

National FFA Farm Business Management Career Development Event

A Special Project of the National FFA Foundation

Important Note

Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.

I. Purpose

The National FFA Farm Business Management Career Development Event provides competition that fosters information assimilation, critical thinking and problem-solving skills necessary for successful business management. The skills learned in this event can be used to successfully manage a farm, pursue agricultural business careers and can be applied to personal financial management. The National FFA Farm Business Management Career Development Event enhances and encourages opportunities for all participants to receive instruction that develops business management skills.

For details about the scope of farms included in this event, see “What is a Farm?” in the Resources section of this chapter.

II. Objectives

The event objectives are for participants to demonstrate their ability to:

- A. Analyze business management information.
- B. Apply economic principles and concepts of business management to the decision-making process.
- C. Evaluate business management decisions.
- D. Work together cooperatively as a group.

III. Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards

With the recommendation of the National FFA Board of Directors, all national FFA programs have incorporated these standards to guide the direction and content of program materials and activities. Refer to Appendix A in this chapter of the handbook for a complete list of the measurable activities that participants will carry out in this event. For details about the incorporation of AFNR standards, refer to the Introduction chapter of the CDE handbook.

IV. Principles and Concepts

The principles and concepts listed below may be included in each section event.

- A. Economic Principles Related to Business Management
 1. Production functions
 - a. diminishing returns
 - b. profit maximizing point:
 - i. $MFC=MVP$
 - ii. $MC=MR$
 2. Opportunity costs
 - a. alternative investment opportunities
 - b. alternative use of resources

3. Cost analysis
 - a. fixed costs
 - b. variable costs
4. Input combinations
5. Enterprise selection
 - a. equi-marginal returns
 - b. specialization and diversification
6. Supply and demand
 - a. price and quantity determination
 - b. elasticity of demand
 - c. elasticity of supply
 - d. substitute, complementary and competitive products
 - e. comparative advantage
7. Types of markets
 - a. perfectly competitive markets
 - b. oligopoly markets
 - c. monopolistic competitions
 - d. monopoly markets
- B. Concepts related to the use and analysis of records to manage resources
 1. Analysis of records
 - a. financial statements
 - i. balance sheet
 - ii. income statement
 - iii. statement of owner equity
 - iv. statement of cash flow
 - b. financial statement ratios
 - i. solvency
 - ii. liquidity
 - iii. profitability
 - iv. repayment capacity
 - v. financial efficiency
 2. Budgeting
 - a. partial budgets
 - b. whole farm budgets
 - c. enterprise budgets
 3. Cash flow analysis
 - a. summary
 - b. projections
 4. Managerial accounting
 5. Tax management
- C. Concepts and functions of risk management
 1. Financial
 - a. capital budgeting
 - i. time value of money
 - ii. net present value
 - b. credit
 - i. sources
 - ii. loan applications
 - iii. interest
 - iv. collateral

- c. leasing of real property
 - d. land acquisition and ownership
 - e. machinery management
 - f. insurance
 - i. life insurance
 - ii. property insurance
 - iii. crop insurance
 - iv. health insurance
 - v. liability insurance
2. Marketing
- a. functions
 - b. price methods
 - i. cash markets
 - ii. futures and options
 - iii. contracting
 - c. trade
 - i. domestic
 - ii. international
3. Legal
- a. estate planning
 - b. business organization
 - i. sole proprietorship
 - ii. cooperatives
 - iii. corporations
 - iv. partnership
 - v. limited liability company or partnership
 - c. written agreements
4. Production
- a. government programs and regulations
 - b. weather
 - c. disease
5. Human resources
- a. training programs
 - b. hiring employees
 - c. employee policies and procedures
 - d. compensation and benefits
- D. Business Management
- 1. Strategic management
 - a. vision statement
 - b. mission statement
 - c. goals
 - 2. Tactical planning
 - 3. Operational planning
 - 4. Succession planning

V. Event Rules

- A. Team make-up- A team consists of three or four members. A team score consists of the total of the top three individuals' scores on the written exam plus the team activity score (all certified members must participate in the team activity).
- B. It is highly recommended that participants wear FFA Official Dress for this event.
- C. Copies of the complete event with answers are distributed to all who are present at the event evaluation meeting.

