

# **Agricultural Education Curriculum Enhancements**

Writers:

Craig W. Gladney and Philip A. Leslie  
Instructional Materials Laboratory  
University of Missouri-Columbia

Lizzi M. Wilkinson  
Agricultural Education  
University of Missouri-Columbia

Senior Coordinator: Erica J. Kassel  
Editor: Janis L. Levsen  
Graphic Designer: Christopher J. Benedict  
Instructional Materials Laboratory  
University of Missouri-Columbia

Produced by:  
Instructional Materials Laboratory  
University of Missouri-Columbia  
1400 Rock Quarry Center  
Columbia, MO 65211

Volume 35  
Number 1

Catalog Number  
10-0003-A

First Edition: June 2003

Available from:  
Instructional Materials Laboratory  
University of Missouri-Columbia  
1400 Rock Quarry Center  
Columbia, MO 65211  
573-882-2883  
800-669-2465

**© 2003 Curators of the University of Missouri. All rights reserved.**

The activity that is the subject of this report was supported in whole or in part by funds from the Department of Elementary and Secondary Education, Division of Vocational and Adult Education. However, the opinions expressed therein do not necessarily reflect the position or policies of the Missouri Department of Elementary and Secondary Education or the Division of Vocational and Adult Education, and no official endorsement should be inferred.

## Acknowledgments

The agricultural education curriculum enhancement project was initiated to develop performance-based assessment activities to assist Missouri instructors and students of agriculture in meeting Missouri School Improvement Program (MSIP) standards. Funding for the curriculum enhancement development project was provided through a grant from the Missouri Department of Elementary and Secondary Education (MDESE).

Recognition is given to advisory committee members for providing their valuable time and suggestions in developing enhancements for Agricultural Science I and Agricultural Science II curricula and for the following curriculum guides: *Exploring Agriculture in America*; *Leadership and Personal Development*; *Developing Programs of Supervised Agricultural Experience*; *Animal Science*; *Agricultural Management and Economics*; *Agribusiness Sales, Marketing, and Management*; and *Advanced Livestock Production and Management*. The committee consisted of the following members:

Dan Burkemper, Jackson R-II High School  
Alicia Corson, Fatima High School  
Matt Crutcher, Fair Grove R-X High School  
Harold Eckler, North Shelby High School  
Raegan Fox, Pierce City R-VI High School  
Dan Hill, Sweet Springs R-VII High School  
Tonya Jedlicka, West Plains R-VII High School  
David Nowland, Grand River Area Vocational Technical School  
Jim Spencer, Aurora R-VIII High School

A special thank-you is extended to Terry Heiman, Director of Agricultural Education and Nancy Alford, Supervisor of the Southeast & South Central Districts of Agricultural Education for the Department of Elementary and Secondary Education.

Thank you also to the Show-Me Curriculum Administrators Association for their assistance with the MSIP requirements.

Special recognition is extended to David J. Kemp, Resident Instruction Instructor, Animal Sciences, University of Missouri-Columbia, and John Dillard, Instructor, Carthage Technical Center, for providing technical expertise.

Instructional Materials Laboratory  
University of Missouri-Columbia





## Introduction

The agricultural education curriculum enhancement project was initiated to develop performance-based assessment activities to assist Missouri instructors and students of agriculture in meeting Missouri School Improvement Program (MSIP) standards. The project was unique in that the enhancement activities, while representing new material, were designed to complement and expand upon material instructors were already using.

Each enhancement corresponds to a unit in the existing agricultural curricula and consists of the following parts: a summary page that describes the performance-based assessment activity contained in the enhancement, along with helpful references and strategies and activities in the existing unit that prepare the student for the enhancement activity; an Instructor Guide and Student Handout that provide step-by-step instructions for a performance-based assessment activity that brings together principal unit objectives; and a Scoring Guide that indicates, in detail, the areas being assessed by the activity and the criteria used for assessment and includes spaces for the student's score and additional comments or explanations from the instructor. (For a more detailed explanation of the individual parts of the enhancement, see the Components section, which follows this section.)

Because they build on existing curricula and are designed to work with the instructor's individual teaching strategies, one of the key attributes of the enhancements is their adaptability. The importance of this feature was established during the development process and carries through all aspects of the enhancements in several ways.

First, the enhancements were designed to be flexible as they are currently written. Procedural steps in the Instructor Guide and Student Handout are clear and thorough but not limiting. For instance, a step in the Instructor Guide might indicate that students should incorporate a visual element into an oral report. The step will include suggestions, such as illustrations, a handout, a slide show using presentation software, or some combination of these or other elements, but it is left to the instructor to specify which of these he or she prefers. Likewise, the criterion in the Scoring Guide that corresponds to this aspect of the assessment will be written "Supporting materials emphasize and clarify key points," rather than as a list of a particular kind and quantity of supporting visual elements that the instructor may not want to use. This allows the instructor to more easily guide the activity in a particular direction and to narrow or expand the scope of the activity based on his or her particular requirements. It also encourages the students to apply their creativity to the development of the project.

Second, a number of the activities can be used or adapted for more than one unit. This can be done in two ways. Some activities can be used as they are written to assess student performance in other units. For example, the performance-based assessment activity for Unit IX, *Entrepreneurship of the Agribusiness Sales, Marketing, and Management* curriculum guide can be used without modification in place of the assessment activity for Unit III, *Planning the Farm Business of the Agricultural Management and Economics* curriculum guide. Other activities involve a project that can be readily tailored to another unit, such as the performance-based assessment activity for the *Introduction to Swine Production* unit, which is to design a time line that follows the animals from conception to retail. By changing the references and substituting relevant management practices, this activity can be used as the assessment for the *Introduction to Sheep Production* unit. A cross-reference chart is included with the assessments that gives a list of all units, a brief description of their current performance-based assessment activity, and the location of other activities that can be used or adapted for that unit.

And finally, because the enhancements are made available by compact disc, any activity can easily be copied to a separate file and rewritten or adjusted by the instructor while still maintaining the original file unaltered. This allows the instructor the freedom to not only adapt one performance-based activity from one unit to another, but also to change specific aspects within the activity to make it more responsive to his or her needs and the needs of the students. In the Scoring Guide, for instance, the total point value of the assessment can be changed, the weight of any assessment area can be increased or decreased, and criteria can be modified, added, or removed.

It is very important to note, however, that if the instructor does change the activity in any way, whether by using the activity from one unit as the performance-based assessment for another unit or by making changes within the activity, the Show-Me Standards, the References, and the Scoring Guide, as well as the other aspects of the enhancement as it is currently written, may no longer apply. This can be true of even seemingly small adjustments. If the instructor does make any changes to a performance-based assessment activity, he or she should thoroughly review the entire activity for accuracy and suitability and make any additional adjustments these changes necessitate prior to assigning the activity to students.

These enhancements were designed to be precise, flexible, and functional. All of us who worked on this project sincerely hope that the instructors and students who use them will find them to be a practical and engaging addition to the agricultural curriculum.

## Components

**Curriculum Guide:** This indicates the existing curriculum guide for which the curriculum enhancement was designed. The instructor will need the curriculum guide to complete the curriculum enhancement activity.

**Unit:** The Unit gives the name and number of the unit within the curriculum guide that the enhancement was designed to assess.

**Unit Objective:** The Unit Objective indicates what the students should accomplish by completing the unit. The students' mastery of these skills and concepts will be measured by their performance on the performance-based assessment activity contained within the curriculum enhancement.

**Show-Me Standards:** The Show-Me Standards lists the learner objectives assessed by the enhancement activity. Each enhancement contains a performance-based assessment activity that directly addresses at least one "performance" standard and one "knowledge" standard, although it is possible that the activity addresses other standards as well. Only the most relevant standards are listed.

**References:** This is the complete bibliographic information for the curriculum guide, as well as other books, web sites, or other reference material used to develop the enhancement or which the instructor or student might find useful to complete the enhancement activity.

**Instructional Strategies/Activities:** These are activities and strategies already in place in the curriculum. The strategies and activities listed were chosen because they relate directly to the curriculum enhancement activity. There may be additional activities and strategies within the curriculum guide that relate to the overall objectives of the unit.

**Performance-Based Assessment:** This is a summary of the performance-based assessment activity. It also includes a brief description of the assessment areas addressed by the activity.

**Instructor Guide:** The Instructor Guide includes step-by-step instructions for administering the performance-based assessment activity. It also includes suggestions and references the instructor may find useful, as well as brief descriptions of the assessment areas addressed by the activity and the criteria used for assessment.

**Student Handout:** This is the student’s guide to completing the performance-based assessment activity. It is based directly on the Instructor Guide, minus the instructor’s directions for conducting the assessment.

**Scoring Guide:** The Scoring Guide indicates, in detail, the areas being assessed by the activity, the criteria used for assessment, and each area’s weight relative to one another and to the activity as a whole. It also includes an area for the student’s score and a space for additional comments or explanations from the instructor. Blank Scoring Guides may be handed out to students prior to the activity to identify the assessment criteria in detail, or Scoring Guides may be completed and distributed to the students following the activity, depending on the instructor’s preference.

## Contents

Performance-based assessment activities are included in this packet for the following curricula or units within curricula.

### **Agricultural Science I**

*Careers I*  
*Introduction to Animal Reproduction*  
*Introduction to Agricultural Business*  
*Introduction to Beef Production*  
*Introduction to Poultry Production*  
*Sheep Production*  
*Equine Science*  
*Introduction to Specialty Animal Production*  
*Introduction to Animal Products*  
*Introduction to Dairy Production*  
*Introduction to Swine Production*  
*Introduction to Animal Nutrition*

### **Agricultural Science II**

*Introduction to Grassland Management*  
    Unit I. Grasslands and Grassland Plants  
    Unit II. Soil Management  
    Unit III. Grassland Management Practices  
*Crop Science*  
*Plant Science*  
*Career and Personal Development for Plant Science Core Curriculum*  
*Entomology*  
*Soil Science*  
*Fruit and Vegetable Production*

### **Animal Science**

Unit I. Nutrition  
Unit II. Genetics  
Unit III. Reproduction  
Unit IV. Animal Health

### **Exploring Agriculture in America**

Unit I. Introduction to Agriculture  
Unit II. Plant Science  
Unit III. Animals in Society  
Unit IV. Products From Agriculture  
Unit V. Natural Resources and Conservation  
Unit VI. Leadership and Personal Development

Unit VII. Basic Home and Farmstead Safety and Maintenance

***Agribusiness Sales, Marketing, and Management***

- Unit I. Agriculture as an Industry
- Unit II. Economic Principles in Agribusiness
- Unit III. Financial Management
- Unit IV. Personal Development
- Unit V. Communication Skills
- Unit VI. Preparing for a Sale
- Unit VII. Making a Sale
- Unit VIII. Promotional Tools
- Unit IX. Entrepreneurship

***Advanced Livestock Production and Management***

- Unit I. Issues in Animal Agriculture
- Unit II. Enterprises
- Unit III. Selection
- Unit IV. Breeding
- Unit V. Parturition
- Unit VI. Animal Health
- Unit VII. Facilities and Equipment
- Unit VIII. Animal Feeding
- Unit IX. Herd/Flock Management
- Unit X. Marketing

***Agricultural Management and Economics***

- Unit I. Economic Principles in Agriculture
- Unit II. Business Management
- Unit III. Planning the Farm Business
- Unit IV. Operating the Agricultural Business

***Developing Programs of Supervised Agricultural Experience***

- Unit I. Developing an SAE Program
- Unit II. Using the *Missouri Agricultural Record Book for Secondary Students*
- Unit III. Analyzing the SAE Program

***Leadership and Personal Development***

- Unit I. Leadership I
- Unit II. Leadership II
- Unit III. Leadership and Personal Development for Advanced Students

## Cross-Reference Chart for Adapting Performance-Based Assessments

Code	Curriculum/Unit	Performance-Based Assessment (PBA)	Code for Alternative PBAs*
<b>Agricultural Science I</b>			
AS1C	<i>Careers I</i>	Write a report on three different occupations	AS2CP, ASAI, ASPD, LPDAS
AS1AR	<i>Introduction to Animal Reproduction</i>	Create a poster on advantages and disadvantages of a common breeding method	AS1B, AS2AR, AS2AH, ALB, ALP
AS1AB	<i>Introduction to Agricultural Business</i>	Create an advertisement for an SAE	AS1SA, EAIA, ASFM, AMEP
AS1B	<i>Introduction to Beef Production</i>	Present an oral report that compares and contrasts management options applied by beef producers	AS1S, AS1E, AS1SA, AS1SW, AS2AR, EAAS, ALS, ALP, ALAH, ALHF
AS1P	<i>Introduction to Poultry Production</i>	Design, organize, and participate in a mini Poultry CDE	AS1B, AS1S, AS1E, AS1SA, AS1D, AS1SW, ALE, ALAH, ALFE, ALHF
AS1S	<i>Sheep Production</i>	Present an oral report on breed characteristics, management practices, and health issues of a given breed of sheep	AL1B, AS1E, AS1SW, AS2AR, AS2AH, EAAS, ALE, ALS, ALB, ALP, ALAH, ALHF
AS1E	<i>Equine Science</i>	Design a health maintenance, hoof care, and feeding plan for a horse	AL1B, AS1S, AS1SW, AS2AR, AS2AH, EAAS, ALE, ALS, ALB, ALP, ALAH, ALHF
AS1SA	<i>Introduction to Specialty Animal Production</i>	Present a sales pitch on a specialty animal	AL1B, AS1S, AS1SW, AS2AR, AS2AH, EAAS, ALE, ALS, ALB, ALP, ALAH, ALHF
AS1AP	<i>Introduction to Animal Products</i>	Identify the species, wholesale cuts, and retail cuts of meat	EAIA, EAPS, ASMS, ASPT
AS1D	<i>Introduction to Dairy Production</i>	Create a poster on the layout and parts of a dairy operation	AL1B, AS1S, AS1SW, AS2AR, AS2AH, EAAS, ALE, ALS, ALB, ALP, ALAH, ALHF
AS1SW	<i>Introduction to Swine Production</i>	Prepare a time line of a pig's life from conception to retail	AL1B, AS1S, AS1D, AS2AR, AS2AH, EAAS, ALE, ALS, ALB, ALP, ALAH, ALHF
AS1AN	<i>Introduction to Animal Nutrition</i>	Write a summary that compares and contrasts two similar animal feeds	

<b>Code</b>	<b>Curriculum/Unit</b>	<b>Performance-Based Assessment (PBA)</b>	<b>Code for Alternative PBAs*</b>
<b>Agricultural Science II</b>			
AS2GP	<i>Introduction to Grassland Management</i> <ul style="list-style-type: none"> <li>Grasslands and Grassland Plants</li> </ul>	Create a plant collection from a grassland area	
AS2GS	<ul style="list-style-type: none"> <li>Soil Management</li> </ul>	Create a chart and present an oral report that analyzes soil test results	AS2SS, EANR
AS2GM	<ul style="list-style-type: none"> <li>Grassland Management Practices</li> </ul>	Create a diagram and present an oral report that evaluates a grassland site for its ability to sustain wildlife	ASEP, AMEP
AS2CS	<i>Crop Science</i>	Create, organize, and participate in a mini Agronomy CDE	AS2GP, AS2PS
AS2PS	<i>Plant Science</i>	Conduct a seed germination experiment and write a summary on findings	AS2GP**, EAPS**
AS2CP	<i>Career and Personal Development for Plant Science Core Curriculum</i>	Write a personal development plan	AS1C, ASAI, ASPD
AS2E	<i>Entomology</i>	Create a collection of insects found in Missouri	AS1P
AS2SS	<i>Soil Science</i>	Create a table that analyzes how soil composition relates to fertility and soil management	AS2GS, EANR
AS2F	<i>Fruit and Vegetable Production</i>	Develop a calendar for cultivating and harvesting fruits and vegetables	AS1SW, AS2GP
<b>Animal Science</b>			
AS2AN	Nutrition	Design a balanced feed ration and explain the selection of ration components in a written report	
AS2AG	Genetics	Rank bulls to breed an imaginary herd and explain the placement in a written report	ALIA, ALS
AS2AR	Reproduction	Create a time line on a group of livestock from birth to weaning and present the findings in an oral report	AS1AR, ALP
AS2AH	Animal Health	Prepare a written checklist and present an oral report on a health management plan for a livestock species	AS1E, ALAH, ALHF



<b>Code</b>	<b>Curriculum/Unit</b>	<b>Performance-Based Assessment (PBA)</b>	<b>Code for Alternative PBAs*</b>
<b><i>Exploring Agriculture in America</i></b>			
EAIA	Introduction to Agriculture	Present an oral report that identifies top-producing states for specific agricultural products	AS1C, ASAI
EAPS	Plant Science	Evaluate plants in a plant care contest	AS2GP**, AS2PS**
EAAS	Animals in Society	Design a poster on a care regimen and budget for a companion or production animal	AS1E
EAPS	Products From Agriculture	Design a poster that identifies food and nonfood agricultural products	AS1SW, AS1AB
EANR	Natural Resources and Conservation	Present an oral report on an environmental problem and how it could be corrected	AMEP
EAL	Leadership and Personal Development	Write a report that includes five personal goals and outlines how to reach each goal	LPD1
EAS	Basic Home and Farmstead Safety and Maintenance	Design a home safety check list	LPD1, AMEP
<b><i>Agribusiness Sales, Marketing, and Management</i></b>			
ASAI	Agriculture as an Industry	Write a report that describes three different agribusiness job positions	AS1C, AS1AB, AS2CP, EAIA, EAPS, LPD1, LPDAS
ASEP	Economic Principles in Agribusiness	Produce and present a lesson on an economic principle	AMEP**
ASFM	Financial Management	Establish a budget for an SAE	AMEP, LPD1
ASPD	Personal Development	Create a career development and job search plan	AS1C, ASAI, AS2CP
ASCS	Communication Skills	Analyze a sales presentation and participate in a class discussion	LPDAS
ASPS	Preparing for a Sale	Write a report that analyzes the sale and use of an agriculture-related product	ASCS
ASMS	Making a Sale	Give a sales presentation on an agriculture-related product	AS1P
ASPT	Promotional Tools	Create a commercial for an agriculture-related product	AS1SA, EAIA, ASFM, AMEP, AS1AB
ASE	Entrepreneurship	Plan, organize, and execute a school-based fund-raising activity	AMPF**
<b><i>Advanced Livestock Production and Management</i></b>			
ALIA	Issues in Animal Agriculture	Research a position on the use of biotechnology and participate in a classroom debate on the topic	AMEP

<b>Code</b>	<b>Curriculum/Unit</b>	<b>Performance-Based Assessment (PBA)</b>	<b>Code for Alternative PBAs*</b>
ALE	Enterprises	Give an oral report on the basic resources needed to establish and maintain a livestock enterprise	
ALS	Selection	Judge classes of livestock and prepare written explanations for the judgments	AS1P, AS1AR
ALB	Breeding	Present an oral report on factors that affect conception rates and hatchability	
ALP	Parturition	Create a birthing checklist on a given species	
ALAH	Animal Health	Design a poster and handout that outlines symptoms, causes, treatment, and prevention of a livestock health problem	AS1E, AS2AH
ALFE	Facilities and Equipment	Devise a farm plan for a type of livestock and present an oral report that explains the plan	AS1D
ALAF	Animal Feeding	Create a display board that explains the feeding options available for a type of livestock	
ALHF	Herd/Flock Management	Give an oral presentation that explains and demonstrates a management practice	AS2AH
ALM	Marketing	Write a market plan for two livestock species and include the differences and similarities between the plans	
<b><i>Agricultural Management and Economics</i></b>			
AMEP	Economic Principles in Agriculture	Produce and present a lesson on an economic principle	ASEP**
AMBM	Business Management	Present an oral report and lead a class discussion on a factor of business management	
AMPF	Planning the Farm Business	Plan, organize, and execute a school-based fund-raising activity	ASE**
AMOA	Operating the Agricultural Business	Create a promotional display for an SAE project or a local business	AS1AB
<b><i>Developing Programs of Supervised Agricultural Experience</i></b>			
SAED	Developing an SAE Program	Complete a form that describes the design of an SAE	

<b>Code</b>	<b>Curriculum/Unit</b>	<b>Performance-Based Assessment (PBA)</b>	<b>Code for Alternative PBAs*</b>
SAEU	Using the <i>Missouri Agricultural Record Book for Secondary Students</i>	Use sample entries to complete forms in the <i>Missouri Agricultural Record Book for Secondary Students</i>	
SAEA	Analyzing the SAE Program	Complete an FFA State Proficiency Award application	
<b>Leadership and Personal Development</b>			
LPD1	Leadership I	Interview an FFA member and create a "top 10 list" of membership benefits based on the interview	
LPD2	Leadership II	Develop, organize, and present a panel discussion on an aspect of FFA	
LPDAS	Leadership and Personal Development for Advanced Students	Create a résumé and a letter of application for a job	

\* Most PBAs will require some modifications based on the unit topic and content.

