are emphasized. Students design demonstration plots for public viewing. Previous farm experience is NOT necessary for this course. Crop science majors must take Field Crops I during the spring immediately before taking Field Crops II (Offered every other year). Prerequisite: Natural Science I and Chemistry Fundamentals or Biological Science I. 2 hours Lecture and 3 hours Laboratory — 3 credits