VI. Event Format

A. Equipment Provided:

1. Two sharpened No. 2 pencils.
2. Non-programmable calculator – participants will not be allowed to provide their own.

B. Team Activity

The team activity evaluates the ability of team members to work together to use decision-making and problem analysis skills while applying economic principles and concepts taught in business management.

1. Members of a team work together cooperatively to complete this section.
2. Ninety (90) minutes are allowed for completion of the team activity. At the end of the activity, each team submits a written report to be scored.
3. The team activity involves the use of business management skills and the resource information.
4. The team activity focus may include but is not limited to the following:
 - a. An outgrowth of the current resource information and/or problems.
 - b. Topics in the outline under the principles and concepts.
 - c. Information in the most current *Farm and Ranch Business Management* text published by John Deere Publishing.
5. The team activity has a maximum value of 300 points per team and is only included in the team score. Points are divided as follows:
 - a. Team Evaluation – 100 points- During the team activity section, the team is observed by event judges and is evaluated on the team's ability to work cooperatively as a group.
 - b. Team written answer sheet – 200 points
6. All team members must be involved in the team activity to receive credit. If a team has two or less participants no credit will be allowed in the team portion of the event.

C. Individual Activity

The written exam tests the ability of the participants to use decision-making and problem analysis skills while applying economic principles and concepts taught in business management.

1. Each team member works independently to complete the written exam. Each team member receives an individual score on the written exam.
2. Three hours are allowed for completion of the written exam.
3. The written exam may include any type of question (such as multiple choice, short answer and fill-in-the-blank).
4. All topics in the outline under the "Principles and Concepts" section can be included in the written exam. Business management forms and procedures follow the samples and procedures as presented in the most current *Farm and Ranch Business Management* text published by John Deere Publishing.
5. The written exam has a maximum value of 300 points per team member.
6. Individual scores on the written exam are used to calculate both the individual and team score.

VII. Event Scoring

The following table summarizes the breakdown of points, event section for each point allocation and the amount of time allowed for each section of the event.

POINTS

Section	Time	Individual	Team
Written Exam	180 Minutes	300	900
Team Activity	90 Minutes		300
Total		300	1200

VIII. Tiebreakers

- A. Judges will break ties on team scores using the following sequence:
1. The score on the written section of the team activity.
 2. The score on pre-selected sections of the written exam.
- B. Judges will break ties on individual scores using the following sequence:
1. The score on pre-selected sections of the written exam.

IX. Awards

Awards will be presented to individuals and/or teams based upon their rankings at the awards ceremony. Awards are sponsored by a cooperating industry sponsor(s) as a special project, and/or by the general fund of the National FFA Foundation.

X. References

This list of references is not intended to be all-inclusive. Other sources may be utilized, and teachers are encouraged to make use of the best instructional materials available. The following list contains references that may prove helpful during event preparation.

Numerous sources of materials exist, and participating teams should consult with their state's cooperative extension service, the colleges and universities teaching farm and ranch business management and other material services available to the participating school. For the most current listing of resources and definitions for economic terms, refer to the national FFA website- farm business management CDE section at www.ffa.org.

A. Primary:

1. Jobses, Steward, Casey and Purcell (2004). *Farm and Ranch Business Management (5th edition)*. Deere & Company, John Deere Publishing, East Moline, Illinois 61244. <http://www.deere.com/publications>
2. Kay, Edwards and Duffy. *Farm Management*. McGraw-Hill Book Co., New York, NY. (6th edition, 2008)
3. CDE NCQ, National FFA Core Catalog, Indianapolis, IN. <http://shop.ffa.org/cde-qas-c1413.aspx> (Published annually following the CDE.) Good source for examples of enterprise budgets and financial statements used in the CDE.