\*\* PBA may be used without any modifications

### Show-Me Standards Table

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
<b>Agricultural Science I</b> <i>Careers I</i>	1.3: Design and conduct field and laboratory investigations to study nature and society SC7: Processes of scientific inquiry (such as formulating and testing hypotheses)
<i>Equine Science</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation SC3: Characteristics and interactions of living organisms
<i>Introduction to Animal Reproduction</i>	3.7: Evaluate the extent to which a strategy addresses the problem SC3: Characteristics and interactions of living organisms
<i>Introduction to Specialty Animal Production</i>	1.2: Conduct research to answer questions and evaluate information and ideas CA1: Speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization)
<i>Introduction to Agricultural Business</i>	3.5: Reason inductively from a set of specific facts and deductively from general premises CA7: Identifying and evaluating relationships between language and culture
<i>Introduction to Animal Products</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
<i>Introduction to Animal Nutrition</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation SC4: Changes in ecosystems and interactions of organisms with their environments
<i>Introduction to Beef Production</i>	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences CA6: Participating in formal and informal presentations and discussions of issues and ideas
<i>Introduction to Dairy Production</i>	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences CA6: Participating in formal and informal presentations and discussions of issues and ideas
<i>Introduction to Poultry Production</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA6: Participating in formal and informal presentations and discussions of issues and ideas
<i>Introduction to Swine Production</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation SC3: Characteristics and interactions of living organisms
<i>Sheep Production</i>	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences CA1: Speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization)

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
<b>Agricultural Science II</b> <b><i>Introduction to Grassland Management</i></b> Unit I. Grasslands and Grassland Plants	1.3: Design and conduct field and laboratory investigations to study nature and society SC5: Processes (such as plate movement, water cycle, air flow) and interactions of Earth's biosphere, atmosphere, lithosphere, and hydrosphere
Unit II. Soil Management	1.3: Design and conduct field and laboratory investigations to study nature and society SC7: Processes of scientific inquiry (such as formulating and testing hypotheses)
Unit III. Grassland Management Practices	1.3: Design and conduct field and laboratory investigations to study nature and society SC4: Changes in ecosystems and interactions of organisms with their environments
<i>Career and Personal Development for Plant Science Core Curriculum</i>	4.1: Explain reasoning and identify information used to support decisions SS6: Composition and structure of the universe and the motions of the objects within it
<i>Crop Science</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA6: Participating in formal and informal presentations and discussions of issues and ideas
<i>Entomology</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation SC4: Changes in ecosystems and interactions of organisms with their environments

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
<i>Fruit and Vegetable Production</i>	1.2: Conduct research to answer questions and evaluate information and ideas CA3: Reading and evaluating nonfiction works and material (such as biographies, newspapers, technical manuals)
<i>Plant Science</i>	1.3: Design and conduct field and laboratory investigations to study nature and society SC7: Processes of scientific inquiry (such as formulating and testing hypotheses)
<i>Soil Science</i>	1.3: Design and conduct field and laboratory investigations to study nature and society CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
<b>Advanced Livestock Production and Management</b> Unit I. Issues in Animal Agriculture	2.3: Exchange information, questions and ideas while recognizing the perspectives of others CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit II. Enterprises	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit III. Selection	1.10: Apply acquired information, ideas, and skills to different contexts as students, workers, citizens, and consumers CA1: Speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization)

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
Unit IV. Breeding	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences SC4: Changes in ecosystems and interactions of organisms with their environments
Unit V. Parturition	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation SC3: Characteristics and interactions of living organisms
Unit VI. Animal Health	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation SC4: Changes in ecosystems and interactions of organisms with their environments
Unit VII. Facilities and Equipment	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit VIII. Animal Feeding	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation SC4: Changes in ecosystems and interactions of organisms with their environments
Unit IX. Herd/Flock Management	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences CA6: Participating in formal and informal presentations and discussions of issues and ideas



<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
Unit X. Marketing	1.2: Conduct research to answer questions and evaluate information and ideas CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
<b><i>Agribusiness Sales, Marketing, and Management</i></b> Unit I. Agriculture as an Industry	1.2: Conduct research to answer questions and evaluate information and ideas CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
Unit II. Economic Principles in Agribusiness	4.6: Identify tasks that require a coordinated effort and work with others to complete those tasks CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit III. Financial Management	1.2: Conduct research to answer questions and evaluate information and ideas CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
Unit IV. Personal Development	4.5: Develop, monitor, and revise plans of action to meet deadlines and accomplish goals CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
Unit V. Communication Skills	3.4: Evaluate the processes used in recognizing and solving problems CA7: Identifying and evaluating relationships between language and culture

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
Unit VI. Preparing for a Sale	1.2: Conduct research to answer questions and evaluate information and ideas CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
Unit VII. Making a Sale	2.6: Apply communication techniques to the job search and to the workplace CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit VIII. Promotional Tools	4.1: Explain reasoning and identify information used to support decisions CA1: Speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization)
Unit IX. Entrepreneurship	3.8: Assess costs, benefits and other consequences of proposed solutions MA3: Data analysis, probability, and statistics
<b>Animal Science</b> Unit I. Nutrition	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation 3.8: Assess costs, benefits and other consequences of proposed solutions SC4: Changes in ecosystems and interactions of organisms with their environments
Unit II. Genetics	1.2: Conduct research to answer questions and evaluate information and ideas 4.1: Explain reasoning and identify information used to support decisions SC3: Characteristics and interactions of living organisms

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
Unit III. Reproduction	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit IV. Animal Health	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation 2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences SC4: Changes in ecosystems and interactions of organisms with their environments
<b><i>Agricultural Management and Economics</i></b> Unit I. Economic Principles in Agriculture	4.6: Identify tasks that require a coordinated effort and work with others to complete those tasks CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit II. Business Management	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences SS4: Changes in ecosystems and interactions of organisms with their environments
Unit III. Planning the Farm Business	3.8: Assess costs, benefits and other consequences of proposed solutions MA3: Data analysis, probability, and statistics
Unit IV. Operating the Agricultural Business	4.5: Develop, monitor, and revise plans of action to meet deadlines and accomplish goals CA6: Participating in formal and informal presentations and discussions of issues and ideas

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
<b><i>Developing Programs of Supervised Agricultural Experience</i></b> Unit I. Developing an SAE Program	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
Unit II. Using the <i>Missouri Agricultural Record Book for Secondary Students</i>	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation MA1: Addition, subtraction, multiplication and division; other number sense, including numeration and estimation; and the application of these operations and concepts in the workplace and other situations
Unit III. Analyzing the SAE Program	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
<b><i>Exploring Agriculture in America</i></b> Unit I. Introduction to Agriculture	1.2: Conduct research to answer questions and evaluate information and ideas SS7: The use of tools of social science inquiry (such as surveys, statistics, maps, documents)
Unit II. Plant Science	1.3: Design and conduct field and laboratory investigations to study nature and society SC4: Changes in ecosystems and interactions of organisms with their environments

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
Unit III. Animals in Society	1.8: Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
Unit IV. Products From Agriculture	1.2: Conduct research to answer questions and evaluate information and ideas SC8: Impact of science, technology, and human activity
Unit V. Natural Resources and Conservation	3.1: Identify problems and define their scope and elements SC8: Impact of science, technology and human activity on resources and the environment
Unit VI. Leadership and Personal Development	4.5: Develop, monitor, and revise plans of action to meet deadlines and accomplish goals CA4: Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes)
Unit VII. Basic Home and Farmstead Safety and Maintenance	4.7: Identify and apply practices that preserve and enhance the safety and health of self and others HP2: Principles and practices of physical and mental health (such as personal health habits, nutrition, stress management)
<b>Leadership and Personal Development</b> Unit I. Leadership I	2.1: Plan and make written, oral and visual presentations for a variety of purposes and audiences CA1: Speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization)

<b>Performance-Based Assessment Activity (One for Each Curriculum or Unit Listed Below)</b>	<b>Show-Me Standards Applicable to Activity</b>
Unit II. Leadership II	2.3: Exchange information, questions and ideas while recognizing the perspectives of others 4.6: Identify tasks that require a coordinated effort and work with others to complete those tasks CA6: Participating in formal and informal presentations and discussions of issues and ideas
Unit III. Leadership and Personal Development for Advanced Students	4.8: Explore, prepare for and seek educational and job opportunities SS6: Relationships of the individual and groups to institutions and cultural traditions

# Agricultural Science I







# Agricultural Science I

**Curriculum Guide:** *Careers I*

**Unit Objective:**

Students will explore their career interests and aptitudes by identifying their “Holland Code” and writing a report on three different occupations that correspond to their code.

**Show-Me Standards:** 1.3, SC7

**References:**

*Career Interests Game*. MU Career Center. Accessed February 7, 2003, from <http://career.missouri.edu/holland>.

Careers in Agriculture. National FFA Organization. Accessed March 6, 2003, from <http://www.ffa.org/careers/index.html>.

*Careers I*. University of Missouri-Columbia, Instructional Materials Laboratory, 1988.

Missouri Department of Economic Development. Accessed May 2, 2003, from <http://www.ded.state.mo.us>.

*Occupational Outlook Handbook*. U.S. Department of Labor. Bureau of Labor and Statistics. Accessed May 2, 2003, from <http://www.bls.gov/oco/home.htm>.

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 3.
- Students will complete WS 3.1, Self-Inventory.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 5, p. 25, and p. 40.

**Performance-Based Assessment:**

Students will identify their “Holland Code” and select three occupations that are related to their code. Students should submit their three occupations for approval before they write their reports. Students will compose a 1- to 2-page report on each occupation, which will include, but is not limited to,

## **Agricultural Science I**

---

description, duties, educational requirements, salary, benefits, and employment outlook.

Students will be assessed on identifying their “Holland Code” and three different reports on occupations related to their code. The reports will be graded on organization, neatness, spelling, grammar, and the topics addressed in their papers.

**Careers I  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students access <http://career.missouri.edu/holland> to determine their “Holland Code.”
  - a. They need to choose the code that is most like them, even though more than one may apply.
  - b. If students are not sure which code applies, have them ask their family, peers, or other teachers which best describes them.
2. Students will submit their three different occupations for approval before writing their reports.
  - a. Make sure that the occupations apply to their interests.
  - b. Make sure that there is adequate accessible information available on their occupations.
3. Each student will research the three occupations and write a 1- to 2-page report on each occupation.
  - a. Topics to be covered for each occupation, at a minimum, are as follows:
    - ☐ Description
    - ☐ Duties
    - ☐ Educational requirements
    - ☐ Salary
    - ☐ Benefits
    - ☐ Employment outlook
  - b. Students may not use source material word for word and must provide a complete bibliography of their sources along with their reports.
4. As an option, students could submit their papers early for proofreading or have a peer proofreading day in which they can pass their papers around and get comments from fellow students.
5. As another option, after the reports are turned in, have a class discussion on the occupations they selected. Have students tell the positives and the negatives of one of the occupations they chose.
6. Final assessment will be based on identification of their “Holland Code” and the content and presentation of their reports.



**Careers I**  
**Student Handout**

1. You will access <http://career.missouri.edu/holland> to determine your “Holland Code.”
  - a. You need to choose the code that is most like you, even though more than one may apply.
  - b. If you are not sure which code applies, ask your family, peers, or other teachers which best describes you.
2. You will submit the three different occupations to your instructor for approval before writing your reports.
3. You will research the three occupations and write a 1- to 2-page report on each occupation.
  - a. Topics to be covered for each occupation, at a minimum, are as follows:
    - ☐ Description
    - ☐ Duties
    - ☐ Educational requirements
    - ☐ Salary
    - ☐ Benefits
    - ☐ Employment outlook
  - b. You may not use source material word for word and must provide a complete bibliography of the sources along with your reports.
4. As an option, the instructor may have you submit your papers early for proofreading or have a peer proofreading day in which you can pass your reports around and get comments from fellow students.
5. As another option, after the reports are turned in, the instructor may have a class discussion on the occupations the class selected. You may be asked to tell the positives and the negatives of one of the occupations you chose.
6. Final assessment will be based on identification of your “Holland Code” and the content and presentation of your reports.



# Agricultural Science I

## Careers I Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Identification of Three Occupations	<input type="checkbox"/> Submitted occupations for approval <input type="checkbox"/> Apply to student's "Holland Code" <input type="checkbox"/> Occupations reflect student's interests <input type="checkbox"/> Three different occupations are chosen	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Content and Presentation of Occupation #1	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Well organized <input type="checkbox"/> No spelling or grammar errors	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Content and Presentation of Occupation #2	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Well organized <input type="checkbox"/> No spelling or grammar errors	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Content and Presentation of Occupation #3	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Well organized <input type="checkbox"/> No spelling or grammar errors	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# Agricultural Science I

**Curriculum Guide:** *Introduction to Animal Reproduction*

**Unit Objective:**

Students will demonstrate an understanding of the principles of animal reproduction by summarizing the advantages and disadvantages of a common breeding method and presenting their findings on a poster that will be displayed in class.

**Show-Me Standards:** 3.7, SC3

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

*FBMA Beef Management* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2001.

*FBMA Horse Management for Adults* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2002.

*Introduction to Animal Reproduction*. University of Missouri-Columbia, Instructional Materials Laboratory, 1996.

Lamberson, B., Massey, J., & Whittier, J. C. *Crossbreeding Systems for Small Herds of Beef Cattle*. University of Missouri-Columbia. Accessed May 1, 2003, from <http://muextension.missouri.edu/explore/agguides/ansci/g02040.htm>.

Sterle, J., & Safranski, T. *Artificial Insemination in Swine: Breeding the Female*. University of Missouri-Columbia. Accessed May 1, 2003, from <http://muextension.missouri.edu/explore/agguides/ansci/g02312.htm>.

Vogt, D., Swartz, H. A., & Massey, J. *Inbreeding: Its Meaning, Uses and Effects on Farm Animals*. University of Missouri-Columbia. Accessed May 1, 2003, from <http://muextension.missouri.edu/explore/agguides/ansci/g02911.htm>.

Students may use additional outside sources to complete this activity.

### **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 1.1, Reproductive System of the Bull; AS 1.2, Dissection of a Testicle; AS 2.1, Reproductive System of the Cow; AS 2.2, Dissection of a Female Reproductive Tract; AS 3.1, Gathering Breeding Age Information; and AS 4.1, Gestation and the Reproductive Tract.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 35, p. 81 (1), and p. 125 (2).

### **Performance-Based Assessment:**

Students will work in groups to determine the advantages and disadvantages of a common method of breeding livestock, such as straight breeding, crossbreeding, artificial insemination, or embryo transfer, and present their findings on a poster that will be displayed in class.

Assessment will be based on the overall content and presentation of the poster. At the instructor’s discretion, students will contribute to the assessment by providing a brief evaluation of the performance of the other members of their group.

**Introduction to Animal Reproduction  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Perform any relevant activities or demonstrations prior to the due date for the performance-based assessment so that students can incorporate material discussed or assigned during these activities in their performance-based assessment project.
2. Divide the class into groups and assign each group a common method of breeding livestock discussed in the unit, such as straight breeding, crossbreeding, artificial insemination, or embryo transfer.
3. Have the groups determine the advantages and disadvantages of their assigned breeding method and present their findings on a poster, which will be displayed in class. Have students list their assigned breeding method at the top of their poster and include a brief explanation of the method.
4. Students may use material in the unit as well as additional outside material to complete their poster.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their poster.
  - b. Students should incorporate additional supporting material, such as diagrams, illustrations, or information from class demonstrations, as needed to make the poster interesting and informative.
5. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing their poster. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.

- c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
6. The final assessment score will be based on the overall content and presentation of the poster.

**Introduction to Animal Reproduction  
Student Handout**

1. The instructor will divide the class into groups and assign each group a common method used for breeding livestock.
2. Determine the advantages and disadvantages of your assigned breeding method.
3. Present your findings on a poster, which will be displayed in class. Include the name of your assigned breeding method and a brief explanation at the top of your poster.
4. You may use material in the unit as well as additional outside material to complete your poster.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your poster.
  - b. Incorporate additional supporting material, such as diagrams, illustrations, or information from class demonstrations or activities, as needed to make the poster interesting and informative.
5. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the poster.
  - a. After your poster has been completed, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
6. Your final assessment score will be based on the overall content and presentation of your poster.



# Agricultural Science I

## Introduction to Animal Reproduction Scoring Guide

Name \_\_\_\_\_

♦ Page 7 ♦

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness	Poster provides all of the major advantages and disadvantages of the assigned breeding method	Failed	Poor	Fair	Good	Excellent	X 10	
Accuracy	Facts are accurate	Failed	Poor	Fair	Good	Excellent	X 7.5	
Presentation	Poster is well organized and eye-appealing	Failed	Poor	Fair	Good	Excellent	X 3.5	
Technical Considerations	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





**Introduction to Animal Reproduction  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# Agricultural Science I

**Curriculum Guide:** *Introduction to Agricultural Business*

## **Unit Objective:**

Students will demonstrate an understanding of a key marketing element of conducting an agricultural business by creating a newspaper or magazine advertisement.

**Show-Me Standards:** 3.5, CA7

## **References:**

Advertisements for agricultural-related products and services, placed in locally available publications

Berger, W. *Advertising Today*. London: Phaidon Press, 2001.

Dru, J. *Beyond Disruption: Changing the Rules in the Marketplace*. New York: John Wiley & Sons, 2002.

Felton, G. *Advertising: Concept and Copy*. Englewood Cliffs, NJ: Prentice Hall, 1994.

*Introduction to Agricultural Business*. University of Missouri-Columbia, Instructional Materials Laboratory, 2001.

Marra, J. L. *Advertising Creativity: Techniques for Generating Ideas*. Englewood Cliffs, NJ: Prentice Hall, 1990.

Wells, W. *Advertising: Principles and Practice*, 3<sup>rd</sup> ed., Englewood Cliffs, NJ: Prentice Hall, 1995.

## **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 1.1, Agricultural Businesses; and AS 4.2, Fixed and Variable Costs.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. 8 (1, 2), p. 27 (8), p. 63, and p. 85 (6).

### **Performance-Based Assessment:**

Each student will create a newspaper or magazine advertisement to promote a product or service related to his or her supervised agricultural experience (SAE). The ad will address the four basic points of an advertisement (draw attention, note product benefits, instill desire, and urge to action) in relation to a potential buyer.

The major focus of the assessment will be how well each of the four points of the advertisement is executed. Assessment also will address graphic elements, including illustration and design.

**Introduction to Agricultural Business  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will develop a newspaper or magazine advertisement to promote his or her SAE's product or service.
  - a. The student will identify a theme for the ad (i.e., the most appealing thing about the product or service that will help sell it to a potential buyer).
  - b. After identifying the theme, the student will compose an ad compatible with that theme.
  - c. Composing the ad should include writing the headline and body copy, drawing an appropriate illustration or including a photo, and designing a rough sketch of the ad (i.e., placement of headline, copy, and illustration).
  - d. Examples of rough sketches for print ads are included following the Student Handout.
2. The advertisement must address the following four specific message points in relation to the potential buyer:
  - ☐ Attention–Does the ad grab the attention of the potential buyer with the headline and/or illustration?
  - ☐ Product benefits–Are the benefits of the product or service evident to the potential buyer? Are they stated concisely? Are they relevant to the potential buyer? (What can this product or service do for the potential buyer? How can it improve the life of the potential buyer? Is the product or service worth the cost?)
  - ☐ Instilling desire–Does the ad create in the potential buyer the desire to possess the product or make use of the service? Is the message convincing? (Can the potential buyer visualize himself or herself using this product or service? Have the benefits been sufficiently described to convince the potential buyer he or she cannot do without the product or service?)
  - ☐ Action–Does the ad contain a strong, simple directive to produce an urge to action? Is the expected behavior obvious? For example, the ad should contain phrases like “clip the coupon,” “go to your nearest store,” or “call this number.”

3. Assessment will address message quality in terms of the four points of an ad, the illustration, and the design.
  - a. Does the advertisement address all four points of an ad's function?
  - b. Is the illustration compatible with the message in the headline and body copy?
  - c. Is the ad designed clearly and simply, in such a manner that it helps convey the message and does not detract from it?

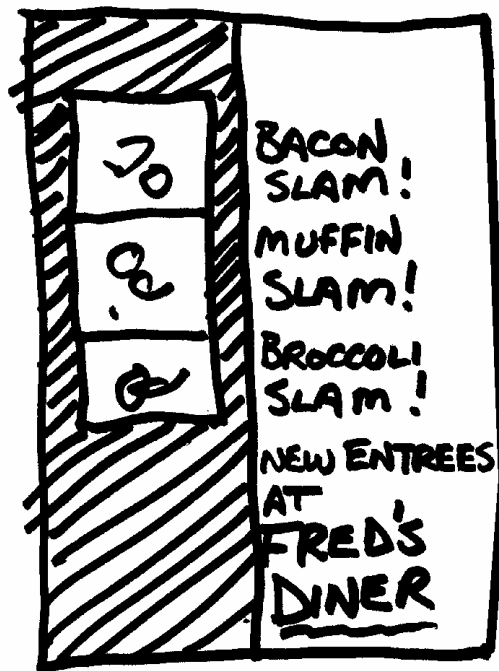
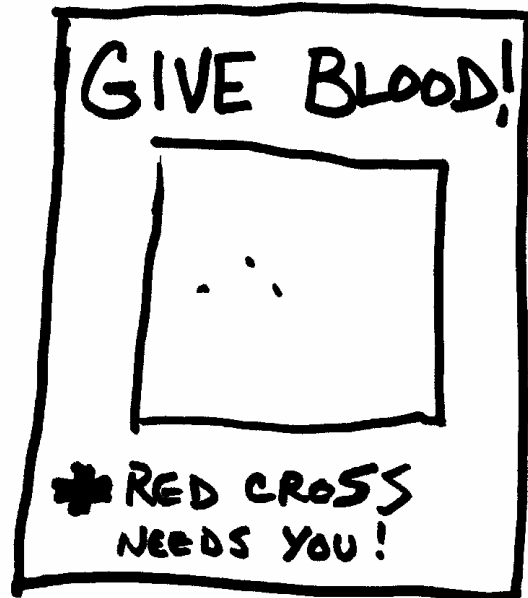
**Introduction to Agricultural Business  
Student Handout**

1. Develop a newspaper or magazine advertisement to promote your SAE's product or service.
  - a. Identify a theme for the ad (i.e., the most appealing thing about the product or service that will help sell it to a potential buyer).
  - b. After identifying the theme, compose an ad compatible with that theme.
  - c. Composing the ad includes writing the headline and body copy, drawing an appropriate illustration or providing a photo, and designing a rough sketch of the ad (i.e., placement of headline, copy, and illustration).
  - d. Examples of rough sketches for print ads are included at the end of this handout.
2. The advertisement must address the following four specific message points in relation to the potential buyer:
  - ☐ Attention–Does the ad grab the attention of the potential buyer with the headline and/or illustration?
  - ☐ Product benefits–Are the benefits of the product or service evident to the potential buyer? Are they stated concisely? Are they relevant to the potential buyer? (What can this product or service do for the potential buyer? How can it improve the life of the potential buyer? Is the product or service worth the cost?)
  - ☐ Instilling desire–Does the ad create in the potential buyer the desire to possess the product or make use of the service? Is the message convincing? (Can the potential buyer visualize himself or herself using this product or service? Have the benefits been sufficiently described to convince the potential buyer he or she cannot do without the product or service?)
  - ☐ Action–Does the ad contain a strong, simple directive to produce an urge to action? Is the expected behavior obvious? For example, the ad should include phrases like “clip the coupon,” “go to your nearest store,” or “call this number.”
3. Assessment will address message quality in terms of the four points of an ad, the illustration, and the design.
  - a. Does the advertisement address all four points of an ad's function?
  - b. Is the illustration compatible with the message in the headline and body copy?
  - c. Is the ad designed clearly and simply, in such a manner that it helps convey the message and does not detract from it?





Sample rough sketches of advertising layouts:





# Agricultural Science I

## Introduction to Agricultural Business Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Four Ad Message Points	Are the following message points in the ad? <input type="checkbox"/> Draws attention <input type="checkbox"/> Describes product benefits <input type="checkbox"/> Instills desire <input type="checkbox"/> Urges to action	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Headline and Illustration	<input type="checkbox"/> Do they draw attention?	Fails	Poor	Fair	Good	Excellent	X 3.75	
Product Benefits	<input type="checkbox"/> Are they concise and relevant?	Fails	Poor	Fair	Good	Excellent	X 3.75	
Instilling Desire	<input type="checkbox"/> Is the message convincing?	Fails	Poor	Fair	Good	Excellent	X 3.75	
Urge to Action	<input type="checkbox"/> Is the expected behavior obvious?	Fails	Poor	Fair	Good	Excellent	X 3.75	
Illustration	<input type="checkbox"/> Is it compatible with the headline and body copy	Fails	Poor	Fair	Good	Excellent	X 3.75	
Design	<input type="checkbox"/> Is it clear and simple? Does it help convey the message?	Fails	Poor	Fair	Good	Excellent	X 3.75	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_/100 pts.

