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Agribusiness Science & Technology - Agronomy Technician Program

Course Curriculum

Semester 01 (Tuition: \$2,470)

Course # Course Title Credits
10-006-116 Introduction to Soils 3

Credits: 3 Lecture Hours: 36 Lab Hours: 36

Course is designed to provide the student with fundamental knowledge of soil and soil composition. Students will study soil types, formation factors, physical properties, biological properties and basic soil chemistry. Units covering tillage, conservation, pH and soil management will also be included. Students will gain the skills required to interpret soil survey maps and recognize qualities of various soil types. The student will perform soil sampling, residue measurements, compaction assessments and soil loss determinations per crop rotation guidelines.

10-006-159 Agribusiness Computer Applications

1

Credits: 1 Lecture Hours: 18

Students will construct, manipulate, and select spreadsheets and documents for various situations in the agriculture industry and on a farm. Data gathering agriculture software will be introduced to demonstrate its use in making management decisions. The use of email features used in business will be explored. Pre/Corequisites: Beginning Microsoft Excel (10-103-106)

10-006-160 Plant Science

3

Credits: 3 Lecture Hours: 36 Lab Hours: 36

Provides fundamental knowledge of plant components and their functions. Topics include pollinating and propagating plants, germinating seeds, plant nutrients, and factors affecting photosynthesis, respiration, and transpiration. Participants will experience plant components and their functions through the completion of hands-on activities.

10-006-161 Career Development in Agriculture

1

Credits: 1 Lecture Hours: 18

Student will develop individual leadership and employment qualities, in addition to exploring the agricultural industry and available careers.

10-103-106 Beginning Microsoft Excel

1

Credits: 1 Lecture Hours: 18

This course is an introduction to Microsoft Excel. Students will learn the basic features to produce basic worksheets and charts. Other topic areas covered include formatting, formulas, built-in functions used to design functional worksheets to solve business problems. Basic experience with Windows is assumed.

10-801-136 English Composition 1

3

Credits: 3 Lecture Hours: 54

This course is designed for learners to develop knowledge and skills in all aspects of the writing process.

Planning, organizing, writing, editing and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of various written documents.

10-804-123 Math with Business Applications

3

Credits: 3 Lecture Hours: 54

Students use real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, and apply math concepts to the purchasing/buying process, the selling process, and apply basic statistics to business/consumer applications.

15

Semester 02 (Tuition: \$3,040)

Course #Course TitleCredits10-006-113Precision Ag Technologies3

Credits: 3 Lecture Hours: 36 Lab Hours: 36

Student will study fundamental processes of the Global Positioning System (GPS) with emphasis on its application to agricultural production. Technical aspects of the GPS satellites, differential correction, and hardware will be covered. The specific applications of the technology in agriculture for navigation, mapping, soil management, variable rate technology (VRT), and yield monitoring will be discussed and demonstrated by the student. Student will gain exposure to technology cost, and potential economic benefit of technology application. Student will also be introduced to the operation of Geographic Information Systems (GIS).

10-006-124 Pesticide Applicator Training

1

Credits: 1 Lecture Hours: 18

The learner will develop a strong understanding and basis of pest application training techniques, methods and standards used in the industry today. This class prepares students to take the Commercial Pesticide Applicator Certificating and Licensing exam category 1.1 Field and Vegetable Crops for the state of Wisconsin.

10-006-125 Crop Protection Products

2

Credits: 2 Lecture Hours: 18 Lab Hours: 36

Course provides information related to current products and practices used in protection of crops. Protection of crops both during the growing season and while in storage following harvest will be covered.

10-006-126 Pest ID & Mgt/Crop Scouting

3

Credits: 3 Lecture Hours: 36 Lab Hours: 36

The student will learn and develop skills, practices, and principles of identifying and managing pests that are a problem for a variety of common regionally grown agricultural crops. The student will learn control measures and application; proper use and safety measures; how to identify insects, weeds, and diseases in crops; various stages of growth related to timeliness of treatment; and methods of applying control measures. The student will learn principles to follow regarding the different ways of crop scouting.

10-006-127 Soil Fertility and Fertilizers

2

Credits: 2 Lecture Hours: 18 Lab Hours: 36

Course will cover the fundamental and applied principles and concepts of soil fertility and plant nutrition. Attention will be given to the nutrient requirements of the commonly produced agronomic crops of our area. Course will provide the student with the information necessary to plan and produce agronomic crops based on crop needs and available resources. Students will be able to interpret soil test reports and make recommendation based on given information for related crop plants. In-field activities will be used to effectively reinforce the material presented in class.

Credits: 2 Lecture Hours: 18 Lab Hours: 36

Students learn to operate, recondition and maintain field application equipment such as manure spreaders, fertilizer spreaders and field sprayers used on modern farms and cooperatives. Students learn calibration procedures for liquid and dry fertilizer applicators. They will learn common terminology used when working with control monitors and associated equipment.

10-070-104 Ag Safety, Electrical & Maintenance

2

Credits: 2 Lecture Hours: 18 Lab Hours: 36

Students will learn skills necessary to help them make general repairs and identify proactive maintenance steps of all types of equipment throughout a farmstead. Safety while performing daily tasks will be included in every unit. Emphasis areas include selecting personal protective equipment, working around cattle, crop storage, farm chemicals and fluids storage, safety awareness of electrical systems both on equipment and around the farmstead, selecting proper tools to perform maintenance procedures, and ATV safety. Students will gain an understanding of viewing the farmstead with a safety focus to recognize farm hazards and being aware of corrective measures that are needed to make the farmstead safe for all personnel on the farm.

10-801-196 Oral/Interpersonal Communication

3

Credits: 3 Lecture Hours: 54

Students demonstrate competency in speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities and other projects.

18

Semester 03 (Tuition: \$490)

Course #Course TitleCredits10-006-197Agribusiness Experiential Learning3

Credits: 3 Lecture Hours: 0 Occupational Hours: 216

The student will have the opportunity to apply course work to a practical, on-the-job situation. Goals, competencies and core abilities are followed. Prerequisites: Legal Aspects of Agribusiness (10-006-114), Pest ID & Mgt/Crop Scouting (10-006-126), Agribusiness Financial Management (10-006-133), Farm Animal Reproduction (10-006-150), or Introduction to Animal Health (10-080-118)

3

Total Credits: 36

Estimated Total Tuition*: \$6,000