B. Secondary:

1. Boehlje and Eidman (1984). *Farm Management*. John Wiley and Sons, New York, NY.
2. Bowers, Love and Kletke (1994). *Machinery Replacement Strategies*. Deere & Company, John Deere Publishing, East Moline, Illinois 61244. Deere & Company. <http://www.deere.com>
3. Dicks, Michael (1998). *Agricultural Policy and How it Affects You*, Deere & Company, John Deere Publishing, East Moline, Illinois 61244.

4. Oltmans, Klinefleter, and Frey (2001) *Agricultural Financial Reporting and Analysis*. Doane Agricultural Services, St. Louis, MO.
5. Purcell, Wayne D. (1995). *Marketing Agricultural Commodities*. Deere & Company, John Deere Publishing, East Moline, Illinois 61244.
6. Wilson, Purcell, Burton, and Wahlberg (1994). *Managing Livestock Production*. Deere & Company, John Deere Publishing, East Moline, Illinois 61244.
7. Wilson, Purcell, Burton, and Wahlberg (1994). *Managing Agricultural Commodities*. Deere & Company, John Deere Publishing, East Moline, Illinois 61244

C. Technical References:

1. *Farmers Tax Guide*, published by the Department of the Treasury, Internal Revenue Service, can be obtained from the IRS Forms Distribution center in your state or the IRS website. <http://www.irs.gov/publications/p225/index.html>
2. Farm Financial Standards Council, *Financial Guidelines for Agriculture Producers*, 1998 <http://www.ffsc.org/>.
3. Assorted educational materials are available on hedging, forward contracting, and commodity futures trading from any of the following addresses.
 - a. Chicago Mercantile Exchange, 30 South Wacker Drive, Chicago, Illinois 60604. <http://www.cmegroup.com>
 - b. Kansas City Board of Trade, 4800 West Main Street, Kansas City, Missouri 64112
 - c. New York Cotton Exchange, New York Mercantile Exchange Building, One North End Avenue, New York, NY 10282-1101
 - d. New York Mercantile Exchange, Commodity Exchange Ctr., One North End Avenue, New York, NY 10282-1101
4. Doane Agricultural Services, Vance Publishing Corp., 77 Westport Plaza, #250, St. Louis, MO 63416. Doane provides a variety of educational materials related to farm and ranch management.
5. Cooperative Extension Service in your state. Contact your local extension agent for access to farm and ranch management educational materials.

D. What is a Farm?

A farm is an area of land, including various structures, devoted primarily to the practice of producing food, fiber and, increasingly, fuel. It is the basic production entity. A farm can be a holding of any size from a fraction of an acre to several thousand acres. For purposes of the Census of Agriculture, the U.S. Department of Agriculture defines a farm as any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. Single individuals or family members, partners or corporations can own and operate farms. Depending on the volume of business produced on the farm, the farm may provide either part-time or full-time employment for the owners.

Farms are often categorized by the enterprises produced. Diversified farms will include several different crop and livestock enterprises. Grain farms specialize in the production of grain and often do not have any livestock production. A ranch is a farm specializing in the raising of grazing livestock such as cattle or sheep for meat or wool. Farms specializing in the production of tree fruits or nuts are orchards; a vineyard produces grapes. A stable is a farm principally involved in the training of horses. Stud and breeding stock farms breed and produce other animals and livestock. Dairy farms focus on the production of milk. A vegetable or truck farm is a farm that grows vegetables but little or no grain. Additional specialty farms include fish farms, which raise fish in captivity as a food source, and tree farms, which grow trees for sale for transplant, lumber or decorative use such as Christmas trees. Farms are usually thought of as being located in rural areas, but they are also located in urban areas. Urban farms are focused on cultivating, processing and distributing food in, or around a village, town or city. Urban farms can also be involved in animal husbandry, aquaculture, agro-forestry and horticulture.