Comments:



# Agricultural Science I

**Curriculum Guide:** *Introduction to Beef Production*

## **Unit Objective:**

Students will demonstrate an understanding of basic principles of beef production by comparing and contrasting the management options applied by regional beef producers and presenting their findings in an oral report.

**Show-Me Standards:** 2.1, CA6

## **References:**

Individual breed associations

*Introduction to Beef Production*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Missouri Cattlemen's Association. Accessed April 8, 2003, from <http://mocattle.org/>.

## **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 1.1, A Career in the Beef Industry; and AS 6.1, Herd Management Calendar.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. 55 (1, 2).

## **Performance-Based Assessment:**

Students will work in groups to compare and contrast the management options applied by beef producers in their area. Each group will interview a different beef producer to learn about the operation and the management techniques the producer prefers and why. Following the interviews, groups will be paired to compare and contrast their findings. The groups will present their findings to the class in a brief oral report.

Assessment will be based on the overall content and presentation of the report. At the instructor's discretion students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.



**Introduction to Beef Production  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Prior to assigning the performance-based assessment, contact beef producers in the area and develop a list of producers willing to be interviewed by students.
  - a. It is preferable to have more producers, rather than fewer, if possible, because this will provide more opportunity for varied management styles and will help ensure a sufficient number of producers in case any must later cancel the interview.
  - b. Additional sources for interview subjects or information on beef management could include the following.
    - ☐ Upper-level students involved in beef production
    - ☐ Missouri Cattlemen's Association, accessed April 9, 2003, from <http://mocattle.org/>.
    - ☐ Individual breed associations
2. Divide the class into an even number of groups and assign each group one of the beef producers to interview. If preferred, arrange for telephone interviews with producers or have them attend class for a panel discussion.
3. Lead students in a discussion to develop a uniform interview questionnaire. A uniform questionnaire is important because students will be comparing and contrasting the information they collect. Use questions from AS 1.1, A Career in the Beef Industry, as a starting point, if desired.
4. Have students interview their assigned producer about his or her beef operation and management techniques.
5. Following the interviews, pair up groups to discuss how the two operations are similar and different. Each group will present its findings to the class in a brief oral report.
  - a. Explain that the pairs of groups should discuss their presentations so that their reports work together to provide a clear and thorough picture of the two operations rather than present the same information.
  - b. Students should be prepared to answer questions about their reports.

6. If desired, have students contribute to the assessment process by completing a short evaluation of the performance of each member of their original group. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
7. The final assessment score will be based on the overall content and presentation of the report and the final peer evaluation score.



**Introduction to Beef Production  
Student Handout**

1. The instructor will divide the class into groups and provide each group with the name of a beef producer.
2. Your group will interview the producer about his or her beef operation and management techniques.
3. Following the interviews, your group will meet with another group to discuss how the two operations are similar and different.
4. Present your findings to the class in a brief oral report. Remember that your group's report should work with the other group's report to provide a clear and thorough picture of the two operations rather than present the same information.
5. Be prepared to answer questions from your instructor and classmates regarding your report.
6. If requested, you will contribute to the assessment process by completing a short evaluation of each member of your original group's performance in conducting the interview and making the presentation.
  - a. When the project is complete, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
7. Your final assessment score will be based on the content and presentation of your report and your final peer evaluation score.



# Agricultural Science I

## Introduction to Beef Production Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Oral Report	<input type="checkbox"/> Addresses key topics <input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Content works with other group's report and does not present the same information <input type="checkbox"/> Answers questions about content correctly	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 18	
Presentation of Oral Report	<input type="checkbox"/> Well organized <input type="checkbox"/> Engages listeners <input type="checkbox"/> Speaks clearly <input type="checkbox"/> Uses correct grammar <input type="checkbox"/> Maintains good posture and eye contact	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 5.5	
Peer Evaluation							6 pts. maximum	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Introduction to Beef Production  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as conducting interviews and doing research. Project completion includes assembling or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# Agricultural Science I

**Curriculum Guide:** *Introduction to Poultry Production*

**Unit Objective:**

Students will apply principles of poultry production to design, organize, and participate in a mini Poultry Career Development Event.

**Show-Me Standards:** 1.8, CA6

**References:**

*Introduction to Poultry Production*. University of Missouri-Columbia, Instructional Materials Laboratory, 1999.

*Missouri CDE Handbook*. Accessed January 7, 2003, from [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete AS 1.1, Identify Poultry Class Traits; AS 2.1, Identify Parts of a Chicken; and AS 2.2, Identify Parts of a Turkey.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 6 (1, 4), p. 18 (1, 2), and p. 73 (1, 2, 3).

**Performance-Based Assessment:**

Students will work in groups to design, organize, and participate in a mini Poultry Career Development Event. Each group will be responsible for one class of poultry or poultry products in the event and will also compete as a team in the whole event.

Assessment will be based on the overall content and presentation of the class of poultry or products and performance in the contest. At the instructor’s discretion, students will contribute to the assessment process by providing a brief evaluation of their teammates’ performance in designing and setting up their poultry class display.





**Introduction to Poultry Production  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide students into groups and assign each group to organize a class of poultry or poultry products in a mini Poultry Career Development Event.
  - a. Each group will also compete in the whole event as a team.
  - b. The event will follow the format and guidelines of a larger contest but will be scaled to the size and time constraints available for the project.
2. Explain or review event format, guidelines, and scoring as needed. Refer to the *Missouri CDE Handbook* for guidelines regarding Poultry Career Development Events. The *Missouri CDE Handbook* is available from the Missouri Department of Elementary and Secondary Education at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
3. Students will be responsible for the content of the information in their display, the items to be identified or graded by the contestants, and overall presentation.
  - a. Sample classes could include, but are not limited to, breed identification and evaluation and grading carcasses, eggs, and poultry products.
  - b. For event classes in which cost or availability of materials could be prohibitive for students, such as locating unsuitable carcasses or eggs, the students may consult the instructor for assistance, but the students must be responsible for the overall design and presentation of their class of poultry or products.
4. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in helping to design and set up their portion of the Poultry Career Development Event. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.

- c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
5. The final assessment score will be a combination of the student's poultry class display score, contestant score, and final peer evaluation score.
6. To mirror contest format, an appropriate award may be given to the high-scoring team and individual.

**Introduction to Poultry Production  
Student Handout**

1. The instructor will divide the class into groups.
2. Your group will organize a class of poultry or poultry products in a mini Poultry Career Development Event.
3. Your group will also compete in the whole event as a team.
4. The contest will follow the format and guidelines of a full-scale Poultry Career Development Event.
5. You will be responsible for the content of the information in your display, the items to be identified or graded by the contestants, and the overall presentation.
6. For poultry or product classes in which cost or availability of materials could be prohibitive, you may consult the instructor for assistance, but you will be responsible for the overall design and presentation of your class of poultry or products.
7. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in helping to design and set up your display.
  - a. Following the event, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
8. Your final assessment score will be a combination of your poultry class display score, your contestant score, and your final peer evaluation score.



## Agricultural Science I

### Introduction to Poultry Production Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Poultry Career Development Event Project	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Provides useful information about poultry and poultry management <input type="checkbox"/> Prepares participants for larger Career Development Events	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 10	
Presentation of Poultry Career Development Project Display	<input type="checkbox"/> Well organized <input type="checkbox"/> Eye appealing <input type="checkbox"/> No spelling, grammar, or punctuation errors <input type="checkbox"/> Supports information and content	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								/50 pts.

Assessment Area	Breed Identification 0-11 Points	Ready-To-Cook Carcasses 0-11 Points	Cartoned Eggs 0-11 Points	Further-Processed Poultry Meat Products 0-11 Points	Total
Poultry Career Development Event					
Peer Evaluation				6 pts. maximum	
<b>TOTAL</b>					/50 pts.

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Introduction to Poultry Production  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)





# Agricultural Science I

**Curriculum Guide:** *Sheep Production*

**Unit Objective:**

Students will demonstrate their understanding of different aspects of sheep production by researching the breed characteristics, management practices, and health issues of a given breed of sheep and presenting their findings in an oral report.

**Show-Me Standards:** 2.1, CA1

**Reference:**

*Sheep Production.* University of Missouri-Columbia, Instructional Materials Laboratory, 2001.

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 3.1, Common Sheep Diseases, and AS 4.1, Year-long Management Practices.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 29 and p. 47.

**Performance-Based Assessment:**

Students will be divided into groups and assigned to research the characteristics, management practices, and health issues of a particular breed of sheep. Students will be asked to present their findings to the class by using visual aids (e.g., pictures, diagrams, charts) and computer technology (e.g., using PowerPoint). At the instructor’s discretion, students will contribute to the assessment process by providing a brief evaluation of their teammates’ performance in gathering information and preparing their presentation.

Assessment will be based on the content and delivery of the students’ oral presentation and their use of visual aids and computer technology.



**Sheep Production  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Divide students into groups and assign each group a specific breed. Have the group do research about the following:
  - ☐ Characteristics of the breed
  - ☐ A management practice
  - ☐ A health issueFor example, one group might have Suffolk, docking tails, and sore mouth.
2. Students may use material in the unit but must use additional outside material to complete their report.
  - a. Students may use textbooks, the Internet, or any other reliable sources to gather their information.
  - b. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their presentation.
3. Students will be asked to present their findings to the class by using visual aids (e.g., pictures, diagrams, charts) and computer technology (e.g., using PowerPoint).
4. Have students meet throughout the unit to make further preparations and practice their presentation.
5. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing their presentation. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.

6. Students will be assessed on the content and delivery of the oral presentation and the use of visual aids and computer technology.

**Sheep Production  
Student Handout**

1. Your instructor will divide students into groups and assign each group a specific breed. Your group will do research about the following:
  - ☐ Characteristics of the breed
  - ☐ A management practice
  - ☐ A health issue
2. You may use material in the unit but must use additional outside material to complete your report.
  - a. You may use textbooks, the Internet, or any other reliable sources to gather information.
  - b. You may not use the source material word for word and must provide a complete bibliography of the sources along with your presentation.
3. Your group will be asked to present your findings to the class by using visual aids (e.g., pictures, diagrams, charts) and computer technology (e.g., using PowerPoint).
4. You and your teammates will meet throughout the unit to make further preparations and practice the presentation.
5. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the presentation.
  - a. After your presentation has been completed, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
6. You will be assessed on the content and delivery of the oral presentation and the use of visual aids and computer technology.



# Agricultural Science I

## Sheep Production Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Oral Presentation	<input type="checkbox"/> Organized format <input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Addresses all three topics	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 10	
Delivery of Oral Presentation	<input type="checkbox"/> Well organized <input type="checkbox"/> All group members participate in some way <input type="checkbox"/> Informs the audience <input type="checkbox"/> Engages the interest of the listener	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 10	
Visual Aids and Use of Technology	<input type="checkbox"/> Visuals tie directly to the presentation <input type="checkbox"/> Used appropriately <input type="checkbox"/> Visuals are well constructed and free of mistakes <input type="checkbox"/> Group used technology in their presentation	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 3.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





**Sheep Production  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# Agricultural Science I

**Curriculum Guide:** *Equine Science*

**Unit Objective:**

Students will demonstrate an understanding of the requirements for care of equine livestock by designing a health maintenance, hoof care, and feeding plan for a horse.

**Show-Me Standards:** 1.8, SC3

**References:**

Equine Nutrition. Accessed March 12, 2003, from <http://www.worldzone.net/recreation/virtuallyhorses/nutrition.html>.

*Equine Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1995.

*FBMA: Horse Management for Adults* (CD). Farm Business Management Analysis, University of Missouri, Agricultural Education Department, 2002.

The Horse.com. Accessed March 12, 2003, from <http://www.thehorse.com>.

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 10.
- Students will complete AS 5.1, Microscope Use; AS 6.1, External Parts of the Foot; and AS 6.2, Internal Parts of the Foot.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. 4 (4), p. 20 (1), p. 27 (2), p. 38 (2), p. 53 (4), p. 71, p. 81 (2), p. 93 (1), and p. 100 (1, 2).

**Performance-Based Assessment:**

Students will work in teams of three to design a health maintenance, hoof care, and feeding plan for a horse. The plan should be presented in the form of tables that cover health maintenance, hoof care, and nutrition.

Assessment will be based on the quality of the information presented in the tables and how thoroughly the tables address their respective areas. Spelling also will be a consideration in the assessment.



**Equine Science  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Students will work in teams of three to design a health maintenance, hoof care, and feeding plan for an actual or imaginary horse.
  - a. The team must identify the breed of the horse.
  - b. After establishing the breed, the team must then identify the basic characteristics of the horse, such as age, sex, activity level, etc.
2. After addressing the horse's breed and characteristics in a brief introductory paragraph, students should present the plan in the form of three tables.
  - a. Tables should cover the areas of health maintenance, hoof care, and nutrition.
  - b. Tables should be presented in a simple, two-column format. Column one should state the issue, condition, or management practice to be addressed and column two should state the solution, treatment (including frequency and/or amount, if applicable), or procedure for the item in column one. (See form on p. 7.)
3. Students may use material found in the unit or discussed in class as a starting point but must use additional outside material to complete their tables. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their tables.
4. Regarding health maintenance, students should cover the following areas:
  - ☐ A vaccination schedule against diseases for which vaccines exist (e.g., influenza, sleeping sickness, tetanus, Rhino, and distemper)
  - ☐ Treatment or solutions for common ailments (e.g., colic, Equine Infectious Anemia, Potomac Horse Fever, and salmonella infection)
  - ☐ Dental care
  - ☐ Parasites (internal and external)
  - ☐ Treatment for common injuries or problems (e.g., wounds, foot punctures, bites and stings, strains, sprains, swelling, and founder)
5. Regarding hoof care, students should cover the following areas:
  - ☐ Hoof inspection
  - ☐ Trimming the hoof
  - ☐ Shoeing

- ☐ Hoof abnormalities (e.g., founder, stone bruise, naviculitis, thrush, and hoof cracks)
6. Regarding nutrition, students should cover the following areas:
- ☐ Nutritional requirements (These should take into account such factors as size, age, and work load.)
  - ☐ Water requirements
  - ☐ Feed types (e.g., grains, roughage, supplements, minerals, and vitamins)
  - ☐ Nutrition-related problems (e.g., colic, founder, epiphysis, vitamin depletion or excess, toxic plant consumption, and tying up syndrome)
7. Assessment will focus on the quality of the information presented in the tables and how well the tables address their respective areas. Spelling also will be a consideration in the assessment.

**Equine Science  
Student Handout**

1. Work in teams of three to design a health maintenance, hoof care, and feeding plan for an actual or imaginary horse.
  - a. Identify the breed of the horse.
  - b. After establishing the breed, identify the basic characteristics of the horse, such as age, sex, activity level, etc.
2. After addressing the horse's breed and characteristics in a brief introductory paragraph, present the plan in the form of three tables.
  - a. Tables should cover the areas of health maintenance, hoof care, and nutrition.
  - b. Tables should be presented in a simple, two-column format. Column one should state the issue, condition, or management practice to be addressed and column two should state the solution, treatment (including frequency and/or amount, if applicable), or procedure for the for the item in column one.
3. You may use material found in the unit or discussed in class as a starting point but must use additional outside material to complete the tables. You may not use the source material word for word and must provide a complete bibliography of the sources along with your tables.
4. Regarding health maintenance, cover the following areas:
  - ☐ A vaccination schedule against diseases for which vaccines exist (e.g., influenza, sleeping sickness, tetanus, Rhino, and distemper)
  - ☐ Treatment or solutions for common ailments (e.g., colic, Equine Infectious Anemia, Potomac Horse Fever, and salmonella infection)
  - ☐ Dental care
  - ☐ Parasites (internal and external)
  - ☐ Treatment for common injuries or problems (e.g., wounds, foot punctures, bites and stings, strains, sprains, swelling, and founder)
5. Regarding hoof care, cover the following areas:
  - ☐ Hoof inspection
  - ☐ Trimming the hoof
  - ☐ Shoeing
  - ☐ Hoof abnormalities (e.g., founder, stone bruise, naviculitis, thrush, and hoof cracks)

6. Regarding nutrition, cover the following areas:
  - ☐ Nutritional requirements (These should take into account such factors as size, age, and work load.)
  - ☐ Water requirements
  - ☐ Feed types (e.g., grains, roughage, supplements, minerals, and vitamins)
  - ☐ Nutrition-related problems (e.g., colic, founder, epiphysis, vitamin depletion or excess, toxic plant consumption, and tying up syndrome)
7. You will be assessed on the quality of the information presented in the tables and how well the tables address their respective areas. Spelling also will be a consideration in the assessment.



## Table for:

☐ Health Maintenance   ☐ Hoof Care   ☐ Nutrition

(Check one)

Health Issue, Condition, or Management Practice	Solution, Treatment, or Procedure



# Agricultural Science I

## Equine Science Scoring Guide

Names \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
<u>Health Maintenance:</u> Vaccinations	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Common Ailments	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Dental Care	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Parasites	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Common Injuries or Problems	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
<u>Hoof Care:</u> Inspection	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Trimming	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Shoeing	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Abnormalities	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	

<u>Nutrition:</u> Requirements	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Water Requirements	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Feed Types	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Related Problems	How well and how thoroughly is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 1.75	
Technical Considerations	Spelling errors	6 or more errors	5 errors	4 errors	2-3 errors	0-1 error	X 2.25	
<b>TOTAL</b>								

**Final Assessment Total \_\_\_\_/100 pts.**

**Comments:**

# Agricultural Science I

**Curriculum Guide:** *Introduction to Specialty Animal Production*

**Unit Objective:**

Students will demonstrate their understanding of specialty animal production by researching a specialty animal and presenting a sales pitch to their fellow classmates on their animal.

**Show-Me Standards:** 1.2, CA1

**References:**

American Beefalo International. Accessed April 28, 2003, from <http://www.ababeefalo.org>.

Aquaculture Network Information Center. Accessed May 3, 2003, from <http://www.aquanic.org>.

Beefalo Home Page. Accessed April 29, 2003, from <http://www.beefalobeef.com>.

*Introduction to Specialty Animal Production*. University of Missouri-Columbia, Instructional Materials Laboratory, 1989.

Missouri Department of Agriculture. Accessed April 28, 2003, from <http://www.mda.state.mo.us/>.

North American Elk Breeders Association. Accessed May 2, 2003, from <http://www.naelk.org>.

Rabbit Web. Accessed April 28, 2003, from <http://www.rabbitweb.net>.

University of Missouri Outreach & Extension. Accessed May 2, 2003, from <http://outreach.missouri.edu>.

Students may use additional outside sources to complete this activity.

### **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 2.1, Start-Up Costs; AS 2.2, Operating Costs; AS 2.3, Labor Requirements; AS 2.4, Form 103 Budget; AS 3.1, Enterprise Comparison Chart; AS 3.2, Beginning Budget Form; AS 4.1, Regulation Checklist; and AS 5.1, Market Comparison.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 5, p. 17, p. 34, and p. 49.

### **Performance-Based Assessment:**

Students will select one specialty animal and research that animal so that they may prepare a sales pitch to present to their classmates. In their presentation, students will include a brief background and history of the animal, common uses, the cost of the animal and necessary supplies, and why or why not the animal would be profitable to produce in their area.

Students will be assessed on the overall content and presentation of the sales pitch, including the visual aid(s) used.

**Introduction to Specialty Animal Production  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students select one specialty animal and research that animal so that they may prepare a sales pitch that will be given to the class.
2. Students will prepare a presentation that contains the following:
  - ☐ A brief background and history of the animal
  - ☐ Common uses for the animal
  - ☐ Supplies that would be needed and the average cost of each
  - ☐ How much the actual animal costs
  - ☐ How the animal would be profitable to produce in their area
  - ☐ Any additional information that would be useful in describing the profitability
  - ☐ A visual aid that enhances their presentation
3. Students may use material found in the unit and additional outside material to complete their presentation. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their presentation.
4. Students will be assessed on the overall content and presentation of the sales pitch, including the visual aid(s) used.





**Introduction to Specialty Animal Production  
Student Handout**

1. You will select one specialty animal and research that animal so that you may prepare a sales pitch that will be given to the class.
2. You will prepare a presentation that contains the following:
  - ☐ A brief background and history of the animal
  - ☐ Common uses for the animal
  - ☐ Supplies that would be needed and the average cost of each
  - ☐ How much the actual animal costs
  - ☐ How the animal would be profitable to produce in your area
  - ☐ Any additional information that would be useful in describing the profitability
  - ☐ A visual aid that enhances your presentation
3. You may use material found in the unit and additional outside material to complete your presentation. You may not use the source material word for word and must provide a complete bibliography of the sources along with your presentation.
4. You will be assessed on the overall content and presentation of the sales pitch, including the visual aid(s) used.



# Agricultural Science I

## Introduction to Specialty Animal Production Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Sales Pitch	<ul style="list-style-type: none"> <li><input type="checkbox"/> Covers all areas required</li> <li><input type="checkbox"/> Detailed explanations and research</li> <li><input type="checkbox"/> All facts are accurate</li> <li><input type="checkbox"/> Serves to persuade listeners</li> <li><input type="checkbox"/> Visual aid(s) support content</li> </ul>	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 20	
Presentation of Sales Pitch	<ul style="list-style-type: none"> <li><input type="checkbox"/> Well organized</li> <li><input type="checkbox"/> Engages listeners</li> <li><input type="checkbox"/> Speaks clearly</li> <li><input type="checkbox"/> Maintains good posture and eye contact</li> </ul>	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Agricultural Science I

**Curriculum Guide:** *Introduction to Animal Products*

**Unit Objective:**

Students will demonstrate their knowledge of animal products by naming the species (beef, pork, or lamb), wholesale cuts, and retail cuts of meat.

**Show-Me Standards:** 1.8, CA4

**References:**

AggieMeat. Meat Judging. Accessed January 29, 2003, from <http://aggiemeat.tamu.edu/judging/meatjudging.html>.

*Introduction to Animal Products*. University of Missouri-Columbia, Instructional Materials Laboratory, 1998.

*Missouri CDE Handbook*. Accessed January 29, 2003, from [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. 14 and p. 39.

**Performance-Based Assessment:**

Students will be asked to identify the species and wholesale and retail name for 40 different cuts of beef, pork, and lamb. The cuts may be fresh or pictures on a poster or flash cards.

Students will be assessed based on the score they receive on the identification of retail cuts of meat.



