

AGRICULTURE BUSINESS

2009 – 2010

20 Months

Credits Required for Graduation: 80

Associate of Applied Science (A.A.S.) Degree

Agri-Business Professionals

Agriculture is one of the leading industries in South Dakota and the Midwest. Lake Area Tech has been training agri-business professionals for about 30 years. These highly skilled graduates are needed in every aspect of the agriculture industry, from managing agri-businesses to applying farm chemicals. Students who enter this program can expect to secure employment in agricultural supply businesses.

A Strong Interest in Agriculture is a Must

Students who enter this profession should have an ag background plus an interest in the business side of agriculture. Students must have the ability to relate well to people and the desire to excel in the academic courses required to complete the degree. Upon successful completion of the required courses, graduates are awarded the Associate of Applied Science (A.A.S.) degree.

Lake Area has an active chapter of the Post-Secondary Agriculture Student Organization (PASO) in which Ag-Business students can participate.

A Blend of Business and Agriculture principles Prepares the Student for the Demands of this Profession

Students receive up-to-date instruction in the areas of crops, soils, fertilizers, chemicals, animal science and nutrition, business management, credit and collections, supervision and business law, computers, sales, and accounting. Each year of the two-year program includes an Internship or a Supervised Occupational Experience (SOE) placement. These Internships and SOE placements allow the student to apply the theory learned in the classroom to the actual job situation.

Field trips and speakers add to the theoretical training provided.

Meanwhile, Back on the Farm...

Lake Area Tech manages a demonstration farm in conjunction with various area ag businesses. The demonstration farm is located northwest of Watertown on county road 17. Students are involved in the operation and management of the demonstration farm.

Job Opportunities Are Plentiful

Due to LATI's history in training ag-business professionals, numerous job sites await successful graduates. Alumni are employed all over the Midwest and graduates should be willing to relocate in order to find the type of job which best meets their needs. A promising future of steady employment, satisfaction, and advancement awaits the well-prepared graduate of agri-business!

Recommended Background Courses

Although not required, the following courses would be beneficial to this course of study prior to attending Lake Area Technical Institute: Vocational Ag courses, Accounting, Computer, Science, Communications, Biology, English, Math.

AGRICULTURE COURSES

ACCT 210 – Principles of Accounting I (3 credits) Basic accounting principles and practices for service and merchandising businesses.

AED 100 – Automated External Defibrillator (.5 credit) To prepare individuals in the workplace to provide care for breathing emergencies, perform cardiopulmonary resuscitation (CPR), and use an automated external defibrillator (AED) for victims of sudden cardiac arrest.

AG 100 – Soil Science (3 credits) Determination of properties of various soils and their suitability for agricultural uses. Hands-on soil sampling and testing are emphasized; also, development of proficiency in interpreting soil survey maps.

AG 102 – Crop Science (3 credits) A comprehensive review of the plant development cycle, from seedling to harvest-ready maturity. Appropriate environmental conditions, insect and disease control, harvesting, and storage are discussed. Profitable management is emphasized.

AG 122 – Fertilizers (2 credits) Identification of fertilizer elements, appropriate use, application procedures, and cost-effectiveness are covered.

AG 124 – Ag Chemicals (2 credits) The safe use of pesticides and herbicides is emphasized. Also discussed: weed and insect identification, chemical selection, and control programs.

AG 200 – Animal Nutrition (2 credits) A comprehensive class dealing with general principles of animal nutrition.

AG 214 – Ag Chemical Equipment (2 credits) Determination of proper application techniques and equipment, calibration of equipment, proper waste disposal, and troubleshooting procedures.

AG 247 – Internship (6 credits) Work-based learning. With instructor approval students are placed in agribusiness jobs which provide the opportunity to apply knowledge gained in the classroom.

AGR 104 – Commodity Merchandising (2 credits) Although designed for the farmer, this course is valuable to anyone interested in marketing commodities. Various strategies and options are discussed so that the student can develop an appropriate personal marketing plan.

AGR 110 – Animal Science (3 credits) The history and development of the livestock industry in South Dakota as well as selection and management of breeding stock, animal health, housing requirements and marketing strategies.

AGR 118 – Soil and Water Management (2 credits) Topics include water quality, the relationship between soil and water, identification of water sources, and South Dakota laws affecting water usage.

AGR 120 – Seed and Grain Technology (2 credits) Grading of grain according to federal standards, selection of high-quality seed, proper storage and conditioning of seed, identification of crop and weed seeds, operation of grading equipment.