Team Activity Evaluation - Observers Score Sheet

Criteria:

Name of Observer: _____

- All team members were involved and contributed to the activity in an organized manner.
- Team members demonstrated effective listening and oral communication skills in resolving issues related to the presented task(s).
- Team members demonstrated cooperation in negotiating possible solutions that were relevant to the activity as presented.

Teamwork Evaluation Questions	Scoring Ranges			Team No.	1	2	3	4
	Low	Medium	High					
1 Leadership Identified	5-6 points Leadership not evident, no listing completed.	7-8 points Leadership evident, listing incomplete.	9-10 points Clearly identifies and lists leaders.	Points	Points	Points	Points	Points
	22-24 points Not listening to each other, talking over other team member, 1 member dominating.	25-27 points Listening and communications occurring, but 2-3 members dominating.	28-30 points Clearly evident that all team members are listening and discussing issues.	Points	Points	Points	Points	Points
2 Effective listening & oral communication	22-24 points Tasks primarily completed by one member, other members contributing only slightly.	25-27 points Tasks primarily completed by 2-3 members, other member(s) assist occasionally.	28-30 points Clearly all team members completing tasks, sharing written and oral computations/solutions.	Points	Points	Points	Points	Points
	22-24 points 1-2 members form the primary team, other members participate occasionally early, fade over time.	25-27 points Members are engaged & attentive, with 2-3 making notes, participation fades over time.	28-30 points Clearly all members are engaged, attentive and making notes for the full term of event.	Points	Points	Points	Points	Points
3 Demonstrated cooperation	22-24 points Tasks primarily completed by one member, other members contributing only slightly.	25-27 points Tasks primarily completed by 2-3 members, other member(s) assist occasionally.	28-30 points Clearly all team members completing tasks, sharing written and oral computations/solutions.	Points	Points	Points	Points	Points
4 Participated in the team	22-24 points 1-2 members form the primary team, other members participate occasionally early, fade over time.	25-27 points Members are engaged & attentive, with 2-3 making notes, participation fades over time.	28-30 points Clearly all members are engaged, attentive and making notes for the full term of event.	Points	Points	Points	Points	Points
Total:								

Team Activity Evaluation Summary Scorecard

National FFA Farm Business Management CDE

Instructions:

Participants should complete the information on this side of the scorecard. Please print clearly.

Team Number _____

State _____

Team members:

1. Name: _____

Role: _____

2. Name: _____

Role: _____

3. Name: _____

Role: _____

4. Name: _____

Role: _____

Team Activity Evaluation Summary Scorecard

National FFA Farm Business Management CDE

A. Teamwork Evaluation (observations)

Criteria:

- All team members were involved and contributed to the activity in an organized manner.
- Team members demonstrated effective listening and oral communication skills in resolving issues related to the presented task(s).
- Team members demonstrated cooperation in negotiating possible solutions that were relevant to the activity as presented.

	Points Possible
1. Team leadership roles were identified and demonstrated	10
2. Team members demonstrated effective listening and oral communication skills in resolving issues related to the presented task(s)	30
3. Team members demonstrated cooperation in negotiating possible solutions that were relevant to the activity as presented	30
4. Each team member participated in the team activity and contributed to the results reached by the team	30
Total	100

Summary of Evaluator's Scores:

	Points Earned
Evaluator:	
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

Average Evaluator Score:

(Maximum 100 points) **B**

B. Team Activity Solution Evaluation (written answer sheet)

Criteria:

- Team demonstrated knowledge of farm business management principles and concepts and summarized consensus in the team activity answer sheet.