**Introduction to Animal Products  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students study cuts of meat to prepare for an evaluation in which they will be asked to identify 40 different cuts of beef, pork, and lamb. The evaluation will be modeled after the Meats Evaluation CDE.
2. Students will use material found in the unit and additional outside material.
  - a. A helpful web site for researching cuts of meat is <http://aggiemeat.tamu.edu/judging/meatjudging.html>.
  - b. To obtain rules for the event, the meat identification card, and the meat identification letters and numbers, access the Meats Evaluation CDE document at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
  - c. Students will print the meat identification card for use during the evaluation.
3. For the evaluation, number the 40 different cuts and display them for students.
  - a. Cuts can be placed in groups on different tables to prevent crowding of students.
  - b. Students will have approximately 1 to 1 ½ minutes per cut to identify it and move to the next cut.
  - c. When students are finished, collect the meat identification cards for grading.
4. Assessment will be based on the score the students receive on the evaluation.





**Introduction to Animal Products  
Student Handout**

1. You will study cuts of meat to prepare for an evaluation in which you will be asked to identify 40 different cuts of beef, pork, and lamb. The evaluation will be modeled after the Meat Evaluation CDE.
2. You will use material found in the unit and additional outside material.
  - a. A helpful web site for researching cuts of meat is <http://aggiemeat.tamu.edu/judging/meatjudging.html>.
  - b. To obtain the meat identification card and the meat identification letters and numbers, access the Meats Evaluation CDE document at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
  - c. Print the meat identification card for use during the evaluation.
3. For the evaluation, your instructor will number the 40 different cuts and display them.
  - a. Cuts may be placed in groups on different tables to prevent crowding of students.
  - b. You will have approximately 1 to 1 ½ minutes per cut to identify it and move to the next cut.
  - c. When you are finished, give the completed meat identification card to your instructor.
4. Assessment will be based on the score you receive on the evaluation.



# Agricultural Science I

## Introduction to Animal Products Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criterion	Weight	Total
Identification of 40 Different Cuts of Beef, Pork, and Lamb	Note: Score the cuts in the same manner as in the actual CDE (240 total points). Multiply the total score by the weight to determine the actual score.	X .3125	

Final Assessment Total \_\_\_\_/100 pts.

Comments:



# Agricultural Science I

**Curriculum Guide:** *Introduction to Dairy Production*

## **Unit Objective:**

Students will demonstrate an understanding of the principles of dairy production by designing a dairy operation and explaining the parts of the operation on a poster that will be displayed in class.

**Show-Me Standards:** 2.1, CA6

## **References:**

*Hoard's Dairyman*. Accessed April 3, 2003, from <http://www.hoards.com/>.

*Introduction to Dairy Production*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

NASCO On-Line Catalogs. Accessed April 3, 2003, from <http://www.enasco.com/prod/Home>.

Steevens, B., Ricketts, R. E., Rook, J., & Ruchlow, R. *Before You Go Into Dairying*. University of Missouri-Columbia Extension. Accessed March 3, 2003, from <http://muextension.missouri.edu/explore/agguides/dairy/g03500.htm>.

Students may use additional outside sources to complete this activity.

## **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete AS 4.1, Costs and Returns.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. 4 and p. 48.

## **Performance-Based Assessment:**

Students will design an aerial view map of a complete dairy operation and present their map on a poster. They will label the facilities and include brief captions to explain why they chose the facilities and made the design decisions they did. Completed posters will be displayed in class.

Assessment will be based on the overall content and presentation of the dairy operation poster.



## **Introduction to Dairy Production Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students design an aerial view map of a complete dairy operation and present their map on a poster.
2. Have students label the facilities and include brief captions to explain why they chose the facilities and made the design decisions they did.
3. Explain the acceptable form or forms for students' maps. For example, students could design their map by drawing, using collage, or other means.
4. If desired, lead the class in a discussion that will help them design their dairy operation. The map should reflect these design decisions, and the captions give the student the opportunity to explain his or her reasons for making them.
  - a. Discussion questions might include the following.
    - ☐ What facilities will you need?
    - ☐ What type of milking parlor would you choose and why?
    - ☐ How will you store feed and waste?
  - b. Additional information can be found at the University of Missouri Extension web site, such as *Before You Go Into Dairying*, accessed March 3, 2003, from <http://muextension.missouri.edu/explore/agguides/dairy/g03500.htm>.
5. Students may use additional outside material to complete their poster. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their completed poster.
6. Display completed posters in class.
7. The final assessment score will be based on the overall content and presentation of the dairy operation poster.





**Introduction to Dairy Production  
Student Handout**

1. Create an aerial view map of a complete dairy operation and present your map on a poster.
2. Label all facilities and include brief captions to explain why you chose the facilities and made the design decisions you did.
3. You may use additional outside material to complete your poster.
4. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your completed poster.
5. Completed posters will be displayed in class.
6. Your final assessment score will be based on the overall content and presentation of your dairy operation poster.



# Agricultural Science I

## Introduction to Dairy Production Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content	Information is complete and facts are accurate	Failed	Poor	Fair	Good	Excellent	X 7.5	
Map Design	Map addresses all basic aspects of a dairy operation	Failed	Poor	Fair	Good	Excellent	X 7.5	
Captions	Captions explain the design of the dairy operation	Failed	Poor	Fair	Good	Excellent	X 5	
Organization	Well organized	Failed	Poor	Fair	Good	Excellent	X 2.5	
Technical Considerations	Spelling, grammar, and punctuation	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Agricultural Science I

**Curriculum Guide:** *Introduction to Swine Production*

**Unit Objective:**

Students will demonstrate their knowledge of swine production by preparing a time line that shows what happens from conception to retail in the swine industry.

**Show-Me Standards:** 1.8, SC3

**Reference:**

*Introduction to Swine Production.* University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 5.2, Swine Antibiotics; AS 6.1, Ear Notching; and AS 7.1, Debate-Swine Production and the Environment.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 59 and p. 73.

**Performance-Based Assessment:**

Students will be asked to construct a time line of a pig’s life from conception to retail (packaging). Students need to include any vaccinations given to the mother during pregnancy or the pig itself, any changes in feed as the pig matures, and management practices performed on the pig. In addition, students will include explanations or benefits of each management practice.

Students will be assessed on the presentation of the time line and the content and overall quality of the events and explanations.



**Introduction to Swine Production  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students prepare a time line that shows the care and management practices in a pig's life from conception to retail.
  - a. Give the students the option of working individually or in pairs.
  - b. Students may use material in the unit but must use additional outside material to complete their time line.
  - c. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their time line.
  - d. Students can create their time line on the computer or draw it by hand.
2. Students need to include any vaccinations given to the mother during pregnancy or the pig itself.
  - a. Vaccinations should be listed in the order they are given.
  - b. They also need to include any restrictions on the medication and withdrawal time that must be observed for harvesting.
3. The student must document any changes in feed rations as the pig matures. This may include, but is not limited to, the following:
  - ☐ Weight or amount of feed given
  - ☐ Protein percentages
  - ☐ Additives
4. Students must list management practices performed on the pig and at what age they are to be done.
  - a. Their time line should at least include the following:
    - ☐ Clipping of needle teeth
    - ☐ Docking of tails
    - ☐ Castration
    - ☐ Notching of ears
  - b. An explanation or benefit of each management practice should also be included. For example, clipping of needle teeth prevents damage to the sow's udder.
5. Students will be assessed on the presentation of the time line and the content and overall quality of the events and explanations.





**Introduction to Swine Production  
Student Handout**

1. You will prepare a time line that shows the care and management practices in a pig's life from conception to retail.
  - a. Your instructor will decide if you work individually or in pairs.
  - b. You may use material in the unit but must use additional outside material to complete the time line.
  - c. You may not use the source material word for word and must provide a complete bibliography of the sources along with your time line.
  - d. You can create the time line on the computer or draw it by hand.
2. You will need to include any vaccinations given to the mother during pregnancy or the pig itself.
  - a. Vaccinations should be listed in the order they are given.
  - b. You will also need to include any restrictions on the medication and withdrawal time that must be observed for harvesting.
3. You must document any changes in feed rations as the pig matures. This may include, but is not limited to, the following:
  - ☐ Weight or amount of feed given
  - ☐ Protein percentages
  - ☐ Additives
4. You must list management practices performed on the pig and at what age they are to be done.
  - a. Your time line should at least include the following:
    - ☐ Clipping of needle teeth
    - ☐ Docking of tails
    - ☐ Castration
    - ☐ Notching of ears
  - b. You will need to include an explanation or benefit of each management practice. For example, clipping of needle teeth prevents damage to the sow's udder.
5. You will be assessed on the presentation of the time line and the content and overall quality of the events and explanations.



# Agricultural Science I

## Introduction to Swine Production Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Content of Explanations and Events	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Facts are in correct order <input type="checkbox"/> Well organized	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 15	
Presentation of Time Line	<input type="checkbox"/> Well organized <input type="checkbox"/> Neat <input type="checkbox"/> Creative <input type="checkbox"/> Easy to follow	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Technical Considerations for Explanations and Events	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Agricultural Science I

**Curriculum Guide:** *Introduction to Animal Nutrition*

**Unit Objective:**

Students will demonstrate an understanding of proper animal nutrition by comparing and contrasting two similar animal feeds and presenting their findings in a brief written summary.

**Show-Me Standards:** 1.8, SC4

**Reference:**

*Introduction to Animal Nutrition*. University of Missouri-Columbia, Instructional Materials Laboratory, 1996.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 3.1, Nutrient Recommendations; AS 4.1, Identifying Nutritional Requirements; and AS 5.1, Balancing Rations.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 74 and p. 84.

**Performance-Based Assessment:**

Each student will locate two different animal feeds. Both feeds should be designed to meet the same nutritional requirements of the same type of animal. Students will compare and contrast the feeds on the basis of key nutrients and fiber, main ingredients, and appearance and present their findings in a brief written summary.

Assessment will be based on the overall content and presentation of the summary.



**Introduction to Animal Nutrition  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students locate two different animal feeds. Both feeds should be designed to meet the same nutritional requirements of the same type of animal.
2. Have students compare and contrast the feeds and present their findings in a brief written summary. Have students compare and contrast the feeds in the following ways.
  - ☐ Key nutrients and fiber: What is the percentage of crude protein, crude fat, and crude fiber in the feed?
  - ☐ Main ingredients: What are the top five ingredients?
  - ☐ Appearance: What is the general texture and appearance of the feed? For example, is the feed pelleted? Is it dry or does it include molasses? Can any ingredients be identified, such as rolled oats?
  - ☐ Based on the appearance of the feed and information from the feed tag, which feed would you choose and why?
3. Students should write the summary in complete sentences and use correct spelling, grammar, and punctuation.
4. Have students turn in the feed tags from their feeds along with their written summary.
5. The final assessment score will be based on the overall content and presentation of the written summary.





**Introduction to Animal Nutrition  
Student Handout**

1. Locate two different animal feeds that are designed to meet the same nutritional requirements of the same type of animal.
2. Compare and contrast the feeds using the points below.
  - ☐ Key nutrients and fiber: What is the percentage of crude protein, crude fat, and crude fiber in the feed?
  - ☐ Main ingredients: What are the top five ingredients?
  - ☐ Appearance: What is the general texture and appearance of the feed? For example, is the feed pelleted? Is it dry or does it include molasses? Can any ingredients be identified, such as rolled oats?
  - ☐ Based on the appearance of the feed and information from the feed tag, which feed would you choose and why?
3. Present your findings in a brief written summary. Use complete sentences and correct spelling, grammar, and punctuation.
4. Turn in the tags from the feeds along with your written summary.
5. Your final assessment score will be based on the overall content and presentation of your written summary.



# Agricultural Science I

## Introduction to Animal Nutrition Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness	Addresses key nutrients and fiber, main ingredients, and appearance; information is complete	Failed	Poor	Fair	Good	Excellent	X 11.25	
Accuracy	Facts are accurate; evaluation of feeds is correct; explanations are persuasive	Failed	Poor	Fair	Good	Excellent	X 11.25	
Presentation	Well organized; no spelling, grammar, or punctuation errors	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Agricultural Science II





# Agricultural Science II

**Curriculum Guide:** *Introduction to Grassland Management*

**Unit:** I. Grasslands and Grassland Plants

**Unit Objective:**

Students will demonstrate the ability to identify and analyze a grassland area by collecting and identifying plant samples from the area and assembling their samples in a binder or other format.

**Show-Me Standards:** 1.3, SC5

**References:**

*Grassland Evaluation Contest Study Guide.* University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

*Introduction to Grassland Management.* University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 4.
- Students will complete AS 1.1, Word Search; AS 2.1, Constructing a Plant Press; AS 2.2, Identifying Grassland Plants; and AS 4.1, Grassland Composition Survey.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: pp. I-5-I-6 (1, 4), p. I-20, and p. I-44 (1, 2).

**Performance-Based Assessment:**

Students will work in groups to identify and analyze a native or managed grassland. Each group must locate a grassland area, determine what kind it is, and identify in detail samples of the plants they find. Students will assemble their samples and findings in a binder, photo album, or other format, such as a computer presentation.

Assessment will be based on the thoroughness of the samples, the accuracy of the identifications, and the overall presentation of the project. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the other members of their group.





**Introduction to Grassland Management  
Unit I—Grasslands and Grassland Plants  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Divide the class into groups.
2. Have each group locate a grassland area and determine what type of grassland it is, such as a glade, savanna, lawn, or pasture.
3. Have students establish an area, 50 ft x 50 ft, and study it in detail.
  - a. The study area is set at 50 ft x 50 ft to mirror the judging site size used in Grassland Evaluation Contests. For more information about Grassland Evaluation, consult the *Grassland Evaluation Contest Study Guide*, available from the University of Missouri-Columbia, Instructional Materials Laboratory.
  - b. Students must collect at least 10 different plants from the area, which they will identify and classify by filling out an identification sheet for each plant.
  - c. Provide students with blank identification sheets, such as the one found in AS 2.2 on p. I-37 of the Instructor Guide, or explain the format identification sheets should follow.
4. Depending on the time constraints of the project, have students examine their sample grassland at one particular point in time or return to the area over the course of the unit and record any developments and changes.
5. Have students assemble their samples and findings in a binder, photo album, or other format, such as a computer presentation, and label the collection according to the type of grassland studied and its location.
6. Students may incorporate other elements, such as photos, to make the report interesting and informative.
7. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in helping to complete the project. A peer evaluation form is included following the scoring guide.

- a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
8. The final assessment score will be a combination of the student's project score and final peer evaluation score.

**Introduction to Grassland Management**  
**Unit I—Grasslands and Grassland Plants**  
**Student Handout**

1. The instructor will divide the class into groups.
2. Your group must locate a grassland area and determine what type of grassland it is, such as a glade, savanna, lawn, or pasture.
3. You will then establish an area, 50 ft x 50 ft, and study it in detail.
4. Collect at least 10 different plants from the area. Identify and classify the plants by filling out an identification sheet for each one. The instructor will provide identification sheets or explain what information each sheet must include.
5. Assemble your samples and findings in a binder, photo album, or other format, such as a computer presentation, and label the collection according to the type of grassland studied and its location.
6. Use other elements, such as photos, as needed to make the report interesting and informative.
7. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance.
  - a. When the project is complete, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
8. Your final assessment will be a combination of your completed project score and final peer evaluation score.



## Agricultural Science II

### Introduction to Grassland Management Unit I—Grasslands and Grassland Plants Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Includes at least 10 different plant samples <input type="checkbox"/> Grassland and samples are correctly identified <input type="checkbox"/> Provides a thorough survey of a grassland area	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 18	
Presentation	<input type="checkbox"/> Clear and well organized <input type="checkbox"/> Emphasizes key points <input type="checkbox"/> No spelling, grammar, or punctuation errors <input type="checkbox"/> Good use of supporting materials	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.5	
Peer Evaluation							6 pts. maximum	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Introduction to Grassland Management  
Unit I—Grasslands and Grassland Plants  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as collecting samples and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)





# Agricultural Science II

**Curriculum Guide:** *Introduction to Grassland Management*

**Unit:** II. Soil Management

**Unit Objective:**

Students will demonstrate an understanding of basic principles of soil management by analyzing the results of a soil test and presenting their findings to the class in a chart and oral report.

**Show-Me Standards:** 1.3, SC7

**References:**

"How to Take a Soil Sample." Missouri Department of Conservation. Accessed January 15, 2003, from <http://www.conservation.state.mo.us/landown/wild/landmgmt/practices.htm>.

*Introduction to Grassland Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Lory, J. A. *Interpreting Missouri Soil Test Reports*. University of Missouri-Columbia Extension. Accessed January 15, 2003, from <http://muextension.missouri.edu/explore/agguides/soils/g09112.htm>.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 2.
- Students will complete AS 1.1, Word Search; and AS 1.2, Taking a Soil Sample.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. II-5 and p. II-17 (1, 2).

**Performance-Based Assessment:**

Students will work in groups to collect soil samples from different locations within an assigned area. They will have the soil tested, analyze the results, and present their findings to the class in a chart and oral report.

## **Agricultural Science II**

---

Assessment will be based on the accuracy of the interpretation of the soil analysis results and the overall content and presentation of the chart and report. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.

**Introduction to Grassland Management  
Unit II—Soil Management  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Divide the class into groups and assign each group a different area from which to collect soil samples, such as a yard, conservation area, football or softball field, or farm.
2. Have each group collect soil samples to create a composite sample. Use AS 1.2, Taking a Soil Sample, p. II-11 of the Instructor Guide.
3. Have students submit their composite sample to a University of Missouri Outreach & Extension office for testing. Samples could also be tested in class.
  - a. Extension offices can be located by searching the University of Missouri Outreach & Extension web site at <http://outreach.missouri.edu/regions/index.html>, accessed January 15, 2003.
  - b. If samples are tested in class, provide testing equipment and explain how to use it properly.
  - c. If students test the samples, verify the accuracy of their results by retesting the samples.
4. Have students compile their results and present their findings to the class as a chart and oral report.
5. Indicate what information students must provide for their samples in their chart and report. Topics could include the following:
  - ☐ Description of topography
  - ☐ Physical properties of the sample
  - ☐ Interpretation of physical properties
  - ☐ Soil test results
  - ☐ Interpretation of soil analysis
  - ☐ Recommendations
6. Students should be prepared to answer questions about their interpretations and recommendations.

7. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in completing the project. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
8. Assessment will be based on the accuracy of the interpretations of the soil analysis results and the overall content and presentation of the chart and report.

**Introduction to Grassland Management**  
**Unit II—Soil Management**  
**Student Handout**

1. The instructor will divide the class into groups.
2. Your group will collect soil samples from an assigned area using the procedure indicated by your instructor.
3. Submit your composite sample for testing.
4. Compile your observations and test results and present your findings to the class as a chart and an oral report.
  - a. Keep in mind questions such as the following:
    - ☐ What is the topography of the sample area like?
    - ☐ What are the physical characteristics of the soil?
    - ☐ What do the physical characteristics indicate about the sample?
    - ☐ What does the soil test indicate about the sample?
    - ☐ Based on the results of the soil analysis, what recommendations would I make?
  - b. Your instructor will provide specific topic headings to be addressed.
  - c. Be prepared to answer questions from your instructor and classmates about your interpretations and recommendations.
5. Turn in your completed chart, along with your soil sample, following your presentation.
6. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in analyzing the soil sample and preparing your presentation.
  - a. When the project is complete, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
7. Your final assessment score will be a combination of your completed project score and your final peer evaluation score.



## Agricultural Science II

### Introduction to Grassland Management Unit II—Soil Management Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Chart and Oral Report	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Well organized <input type="checkbox"/> No spelling, grammar, or punctuation errors <input type="checkbox"/> Answers questions from the instructor and students correctly	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 20	
Presentation of Oral Report	<input type="checkbox"/> Holds audience interest <input type="checkbox"/> Speaks clearly <input type="checkbox"/> Good posture <input type="checkbox"/> Maintains eye contact	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 3.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





**Introduction to Grassland Management**  
**Unit II—Soil Management**  
**Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as preparation and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# Agricultural Science II

**Curriculum Guide:** *Introduction to Grassland Management*

**Unit:** III. Grassland Management Practices

**Unit Objective:**

Students will apply grassland management practices by evaluating a grassland site for its ability to sustain wildlife and presenting their findings to the class in a diagram and oral report.

**Show-Me Standards:** 1.3, SC4

**References:**

*Introduction to Grassland Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Missouri Department of Conservation. Accessed January 14, 2003, from <http://www.conservation.state.mo.us>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 4.1, Habitat Evaluation; AS 4.2, Grassland Evaluation for Wildlife Habitat; AS 5.1, Determining Grassland Condition; and AS 5.2, Evaluating a Grassland.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. III-42.

**Performance-Based Assessment:**

Students will work in groups to find and record evidence of wildlife activity in a grassland area. Based on their findings, students will evaluate the area in terms of its ability to sustain wildlife and present their findings to the class in a diagram and oral report.

Assessment will be based on the thoroughness of the evidence collected, the interpretation of the evidence, and the overall content and presentation of the diagram and report. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.



**Introduction to Grassland Management  
Unit III—Grassland Management Practices  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Prior to assigning the investigative portion of this assessment, lead the class in a discussion that will help students evaluate a grassland site in terms of its ability to sustain wildlife. See Lesson 4 of this unit, Wildlife Management.
2. Divide the class into groups.
3. Have each group locate a grassland site, such as a native grassland or farmland, and record evidence of animal activity in the area by making written notes. Indicate other acceptable methods of recording or collecting evidence, if desired.
4. Based on their observations, have students evaluate the area in terms of its ability to sustain wildlife and present their findings to the class in a diagram of the area and an oral report.
  - a. Students should indicate the layout of the area in their diagram and include key features, such as streams, trees, and fencerows. They should also label their diagram to indicate where they found evidence of animal activity and what the evidence was.
  - b. Students should incorporate their notes and other elements as needed to make the presentation interesting and informative.
  - c. Have students turn in their diagram following their presentation.
5. Extensive expertise in wildlife identification is *not* necessary to successfully complete this assessment. Students should simply observe and record evidence to the best of their ability.
  - a. Students may use outside sources to help them in the identification process. For example, information regarding native Missouri animals can be found on the Missouri Department of Conservation web site at <http://www.conservation.state.mo.us>.
  - b. If students do use web sites or other sources to help identify wildlife, they must turn in a list of these sources along with their diagram.

6. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in completing the project. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
7. The final assessment score will be a combination of the student's diagram and oral report score and final peer evaluation score.

