

Agricultural Power, Structural and Technical Systems (2022)

ACADEMIC SKILLS

AA. SPEAKING AND LISTENING AA

- 1 Utilize effective verbal and non-verbal communication skills AA1
- 2 Participate in conversation, discussion and group presentations AA2
- 3 Communicate and follow directions/procedures AA3
- 4 Utilize speaking and listening skills to communicate effectively with customers and co-workers AA4

AB. READING AND WRITING AB

- 1 Locate and interpret written information AB1
- 2 Read and interpret workplace documents, e.g., reports, manuals, schematics, flowcharts, tables, graphs AB2
- 3 Identify relevant details, facts and specifications AB3
- 4 Record information accurately and completely AB4
- 5 Demonstrate competence in organizing, writing and editing using correct vocabulary, spelling, grammar and punctuation AB5
- 6 Demonstrate the ability to write clearly and concisely using industry-specific terminology AB6

AC. CRITICAL THINKING AND PROBLEM SOLVING AC

- 1 Utilize critical-thinking skills to determine best options/outcomes, e.g., analyze reliable/unreliable sources of information, use previous experiences, implement crisis management, develop contingency planning AC1
- 2 Utilize innovation and problem-solving skills to arrive at the best solution for the current situation AC2
- 3 Implement effective decision-making skills AC3

AD. MATHEMATICS AD

- 1 Perform basic and higher-level math operations, e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios, numbering systems AD1
- 2 Solve problems using measurement skills, e.g., distance, weight, area, volume AD2

- 3 Make reasonable estimates AD3
- 4 Use tables, graphs, diagrams and charts to obtain or convey information AD4
- 5 Use reasoning and problem-solving skills in mathematics AD5

AE. FINANCIAL LITERACY AE

- 1 Locate, evaluate and apply personal financial information AE1
- 2 Identify the components of a budget and how one is created AE2
- 3 Set personal financial goals and develop a plan for achieving them AE3
- 4 Describe types of financial service providers and considerations in selecting a provider AE4
- 5 Demonstrate ability to meet financial obligations AE5

AF. INTERNET USE AND SECURITY AF

- 1 Recognize the potential risks associated with internet and social media use AF1
- 2 Identify and apply internet security practices, e.g., password security, login, logout, log off, lock computer AF2
- 3 Practice safe, legal and responsible use of technology in the workplace AF3

AG. INFORMATION TECHNOLOGY AG

- 1 Use technology appropriately to enhance professional presentations AG1
- 2 Demonstrate effective, appropriate and ethical use of social media AG2
- 3 Identify ways social media can be used as marketing, advertising and data gathering tools AG3

AH. TELECOMMUNICATIONS AH

- 1 Select and utilize the appropriate environment, devices, services and applications to complete workplace tasks AH1
- 2 Demonstrate appropriate etiquette when using telecommunications, e.g., cell phone, e-mail, messaging services, online meetings, conference calls AH2

EMPLOYABILITY SKILLS**EA. POSITIVE WORK ETHIC EA**

- 1 Explain the importance of pride and confidence about work and learning new tasks EA1
- 2 Demonstrate consistent and punctual attendance EA2
- 3 Demonstrate initiative in assuming tasks EA3
- 4 Exhibit dependability in the workplace EA4
- 5 Take and provide direction in the workplace EA5
- 6 Accept responsibility for personal decisions and actions EA6

EB. INTEGRITY EB

- 1 Abide by workplace policies and procedures, e.g., safety, internet and cell phone use, code of conduct **EB1**
 - 2 Demonstrate honesty and reliability **EB2**
 - 3 Demonstrate ethical characteristics and behaviors **EB3**
 - 4 Maintain confidentiality and integrity of company information **EB4**
 - 5 Support the mission and vision of the company **EB5**
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EC. SELF-REPRESENTATION **EC**

- 1 Demonstrate appropriate dress and hygiene in the workplace **EC1**
 - 2 Use language and manners suitable for the workplace **EC2**
 - 3 Demonstrate polite and respectful behavior toward others **EC3**
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ED. TIME, TASK AND RESOURCE MANAGEMENT **ED**

- 1 Plan and follow a work schedule **ED1**
 - 2 Complete work tasks successfully with minimal supervision **ED2**
 - 3 Work successfully within budgetary constraints **ED3**
 - 4 Demonstrate ability to stay on task to produce high-quality deliverables on time **ED4**
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EE. DIVERSITY AWARENESS **EE**