Points Possible 200

Score:

(Maximum 200 points) **B**

Total Score for Team Activity

A + B =

Appendix A: AFNR Career Cluster Content Standards

	Performance Measurement Levels	Event Activity Addressing Measurement	Related Academic Standards
ABS.01.01. Performance Indicator: Apply principles of capitalism in the business environment.			Social Studies: 7b and 7g
	ABS.01.01.01.b. Differentiate types of ownership and outline the structure of AFNR businesses in a capitalistic economic system.	exam, team activity	
ABS.02.01. Performance Indicator: Compose and analyze a business plan for an enterprise.			Language Arts: 3, 4, 5, 7 and 8 Social Studies: 7h
	ABS.02.01.01.c. Prepare and critique AFNR business plans.	exam, team activity	
ABS.02.02. Performance Indicator: Read, interpret, evaluate and write a mission statement to guide business goals, objectives and resource allocation.			Language Arts: 3, 4, 5 and 6
	ABS.02.02.01.a. Read and interpret mission statements.	exam, team activity	
ABS.02.03. Performance Indicator: Apply appropriate management skills to organize a business.			Language Arts: 12
	ABS.02.03.02.a. Identify appropriate local, state, federal, international and industry regulations for AFNR businesses.	exam, team activity	
ABS.03.01. Performance Indicator: Prepare and maintain all files needed to accomplish effective record keeping.			Math: 5A and 6B Language Arts: 8
	ABS.03.01.01.c. Apply management information systems in AFNR business financial analysis.	exam, team activity	
ABS.03.02. Performance Indicator: Implement appropriate inventory management practices.			Language Arts: 8
	ABS.03.02.01.a. Monitor inventory to maintain optimal levels and calculate costs of carrying input and output inventory.	exam, team activity	

ABS.04.01. Performance Indicator: Use accounting fundamentals to accomplish dependable bookkeeping and fiscal management.		Math: 1C, 5A and 5C Social Studies: 7h
	ABS.04.01.02.c. Evaluate characteristics of lines of credit, loan terms and alternatives in sources of capital.	exam
	ABS.04.01.03.b. Analyze reporting requirements for income, property and employment taxes associated with small AFNR businesses.	exam, team activity
ABS.05.01. Performance Indicator: Maintain and interpret financial information (income statements, balance sheets, inventory, purchase orders, accounts receivable and cash-flow analyses) for businesses.		Math: 1C, 5A and 5C Language Arts: 8
	ABS.05.01.01.c. Interpret financial information for an AFNR business to determine profitability, net worth position, financial ratios, performance measures and ability to meet cash-flow requirements.	exam, team activity
	ABS.05.01.02.b. Recognize how changes in prices of inputs and/or outputs influence the financial statements of an AFNR business.	exam, team activity
	ABS.05.01.03.c. Conduct a breakeven analysis for an AFNR business.	exam, team activity
	ABS.05.01.04.c. Interpret and evaluate financial statements, including income statements,	exam, team activity
ABS.06.01. Performance Indicator: Conduct appropriate market and marketing research.		Social Studies: 7b and 7h
	ABS.06.01.01.c. Implement and evaluate marketing strategies with agricultural commodities, products and services.	exam, team activity
	ABS.06.01.02.a. Describe functions in agricultural marketing.	exam, team activity
ABS.06.03. Performance Indicator: Develop strategies for marketing plan implementation.		Social Studies: 7b and 7h
	ABS.06.03.01.b. Determine marketing strategies that are most likely to be effective in an AFNR business.	exam, team activity
ABS.07.03. Performance Indicator: Utilize appropriate techniques to determine the most likely strengths, weaknesses and inconsistencies in a business plan and relate these to risk management strategies.		Language Arts: 12
	ABS.07.03.01.b. Describe approaches to use in revising a business plan for improved consistency and realism.	exam, team activity