**Introduction to Grassland Management**  
**Unit III—Grassland Management Practices**  
**Student Handout**

1. The instructor will divide the class into groups.
2. Your group will locate a grassland site, such as a native grassland or farmland, and identify and record evidence of animal activity in the area by making written notes.
3. Based on your observations, evaluate the area in terms of its ability to sustain wildlife and present your findings to the class as a diagram and an oral report.
4. Your diagram should indicate the layout of the area and include key features, such as streams, trees, and fencerows.
  - a. Label your diagram to indicate where you found evidence of animal activity and what the evidence was.
  - b. Incorporate your notes and other elements as needed to make the diagram and report interesting and informative.
5. You may use outside sources to help in the identification process.
6. Give your diagram to your instructor following your presentation, along with a list of any sources you used.
7. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in helping to develop the presentation.
  - a. Following the presentation, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
8. Your final assessment score will be a combination of your diagram and oral report score and your final peer evaluation score.





## Agricultural Science II

### Introduction to Grassland Management Unit III—Grassland Management Practices Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Grassland Evaluation	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Evidence provides a thorough representation of a grassland site <input type="checkbox"/> Animals and evidence are correctly identified <input type="checkbox"/> Assessment of the area's ability to sustain wildlife is correct based on the evidence presented	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 16	
Presentation of Diagram	<input type="checkbox"/> Well organized <input type="checkbox"/> Emphasizes key points <input type="checkbox"/> No spelling, grammar, or punctuation errors <input type="checkbox"/> Good use of supporting materials	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Delivery of Oral Report	<input type="checkbox"/> Holds audience interest <input type="checkbox"/> Speaks clearly <input type="checkbox"/> Good posture <input type="checkbox"/> Maintains eye contact	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Introduction to Grassland Management  
Unit III—Grassland Management Practices  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as recording evidence and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# Agricultural Science II

**Curriculum Guide:** *Crop Science*

**Unit Objective:**

Students will demonstrate an understanding of crops and crop production by creating, organizing, and participating in a mini Agronomy Career Development Event.

**Show-Me Standards:** 1.8, CA6

**References:**

*Crop Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1992.

*Missouri CDE Handbook*. Accessed March 4, 2003, from [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 9.
- Students will complete WS 3.1, Parts of a Bean Seed; WS 3.2, Parts of a Grass Plant and Leaf; WS 3.3, Characteristics of Selected Crop and Weed Plants; WS 3.4, Seed Identification Score Sheet; and WS 4.1, Seed Information and Germination Test.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. 20 (1, 2) and p. 83 (2).

**Performance-Based Assessment:**

Students will work in groups to create, organize, and participate in a mini Agronomy Career Development Event. Each group will be responsible for one class of seed or plant samples in the overall event and will also compete as a team in the whole event.

Assessment will be based on the overall content and presentation of the class in the event and on performance in the contest. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of their teammates' performance in designing and setting up their class in the event.



**Crop Science  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide students into groups and assign each group a class of seed or plant samples to organize in a mini Agronomy Career Development Event.
  - a. Each group will also compete in the whole event as a team.
  - b. The event will follow, as closely as possible, the format and guidelines of a larger event but will be scaled to the size and time constraints available for the project.
2. Explain or review event format, guidelines, and scoring as needed. Refer to the *Missouri CDE Handbook* for guidelines regarding Agronomy Career Development Events. The *Missouri CDE Handbook* is available from the Missouri Department of Elementary and Secondary Education at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
3. Students will be responsible for the content of their display and its overall presentation.
4. Sample classes could include, but are not limited to, seed identification, wheat judging, soybean judging, and alfalfa hay judging.
5. Students may consult the instructor for assistance if they have difficulty locating materials, but they must be responsible for the overall content, design, and presentation of their class in the event.
  - a. Seed samples are available from the Instructional Materials Laboratory, University of Missouri-Columbia, at <http://iml.coe.missouri.edu/subj/subj.htm> and from NASCO at <http://www.nascofa.com/prod/Home?seqid=0>, both accessed April 30, 2003.
  - b. Classes to be judged should only include seeds or plants or use judging factors that have been discussed by the instructor with all the students as a group.

## **Agricultural Science II**

---

6. Scale down or divide classes as needed so that all groups do an equal amount of work.
  - a. For example, for seed identification, students could present 10 crop or weed seeds discussed in class, or seed identification could be assigned to more than one group.
  - b. If a class is assigned to more than one group, guide students as needed to ensure that each group presents different material.
7. Verify the students' placement of their assigned class prior to the contest and suggest corrections as needed.
8. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in helping to design and set up their portion of the event. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
9. The final assessment score will be a combination of the student's class display score, contestant score, and final peer evaluation score.
10. Present an appropriate award to the high-scoring team and individual, if desired.



**Crop Science  
Student Handout**

1. You will work with a group to organize a class of seed or plant samples to be judged in a mini Agronomy Career Development Event.
2. Your group will also compete in the whole event as a team.
3. The contest will follow the format and guidelines of a full-scale Agronomy Career Development Event.
4. You will be responsible for the content and presentation of your class of seeds or samples.
5. The instructor will verify your placement of your class of samples prior to the contest.
6. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in helping to design and set up your class of seeds or samples in the event.
  - a. Following the event, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
7. Your final assessment score will be a combination of your class display score, your contestant score, and your final peer evaluation score.



# Agricultural Science II

## Crop Science Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness and Accuracy of CDE Project	Project includes all required seeds or samples and placement is correct	Failed	Poor	Fair	Good	Excellent	X 10	
Presentation of CDE Project	Project is well organized and eye-appealing	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								/50 pts.

◆ Page 7 ◆

Assessment Area	Seed Identification 0-11 Points	Wheat Judging 0-11 Points	Soybean Judging 0-11 Points	Alfalfa Hay Judging 0-11 Points	Total
Agronomy Career Development Event					
Peer Evaluation				6 pts. maximum	
<b>TOTAL</b>					/50 pts.

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Crop Science  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# Agricultural Science II

**Curriculum Guide:** *Plant Science*

**Unit Objective:**

Students will demonstrate an understanding of the basic plant processes of germination and photosynthesis by conducting a seed germination experiment and writing a summary of their findings.

**Show-Me Standards:** 1.3, SC7

**References:**

Planet Ag. Science Fair Project Ideas. Accessed April 24, 2003, from <http://www.fl-ag.com/PlanetAg/ideas.htm>.

*Plant Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1991.

Sci4Kids. Science Projects in Agriculture. Accessed April 24, 2003, from <http://www.ars.usda.gov/is/kids/fair/story.htm>.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 8.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 24 and p. 39.

**Performance-Based Assessment:**

Students will conduct a seed germination experiment comparing the difference in growth patterns between monocot and dicot seeds. Each student will germinate both types of seeds (e.g., corn and beans). The student will examine the seeds each class period and record the differences (height and the appearance of the plant) in a chart that he or she designs. In addition, students will experiment with different variables such as light, media type, initial seed depth, and moisture levels. Before the students plant their seeds, they must hypothesize what will happen to their seeds. At the end of the experiment, students will write a 1-page summary of their findings.

Assessment will be based on the content and presentation of the chart and the overall quality of the summary.





**Plant Science  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Provide the following materials for students.
  - ☐ Bean and corn seeds (four of each per student)
  - ☐ Plastic cups
  - ☐ Media
  - ☐ Water
2. Assign each student a variable relating to levels of light, media type, initial seed depth, or soil moisture levels. Students will germinate their seeds according to their variable.
3. Students will predict or hypothesize what will happen to their plants based on their variable.
4. Have students develop a chart to record their plants' activity.
  - a. The chart will include a space at the top for writing the hypothesis before the experiment begins.
  - b. Students will examine their plants and record activity (e.g., height and appearance) every day that they are in the classroom.
  - c. Students will collect data over a 3-week period.
5. At the end of 3 weeks, students will write a 1-page summary of the performance of their plants.
6. Assessment will be based on the content and presentation of the chart and the overall quality of the summary.



**Plant Science  
Student Handout**

1. Your instructor will provide the following materials.
  - ☐ Bean and corn seeds (four of each type)
  - ☐ Plastic cups
  - ☐ Media
  - ☐ Water
2. Your instructor will assign a variable relating to levels of light, media type, initial seed depth, or soil moisture levels. You will germinate the seeds according to the variable.
3. You will predict or hypothesize what will happen to your plants based on the variable.
4. You will develop a chart to record your plants' activity.
  - a. The chart will include a space at the top for writing the hypothesis before the experiment begins.
  - b. You will examine your plants and record activity (e.g., height and appearance) every day that you are in the classroom.
  - c. Data will be collected over a 3-week period.
5. At the end of 3 weeks, you will write a 1-page summary of the performance of your plants.
6. Assessment will be based on the content and presentation of the chart and the overall quality of the summary.



## Agricultural Science II

### Plant Science Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Content of Chart	<input type="checkbox"/> Complete (all days have data) <input type="checkbox"/> Plants were treated according to the variable <input type="checkbox"/> Hypothesis is present <input type="checkbox"/> Hypothesis is logical per the variable	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 10	
Presentation of Chart	<input type="checkbox"/> Easy to follow <input type="checkbox"/> Organized format <input type="checkbox"/> Neat <input type="checkbox"/> No spelling errors	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
One-Page Summary	<input type="checkbox"/> Proper grammar <input type="checkbox"/> No spelling errors <input type="checkbox"/> Covers assigned variable <input type="checkbox"/> Well organized	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 10	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Agricultural Science II

## Curriculum Guide:

*Career and Personal Development for Plant Science Core Curriculum*

## Unit Objective:

Students will demonstrate an understanding of career and personal development by creating a personal development plan that reflects self-confidence, personal responsibility, and good human relations.

## Show-Me Standards: 4.1, SS6

## References:

Beilke, I. T. *Career Motivation and Self-Concept: Get Your Life on Track*, 4<sup>th</sup> ed., Dubuque, IA: Kendall/Hunt Publishing Co., 2000.

Brown, D. *Career Choice and Development*, 4<sup>th</sup> ed., San Francisco, CA: Jossey-Bass, 2002.

*Career and Personal Development for Plant Science Core Curriculum*. University of Missouri-Columbia, Instructional Materials Laboratory, 1983.

Ettinger, J. M. (Ed.), & Engels, D. W. (Ed.). *Improved Career Decision Making in a Changing World: Participant's Resource Guide*, 2<sup>nd</sup> ed., Garrett Park, MD: Garrett Park Press, 1996.

Hansen, L. S. *Integrative Life Planning: Critical Tasks for Career Development and Changing Life Patterns*, 1<sup>st</sup> ed., San Francisco, CA: Jossey-Bass, 1997.

Students may use additional outside sources to complete this activity.

## Instructional Strategies/Activities:

- Students will engage in study questions in lessons 1 through 5.
- Students will complete HO-1, Personal Data Sheet; HO-4, A Personality Rating Scale; and HO-8, How Do You Get Along with Others?
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. 16 (1) and p. 23 (2).

### **Performance-Based Assessment:**

Each student will create a personal development plan to promote better self-awareness. The plan, in essay form, will focus on the theme of the importance of good human relations.

The major focus of the assessment will be on the content, organization, details, and thoroughness of the plan. Spelling, grammar, punctuation, and capitalization also will be factors in the assessment.



**Career and Personal Development for Plant Science Core Curriculum  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Each student will write a 400- to 600-word essay aimed at creating a personal development plan for his or her social and career goals.
2. Students may use additional outside material to complete their essay. If students use outside sources, they may not use the source material word for word and must provide a complete bibliography of their sources along with their essay.
3. The essay's theme will focus on the importance of good human relations in one or more settings.
  - a. The settings to be considered are school, work, community, and family.
  - b. The plan should include examples of desired behavior and outcomes in one or more of the four settings.
  - c. One question should guide the creation of this essay: How should I treat others to encourage them to treat me as I would like to be treated?
  - d. This question serves as a departure point in the personal development plan, which would basically state the conditions under which the student plans to develop socially and to relate to others (i.e., a philosophy for life).
4. The essay promotes a self-awareness examination, encouraging the student to assess how he or she relates as a person to other people.
  - a. It also forces the student to inquire how that awareness can translate into positive social and career development steps.
  - b. Self-awareness factors could include such things as the following:
    - ☐ Personality
    - ☐ Grooming habits
    - ☐ Voice inflection and intonation
    - ☐ Nonverbal mannerisms
    - ☐ Amiability
    - ☐ Adaptability to various situations (pleasant, challenging, or traumatic)
5. Assessment will focus on the content, organization, details and examples, and thoroughness of the personal development plan. In addition, spelling, grammar, punctuation, and capitalization will be assessed.



**Career and Personal Development for Plant Science Core Curriculum  
Student Handout**

1. Write a 400- to 600-word essay aimed at creating a personal development plan for your social and career goals. (Remember: A plan, by definition, looks to the future.)
2. You may use additional outside material to complete your essay. If you use outside sources, you may not use the source material word for word and must provide a complete bibliography of the sources along with your essay.
3. Your essay's theme will focus on the importance of good human relations in one or more settings.
  - a. The settings to consider are school, work, community, and family.
  - b. Your plan should include examples of desired behavior and outcomes in one or more of the four settings.
  - c. One question should guide you in the creation of this essay: How should I treat others to encourage them to treat me as I would like to be treated?
  - d. This question serves as a departure point in your personal development plan, in which you will basically state the conditions under which you plan to develop socially and to relate to others (i.e., a philosophy for life).
4. The writing of your essay should promote a self-awareness examination, encouraging you to assess how you relate as a person to other people.
  - a. It also forces you to inquire how you can translate that self-awareness into positive social and career development steps.
  - b. Self-awareness factors could include such things as the following:
    - ☐ Personality
    - ☐ Grooming habits
    - ☐ Voice inflection and intonation
    - ☐ Nonverbal mannerisms
    - ☐ Amiability
    - ☐ Adaptability to various situations (pleasant, challenging, or traumatic)
5. Assessment will focus on the content, organization, details and examples, and thoroughness of your personal development plan. In addition, spelling, grammar, punctuation, and capitalization will be assessed.



## Agricultural Science II

### Career and Personal Development for Plant Science Core Curriculum Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Content of Essay	<input type="checkbox"/> How well is this area addressed?	Failed	Poor	Fair	Good	Excellent	X 5.625	
Organization of Essay	<input type="checkbox"/> How well is this area addressed?	Failed	Poor	Fair	Good	Excellent	X 5.625	
Details or Examples in the Essay	<input type="checkbox"/> How well is this area addressed?	Failed	Poor	Fair	Good	Excellent	X 5.625	
Thoroughness of the Essay	<input type="checkbox"/> How well is this area addressed?	Failed	Poor	Fair	Good	Excellent	X 5.625	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Agricultural Science II

**Curriculum Guide:** *Entomology*

**Unit Objective:**

Students will demonstrate an understanding of insects by collecting, classifying, and displaying 30 insects found in Missouri.

**Show-Me Standards:** 1.8, SC4

**References:**

*Entomology*. University of Missouri-Columbia, Instructional Materials Laboratory, 1991.

Field guide for insects (useful for students to classify their collection)

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete JS 2.1, Making a Killing Jar; JS 2.2, Labeling Insects; JS 2.3, Spreading the Wings of Butterflies and Moths; AS 2.1, Making an Insect Collection; WS 3.1, Insect Fact Sheet; WS 3.2, Insect Orders; and WS 6.1, Reading an Insecticide Label.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. III-50.

**Performance-Based Assessment:**

Students will collect, classify, and mount 30 different insects for display. The collection will be supplemented with an explanation of each insect's name, life cycle, main food source, and control methods.

Assessment will be based on the quantity of insects, presentation of the collection, and overall quality of the explanations.





**Entomology  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Each student will create an insect collection of 30 insects found in Missouri.
2. As part of the collection, students will provide explanations for each insect.
  - a. The explanations will include the following:
    - ☐ Name of the insect
    - ☐ Life cycle
    - ☐ Main food source
    - ☐ Control methods
  - b. Students will need to use outside sources to find their information.
  - c. Students may not use the source information word for word and must provide a complete bibliography of their sources with their collection.
3. For catching, preserving, and mounting instructions, have students refer to Lesson 2 for information.
4. Present students with both scoring guides (A and B) and instruct them to fill out Scoring Guide B with the name of each insect they collect. Have students turn in Scoring Guide B along with their collection and explanations.
5. Assessment will be based on the quantity of insects, presentation of the collection, and overall quality of the explanations.



**Entomology  
Student Handout**

1. You will create an insect collection of 30 insects found in Missouri.
2. As part of the collection, you will provide explanations for each insect.
  - a. The explanations will include the following:
    - ☐ Name of the insect
    - ☐ Life cycle
    - ☐ Main food source
    - ☐ Control methods
  - b. You will need to use outside sources to find information.
  - c. You may not use the source information word for word and must provide a complete bibliography of the sources with your collection.
3. For catching, preserving, and mounting instructions, refer to Lesson 2 for information.
4. You will be given two scoring guides (A and B) and instructed to fill out Scoring Guide B with the name of each insect you collect. When complete, give Scoring Guide B to your instructor along with your collection and explanations.
5. Assessment will be based on the quantity of insects, presentation of the collection, and overall quality of the explanations.



## Agricultural Science II

### Entomology Scoring Guide A

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Presentation of Insect Collection	<input type="checkbox"/> Organized <input type="checkbox"/> Neat <input type="checkbox"/> Correct materials used <input type="checkbox"/> Correct display techniques used	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Content of Explanations	<input type="checkbox"/> Information for all insects <input type="checkbox"/> Covers all areas required <input type="checkbox"/> Well organized <input type="checkbox"/> Neat	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Technical Considerations for Explanations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								/40 pts.

Score from Scoring Guide B

/60 pts.

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Entomology  
Scoring Guide B**

Name: \_\_\_\_\_

*Note to student: Fill out this form with the names of the insects in your collection and return it to the instructor along with your collection and explanations.*

<b>Insect Name</b>	<b>Number of Points Given (2 points per insect)</b>
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	
26.	
27.	
28.	
29.	
30.	

**Total number of insects**\_\_\_\_\_ **Total number of points**\_\_\_\_\_





# Agricultural Science II

**Curriculum Guide:** *Soil Science*

**Unit Objective:**

Students will demonstrate an understanding of soil science by analyzing how soil composition relates to fertility and soil management and recording their findings in a table.

**Show-Me Standards:** 1.3, CA4

**References:**

Missouri Department of Conservation. Accessed April 24, 2003, from [www.mdc.state.mo.us](http://www.mdc.state.mo.us).

Missouri Department of Natural Resources. Accessed April 24, 2003, from [www.dnr.state.mo.us](http://www.dnr.state.mo.us).

*Soil Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1995.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 13.
- Students will complete AS 4.1, Soil Texture; and AS 9.1, Soil Sampling and Interpreting Soil Test Results.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 4, p. 33, p. 42, p. 61, p. 88, and p. 113.

**Performance-Based Assessment:**

Working in pairs, students will be assigned to take three soil samples from varied topographies. Students will do a field estimate of the physical properties and then categorize the type of soil for each sample. Based on the physical and chemical properties of the soil samples and research relating to the needs of specific crops, students will recommend appropriate crops and soil management for each soil sample. Their findings will be recorded in a table they create.

Students will be assessed on the accuracy and thoroughness of the table and recommendations. Spelling, grammar, punctuation, and capitalization will also be assessed.



**Soil Science  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide students into pairs and assign each pair to collect three soil samples, each from a different topography.
2. Have students design a table in which they will record the following information.
  - ☐ Description of the location where each sample was taken
  - ☐ Physical properties (color, texture, structure, and permeability) of the soil and soil categorization
  - ☐ Interpretation of physical properties and categorization
  - ☐ Interpretation of the chemical analysis report
  - ☐ Recommended crops and management plan for each sample
3. Students will bring the soil samples to class and prepare them for analysis.
4. When the physical properties are determined, have the students interpret the results and record them in their tables.
5. Students will be assessed on the accuracy and thoroughness of the table and recommendations. Spelling, grammar, punctuation, and capitalization will also be assessed.



**Soil Science  
Student Handout**

1. You will work with a fellow classmate to collect three soil samples, each from a different topography.
2. Your team will design a table to record the following information.
  - ☐ Description of the location where each sample was taken
  - ☐ Physical properties (color, texture, structure, and permeability) of the soil and soil categorization
  - ☐ Interpretation of physical properties and categorization
  - ☐ Interpretation of the chemical analysis report
  - ☐ Recommended crops and management plan for each sample
3. Your team will bring the soil samples to class and prepare them for analysis.
4. When the soil test results are complete, you will interpret the results and record them in your table.
5. You will be assessed on the accuracy and thoroughness of the table and recommendations. Spelling, grammar, punctuation, and capitalization will also be assessed.



## Agricultural Science II

### Soil Science Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Content of Table	<input type="checkbox"/> Organized <input type="checkbox"/> Neat <input type="checkbox"/> All areas are covered <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 10	
Recommendations for Soil	<input type="checkbox"/> Well organized <input type="checkbox"/> Detailed <input type="checkbox"/> Accurate information <input type="checkbox"/> Covers all three soil samples	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 10	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# Agricultural Science II

**Curriculum Guide:** *Fruit and Vegetable Production*

**Unit Objective:**

Students will demonstrate their knowledge of production requirements for fruits and vegetables by developing a calendar for cultivating and harvesting 10 fruits and vegetables.

**Show-Me Standards:** 1.2, CA3

**Reference:**

*Fruit and Vegetable Production*. University of Missouri-Columbia, Instructional Materials Laboratory, 1984.

Students may use additional outside sources to complete this activity (e.g., seed catalogs or gardening magazines).

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 11.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. 6, p. 75, p. 116, p. 135, and p.146.

**Performance-Based Assessment:**

Students will develop a yearlong calendar for establishing, maintaining, and harvesting 10 different fruits and vegetables. A real calendar or a different format, determined by the student, may be used for this activity. The calendar should include a combination of both fruits and vegetables.

Students will be assessed based on the overall presentation and content of their calendar.



**Fruit and Vegetable Production  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Assign each student to develop a yearlong calendar for establishing, maintaining, and harvesting 10 different fruits and vegetables.
  - a. Students may use the information in their student reference or other reliable information they might acquire. They may not use the source information word for word and must provide a complete bibliography of their sources along with their calendar.
  - b. The calendar must include a combination of 10 different fruits and vegetables.
  - c. Special consideration should be given to certain crops because they may not be ready for harvest during that calendar year (e.g., seedling asparagus plants).
2. The students may be creative in the layout of their project as long as it is useful and easy to follow. An actual calendar may be used or a chart or diagram.
3. The calendar must include the following information and dates for each fruit or vegetable.
  - ☐ When and how to establish the ground prior to planting
  - ☐ When the plants should be planted
  - ☐ When and how to maintain the plants and soil prior to planting, during growth, and after harvesting
  - ☐ When and how to harvest the fruits and vegetables
  - ☐ Any other necessary practices that should be noted
4. Students will be assessed on the overall content and presentation of their calendar.



