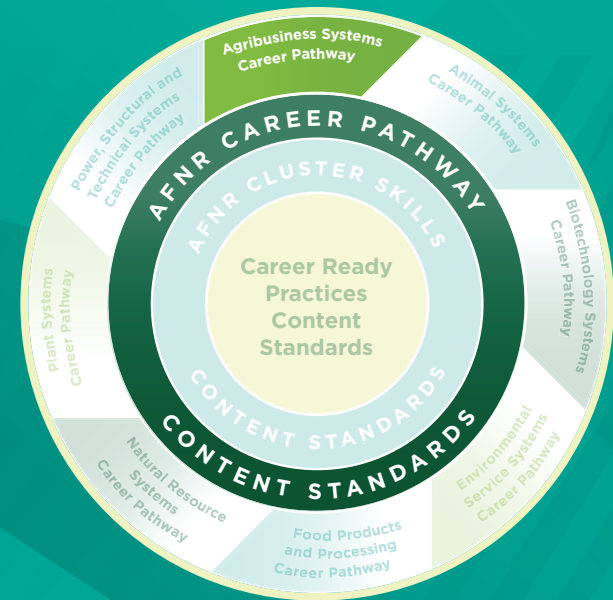


AGRIBUSINESS SYSTEMS CAREER PATHWAY



Agriculture, Food and Natural Resources Content Standards

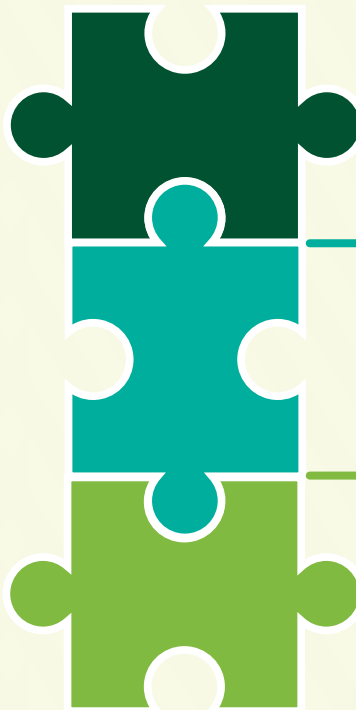
Agribusiness Systems Career Pathway Content Standards

PURPOSE: The career pathway content standards outline technical knowledge and skills required for future success within this discipline. The content standards are intended to provide state agricultural education leaders and educators with a forward-thinking guide for what students should know and be able to do after completing a program of study in this career pathway. State leaders and local educators are encouraged to use the standards as a basis for the development of well-planned curriculum and assessments for Agriculture, Food and Natural Resource (AFNR)-related Career and Technical Education (CTE) programs. Adoption and use of these standards is voluntary; states and local entities are encouraged to adapt the standards to meet local needs.

SCOPE: The Agribusiness Systems (ABS) Career Pathway encompasses the study of agribusinesses and their management including, but not limited to, record keeping, budget management (cash and credit), business planning, and sales and marketing. Students completing a program of study in this pathway will demonstrate competence in the application of principles and techniques for the planning, development, application and management of agribusiness systems in AFNR settings.

SAMPLE CAREERS: Banker/Loan Officer, Farm Investment Manager, Agricultural Commodity Broker, Agricultural Economist, Agricultural Chemical Dealer, Field Service Representative, Rural Appraiser, Insurance Adjuster

DEFINITIONS: Within each pathway, the standards are organized as follows:



- **Common Career Technical Core (CCTC) Standards** – These are the standards for Agribusiness Systems (AG-ABS) from the 2012 version of the Common Career and Technical Core Standards, which are owned by the National Association of State Directors of Career and Technical Education/National Career Technical Education Foundation and are used here with permission. These statements define what students should know and be able to do after completing instruction in a program of study for this pathway.
- **Performance Indicators** – These statements distill each CCTC Standard into more discrete indicators of the knowledge and skills students should attain through a program of study in this pathway. Attainment of the knowledge and skills outlined in the performance indicators is intended to demonstrate an acceptable level of proficiency with the related CCTC Standard at the conclusion of a program of study in this area.
- **Sample Measurements** – The statements are *sample* measurable activities that students might carry out to indicate attainment of each performance indicator at three levels of proficiency – awareness (a), intermediate (b), and advanced (c). This is not intended to be an all-encompassing list; the sample measurements are provided as examples to demonstrate a logical progression of knowledge and skill development pertaining to one or more content areas related to the performance indicator. State and local entities may determine the most appropriate timing for attainment of each level of proficiency based upon local CTE program structures.