ABS.07.04. Performance Indicator: Manage risk and uncertainty.		Language Arts: 12
ABS.07.04.01.b. Describe alternative approaches to reducing risk, including the use of insurance for product liability, property, production or income loss and for personnel life and health.	exam, team activity	
CS.01.01. Performance Indicator: Action: Exhibit the skills and competencies needed to achieve a desired result.		Social Studies: 4d and 4h
CS.01.01.01.c. Work independently and in group settings to accomplish a task.	team activity	
CS.01.01.03.a. Exhibit good planning skills for a specific task or situation.	team activity	
CS.01.01.06.b. Assign project parts equitably amongst team members to achieve a given task.	team activity	
CS.01.02. Performance Indicator: Relationships: Build a constituency through listening, coaching, understanding and appreciating others.		Language Arts: 12 Social Studies: 4h
CS.01.02.02.b. Utilize communication skills to collaborate in a group setting.	team activity	
CS.01.03. Performance Indicator: Vision: Establish a clear image of what the future should look like.		Social Studies: 4a, 4d and 4h
CS.01.03.04.b. Demonstrate consensus building.	team activity	
CS.01.06. Performance Indicator: Continuous Improvement: Pursue learning and growth opportunities related to professional and personal aspirations.		Science: A4 Language Arts: 8 Social Studies: 4h
CS.01.06.03.b. Utilize a problem-solving model to solve a given problem.	team activity	
CS.02.04. Performance Indicator: Mental Growth: Demonstrate the effective application of reasoning, thinking and coping skills.		Math: 6C Science: A4 Language Arts: 4 and 8
CS.02.04.01.c. Demonstrate critical and creative thinking skills while completing a task.	team activity	
CS.02.04.02.c. Implement effective problem solving strategies.	team activity	
CS.02.04.03.c. Demonstrate the skills needed to negotiate with others.	team activity	

CS.03.02. Performance Indicator: Decision Making –Analyze situations and execute an appropriate course of action.		Science: A1, A5 Social Studies: 1c and 4h
	CS.03.02.01.c. Make decisions for a given situation by applying the decision-making pro-	team activity
	CS.03.02.02.c. Use problem-solving skills.	team activity

Appendix B: Related Academic Standards

National academic standards for mathematics, science, English language arts and social studies related to this event are reported below. The statements are based on information in reports of the respective associations/organizations in the academic areas. Some adjustment of numbering was done to facilitate the process of alignment with the standards that have been developed in the pathways of the Agriculture, Food and Natural Resources (AFNR) Career Cluster.

The approach was to determine the presence of alignment between the content standards, expectations or thematic strands of the four academic areas and the performance indicators of the AFNR Standards. Supporting statements have been included to clarify content of the respective content standards, expectations or thematic strands. The statements were initially developed independently by the respective organizations and, therefore, are not parallel in wording and presentation. Occasionally minor editing was done to adjust the background or stem of a statement but not the statement itself.

Mathematics

1. Standard and Expectations: Number and Operations
 - 1C. Compute fluently and make reasonable estimates.
5. Standard and Expectations: Data Analysis and Probability
 - 5A. Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.
 - 5C. Develop and evaluate inferences and predictions that are based on data.
6. Standard and Expectations: Problem Solving
 - 6B. Solve problems that arise in mathematics in other contexts.
 - 6C. Apply and adapt a variety of appropriate strategies to solve problems.

Science

- A. Content Standard: Science as an Inquiry
 - A1. Identify questions and concepts that guide scientific investigation.
 - A4. Formulate and revise scientific explanations and models using logic and evidence.
 - A5. Recognize and analyze alternative explanations and models.

English Language Arts

3. Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).
4. Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.
6. Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language and genre to create, critique and discuss print and non-print texts.
7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.
12. Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information).

Social Studies

1. Thematic Strand: Culture

1c. apply an understanding of culture and an integrated whole that explains the functions and interactions of language, literature, the arts, traditions, beliefs and values and behavior patterns;

4. Thematic Strand: Individual Development and Identity

4a. articulate personal connections to time, place and social/cultural systems;

4d. apply concepts, methods and theories about the study of human growth and development, such as physical endowment, learning, motivation, behavior, perception and personality;

4h. work independently and cooperatively within groups and institutions to accomplish goals;

7. Thematic Strand: Production, Distribution and Consumption

7b. analyze the role that supply and demand, prices, incentives and profits play in determining what is produced and distributed in a competitive market system;

7f. compare how values and beliefs influence economic decisions in different societies;

7g. compare basic economic systems according to how rules and procedures deal with demand, supply, prices, the role of government, banks, labor and labor unions, savings and investments and capital;

7h. apply economic concepts and reasoning when evaluating historical and contemporary social developments and issues;