**Fruit and Vegetable Production  
Student Handout**

1. You will develop a yearlong calendar for establishing, maintaining, and harvesting 10 different fruits and vegetables.
  - a. You may use the information in the student reference or other reliable information you might acquire. You may not use the source information word for word and must provide a complete bibliography of the sources along with your calendar.
  - b. The calendar must include a combination of 10 different fruits and vegetables.
  - c. Special consideration should be given to certain crops because they may not be ready for harvest during that calendar year (e.g., seedling asparagus plants).
2. You may be creative in the layout of your project as long as it is useful and easy to follow. An actual calendar may be used or a chart or diagram.
3. The calendar must include the following information and dates for each fruit or vegetable.
  - ☐ When and how to establish the ground prior to planting
  - ☐ When the plants should be planted
  - ☐ When and how to maintain the plants and soil prior to planting, during growth, and after harvesting
  - ☐ When and how to harvest the fruits and vegetables
  - ☐ Any other necessary practices that should be noted
4. Students will be assessed on the overall content and presentation of their calendar.



## Agricultural Science II

### Fruit and Vegetable Production Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Calendar	<input type="checkbox"/> All facts are accurate <input type="checkbox"/> Practices are sound <input type="checkbox"/> Addresses all key topics <input type="checkbox"/> Facts or practices are listed in proper order	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 20	
Presentation	<input type="checkbox"/> Well organized <input type="checkbox"/> Useful format <input type="checkbox"/> Neat <input type="checkbox"/> No spelling or punctuation errors	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# Animal Science





# Animal Science

**Curriculum Guide:** *Animal Science*

**Unit:** I. Nutrition

**Unit Objective:**

Students will demonstrate an understanding of animal nutrition by designing a balanced feeding ration and explaining their selection of ration components in a short written report.

**Show-Me Standards:** 1.8, 3.8, SC4

**References:**

Agriculture Publications. MU Extension. University of Missouri-Columbia. Accessed May 16, 2003, from <http://muextension.missouri.edu/explore/agguides/>.

*Animal Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1996.

*FBMA Beef Management* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2001.

*FBMA Horse Management for Adults* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2002.

Missouri Dairymen's Resource Guide. University of Missouri Outreach & Extension. Accessed May 20, 2003, from <http://agebb.missouri.edu/dairy/index.htm>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 9.
- Students will complete AS 9.1, Formulating Rations.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. I-6 (2, 3), p. I-39 (1, 2), p. I-50 (2, 3), p. I-66 (1, 2), p. I-80 (1, 2), and p. I-105 (1, 2).

### **Performance-Based Assessment:**

Each student will design a balanced feeding ration for a type of animal discussed in the unit and explain his or her selection of ration components in a short written report.

Assessment will be based on the student's ability to develop a balanced, economical ration and the overall content and presentation of the report.

**Unit I—Nutrition  
Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Describe one animal from each category discussed in the unit – ruminants, nonruminants, modified nonruminants, and poultry.
  - a. Possible examples are a 1,000-lb steer for the ruminant, a 150-lb gilt for the nonruminant, a 1,100-lb gelding for the modified nonruminant, and a laying hen for poultry.
  - b. Describe each animal in as much detail as necessary for the students to accurately design a feeding ration for that animal, such as indicating if the steer is being prepared for showing, or if the gelding is kept for pleasure riding or light work.
2. Assign one animal to each student. Students could also choose among the example animals, or animals can be assigned by random drawing, if one of these methods is preferred.
3. Have students design a feeding ration for their assigned animal and explain why they chose the different feeds and any supplements in the ration in a short written report. Students must weigh the characteristics provided and design a balanced, high-quality ration that meets the nutritional requirements of the animal and is economical to feed.
4. If desired, prior to assigning the assessment activity, develop a balanced ration for each of the example animals to use as a guideline for evaluating the students' results.
5. Students may use the material found in the unit or discussed in class as well as additional outside material to complete the report.
6. Students may not use source material word for word and must provide a complete bibliography of their sources along with their report.
7. Assessment will be based on the student's ration and the overall content and presentation of the written report.



**Unit I—Nutrition**  
**Student Handout**

1. The instructor will describe an animal from each of the following categories – ruminants, nonruminants, modified nonruminants, and poultry – and assign one of the animals to you.
2. Weigh the characteristics provided by the instructor about your assigned animal and design a balanced, high-quality ration that meets its nutritional requirements and is economical to feed.
3. Explain why you chose the different feeds and any supplements in the ration in a short written report that will be given to the instructor.
4. You may use the material found in the unit or discussed in class as well as additional outside material to complete the report.
5. You may not use source material word for word and must provide the instructor with a complete bibliography of your sources along with your ration and report.
6. Your final assessment score will be based on your ration and the overall content and presentation of your report.





## Animal Science

### Unit I—Nutrition Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Ration Development	<input type="checkbox"/> Ration is balanced <input type="checkbox"/> Components are high quality <input type="checkbox"/> Meets the specific nutritional needs of the animal <input type="checkbox"/> Economical to feed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 19	
Content and Presentation of Written Report	<input type="checkbox"/> Information is complete and facts are accurate <input type="checkbox"/> Well organized <input type="checkbox"/> Persuasive <input type="checkbox"/> No spelling, grammar, or punctuation errors	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 6	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Animal Science

**Curriculum Guide:** *Animal Science*

**Unit:** II. Genetics

**Unit Objective:**

Students will apply concepts and standards of genetics developed in the unit to place a series of bulls in the order they would select them to breed an imaginary herd of beef cattle and explain their placement in a short written report.

**Show-Me Standards:** 1.2, 4.1, SC3

**References:**

*Animal Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1996.

Bullock, D. *Using EPDs*. University of Kentucky Cooperative Extension Service. Accessed April 16, 2003, from <http://www.uky.edu/Agriculture/AnimalSciences/extension/pubpdfs/asc141.pdf>.

*FBMA Beef Management* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2001.

*Missouri CDE Handbook*. Accessed January 7, 2003, from [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).

Myers, S. E. *Judging: Scoring Procedures*. Colorado State University Cooperative Extension. Accessed May 19, 2003, from <http://www.ext.colostate.edu/pubs/livestk/01619.pdf>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 8.
- Students will complete AS 1.1, Heritability Traits; AS 1.2, Beef Herd Selection; and AS 7.1, Analyzing Performance Data.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. II-6 (1), p. II-53 (1, 2), p. II-61 (1, 2, 4), and p. II-83 (2).

### **Performance-Based Assessment:**

Each student will use the expected progeny difference (EPD) data of a series of bulls to place the bulls in the order he or she would select them to breed an imaginary herd of beef cattle. Students will explain their placement of the bulls in a short written report.

Assessment will be based on the student's placement of the bulls and the overall content and presentation of the report.

**Unit II—Genetics**  
**Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Provide students with a scenario in which they must rank a series of four bulls in the order they would select the bulls to breed a herd of beef cattle. Have students use the information in the scenario, along with the expected progeny difference (EPD) data of the bulls and the breed average EPD data for the herd to make their decision.
  - a. Two scenarios are included with this assessment.
  - b. Provide each student with one of these scenarios or develop different scenarios, if preferred.
2. Have students explain their ranking of the bulls in a short written report. Students should turn in their ranking along with their report.
3. Students may use material found in the unit or discussed in class as well as additional outside material to complete their report.
4. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their report.
5. This activity should help prepare students for the Livestock Judging Career Development Event.
  - a. Refer to the *Missouri CDE Handbook* for guidelines regarding Career Development Events.
  - b. The *Missouri CDE Handbook* is available from the Missouri Department of Elementary and Secondary Education at [http://www.dese.state.mo.us/divvoced/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoced/ag_cde_guidelines.htm).
6. The correct ranking of the bulls in Scenario A is 2 4 3 1. The cuts are 7 2 1. The correct ranking of the bulls in Scenario B is 3 4 2 1. The cuts are 5 2 5. An explanation of livestock scoring procedures and terminology can be found in *Judging: Scoring Procedures* by S. E. Myers at the Colorado State University Cooperative Extension web site, accessed May 19, 2003, from <http://www.ext.colostate.edu/pubs/livestk/01619.pdf>.
7. The final assessment score will be based on the student's ranking of the bulls and the overall content and presentation of the report.



**Unit II—Genetics**  
**Student Handout**

1. The instructor will provide you with a scenario in which you must rank a series of four bulls in the order you would select them to breed a herd of beef cattle.
2. Use the information in the scenario, along with the expected progeny difference (EPD) data of the bulls and the breed average EPD data for the herd to make your decision.
3. Explain your ranking in a short written report.
4. Turn in your ranking along with your report.
5. You may use material found in the unit or discussed in class as well as additional outside material to complete your report.
6. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your report.
7. Your final assessment score will be based on your ranking of the bulls and the overall content and presentation of your report.





**Unit II—Genetics**  
**EPD Scenario A**

**Scenario:** These bulls are being considered as herd sires for a purebred Angus operation that focuses on producing seedstock that strives for cutting-edge genetic potential. The bulls will be mated to mature cows. Nutritional resources and labor are abundant. Rank these bulls in the order you would purchase them as sires for this herd.

<b>ID No.</b>	<b>Birth Weight EPD</b>	<b>Weaning Weight EPD</b>	<b>Yearling Weight EPD</b>	<b>Milk EPD</b>
1	1.6	32	54	10
2	3.6	48	82	23
3	2.2	43	52	15
4	1.6	33	56	11
<b>Angus Breed Average</b>	2.7	33	61	16

Courtesy: David J. Kemp, Resident Instruction Instructor, Animal Sciences, University of Missouri-Columbia, 2003.



**Unit II—Genetics**  
**EPD Scenario B**

**Scenario:** These bulls are being considered as potential herd sires for an operation that focuses on producing heifers to be marketed as replacements to commercial cow/calf producers. These bulls will be mated to Angus females, both heifers and mature cows, in an effort to produce daughters that fit the stated focus. Those heifers not selected as replacements and all steer progeny will be owned through the feedlot. Nutritional resources and labor are abundant. Rank these bulls in the order you would purchase them as sires for this herd.

ID No.	Birth Weight EPD	Weaning Weight EPD	Yearling Weight EPD	Milk EPD
1	4.1	34	59	8
2	1.3	30	56	16
3	1.7	35	70	20
4	1.9	33	62	24
<b>Angus Breed Average</b>	2.7	33	61	16

Courtesy: David J. Kemp, Resident Instruction Instructor, Animal Sciences, University of Missouri-Columbia, 2003.



## Animal Science

### Unit II—Genetics Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Sire Selection Report	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Explanations are persuasive <input type="checkbox"/> Well organized <input type="checkbox"/> No spelling, grammar, or punctuation errors	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 12.5	
<b>TOTAL</b>								<b>/50 pts.</b>

<b>Score from Sire Selection Scenario</b>	<b>/50 pts.</b>
---	-----------------

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Animal Science

**Curriculum Guide:** *Animal Science*

**Unit:** III. Reproduction

**Unit Objective:**

Students will demonstrate an understanding of principles of animal reproduction by devising and presenting a time line and oral report that follow a group of livestock and their offspring from preparation for breeding through weaning.

**Show-Me Standards:** 1.8, CA6

**References:**

*Animal Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1996.

*FBMA Beef Management* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2001.

Maryland Small Ruminant Page. Accessed April 14, 2003, from <http://www.sheepandgoat.com>.

Missouri Pork Association. Accessed April 14, 2003, from <http://www.mopork.org>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete AS 3.1, Reproductive Functions of Livestock.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. III-7 (2), p. III-39 (2), and p. III-48 (2).

**Performance-Based Assessment:**

Students will be divided into four groups with each group assigned to report on one of the four types of livestock discussed in the unit—beef cattle, dairy cattle, sheep, and swine. Each group will devise a time line that follows a breeding population of livestock and their offspring from preparation for breeding through weaning. The groups will present their time lines to the class as part of an oral report.

## **Animal Science**

---

Assessment will be based on the overall content and presentation of the time line and report. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.



**Unit III—Reproduction  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide students into four groups and assign each group one of the four types of livestock discussed in the unit – beef cattle, dairy cattle, sheep, and swine.
2. Have each group develop a time line and oral report about a breeding population of livestock and their offspring.
3. The time line should include key points in the breeding process, such as the following:
  - ☐ When to begin preparing for breeding
  - ☐ Time of breeding
  - ☐ Stages of fetal development
  - ☐ Time of expected birthing
  - ☐ Time of expected weaning
4. Students should use these events as a framework for developing their oral report, which should address the producer's many roles and responsibilities in the process. Students should be sure to address the following points:
  - ☐ What the producer must do at each stage and why
  - ☐ Equipment and materials the producer would need or find useful
  - ☐ Vaccinations
  - ☐ Special nutritional needs
  - ☐ Other health concerns of the animals
5. Students may use material in the unit as well as additional outside material to complete their presentations.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their time line following the presentation.
  - b. Students should also incorporate other elements, such as illustrations, and make use of presentation software or other equipment or material as needed to make the time line and report interesting and informative.

6. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing the time line and report. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
7. The final assessment score will be a combination of the student's time line and report score and final peer evaluation score.

**Unit III—Reproduction**  
**Student Handout**

1. The instructor will divide the class into four groups and assign each group a breeding population of animals.
2. Your group will develop a time line and oral report about the animals and their offspring and present your findings to the class.
3. Include key points in the breeding process in the time line, such as the following:
  - ☐ When to begin preparing for breeding
  - ☐ Time of breeding
  - ☐ Stages of fetal development
  - ☐ Time of expected birthing
  - ☐ Time of expected weaning
4. Use these events as a framework for building the oral report portion, which should explain the producer's many roles and responsibilities in the process. Be sure to include the following:
  - ☐ What the producer must do at each stage and why
  - ☐ Equipment and materials the producer would need or find useful
  - ☐ Vaccinations
  - ☐ Special nutritional needs
  - ☐ Other health concerns of the animals
5. You may use material in the unit as well as additional outside material to complete your presentation.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your time line following your presentation.
  - b. Use other elements, such as illustrations, and make use of presentation software or other equipment or material as needed to make the time line and report interesting and informative.
6. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in helping to develop the time line and report.
  - a. Following the report, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
7. Your final assessment score will be a combination of your time line and report score and your final peer evaluation score.



## Animal Science

### Unit III—Reproduction Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Content of Time Line and Report	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Provides useful information about the animal's breeding cycle <input type="checkbox"/> Explains the role of the producer	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 16	
Presentation of Time Line and Report	<input type="checkbox"/> Well organized <input type="checkbox"/> Emphasizes key points <input type="checkbox"/> No spelling, grammar, or punctuation errors <input type="checkbox"/> Good use of supporting materials	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Delivery of Oral Report	<input type="checkbox"/> Holds audience interest <input type="checkbox"/> Speaks clearly <input type="checkbox"/> Good posture <input type="checkbox"/> Maintains eye contact	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Unit III—Reproduction**  
**Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)





# Animal Science

**Curriculum Guide:** *Animal Science*

**Unit:** IV. Animal Health

**Unit Objective:**

Students will apply principles of animal health to design a health management program for a livestock species and present their findings to the class as a written checklist and oral report.

**Show-Me Standards:** 1.8, 2.1, SC4

**References:**

*Animal Science*. University of Missouri-Columbia, Instructional Materials Laboratory, 1996.

*Keys to Successful Cattle Production*. Accessed January 13, 2003, from <http://www.mocattle.org/BQA/manual.htm>.

Milk and Dairy Beef Quality Assurance Center, Inc. Accessed January 13, 2003, from <http://www.dqacenter.org>.

*Pork Quality Assurance*. Accessed January 13, 2003, from <http://www.porkboard.org/PQA/default.asp>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 3.1, Respiratory Diseases Affecting Livestock.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. IV-15 (2), p. IV-26 (1, 2), p. IV-41 (1, 2), p. IV-51 (1), and p. IV-77 (1, 2, 3).

**Performance-Based Assessment:**

Students will be divided into four groups. Each group will design a health management program for a different type of livestock discussed in the unit – beef cattle, dairy cattle, swine, and horses. The groups will present their programs to the class as a written checklist and oral report.

## **Animal Science**

---

Assessment will be based on the overall content and presentation of the checklist and report. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.

**Unit IV—Animal Health  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide students into four groups and assign each group one of the four types of livestock discussed in the unit – beef cattle, dairy cattle, swine, and horses.
2. Have each group design a yearlong health management program for its species and present the program to the class as a written checklist and oral report.
  - a. The program should focus on prevention. It should include a complete vaccination schedule and address all major health concerns, such as common diseases and parasites and the animals' general environment.
  - b. The checklist should be written so that it can be used to regularly monitor the animals' health.
3. If desired, for animals for which quality review boards exist, have students make use of actual quality assurance checklists and work sheets to design their program.
  - a. If quality assurance checklists are used, provide students with relevant information from the appropriate quality review board or indicate where they can access it.
  - b. Quality assurance information for beef cattle is available online at <http://www.mocattle.org>, for dairy cattle at <http://www.dqacenter.org>, and for swine at <http://www.porkboard.org>.
4. Students may use material in the unit as well as additional outside material to complete their checklist and report.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their checklist following their report.
  - b. Students should also incorporate other elements, such as illustrations, and make use of presentation software or other equipment or material as needed to make the report interesting and informative.
  - c. Students should be prepared to answer questions about their report.

5. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing and presenting their checklist and report. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
6. The final assessment score will be based on the overall content and presentation of the checklist and report and final peer evaluation score.

**Unit IV—Animal Health**  
**Student Handout**

1. The instructor will divide the class into four groups and assign a livestock species to each group.
2. Your group will design a yearlong health management program for your assigned livestock species and present the program to the class as a written checklist and oral report.
3. Include a complete vaccination schedule and address all major health concerns, such as common diseases and parasites and the animals' general environment.
4. Focus on prevention and design your checklist so that it can be used to regularly monitor the animals' health.
5. If instructed to do so, design your program to comply with the official quality assurance standards for your type of livestock.
6. You may use material in the unit as well as additional outside material to complete your checklist and report.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your checklist following your report.
  - b. Use other elements, such as illustrations, and make use of presentation software or other equipment or material as needed to make your report interesting and informative.
  - c. Be prepared to answer questions about your report.
7. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing and presenting the checklist and report.
  - a. Following the report, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
8. Your final assessment score will be a combination of your checklist and report score and your final peer evaluation score.



## Animal Science

### Unit IV—Animal Health Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Health Management Program	<input type="checkbox"/> Information is complete and facts are accurate <input type="checkbox"/> Includes a checklist to monitor animal health <input type="checkbox"/> Well organized <input type="checkbox"/> No spelling, grammar, or punctuation errors in checklist <input type="checkbox"/> Good use of supporting materials	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 18	
Presentation of Oral Report	<input type="checkbox"/> Holds audience interest <input type="checkbox"/> Speaks clearly <input type="checkbox"/> Good posture <input type="checkbox"/> Maintains eye contact	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





**Unit IV—Animal Health  
Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# Exploring Agriculture In America





# Exploring Agriculture in America

**Curriculum Guide:** *Exploring Agriculture in America*

**Unit:** I. Introduction to Agriculture

**Unit Objective:**

Students will demonstrate an understanding of the importance of agriculture by identifying top-producing states in the United States for several major agricultural products and explaining the importance of one product to one state's economy in a brief oral report.

**Show-Me Standards:** 1.2, SS7

**References:**

*Exploring Agriculture in America*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

*Farm Facts*. American Farm Bureau Federation. Accessed April 17, 2003, from <http://www.fb.com/brochures/farmfacts/>.

U.S. National Agricultural Statistics Service. Census of Agriculture. Accessed February 13, 2003, from <http://www.nass.usda.gov/census/>.

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 3.1, Census of Agriculture; AS 3.2, Time Line of Agriculture and History; and AS 4.2, Agricultural Commodities Produced in Missouri.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: pp. I-64-I-65 (1, 2, 3, 5) and p. I-79 (1).

**Performance-Based Assessment:**

The instructor will provide students with a list of agricultural products. Students will identify the five leading U.S. states in the production of each product. Students will also research one state and product to determine the importance of that product in the state's economy and present their findings in a brief oral report.

## **Exploring Agriculture in America**

---

Assessment will be based on the accuracy of identifications and overall content and presentation of the report.

### Unit I—Introduction to Agriculture Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Provide students with a list of major agricultural products.
  - a. A list of common agricultural products is included with AS 3.1, Census of Agriculture.
  - b. Substitute important regional products or develop a new list of products, if preferred.
2. Provide students with a map of the United States, such as the one included with AS 3.1 on p. I-73.
3. Have students identify the five leading U.S. states in the production of each product and label the states on the map. Information regarding agricultural census data can be found at the USDA-NASS web site at <http://www.nass.usda.gov/census/>, accessed February, 13, 2003.
4. Once students have identified the states, they must choose one state and product and determine the importance of that product to the state's overall economy. If desired, lead a discussion to help students focus their research. Sample topics students could address include, but are not limited to, the following:
  - ☐ Where is the product grown or raised within the state?
  - ☐ How is it used?
  - ☐ Are there processing or purification plants in the state?
  - ☐ What are some of the final products?
  - ☐ Are these final products manufactured in the state?
  - ☐ Is the product used with other products manufactured in the state?
5. Have students present their findings in a brief oral report.
6. Students may use material found in the unit as well as additional outside material to complete their report.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their completed map following their report.

## **Exploring Agriculture in America**

---

- b. Students should also incorporate other elements, such as charts or illustrations, and make use of presentation software or other equipment or material as needed to make the report interesting and informative.
7. The final assessment score will be based on the accuracy of the identifications and the overall content and presentation of the report.



### Unit I—Introduction to Agriculture Student Handout

1. The instructor will provide you with a map of the United States and a list of major agricultural products.
2. Determine the five top-producing states for each product and label the states on the map.
3. Once you have identified the states, choose one state and one of its products and determine the importance of that product to the state's overall economy. Be sure to include related industries and by-products, as well as any additional topics indicated by your instructor.
4. Present your findings in a brief oral report.
5. You may use material found in the unit or discussed in class as well as additional outside material to complete your report.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your completed map following your report.
  - b. Incorporate other elements, such as charts or illustrations, and make use of presentation software or other equipment as needed to make the report interesting and informative.
6. Your final assessment score will be based on the accuracy of your identifications and the overall content and presentation of your report.



## Exploring Agriculture in America

### Unit I—Introduction to Agriculture Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness of Map	Map addresses all products	Failed	Poor	Fair	Good	Excellent	X 5	
Accuracy of Map	Top producers are correctly identified	Failed	Poor	Fair	Good	Excellent	X 5	
Thoroughness and Accuracy of Report	Information is complete and facts are accurate	Failed	Poor	Fair	Good	Excellent	X 7.5	
Delivery of Report	Engages listeners, speaks clearly, and maintains good posture and eye contact	Failed	Poor	Fair	Good	Excellent	X 3.5	
Organization of Report	Report is well organized	Failed	Poor	Fair	Good	Excellent	X 2	
Technical Considerations	Spelling and grammar are correct	Failed	Poor	Fair	Good	Excellent	X 2	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Exploring Agriculture in America

**Curriculum Guide:** *Exploring Agriculture in America*

**Unit:** II. Plant Science

**Unit Objective:**

Students will demonstrate an understanding of the importance of plants and proper plant care by evaluating plants in a plant care contest.