CONNECTIONS TO OTHER PATHWAYS:

For additional content standards on the topic of career awareness, see Cluster Skills CS.05.
For additional content standards on the topic of leadership, see Career Ready Practices CRP.09.
For additional content standards on the topic of ethics, see Career Ready Practices CRP.09.
For additional content standards on the topic of teamwork, see Career Ready Practices CRP.12.



ABS.01. Apply management planning principles in AFNR businesses.



ABS.01.01. Apply micro- and macroeconomic principles to plan and manage inputs and outputs in an AFNR business.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.01.01.01.a. Examine and provide examples of microeconomic principles related to decisions about AFNR business inputs and outputs (e.g., supply, demand and equilibrium, elasticity, diminishing returns, opportunity cost, etc.).

ABS.01.01.01.b. Apply microeconomic principles to calculate values associated with different inputs and outputs in AFNR businesses (e.g., price, point of equilibrium, opportunity costs, marginal costs, etc.).

ABS.01.01.01.c. Create strategies to maximize the efficiency of AFNR business inputs and outputs using microeconomic principles.

ABS.01.01.02.a. Examine and provide examples of macroeconomic principles related to AFNR businesses (e.g., Gross Domestic Product, inflation, capital accounts, unemployment rate, etc.).

ABS.01.01.02.b. Analyze and describe the relationship between AFNR business and industry outputs and domestic and global macroeconomic trends (e.g., Gross Domestic Product, national income, rate of growth, price levels, etc.).

ABS.01.01.02.c. Analyze the impact of the current macroeconomic environment on decisions related to AFNR businesses.

ABS.01.01.03.a. Define and research the nature of monetary policies in different global economic systems (e.g., traditional economic system, command economic system, market economic system, mixed economic system, etc.).

ABS.01.01.03.b. Assess the monetary policy in different countries and explain how it impacts AFNR businesses.

ABS.01.01.03.c. Create recommendations for change in monetary policy according to a scenario related to an AFNR business.



ABS.01.02. Read, interpret, evaluate and write statements of purpose to guide business goals, objectives and resource allocation.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.01.02.01.a. Read and interpret statements of purpose (e.g., vision, mission statement, charter, etc.).

ABS.01.02.01.b. Assess different approaches for creating statements of purpose for AFNR businesses and choose an appropriate approach to meet organizational needs.

ABS.01.02.01.c. Create and disseminate statements of purpose for activities in AFNR businesses.

<p>ABS.01.02.02.a. Identify the meaning and importance of goals and objectives in AFNR business enterprises.</p>	<p>ABS.01.02.02.b. Prepare short-term, intermediate and long-term goals and objectives that are consistent with the statements of purpose for an AFNR business.</p>	<p>ABS.01.02.02.c. Evaluate AFNR business goals and objectives, then make revisions based on data and observations.</p>
 <p>ABS.01.03. Devise and apply management skills to organize and run an AFNR business in an efficient, legal and ethical manner.</p>		
 <p>Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.</p>		
<p>ABS.01.03.01.a. Define and provide examples of management skills used to organize an AFNR business (e.g., management types, organizational structures, time management techniques, conducting business agreements, etc.).</p>	<p>ABS.01.03.01.b. Analyze the effectiveness of different management skills used in an AFNR business.</p>	<p>ABS.01.03.01.c. Devise strategies to improve the operation of AFNR businesses using management skills.</p>
<p>ABS.01.03.02.a. Identify and interpret appropriate local, state, federal, international and industry regulations that impact the management and operation of AFNR businesses.</p>	<p>ABS.01.03.02.b. Assess and describe the positive and negative impact of local, state, federal, international and industry regulations on the management and operation of AFNR businesses.</p>	<p>ABS.01.03.02.c. Devise management or operational strategies to address and adhere to local, state, federal, international and industry regulations.</p>
<p>ABS.01.03.03.a. Identify and evaluate the presence or lack of ethical standards in planning and operating AFNR businesses.</p>	<p>ABS.01.03.03.b. Analyze the importance of using ethical standards and develop methods to communicate ethical standards within AFNR businesses.</p>	<p>ABS.01.03.03.c. Design methods for AFNR businesses to implement ethical standards in management skills (e.g., management types, organizational structures, time management techniques, conducting business agreements, etc.).</p>
 <p>ABS.01.04. Evaluate, develop and implement procedures used to recruit, train and retain productive human resources for AFNR businesses.</p>		
 <p>Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.</p>		
<p>ABS.01.04.01.a. Research and explain the meaning and functions of human resources in AFNR businesses (e.g., recruitment, evaluate employee performance, employee record management, compensation, etc.).</p>	<p>ABS.01.04.01.b. Create methods to describe specific positions and structures of an AFNR business to share with human resources (e.g., job descriptions, business information sheet, pamphlet, etc.).</p>	<p>ABS.01.04.01.c. Establish and maintain appropriate records and reports on human resources in AFNR businesses (e.g., personal records, absenteeism record, payroll data, employee requests, etc.).</p>