AGR 165 – Business Supervised Occupational Experience I (S.O.E.) (6 credits) Work-based learning. With instructor approval students are placed in agri-business jobs which provide the opportunity to apply knowledge gained in the classroom.

AGR 167 – Business Supervised Occupational Experience II (S.O.E.) (5 credits) Work-based learning. With instructor approval, students are placed in agri-business jobs which provide the opportunity to apply knowledge gained in the classroom.

AGR 202 – Livestock Nutrition Problems (2 credits) Application of principles discussed in AGR 200: evaluation and formulation of suitable rations. Computers are used in this process.

AGR 236 – Business Management I (2 credits) An introductory course which includes an overview of the business world: legal aspects, social responsibility, forms of ownership, management challenges, employee motivation, labor relations, and information management.

AGR 238 – Business Management II (2 credits) Prerequisite: AGR 236. Topics include marketing, financial management and reporting, international business growth, and discussion of career implications.

AGR 244 – Supervision (2 credits) Development of knowledge and skills in planning, organization, communication, motivation and leadership. An important course for anyone, especially in the business world.

AGR 250 – Computer Software Applications for Agriculture (2 credits) A review and evaluation of various software packages available today. Application of software to complete typical farm/ranch use exercises so that the student will be able to use a computer effectively to meet the needs of his/her own farm or ranch.

BUS 158 – Business Law (3 credits) An important basic course in how laws affect business. Students gain general knowledge and learn when and where to seek specialized advice and/or legal assistance.

BUS 160 – Principles of Selling (3 credits) An overview of the entire sales process: selling, buying behavior, customer/organization relationships, strategies, legal and ethical considerations.

CIS 102 – Windows Applications for Technicians (3 credits) Using a Windows-based microcomputer and related software, you will gain an understanding and basic operational knowledge about the Windows XP operating system, Microsoft Office word processing, and spreadsheets, presentation software, and publishing software. You will demonstrate this knowledge by scoring at least 80% on assignments, related objective, and performance tests.

ECON 201 – Principles of Microeconomics I (3 credits) Studies the basic economic concepts as they relate to consumer, worker, and business decisions. Emphasis is given to satisfaction maximizing behavior by individuals and profit maximization by firms. Market structures are thoroughly analyzed regarding their effect on price, output, and competitiveness.

HAZ 100 – Hazardous Materials Safety (.5 credit) Hazardous materials safety covers identifying types of hazardous material, demonstrating personal protective equipment, and identifying blood borne pathogens.

SPCM 101 – Fundamentals of Speech (3 credits) Introduces the study of speech fundamentals and critical thinking through frequent public speaking practice, including setting, purpose, audience, and subject.

Electives

AGR 142 – Commercial Pesticide Certification (.5 credit)

AGR 150 – Commercial Drivers License Preparation (.5 credit)

AGR 162 – Co-op Principles (2 credits) Identification of the structure and scope of American cooperatives, the economic rationale, marketing and financing concepts, management, and structural dynamics.

AGR 170 – Dairy Science (2 credits)

An introduction to the development of South Dakota's dairy industry. Topics include selection and management of a dairy herd, animal health and nutrition, housing requirements, and marketing strategies.

AGR 204 – Animal Health II (2 credits) Designed to familiarize students with animal diseases, health products and feed additives.

AGR 212 – Plant Diseases/Insect Identification and Control (2 credits) Topics include pest/disease management, identification of satisfactory pest/disease control practices, and the biology of the causal organisms.

AGR 252 – Advanced Nutrition (2 credits) Advanced discussion of nutrition and its effects on livestock.

AGR 262 – Precision Agriculture (2 credits) This course describes the basic purposes and concepts of precision farming. Basic tools of precision farming including GPS, CIS, and VRT will be used to collect, analyze, and apply the information.

To fulfill graduation requirements, students must select one course in each of the areas listed. Courses marked with an asterisk can be transferred directly to the university system under the terms of articulation agreements.

Behavioral Science

PSYC 100 – Psychology of Human Relations

PSYC 101 – General Psychology *

Communications

ENGL 101 – Composition *

COMM 101 – Contemporary Communication

Mathematics

MATH 100 – Applied General Math

MATH 101 – Intermediate Algebra

MATH 102 – College Algebra *

Social Science

ECON 105 – Leadership in the Global Workplace

ECON 202 – Principles of Macroeconomics II *

SOC 100 – Introduction to Sociology *