**Show-Me Standards:** 1.3, SC4

**References:**

*Exploring Agriculture in America*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

*Missouri CDE Handbook*. Accessed February 14, 2003, from [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 4.1, Plant Care Contest; and AS 4.2, Plant Care Requirements.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following location: p. II-66 (1, 2, 4).

**Performance-Based Assessment:**

As part of the instructional activities for this unit, students will care for a plant and enter it in a plant care contest that will be judged by the instructor. For the performance-based assessment, students will judge the plant care contest as well.

Assessment will be based on the thoroughness and accuracy of judgments and comments in the plant care contest.



### Unit II—Plant Science Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Assign AS 4.1, Plant Care Contest, and AS 4.2, Plant Care Requirements.
2. As part of AS 4.1, each student will receive a house plant at the beginning of the course that he or she will care for and bring back to class to be evaluated by the instructor in a plant care contest.
  - a. Be sure that all plants are of the same type and in uniform condition when the students receive them.
  - b. See AS 4.1 and AS 4.2 for additional details.
3. For the performance-based assessment, have students judge the plant care contest as well.
4. To judge the contest, students will need a scoring guide that addresses common needs and problems associated with their plant. Lead students in a discussion to develop a uniform scoring guide.
  - a. Areas to be addressed by the scoring guide could include, but are not limited to, the following:
    - ☐ Common pests, diseases, and other disorders
    - ☐ Indicators of a healthy plant
    - ☐ Recommendations and comments
  - b. See also the table that accompanies AS 4.2 for other possible scoring guide areas.
  - c. A blank scoring guide form is included with this assessment that can be used or adapted for this activity, as desired.
  - d. Establish and explain a point system for the scoring guide. The form included with this assessment is set up for a 0 to 5 scoring range, with 5 being the maximum number of points possible.
5. This activity should help students prepare for similar Career Development Events (CDEs), such as the Floriculture Event and Nursery Landscape Event.
  - a. Refer to the *Missouri CDE Handbook* for guidelines regarding Floriculture and Nursery Landscape Events. The *Missouri CDE Handbook* is available from the Missouri Department of Elementary and Secondary Education at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm), accessed February 17, 2003.

## **Exploring Agriculture in America**

---

- b. The Plant Disorder Diagnosis Practicum in the Floriculture Event and the Plant Disorder Diagnosis Scorecard in the Nursery Landscape Event can be used to help develop the plant contest scoring guide, if desired.
- 6. Judge the plant care contest and have students judge it as well. Students should judge their own plant as well as the plants of all their classmates.
- 7. Have students turn in their completed scoring guides.
- 8. The final assessment score will be based on the thoroughness and accuracy of judgments and comments in the plant care contest.
  - a. The student's care of his or her plant is assessed by AS 4.1.
  - b. The students' placement of the plants is not figured into the final assessment score.
- 9. If desired, award appropriate prizes for the best-cared-for plants.



**Unit II—Plant Science**  
**Student Handout**

1. The instructor will provide you with a plant that you must take home and care for and bring back later in the course to be judged in a plant care contest.
2. Determine how to care for the plant properly. For example, determine what pests and diseases it is likely to get and how to prevent or treat them, what its basic needs are, and how to tell if the plant is healthy.
3. Use the information you gather to judge the plant care contest. The instructor will also be judging the contest.
4. Judge all the plants in the contest, including your own. Be sure to write comments for all the plants. Comments would include observations about signs of good health as well as any disorders. For any comments about disorders, be sure to include recommendations for how to correct the situation.
5. Give each contestant a score from 0 to 5, with 5 being the best, based on the plant's overall condition.
6. Turn in your completed scoring guide.
7. Your final assessment score will be based on the thoroughness and accuracy of your judgments and comments in the plant care contest.



**Unit II—Plant Science****Plant Care Contest Scoring Guide**

Name \_\_\_\_\_

Use the form below to judge the plant care contest. Judge all the plants in the contest, including your own. Give each contestant a score from 0 to 5, with 5 being the best, based on the plant's overall condition. Write comments for all the plants. Comments would include observations about signs of good health as well as any disorders. For any comments about disorders, be sure to include recommendations for how to correct the situation.

<b>Name of Contestant</b>	<b>Comments and Recommendations: Note Pests, Diseases, or Other Disorders and Indicators of Good Health</b>	<b>Total (5 Pts. Max.)</b>



## Exploring Agriculture in America

### Unit II—Plant Science Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Accuracy of Judgments in Plant Care Contest	Makes thorough and accurate comments and judgments	Failed	Poor	Fair	Good	Excellent	X 11.25	
Recommendations	Offers appropriate, constructive recommendations to correct any disorders	Failed	Poor	Fair	Good	Excellent	X 11.25	
Technical Considerations	Uses correct spelling, punctuation, and grammar	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Exploring Agriculture in America

**Curriculum Guide:** *Exploring Agriculture in America*

**Unit:** III. Animals in Society

**Unit Objective:**

Students will demonstrate an understanding of the importance of animals in society and the responsibility of animal ownership by designing a care regimen and budget for a companion or production animal and presenting their findings on a poster that will be displayed in class.

**Show-Me Standards:** 1.8, CA4

**Reference:**

*Exploring Agriculture in America*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 4.
- Students will complete AS 2.1, Animal Care Requirements; AS 2.2, Pet Journal; AS. 3.1, Animal Budget— Can You Afford a Pet?; and AS 3.3, Livestock Concerns.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. III-15 (1) and p. III-23 (1, 2, 3).

**Performance-Based Assessment:**

Each student will choose an animal, either a companion animal, such as a dog, or a production animal, such as a beef cow, and design a weekly care regimen for that animal. Students will also research their chosen animal to determine what major scheduled care practices, such as vaccination, the animal needs throughout the year, when they should take place, and how much they cost. They will present their findings on a poster that will be displayed in class.

Assessment will be based on the overall content and presentation of the poster.





### Unit III—Animals in Society Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students choose a companion or production animal.
  - a. To help broaden the students' understanding of the material, have them select an animal that they have not personally taken care of and have not researched for a previous activity in this unit.
  - b. If desired, lead the class in listing animals besides the most common production and companion animals. For example, students could research a type of production animal that is important in the state but is not typically raised in their region, or specialty animals, such as ostriches, emus, bison, fish, or bees, or an exotic pet, such as a snake.
2. Have students design a weekly care regimen for their chosen animal. If desired, adapt the chart that accompanies AS 2.2, Pet Journal, which includes the following categories: "Food," "Water," "Exercise & Play," "Cleaning, Brushing, Bathing, or Cleaning Pen," and "Other."
3. Have students develop an expected yearly budget for maintaining the animal.
  - a. To do this, have students list the basic materials and care practices they will have to purchase for the animal throughout the year, such as food and vaccinations, when and how often they will be needed, and how much they cost. Students should show their work and include the cost for each item as well as a total cost for all the materials and care practices.
  - b. If desired, use or adapt the Ongoing Expenses budget that accompanies AS 3.1, Animal Budget—Can You Afford a Pet?
4. Have students present their weekly schedule and yearly maintenance budget on a poster, which will be displayed in class.
5. Students may use material found in the unit or discussed in class as well as additional outside material to complete their poster.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their completed poster.
  - b. Students should incorporate other elements, such as illustrations, as needed to make their poster interesting and informative.

## **Exploring Agriculture in America**

---

6. The final assessment score will be based on the overall content and presentation of the poster.

**Unit III—Animals in Society**  
**Student Handout**

1. Choose a companion or production animal that you have not personally taken care of and have not researched for a previous activity in this unit.
2. Design a program for your chosen animal that includes all the care requirements the animal will need each day for a week, such as feeding, watering, exercise, and grooming, and any other activities that apply.
3. Develop an expected yearly budget for maintaining the animal.
  - a. To do this, list the basic materials and care practices you will have to purchase for the animal throughout the year, such as food and vaccinations, when and how often they will be needed, and how much they cost.
  - b. Show your work and include the cost for each item as well as a total cost for all the materials and care practices.
4. Present your weekly care schedule and your yearly maintenance budget on a poster, which will be displayed in class.
5. You may use material found in the unit or discussed in class as well as additional outside material to complete your poster.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your completed poster.
  - b. Incorporate other elements, such as illustrations, as needed to make the poster interesting and informative.
6. Your final assessment score will be based on the overall content and presentation of your poster.



## Exploring Agriculture in America

### Unit III—Animals in Society Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness	Poster provides a thorough overview of the responsibilities and costs of caring for an animal	Failed	Poor	Fair	Good	Excellent	X 10	
Accuracy	Information is accurate	Failed	Poor	Fair	Good	Excellent	X 7.5	
Presentation	Poster is well organized and eye-appealing	Failed	Poor	Fair	Good	Excellent	X 5	
Technical Considerations	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# Exploring Agriculture in America

**Curriculum Guide:** *Exploring Agriculture in America*

**Unit:** IV. Products From Agriculture

**Unit Objective:**

Students will demonstrate an understanding of the role of agriculture in developing common consumer goods by identifying food and nonfood agricultural products in a local restaurant and explaining their connection to agriculture on a poster that will be displayed in class.

**Show-Me Standards:** 1.2, SC8

**Reference:**

*Exploring Agriculture in America*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete AS 1.2, Food Web; AS 5.2, Clothing Labels; and AS 6.4, Nonfood Products From Cattle and Hogs.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. IV-3, p. IV-18 (1, 2, 3), p. IV-85 (1), and p. IV-98 (2, 3, 4).

**Performance-Based Assessment:**

Students will work in groups to identify food and nonfood agricultural products in a local restaurant and indicate how the products are derived from agriculture. For example, one student might list soda and explain that it is sweetened with corn syrup. Students will present their findings on a poster that will be displayed in class.

Assessment will be based on the overall presentation and content of the poster. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.





### Unit IV—Products From Agriculture Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide the class into groups and assign each group a local or nearby restaurant.
  - a. Include other establishments, such as grocery stores or the school cafeteria, if desired.
  - b. Allow the groups to choose an establishment, if preferred.
2. Explain that each group will identify as many food and nonfood agricultural products in the establishment as they can and indicate how each product is derived from agriculture. If desired, lead the class in finding a few examples. Guide them toward thinking broadly about agricultural products, if needed. For example, if students focus on food products, remind them of fiber and lumber products, such as tablecloths and building materials.
3. Have students present their findings in a poster, which will be displayed in class.
4. Students should incorporate other elements, such as illustrations, as needed to make their poster interesting and informative.
5. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing their poster. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.

## **Exploring Agriculture in America**

---

6. The final assessment score will be based on the overall content and presentation of the poster and the final peer evaluation score.

**Unit IV—Products From Agriculture**  
**Student Handout**

1. The instructor will divide the class into groups and assign each group a restaurant or other establishment.
2. Identify as many food and nonfood agricultural products in the establishment as you can and indicate how each product is derived from agriculture.
3. Present your findings on a poster, which will be displayed in class.
4. Use other materials, such as illustrations, as needed to make your poster interesting and informative.
5. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the poster.
  - a. After your poster has been completed, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
6. Your final assessment score will be based on the overall content and presentation of your poster and your final peer evaluation score.



## Exploring Agriculture in America

### Unit IV—Products From Agriculture Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness	Poster provides a thorough overview of the range of agricultural products	Failed	Poor	Fair	Good	Excellent	X 10	
Accuracy	Facts are accurate	Failed	Poor	Fair	Good	Excellent	X 7.5	
Presentation	Poster is well organized and eye-appealing	Failed	Poor	Fair	Good	Excellent	X 3.5	
Technical Considerations	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



**Unit IV—Products From Agriculture**  
**Peer Evaluation**

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)





# Exploring Agriculture in America

**Curriculum Guide:** *Exploring Agriculture in America*

**Unit:** V. Natural Resources and Conservation

**Unit Objective:**

Students will apply principles of conservation by identifying an example of air or water pollution, an example of soil erosion, and a factor that damages wildlife habitat and explaining how each could be corrected in a brief oral report.

**Show-Me Standards:** 3.1, SC8

**References:**

*Exploring Agriculture in America*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

*Missouri Conservationist* Online. Accessed April 24, 2003, from <http://www.conservation.state.mo.us/conmag/>.

Missouri Department of Conservation. MDC Private Land Assistance. Accessed April 24, 2003, from <http://www.conservation.state.mo.us/landown/>.

National Resources Conservation Service. NRCS Photo Gallery. Accessed April 23, 2003, from <http://photogallery.nrcs.usda.gov/>.

*Pollution Prevention Examples*. Missouri Department of Natural Resources Technical Assistance Program. Accessed April 24, 2003, from [http://www.dnr.state.mo.us/oac/p2\\_examples.pdf](http://www.dnr.state.mo.us/oac/p2_examples.pdf).

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete AS 1.1, Exhaustible vs. Inexhaustible Resources; AS 1.3, Oil Pollution of Water Environment; AS 2.1, How Does Mulch Prevent Soil Loss?; AS 4.1, Factors Affecting Air Quality; AS 4.2, Pollutants in the Home; AS 5.1, Maintaining Wildlife Habitats; and AS 6.1, Conservation in Agriculture.

## **Exploring Agriculture in America**

---

- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. V-4 (6), p. V-19 (1, 2, 4), p. V-27 (1, 2, 4), and p. V-37 (1, 2, 3).

### **Performance-Based Assessment:**

Students will locate images that illustrate examples of air or water pollution, soil erosion, and a factor that destroys or damages wildlife habitat. They will examine each situation to identify the causes and effects of the problem and determine how the situation could be corrected or greatly improved and present their work in a brief oral report.

Assessment will be based on the overall content and presentation of the report.

### Unit V—Natural Resources and Conservation Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students locate pictures from newspapers, magazines, or the Internet that illustrate each of the following:
  - ☐ An example of air or water pollution
  - ☐ An example of soil erosion
  - ☐ A factor that destroys or damages wildlife habitatPossible sources for images include *Missouri Conservationist* Online, <http://www.conservation.state.mo.us/conmag/>, and the National Resources Conservation Service Photo Gallery, <http://photogallery.nrcs.usda.gov/>, both accessed April 23, 2003.
2. Have students examine each situation to identify the causes and effects of the problem and determine how the situation could be corrected or greatly improved.
3. Have students present their work in a brief oral report.
4. Students may use additional outside material to complete their report.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources, including sources for illustrations, following their report.
  - b. Students can use tools such as presentation software to combine their text and illustrations or use other visual aids to make their report interesting and informative.
5. The final assessment score will be based on the overall content and presentation of the report.



**Unit V—Natural Resources and Conservation**  
**Student Handout**

1. Locate pictures from newspapers, magazines, or the Internet that illustrate each of the following:
  - ☐ An example of air or water pollution
  - ☐ An example of soil erosion
  - ☐ A factor that destroys or damages wildlife habitat
2. Examine each situation to identify the causes and effects of the problem and determine how the situation could be corrected or greatly improved.
3. Present the problems, their causes and effects, and your proposed solutions or improvements in a brief oral report.
4. You may use additional outside material to complete your report.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources, including sources for illustrations, following your report.
  - b. You can use tools such as presentation software to combine your text and illustrations or use other visual aids to make your report interesting and informative.
5. Your final assessment score will be based on the overall content and presentation of your report.



## Exploring Agriculture in America

### Unit V—Natural Resources and Conservation Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content	<ul style="list-style-type: none"> <li><input type="checkbox"/> Includes an example of pollution, soil erosion, and damage to wildlife habitat</li> <li><input type="checkbox"/> Information is complete</li> <li><input type="checkbox"/> Evaluations of problems are accurate based on the evidence presented</li> <li><input type="checkbox"/> Recommended solutions are workable based on the evidence presented</li> </ul>	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 20	
Presentation	<ul style="list-style-type: none"> <li><input type="checkbox"/> Well organized</li> <li><input type="checkbox"/> Engages listeners and maintains good posture and eye contact</li> <li><input type="checkbox"/> Uses correct grammar</li> <li><input type="checkbox"/> Good use of illustrations or other supporting materials</li> </ul>	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# Exploring Agriculture in America

**Curriculum Guide:** *Exploring Agriculture in America*

**Unit:** VI. Leadership and Personal Development

**Unit Objective:**

Students will apply leadership and personal development skills by setting five goals for themselves and outlining the steps necessary to reach each goal in a short written report.

**Show-Me Standards:** 4.5, CA4

**Reference:**

*Exploring Agriculture in America*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 2.
- Students will complete AS 1.1, Personal Leadership Qualities; AS 1.3, Setting Goals; and AS 1.4, Verbal Communication Skills Checklist.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. VI-3 (1, 2).

**Performance-Based Assessment:**

Students will set five goals for themselves and outline the steps necessary to reach each goal. They will present their goals and plans for reaching them in a short written report.

Assessment will be based on the overall content and presentation of the report.



**Unit VI—Leadership and Personal Development  
Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students set five goals for themselves. If desired, lead students in a discussion about goal setting. Discussion questions could include, but are not limited to, the following:
  - ☐ Why is it important to set goals?
  - ☐ What goals are you considering for yourself?
  - ☐ Are they short-term, intermediate, or long-term goals, or a combination?
  - ☐ What factors influenced your choice of goals?
2. Have students write a short report that explains the following:
  - ☐ What each goal is
  - ☐ How they plan to reach it
  - ☐ Why they feel it is important

Students should be as specific as possible in describing their goals and the steps necessary to reach them.
3. Have students turn in their personal goal report.
4. The final assessment score will be based on the overall content and presentation of the report.



**Unit VI—Leadership and Personal Development**  
**Student Handout**

1. Set five goals for yourself.
2. Write a short report that explains the following:
  - ☐ What each goal is
  - ☐ How you plan to reach it
  - ☐ Why you feel it is importantBe as specific as possible in describing your goals and the steps necessary to reach them.
3. Your final assessment score will be based on the overall content and presentation of your report.



## Exploring Agriculture in America

### Unit VI—Leadership and Personal Development Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Written Report	Report establishes five specific goals and outlines a clear plan for reaching them	Failed	Poor	Fair	Good	Excellent	X 17.5	
Presentation	Presentation is clear and well organized	Failed	Poor	Fair	Good	Excellent	X 5	
Technical Considerations	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# Exploring Agriculture in America

**Curriculum Guide:** *Exploring Agriculture in America*

**Unit:** VII. Basic Home and Farmstead Safety and Maintenance

**Unit Objective:**

Students will apply their understanding of basic safety and maintenance procedures by designing a home safety checklist.

**Show-Me Standards:** 4.7, HP2

**References:**

*Exploring Agriculture in America*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Farm Safety 4 Just Kids. Safety Fact Sheets. Accessed April 25, 2003, from <http://www.fs4jk.org/factsheets.html>.

National Ag Safety Database. Accessed April 25, 2003, from <http://www.cdc.gov/nasd/index.html>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 2.1, Electrical Safety Checklist; AS 5.4, Mower Safety Demonstration; AS 5.5, Mowing Obstacle Course; and AS 5.6, Lawn Mower Safety Guidelines.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. VII-5 (3), p. VII-37 (2, 3), p. VII-51 (1, 2, 3, 4), and p. VII-56 (3, 4).

**Performance-Based Assessment:**

Students will apply basic safety and maintenance procedures by designing a home safety checklist.

Assessment will be based on the overall content and presentation of the checklist.



### Unit VII—Basic Home and Farmstead Safety and Maintenance Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students develop a general safety checklist for the home. If desired, lead students in a discussion to help them design their checklist. Safety information is addressed in study questions in lessons 1, 4, and 5 of this unit. Discussion topics could include, but are not limited to, the following:
  - a. Review the items and areas students will need to address to conduct a thorough safety inspection.
  - b. Point out that the checklist should clearly and precisely indicate the safety status of all the equipment and materials it addresses so that they or someone else looking at the checklist would know at a glance what items could be used safely and what must be done to correct any problems.
  - c. If desired, indicate that students might want to include a column with a heading such as “Comments” or “Correction Needed” that could be used to explain specifically any repairs or replacements that must be made.
2. Students may use material found in the unit or discussed in class as well as additional outside material to complete their checklist. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their checklist.
3. Have students turn in their checklists. Grade the checklists.
  - a. Checklists should be thorough, clear, and easy to use.
  - b. All safety information should be correct and there should be no spelling, grammar, or punctuation errors.
4. Return the checklists to the students.
5. If desired, lead the class in a discussion of home safety to review the precautions the students named and to cover any procedures they might have missed.
  - a. This discussion could be used to develop a final home safety checklist that could be turned into a handout or written on the board for the students to copy, if desired.
  - b. Because this step is listed as an optional activity, it is not included in the final assessment scoring guide.

## **Exploring Agriculture in America**

---

6. The final assessment score will be based on the overall content and presentation of the original safety checklist.

**Unit VII—Basic Home and Farmstead Safety and Maintenance  
Student Handout**

1. Develop and write a home safety checklist.
2. You may use material found in the unit or discussed in class as well as outside material to complete your checklist.
3. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your completed checklist.
4. Checklists should be thorough, clear, and easy to use and all safety information should be correct.
5. Your final assessment score will be based on the overall content and presentation of your safety checklist.