ABS.01.04.02.a. Identify and explain programs used in AFNR businesses to recruit, train and retain employees and define their purpose (e.g., career development, training plans, recruitment plans, evaluation programs, etc.).	ABS.01.04.02.b. Analyze and evaluate programs used to recruit, train and retain employees based on their effectiveness.	ABS.01.04.02.c. Design guidelines and programs to recruit, train and retain employees in AFNR businesses.
ABS.01.04.03.a. Research and summarize purposes and objectives of benefit and compensation plans for AFNR businesses.	ABS.01.04.03.b. Generate compliant and competitive benefit and compensation plans for AFNR business employees.	ABS.01.04.03.c. Create recommendations for AFNR employers to improve current benefit and compensation plans (e.g., how to motivate employees, recognize productivity, equitably compensate, etc.).



ABS.02. Use record keeping to accomplish AFNR business objectives, manage budgets and comply with laws and regulations.



ABS.02.01. Apply fundamental accounting principles, systems, tools and applicable laws and regulations to record, track and audit AFNR business transactions (e.g., accounts, debits, credits, assets, liabilities, equity, etc.).



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.02.01.01.a. Examine and describe accounting systems and procedures used for record keeping in AFNR businesses (e.g., cash vs. accrual systems, identification of appropriate accounts, double-entry accounting, entry of debits and credits, etc.).	ABS.02.01.01.b. Evaluate the implementation and appropriateness of accounting systems and procedures used for record keeping in AFNR businesses	ABS.02.01.01.c. Select appropriate accounting systems and develop accounting procedures to maintain records for AFNR businesses
ABS.02.01.02.a. Research and summarize the features of different tools and services for recording, tracking and auditing AFNR business transactions (e.g., electronic tools, paper-based tools, consultative services, on-line services, banking services, etc.).	ABS.02.01.02.b. Compare and contrast the benefits and limitations of different tools and services for recording, tracking, and auditing AFNR business transactions (e.g., convenience, costs, data security, etc.).	ABS.02.01.02.c. Recommend and select tools and services to track, record and audit AFNR business transactions that meet business needs and priorities (e.g., electronic and paper based systems, etc.).
ABS.02.01.03.a. Research and examine the implications of applicable laws and regulations related to recording, tracking and auditing AFNR business transactions (e.g., Generally Accepted Accounting Principles, data security, etc.).	ABS.02.01.03.b. Predict and calculate the consequences of non-compliance with laws and regulations related to recording, tracking and auditing accounting information in AFNR businesses.	ABS.02.01.03.c. Assess the degree to which AFNR accounting practices comply with laws and regulations related to recording, tracking and auditing accounting information in AFNR businesses.



ABS.02.02. Assemble, interpret and analyze financial information and reports to monitor AFNR business performance and support decision-making (e.g., income statements, balance sheets, cash-flow analysis, inventory reports, break-even analysis, return on investment, taxes, etc.).



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.02.02.01.a. Compare and contrast the different types of financial reports (e.g., income statements, cash flow statements, equity statements, etc.) and their frequency of use (e.g., daily, weekly, monthly, quarterly, annual) for monitoring AFNR business performance.

ABS.02.02.01.b. Prepare and interpret financial reports to describe the performance of AFNR businesses (e.g., efficiency, profitability, net worth, financial ratios, working capital ratio, leverage, etc.).

ABS.02.02.01.c. Recommend appropriate financial reports to assemble to support specific AFNR business decisions (e.g., evaluating efficiency, profitability, net worth, financial ratios, etc.).

ABS.02.02.02.a. Research and summarize strategies for tracking, reporting and managing inventory in AFNR businesses (e.g., spreadsheets, databases, word processing, networked systems and the Internet, etc.).

ABS.02.02.02.b. Use accounting information to prepare financial reports associated with inventory in AFNR businesses (e.g., cost of goods sold, margins on goods, etc.).

ABS.02.02.02.c. Create recommendations to improve management of inventory in AFNR businesses (e.g., maintaining optimal levels, calculating costs of carrying input and output inventory, supply chain management, etc.).