- 1 Define and differentiate diversity, equity, inclusion, discrimination and harassment **EE1**
 - 2 Work effectively with all customers and co-workers **EE2**
 - 3 Explain the benefits of diversity within the workplace **EE3**
 - 4 Explain the importance of respect for the feelings, values and beliefs of others **EE4**
 - 5 Identify strategies to bridge cultural/generational differences and use differing perspectives to increase the overall quality of work **EE5**
 - 6 Illustrate techniques for eliminating bias and stereotyping in the workplace **EE6**
 - 7 Identify ways tasks can be structured to accommodate the diverse needs of workers **EE7**
 - 8 Recognize the challenges and advantages of a global workforce **EE8**
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EF. TEAMWORK **EF**

- 1 Recognize the characteristics of a team environment and conventional workplace **EF1**
- 2 Demonstrate effective team skills, e.g., setting goals, listening, following directions, questioning, dividing work, conflict resolution, meeting facilitation, and evaluate their importance in the workplace **EF2**

EG. CREATIVITY AND RESOURCEFULNESS **EG**

- 1 Explain the importance of contributing and conveying new ideas in the workplace **EG1**
 - 2 Describe the importance of posing questions when developing ideas **EG2**
 - 3 Explain the value of varying ideas and opinions **EG3**
 - 4 Locate and verify information during the creative process **EG4**
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EH. CONFLICT RESOLUTION **EH**

- 1 Identify conflict resolution skills to enhance productivity and improve workplace relationships **EH1**
 - 2 Implement conflict resolution strategies and problem-solving skills **EH2**
 - 3 Explain the use of documentation and its role as a component of conflict resolution **EH3**
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EI. CUSTOMER/CLIENT SERVICE **EI**

- 1 Recognize the importance of and demonstrate how to properly greet/approach customers and clients **EI1**
 - 2 Identify and address needs of customers/clients **EI2**
 - 3 Provide helpful, courteous and knowledgeable service **EI3**
 - 4 Identify appropriate channels of communication with customers/clients, e.g., online, phone call, faceto-face **EI4**
 - 5 Identify techniques to seek and use customer/client feedback to improve company services **EI5**
 - 6 Explain the relationship between customer/client satisfaction and company success **EI6**
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EJ. ORGANIZATIONS, SYSTEMS AND CLIMATES **EJ**

- 1 Define profit and identify factors affecting the profitability of a business **EJ1**
 - 2 Identify "big picture" issues in conducting business, e.g., forecasting, global market, risk management **EJ2**
 - 3 Identify roles in fulfilling the mission of the workplace **EJ3**
 - 4 Identify the rights of workers, e.g., adult and child labor laws, and other equal employment opportunity laws **EJ4**
 - 5 Recognize the chain of command, organizational flow chart system and hierarchy of management within an organization **EJ5**
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EK. JOB ACQUISITION AND ADVANCEMENT **EK**

- 1 Recognize the importance of maintaining a job and pursuing a career **EK1**
- 2 Define jobs associated with a specific career path or profession **EK2**
- 3 Identify and seek various work experience opportunities, e.g., volunteerism, internships, co-op, parttime/full-time employment **EK3**
- 4 Prepare a resume, cover letter and job application **EK4**

- 5 Prepare for and participate in a job interview, e.g., research company, highlight personal strengths, prepare questions, conduct a mock interview, dress appropriately **EK5**
 - 6 Explain the components of a successful job interview **EK6**
 - 7 Identify key factors to evaluate employment offers, e.g., salary, benefits packages **EK7**
 - 8 Explain the proper procedure for leaving a job **EK8**
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EL. LIFELONG LEARNING **EL**

- 1 Acquire current and emerging industry-related information **EL1**
 - 2 Demonstrate commitment to learning as a life-long process and recognize learning opportunities **EL2**
 - 3 Identify various self-improvement opportunities **EL3**
 - 4 Explain the importance of adaptability in career planning and self-management, e.g., diverse portfolio, credentials, professional development **EL4**
 - 5 Employ leadership skills to achieve workplace objectives, e.g., personal vision, adaptability, change, shared vision **EL5**
 - 6 Recognize the importance of job performance evaluation and coaching as it relates to career advancement **EL6**
 - 7 Accept and provide constructive criticism **EL7**
 - 8 Describe the impact of the global economy on jobs and careers **EL8**
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EM. JOB SPECIFIC TECHNOLOGIES **EM**

- 1 Identify the value of new technologies and their impact on driving continuous change and the need for lifelong learning **EM1**
 - 2 Research and identify emerging technologies for specific careers **EM2**
 - 3 Select appropriate technological resources to accomplish work **EM3**
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EN. HEALTH AND SAFETY **EN**

- 1 Identify and assume responsibility for the safety of self and others **EN1**
 - 2 Follow safety guidelines in the workplace, e.g., OSHA, CDC **EN2**
 - 3 Explain the impact of personal health and wellness on job performance **EN3**
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OCCUPATIONAL SKILLS

OA. APPLY MANAGEMENT PLANNING PRINCIPLES IN AFNR BUSINESS ENTERPRISES **OA**

- 1 Evaluate how mission statements guide business goals, objectives and resource allocation **OA1**
- 2 Formulate individual/business goals and objectives **OA2**
- 3 Describe the impact of the US Farm Bill on the agriculture industry **OA3**

- 4 Evaluate federal government and industry regulations, e.g., EPA, OSHA, USDA, NRCS, FSA, in planning/operating an AFNR business OA4
 - 5 Develop a budget, as applied to the AFNR business, including capital, human, financial and time, e.g., enterprise budget, time on investment, budget constraint OA5
 - 6 Describe how special interest groups, e.g., PETA, HSUS, Sierra Club, influence U.S. agricultural policy OA6
 - 7 Describe how proactive farm groups influence agricultural policy, e.g., KYFB, KY Pork Producers, KY Beef Council, KY Soybean Board, KY Corn Growers Association, Kentucky Poultry Federation, Kentucky Dairy Development Council OA7
 - 8 Analyze how communication technology, e.g., social media, print news, television, impacts public perception of the agriculture industry OA8
 - 9 Evaluate state government and industry regulations, e.g., KDA, KY Proud, livestock reports, in planning/operating an AFNR business OA9
 - 10 Identify related government agencies, their functions and programs, as they relate to agribusiness, e.g., Extension, KY Ag Finance, KY Ag Development OA10
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OB. USE RECORD KEEPING AND ACCOUNTING PROCESSES TO ACCOMPLISH AFNR OBJECTIVES, MANAGE BUDGETS AND COMPLY WITH LAWS AND REGULATIONS BUSINESS OB

- 1 Maintain accurate production/agribusiness records, e.g., balance sheet, profit/loss sheet, enterprise budgets OB1
 - 2 Analyze records to improve efficiency and profitability of an AFNR business, e.g., liquidity and solvency, return on investment, repayment capacity OB2
 - 3 Compare types and terms of credit, e.g., line of credit, term loan, interest rate, credit establishment OB3
 - 4 Budget resources, as applied to the AFNR business, including capital, human, financial and time, e.g., enterprise budget, time on investment, budget constraint OB4
 - 5 Identify tax reporting requirements for income, property and employment associated with small AFNR businesses, e.g., Farm Business Management Program OB5
 - 6 Monitor inventory to maintain optimal levels and calculate costs of carrying input and output inventory OB6
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OC. DEVELOP A BUSINESS PLAN FOR AN AFNR ENTERPRISE OR BUSINESS UNIT OC

- 1 Differentiate types of ownership/business structures, e.g., corporations, cooperatives, partnerships, sole proprietorships, non-profit, in a capitalistic economic system OC1
- 2 Analyze businesses to determine strengths, weaknesses, opportunities and threats, i.e., SWOT Analysis OC2

- 3 Describe ways to assess and manage risks, e.g., financial, environmental, workplace, to reduce liability **OC3**
 - 4 Describe how enterprise diversification can address production risks **OC4**
 - 5 Analyze marketing techniques, e.g., contracts, futures, direct marketing, options that reduce risk **OC5**
 - 6 Explain how insurance strategies minimize risk, e.g., property, liability, production/income loss, personal life and health, workman's comp, auto liability **OC6**
 - 7 Describe the types and components of a risk management plan for an AFNR business, e.g., Water Quality Plan, HACCP **OC7**
 - 8 Identify the effect of foreign policy on agricultural economics, e.g., tariffs, trade agreements, embargos **OC8**
 - 9 Compare sources of credit, e.g., farm credit systems, grants, dealer credit **OC9**
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OD. UTILIZE SALES AND MARKETING PRINCIPLES COMMON TO AGRIBUSINESS SYSTEMS TO ACCOMPLISH AFNR BUSINESS OBJECTIVES **OD**

- 1 Interpret the laws of supply and demand **OD1**
- 2 Compare and contrast macroeconomic and microeconomic concepts **OD2**
- 3 Discuss factors that influence buyer motivation, e.g., service, price, brand loyalty, product quality, product features **OD3**
- 4 Explain effective techniques that develop effective customer relationships **OD4**
- 5 Explain components of the sales process, e.g., personal rapport, needs and wants, features and benefits, objections, close **OD5**
- 6 Describe the meaning and use of the four P's, i.e., product, place, price and promotion, in marketing **OD6**
- 7 Analyze appropriate market and marketing research, e.g., target market, niche market, buyer profiles **OD7**
- 8 Compare the effectiveness of various marketing strategies for an AFNR business **OD8**
- 9 Develop a marketing plan for an agricultural product, service, or agribusiness **OD9**
- 10 Explain concepts associated with international markets, e.g., global food supply chain **OD10**
- 11 Assess the presence of marketing infrastructure for agricultural commodities, e.g., storage, transportation, processing **OD11**