ABS.02.02.03.a. Define and classify different types of taxes that may be paid by AFNR businesses (e.g., income, property, sales, employment, estate, etc.).

ABS.02.02.03.b. Analyze and describe reporting requirements for different types of taxes paid by AFNR businesses (e.g., income, property, sales, employment, etc.).

ABS.02.02.03.c. Assemble financial information to prepare tax filings for AFNR businesses.



ABS.03. Manage cash budgets, credit budgets and credit for an AFNR business using generally accepted accounting principles.



ABS.03.01. Develop, assess and manage cash budgets to achieve AFNR business goals.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.03.01.01.a. Compare and contrast components of cash budgets (e.g., anticipated revenue, production costs, overhead costs, profit, etc.) and identify the appropriate components to include in a budget given the nature of the AFNR enterprise.	ABS.03.01.01.b. Examine and interpret cash budgets for AFNR businesses.	ABS.03.01.01.c. Develop cash budgets for AFNR businesses.
ABS.03.01.02.a. Research and summarize factors that impact management of cash budgets in AFNR businesses (e.g., changes in price of inputs/outputs, financial investment performance, capital purchases, human resources, etc.).	ABS.03.01.02.b. Examine and identify strategies to manage components of cash budgets to minimize liabilities and maximize profit in AFNR businesses (e.g., delayed payment of expenses, prepayment of expenses, etc.).	ABS.03.01.02.c. Predict the impact of management decisions on cash budgets in AFNR businesses.



ABS.03.02. Analyze credit needs and manage credit budgets to achieve AFNR business goals.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.03.02.01.a. Research and summarize the characteristics of different types of credit instruments available to AFNR businesses (e.g., lines of credit, operating notes, alternative sources of capital, etc.).	ABS.03.02.01.b. Analyze AFNR business needs to determine the necessity of loans for business operation.	ABS.03.02.01.c. Analyze and assemble the information needed to obtain credit for AFNR businesses.
ABS.03.02.02.a. Examine and interpret the terms and conditions associated with credit instruments used in AFNR businesses (e.g., repayment terms, APR, grace periods, personal liability, interest rates, etc.).	ABS.03.02.02.b. Compare and contrast strategies to responsibly manage credit budgets in AFNR businesses.	ABS.03.02.02.c. Analyze AFNR business needs and recommend appropriate uses of available credit budgets to meet goals.



ABS.04. Develop a business plan for an AFNR business.



ABS.04.01. Analyze characteristics and planning requirements associated with developing business plans for different types of AFNR businesses.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.04.01.01.a. Describe the meaning, importance and economic impact of entrepreneurship on the AFNR industry and larger economy.	ABS.04.01.01.b. Classify the characteristics of successful entrepreneurs in AFNR businesses.	ABS.04.01.01.c. Demonstrate the application of entrepreneurial skills to conceptualize an AFNR business (e.g., idea generation, opportunity analysis, risk assessment, etc.).
ABS.04.01.02.a. Categorize the characteristics of the types of ownership structures used in AFNR businesses (e.g., sole proprietorships, cooperatives, partnerships and corporations).	ABS.04.01.02.b. Compare and contrast business plans for different types of ownership structures used in AFNR businesses.	ABS.04.01.02.c. Generate conclusions about the successes and failures of AFNR businesses within the global economics system as related to the business ownership structure.
ABS.04.01.03.a. Research and describe the components to include in a business plan for an AFNR business.	ABS.04.01.03.b. Analyze the information needed and strategies to obtain the information to complete an AFNR business plan (e.g., SMART goals and objectives, needs assessment, cash flow projection, etc.).	ABS.04.01.03.c. Prepare a business plan for an AFNR business.



ABS.04.02. Develop production and operational plans for an AFNR business.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.04.02.01.a. Identify and define the components of operational plans in AFNR businesses (e.g., location, supply and inventory management, production and distribution, organization structure, etc).	ABS.04.02.01.b. Compare and contrast the strengths and weaknesses of operational plans from different AFNR businesses to determine best practices.	ABS.04.02.01.c. Make recommendations to improve operational plans for an AFNR business based on best practices.
ABS.04.02.02.a. Devise strategies to illustrate the production process of an AFNR business to produce a specific agricultural product.	ABS.04.02.02.b. Identify and assess alternative production systems for a specific agricultural product.	ABS.04.02.02.c. Create strategies to improve the production process of an agricultural product for an AFNR facility (e.g., SWOT-strengths, weaknesses, opportunities and threats, supply chain management, etc.).



ABS.04.03. Identify and apply strategies to manage or mitigate risk.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.04.03.01.a. Assess and classify sources of risk for an AFNR business (e.g., financial risk, public perception of company, etc.).	ABS.04.03.01.b. risk management strategies for AFNR businesses (e.g., cash flow projection, analyze market trends, etc.).	ABS.04.03.01.c. Determine methods to match risk management strategies to risk situations in an AFNR business.
ABS.04.03.02.a. Research and summarize examples that illustrate the importance of risk and uncertainty within AFNR businesses.	ABS.04.03.02.b. Analyze alternative approaches to reducing risk for AFNR businesses (e.g., insurance for product liability, property, production or income loss for personnel life and health, etc.).	ABS.04.03.02.c. Prepare a comprehensive risk management and contingency plan for an AFNR business.



ABS.05. Use sales and marketing principles to accomplish AFNR business objectives.



ABS.05.01. Analyze the role of markets, trade, competition and price in relation to an AFNR business sales and marketing plans.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.05.01.01.a. Distinguish and explain markets related to AFNR businesses (e.g. commodity markets, energy markets, etc.).	ABS.05.01.01.b. Analyze and describe the role of trade and price in the market structure as it relates to AFNR businesses.	ABS.05.01.01.c. Evaluate and predict future trends for a specific AFNR product as related to markets, trade and price (e.g., corn, oil, wheat, etc.).
ABS.05.01.02.a. Research and summarize different forms of market competition found in AFNR businesses (e.g., direct competitors, indirect competitors, replacement competitors, etc).	ABS.05.01.02.b. Compare and contrast different forms of market competition and how they can be applied to different AFNR businesses.	ABS.05.01.02.c. Design and conduct experiments to determine market competition effectiveness of different AFNR businesses.





ABS.05.02. Assess and apply sales principles and skills to accomplish AFNR business objectives.



Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.

ABS.05.02.01.a. Identify and explain components of the sales process for AFNR businesses (e.g., understanding needs, develop solutions, close sale, etc.).	ABS.05.02.01.b. Apply the sales process to AFNR businesses and communicate ways of accomplishing the businesses' goals and objectives.	ABS.05.02.01.c. Analyze the sales process of AFNR businesses and create methods to suggest improvements.
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<p>ABS.05.02.02.a. Research and summarize examples of different types of sales calls used in AFNR businesses (e.g., cold calls, face-to-face meetings, follow up calls, etc.).</p>	<p>ABS.05.02.02.b. Assess different customer reactions that could be encountered during different types of sales calls used in AFNR businesses and prepare an appropriate response (e.g., objections, competitor prices, competing products, post-sale service, complaints about product, etc.).</p>	<p>ABS.05.02.02.c. Create strategies for developing plans for different types of sales calls used in AFNR businesses.</p>
 <p>ABS.05.03. Assess marketing principles and develop marketing plans to accomplish AFNR business objectives.</p>		
 <p>Sample Measurement: The following sample measurement strands are provided to guide the development of measurable activities (at different levels of proficiency) to assess students' attainment of knowledge and skills related to the above performance indicator. The topics represented by each strand are not all-encompassing.</p>		
<p>ABS.05.03.01.a. Identify and explain marketing principles used in AFNR businesses (e.g., 4 P's-product, place, price, promotion; attention, interest, desire, action, etc.).</p>	<p>ABS.05.03.01.b. Assess and select appropriate alternative marketing strategies (e.g. value-adding, branding, niche marketing, etc.) for AFNR businesses using established marketing principles</p>	<p>ABS.05.03.01.c. Deconstruct and analyze current AFNR marketing plans to determine the effectiveness of implementation of marketing principles and alternative marketing strategies.</p>
<p>ABS.05.03.02.a. Research and categorize different strategies used in marketing programs for AFNR businesses (e.g., Internet, direct to customer, social media, etc.).</p>	<p>ABS.05.03.02.b. Compare and contrast the strategies of marketing for products and services used in AFNR businesses (e.g., direct marketing, commodities, etc.).</p>	<p>ABS.05.03.02.c. Devise plans to implement and evaluate marketing strategies for products and services used in AFNR businesses.</p>
<p>ABS.05.03.03.a. Research and summarize the purpose, components and process to develop marketing plans for AFNR businesses.</p>	<p>ABS.05.03.03.b. Perform a market analysis to gather information for marketing plans for AFNR businesses (e.g., evaluation of competitors, customers, domestic and international policy, regulations and rules, standards, etc.).</p>	<p>ABS.05.03.03.c. Construct comprehensive marketing plans for AFNR businesses.</p>