## Exploring Agriculture in America

### Unit VII—Basic Home and Farmstead Safety and Maintenance Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness of Safety Checklist	Addresses all key items and areas in the home	Failed	Poor	Fair	Good	Excellent	X 8.75	
Accuracy of Safety Information	All safety information is correct	Failed	Poor	Fair	Good	Excellent	X 8.75	
Presentation	Clear, well organized, and easy to use	Failed	Poor	Fair	Good	Excellent	X 5	
Technical Considerations	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

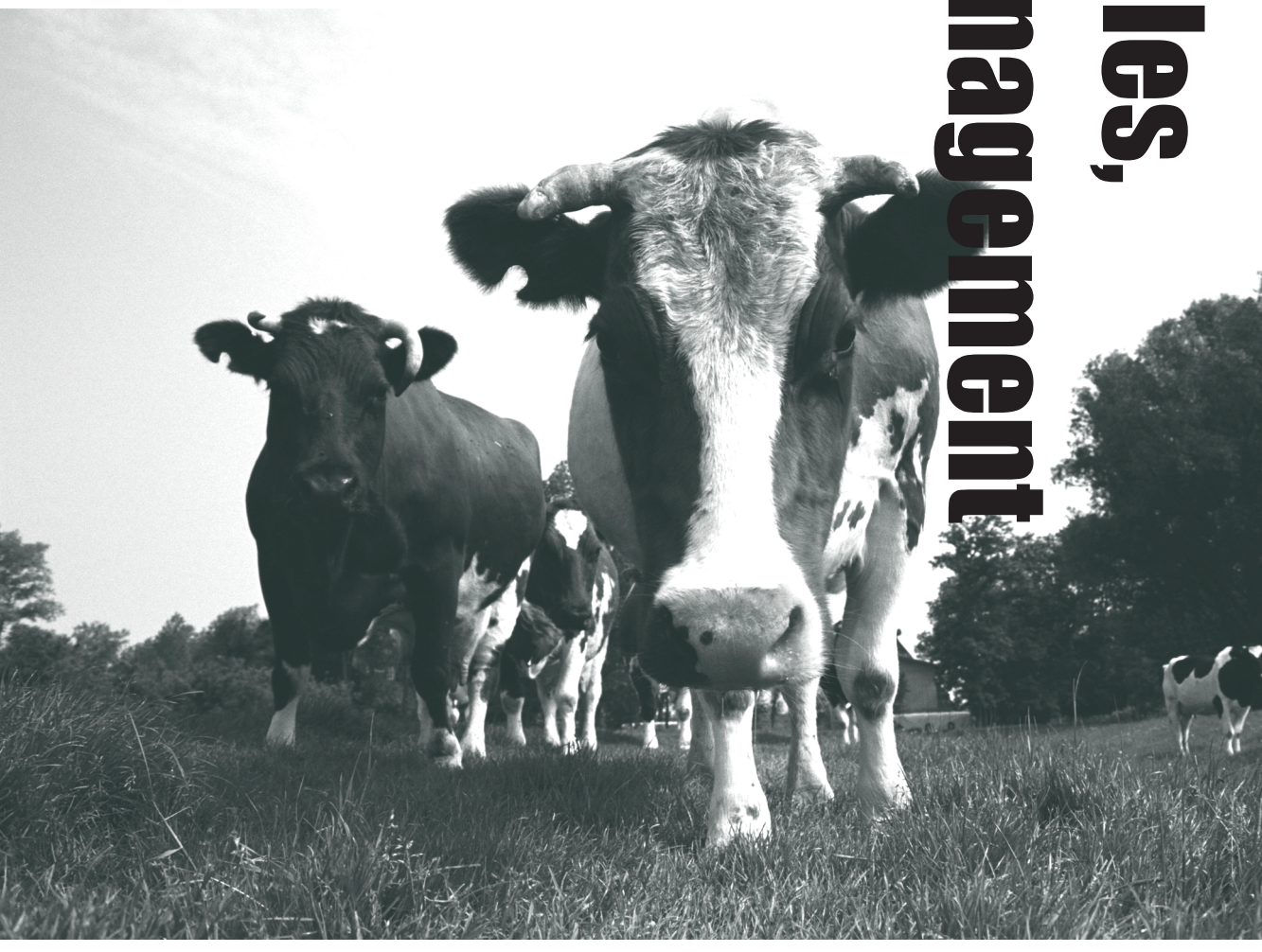
Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# **Agribusiness Sales, Marketing, & Management**





# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** I. Agriculture as an Industry

**Unit Objective:**

Students will explore agribusiness career opportunities by researching positions at a specific company and submitting their findings in a written report.

**Show-Me Standards:** 1.2, CA4

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Business and Company Resource Center. MOREnet (Missouri Research & Education Network). Accessed May 5, 2003, from <http://www.more.net/online/index.html>.

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 2.
- Students will complete AS 1.1, The Agricultural Industry.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. I-19 (1, 2).

**Performance-Based Assessment:**

Each student will select a specific agribusiness company and research three specific positions, one each in sales, marketing, and management. Students will submit their findings in a 400- to 500-word written report, which summarizes each position and describes those positions' individual and collective roles in the company's overall mission.

Assessment will be based on the completeness of the report with significant weight given to content, organization, details, and thoroughness. Spelling, grammar, punctuation, and capitalization also will be factors in the assessment.



### **Unit I—Agriculture as an Industry Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student should select a specific agribusiness company from a national agribusiness directory.
  - a. This company will serve as the subject of research on jobs in the categories of sales, marketing, and management.
  - b. After identifying the company, each student will contact the company's public relations department for a copy of the latest annual report.
  - c. Students will also contact the company's human relations department for job descriptions of specific positions in sales, marketing, and management.
2. After completing the research, each student will write a 400- to 500-word report about his or her findings.
  - a. The report will include information about three positions (one each in sales, marketing, and management).
  - b. The report should provide a summary that includes the following information on each position.
    - ☐ Job description
    - ☐ Salary range
    - ☐ Necessary experience
    - ☐ Educational requirements
  - c. Also, the report should include a brief analysis of each job's role in relation to the other two jobs and in relation to the company's overall mission.
3. Students may not use source material word for word and must provide a complete bibliography of their sources along with their report.
4. Assessment will be based on the completeness of the report.
  - a. Among the attributes to be evaluated will be content, organization, accuracy of details, and thoroughness.
  - b. The job summaries and analysis will each be assessed separately.
  - c. Technical aspects of the written report, such as grammar, spelling, punctuation, and capitalization, will be factors in the assessment.



### Unit I—Agriculture as an Industry Student Handout

1. Select a specific agribusiness company from a national agribusiness directory.
  - a. This company will serve as the subject of your research on jobs in sales, marketing, and management.
  - b. After identifying the company, contact the company's public relations department for a copy of the latest annual report.
  - c. Also contact the company's human relations department for job descriptions of specific positions in sales, marketing, and management.
2. After completing the research, write a 400- to 500-word report about your findings.
  - a. The report will include information about three positions (one each in sales, marketing, and management).
  - b. The report should provide a summary that includes the following information on each position.
    - ☐ Job description
    - ☐ Salary range
    - ☐ Necessary experience
    - ☐ Educational requirements
  - c. Also, the report should include a brief analysis of each job's role in relation to the other two jobs and in relation to the company's overall mission.
3. You may not use source material word for word and must provide a complete bibliography of the sources along with your report.
4. Assessment will be based on the completeness of the report.
  - a. Among the attributes to be evaluated will be content, organization, accuracy of details, and thoroughness.
  - b. The job summaries and analysis will each be assessed separately.
  - c. Technical aspects of the written report, such as grammar, spelling, punctuation, and capitalization, will be factors in the assessment.





# Agribusiness Sales, Marketing, and Management

## Unit I—Agriculture as an Industry Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Sales Job	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Accuracy of details <input type="checkbox"/> Thoroughness	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Marketing Job	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Accuracy of details <input type="checkbox"/> Thoroughness	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Management Job	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Accuracy of details <input type="checkbox"/> Thoroughness	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Analysis	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Accuracy of details <input type="checkbox"/> Thoroughness	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** II. Economic Principles in Agribusiness

**Unit Objective:**

Students will demonstrate their understanding of basic economic principles by producing and presenting a short lesson on a principle and identifying examples that illustrate that principle.

**Show-Me Standards:** 4.6, CA6

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Morgan, J. N. *Making Your Choices Count: Economic Principles for Everyday Decisions*. Ann Arbor, MI: University of Michigan Press, 1982.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 7.1, The Government's Impact on Agriculture.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. II-98 (3) and p. II-119.

**Performance-Based Assessment:**

Students will work in teams of three to five to research, teach, and identify examples of one of six economic principles: supply and demand, diminishing returns, fixed and variable costs, substitution of inputs, opportunity cost, and major markets for price discovery (futures and options). Each team will develop an outline to distribute to classmates, and produce and present a lesson as a PowerPoint presentation to other members of the class.

Assessment will be conducted on each team's effort and will be based on the thoroughness and understandability of the lesson presentation and outline. Items to be evaluated will be content, organization, details (including examples), and clarity. Spelling, grammar, punctuation, and capitalization will be factors in the assessment.



### **Unit II—Economic Principles in Agribusiness Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Students will work in teams of three to five to focus on one of six economic principles covered in this unit: supply and demand, diminishing returns, fixed and variable costs, substitution of inputs, opportunity cost, and major markets for price discovery (futures and options).
2. Team members will work as a unit to research and identify examples of the economic principle assigned by the teacher.
3. Students may use material found in the unit and additional outside material to complete their presentations. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their presentation.
4. After completing research, the team will develop, outline, script, and present a PowerPoint-based lesson to teach other members of the class about the topic.
  - a. The presentation should effectively explain the principle, provide examples to illustrate it, and make it understandable to members of the class.
  - b. The presentation should be thorough, but concise, and range between 10 and 15 minutes, including time for questions and answers.
  - c. Immediately preceding the presentation, the team will submit copies of a sentence outline of the lesson to serve as a reference and study guide for members of the class.
5. Assessment will evaluate the team's effort (both presentation and outline/study guide) and will be based on thoroughness of subject matter and understandability of the lesson.
  - a. Items to be evaluated will be content, organization, details (including examples), and clarity.
  - b. Spelling, grammar, punctuation, and capitalization will be factors in the evaluation.



### **Unit II—Economic Principles in Agribusiness Student Handout**

1. Work in a team of three to five students to focus on one of six economic principles covered in this unit: supply and demand, diminishing returns, fixed and variable costs, substitution of inputs, opportunity cost, and major markets for price discovery (futures and options).
2. You and your teammates will work as a unit to research and identify examples of the assigned economic principle.
3. You may use material found in the unit and additional outside material to complete the presentation. You may not use the source material word for word and must provide a complete bibliography of your sources along with the presentation.
4. After completing research, your team will develop, outline, script, and present a PowerPoint-based lesson to teach other members of the class about your topic.
  - a. Your presentation should effectively explain the principle, provide examples to illustrate it, and make it understandable to members of the class.
  - b. The presentation should be thorough, but concise, and range between 10 and 15 minutes, including time for questions and answers.
  - c. Immediately preceding the presentation, your team will submit copies of a sentence outline of the lesson to serve as a reference and study guide for members of the class.
5. Assessment will evaluate the team's effort (both presentation and outline/study guide) and will be based on thoroughness of subject matter and understandability of the lesson.
  - a. Items to be evaluated will be content, organization, details (including examples), and clarity.
  - b. Spelling, grammar, punctuation, and capitalization will be factors in the evaluation.





## Agribusiness Sales, Marketing, and Management

### Unit II—Economic Principles in Agribusiness

#### Scoring Guide

Team Topic/Members \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
PowerPoint Presentation	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Details and examples <input type="checkbox"/> Clarity	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 15	
Outline/Study Guide	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Details and examples <input type="checkbox"/> Clarity	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** III. Financial Management

**Unit Objective:**

Students will demonstrate an understanding of financial management principles by establishing a budget for their supervised agricultural experience (SAE).

**Show-Me Standards:** 1.2, CA4

**References:**

*Agribusiness Sales, Marketing, and Management.* University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

*Missouri Agricultural Record Book for Secondary Students.* University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 4.
- Students will complete AS 1.4, Business Expense Report; and AS 2.1, Preparing a Personal Budget.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. III-37 and p. III-49 (1).

**Performance-Based Assessment:**

Using principles of financial management, each student will develop and establish a budget for his or her SAE. The budget should take into consideration elements related to start-up capital and projected income and expenses.

Assessment will be based on the completeness and accuracy of the budget, as well as the organization and details of the items included in the budget. Spelling and arithmetic calculations also will be factors in the assessment.



### Unit III—Financial Management Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will develop and establish a budget for his or her SAE, using principles of financial management, and listing the items in an orderly and clear manner on a budget (income/expense) sheet, such as Form 5, Cash Flow from the *Missouri Agricultural Record Book for Secondary Students*.
2. The budget should account for projections of start-up capital (for ownership SAEs) or earnings (for placement SAEs), all items of expense, and all sources of income. Examples of each follow:
  - ☐ Start-up capital might be derived from loans or personal resources.
  - ☐ Earnings might come from payment from an employer for labor.
  - ☐ Expense items include such things as tools, equipment, and supplies.
  - ☐ Income items are revenue generated from the sale of products (e.g., livestock, produce), services (e.g., work for hire, specialized business), or capital appreciation (e.g., interest from a savings account).
3. Assessment will be based on the completeness and accuracy of the budget.
  - a. Other assessment factors are the organization and details of the items included in the budget.
  - b. Spelling and arithmetic calculations also will be factors in the assessment.



### **Unit III—Financial Management**

#### **Student Handout**

1. Develop and establish a budget for your SAE, using principles of financial management, and listing the items in an orderly and clear manner on a budget (income/expense) sheet, such as Form 5, Cash Flow from the *Missouri Agricultural Record Book for Secondary Students*.
2. Your budget should account for start-up capital (for ownership SAEs) or earnings (for placement SAEs), all items of expense, and all sources of income. Examples of each follow:
  - ☐ Start-up capital might be derived from loans or personal resources.
  - ☐ Earnings might come from payment from an employer for labor.
  - ☐ Expense items include such things as tools, equipment, and supplies.
  - ☐ Income items are revenue generated from the sale of products (e.g., livestock, produce), services (e.g., work for hire, specialized business), or capital appreciation (e.g., interest from a savings account).
3. Assessment will be based on the completeness and accuracy of your budget.
  - a. Other assessment factors are the organization and details of the items included in the budget.
  - b. Spelling and arithmetic calculations also will be factors in the assessment.





## Agribusiness Sales, Marketing, and Management

### Unit III—Financial Management Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Start-Up Capital or Earnings	<input type="checkbox"/> Complete <input type="checkbox"/> Accurate <input type="checkbox"/> Organized <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Expenses	<input type="checkbox"/> Complete <input type="checkbox"/> Accurate <input type="checkbox"/> Organized <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Income	<input type="checkbox"/> Complete <input type="checkbox"/> Accurate <input type="checkbox"/> Organized <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Arithmetic <input type="checkbox"/> Orderly <input type="checkbox"/> Clear	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** IV. Personal Development

**Unit Objective:**

Students will demonstrate skills related to career development by creating a written plan for securing a position in some aspect of agricultural sales.

**Show-Me Standards:** 4.5, CA4

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

*Missouri CDE Handbook*. Accessed April 3, 2003, from  
[http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 9.
- Students will complete AS 3.1, Handling Criticism; AS 4.2, An Ethical Dilemma; and AS 7.1 Career Goals.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. IV-54 (1) and p. IV-97 (3).

**Performance-Based Assessment:**

Each student will create a written career development and job search plan in paragraph form. The plan will cover such factors as identifying a job interest area, writing a specific job description, listing specific competencies needed for the job, and matching the student's competencies and strengths to the job.

Assessment will be based on the completeness and thoroughness of the plan, in addition to the organization and details of the items covered by the plan. Spelling, grammar, punctuation, and capitalization also will be factors in the assessment.



### **Unit IV—Personal Development Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will create a written career development and job search plan intended for securing a position in some aspect of agricultural sales. The plan will be organized in paragraph form.
2. For a suggested writing format, refer to the “Job Description” portion of the Agricultural Sales CDE available at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
3. Students may not use source material word for word and must provide a complete bibliography of their sources along with their written report.
4. Topics to be covered by the plan include the following:
  - ☐ Identifying a job interest area
  - ☐ Writing a specific job description
  - ☐ Listing specific competencies needed for the job
  - ☐ Matching the student’s competencies and strengths to the job
5. Assessment will be based on the completeness and appropriateness of the plan.
  - a. This will include evaluation of the organization and details of the topics covered by the plan.
  - b. Other factors to be considered are grammar, spelling, punctuation, and capitalization.



### Unit IV—Personal Development Student Handout

1. Create a written career development and job search plan intended for securing a position in some aspect of agricultural sales. Organize the plan in paragraph form.
2. Your plan could closely approximate the format covered in the “Job Description” portion of the Agricultural Sales CDE available at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
3. You may not use source material word for word and must provide a complete bibliography of sources along with your written report.
4. Topics to be covered by your plan include the following:
  - ☐ Identifying a job interest area
  - ☐ Writing a specific job description
  - ☐ Listing specific competencies needed for the job
  - ☐ Matching your competencies and strengths to the job
5. Assessment will be based on the completeness and appropriateness of your plan.
  - a. This will include evaluation of the organization and details of the topics covered by your plan.
  - b. Other factors to be considered are grammar, spelling, punctuation, and capitalization.





## Agribusiness Sales, Marketing, and Management

### Unit IV—Personal Development Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Job Interest Area	<input type="checkbox"/> Complete <input type="checkbox"/> Appropriate <input type="checkbox"/> Organized <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Specific Job Description	<input type="checkbox"/> Complete <input type="checkbox"/> Appropriate <input type="checkbox"/> Organized <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Competencies Needed for the Job	<input type="checkbox"/> Complete <input type="checkbox"/> Appropriate <input type="checkbox"/> Organized <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Matching Student Competencies and Strengths to the Job	<input type="checkbox"/> Complete <input type="checkbox"/> Appropriate <input type="checkbox"/> Organized <input type="checkbox"/> Detailed	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** V. Communication Skills

**Unit Objective:**

Students will recognize and identify examples of verbal and nonverbal communication by analyzing a videotape of a presentation between a sales representative and a customer.

**Show-Me Standards:** 3.4, CA7

**Reference:**

*Agribusiness Sales, Marketing, and Management*, University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

To find videotapes on selling, check at the local city or school library. Also, check at school for videotapes of past students performing sales presentations. Videos may be available that were made for the performance-based assessment for Unit VII, Making a Sale. Another source of videotapes is Career and Technical Education Resources (CATER), 573-882-1470 or 800-392-7217 (Missouri only), <http://cater.missouri.edu/>. Two examples are *Successful Selling* (MCE Video 127) and *Fundamentals of Effective Selling: Building a Successful Business* (MCE Video 273).

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 3.
- Students will complete AS 1.2, Using Nonverbal Skills in a Selling Situation; and AS 3.1, Using Telephone Skills.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. V-5 and p. V-23 (2).

**Performance-Based Assessment:**

Students will view, as a class, a videotape of a presentation between a sales representative and a customer. During the viewing, each student will analyze the presentation and note examples of verbal and nonverbal communication. Class discussion will follow.

## **Agribusiness Sales, Marketing, and Management**

---

Assessment will be based on each student's analysis of the videotape and the number and accuracy of examples cited. Extra points will be awarded to students who take part in the class discussion.

### **Unit V—Communication Skills Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Students will view, as a class, a videotape of a presentation between a sales representative and a customer.
2. While watching the videotape, each student will critique the presentation, using a preprinted form (included with this assessment).
  - a. Each student will analyze the presentation from a communication perspective and write a short paragraph indicating his or her assessment of the overall effectiveness of communication by both individuals in the videotape.
  - b. Each student will also note positive and negative examples of verbal and nonverbal communication (a minimum of two examples in each of the four categories). The student will indicate examples by writing a key phrase or complete sentence about the example in the appropriate section of the form.
3. After completion of the critiques, there will be a discussion during the remaining period of the class to review the findings.
4. Assessment will be based on the appropriateness of the analysis paragraph and the quantity and accuracy of the examples cited on the form. In addition, extra points (maximum of 10) will be awarded to students taking part in the class discussion.



### **Unit V—Communication Skills**

#### **Student Handout**

1. View, along with your classmates, a videotape of a presentation between a sales representative and a customer.
2. While watching the videotape, critique the presentation, using a preprinted form.
  - a. Analyze the presentation from a communication perspective and write a short paragraph indicating your assessment of the overall effectiveness of communication by both individuals in the videotape.
  - b. Also note positive and negative examples of verbal and nonverbal communication (a minimum of two examples in each of the four categories). Indicate the examples by writing a key phrase or complete sentence about the example in the appropriate section of the form.
3. After completion of the critiques, there will be a discussion during the remaining period of the class to review the findings.
4. Assessment will be based on the appropriateness of your analysis paragraph and the quantity and accuracy of the examples you cite on the form. In addition, extra points (maximum of 10) will be awarded for participating in the class discussion.





**Unit V—Communication Skills  
Analysis Form**

**Name** \_\_\_\_\_

Analysis of Communication	
Verbal Examples - Positive	Nonverbal Examples - Positive
Verbal Examples - Negative	Nonverbal Examples - Negative



# Agribusiness Sales, Marketing, and Management

## Unit V—Communication Skills Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Analysis of Communication	<div><input type="checkbox"/> Complete</div> <div><input type="checkbox"/> Appropriate</div>	0 criteria met		1 criterion met		Both criteria met	X 10	
Verbal Examples–Positive and Negative	<div><input type="checkbox"/> Accurate and sufficient quantity</div>	0 criteria met	1 example	2 examples	3 examples	4 examples	X 7.5	
Nonverbal Examples–Positive and Negative	<div><input type="checkbox"/> Accurate and sufficient quantity</div>	0 criteria met	1 example	2 examples	3 examples	4 examples	X 7.5	
Class Discussion	<div><input type="checkbox"/> Participated</div>	Not met				Met	X 2.5	Extra <u>Points</u>
TOTAL								

Final Assessment Total \_\_\_\_\_/100 pts.

Extra Points \_\_\_\_\_/10 pts.

Comments:



# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** VI. Preparing for a Sale

**Unit Objective:**

Each student will demonstrate knowledge of a product by writing a report in which the student analyzes the sale and use of a specific agriculture-related product.

**Show-Me Standards:** 1.2, CA4

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

*Missouri CDE Handbook*. Accessed April 3, 2003, from [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).

Students will use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 4.1, Product and Competition Summary Sheet; and AS 4.2, Product and Industry Research.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. VI-22 (1, 2) and VI-47.

**Performance-Based Assessment:**

Each student will research the sale and use of an agriculture-related product and submit a report covering his or her findings. The report will focus on the factors listed in the "Product Summary Sheet" (Item A) of the Agricultural Sales Contest CDE in the *Missouri CDE Handbook*.

Assessment will be based on the quality of the report. Significant weight will be given to the content, details, and thoroughness of the coverage of each factor in the report. Spelling, grammar, punctuation, and capitalization will be factors in the assessment.



### Unit VI—Preparing for a Sale Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will select for study an agriculture-related product used in the household, in industry, or on the farm.
2. The student will research the product based on factors listed in the “Product Summary Sheet” (Item A) of the Agricultural Sales Contest CDE available at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
3. Following the research, the student will submit a written report that covers the factors in the “Product Summary Sheet.” The factors are the following:
  - ☐ Statement of situation, circumstances, location, etc.
  - ☐ Features of the product
  - ☐ Service availability
  - ☐ Warranty
  - ☐ Demonstration of function
  - ☐ Competitors and pertinent information
  - ☐ Closing statement or method
4. Students may not use source material word for word and must provide a complete bibliography of their sources along with their report.
5. Assessment will focus on the quality of the report, including how well each of the seven specific points is covered.
  - a. Criteria to be considered include content, accuracy of details, and thoroughness.
  - b. Spelling, grammar, punctuation, and capitalization will also be factors in the assessment.





### **Unit VI—Preparing for a Sale**

#### **Student Handout**

1. Select for study an agriculture-related product used in the household, in industry, or on the farm.
2. Research the product based on factors listed in the “Product Summary Sheet” (Item A) of the Agricultural Sales Contest CDE available at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm).
3. Following the research, submit a written report that covers the following factors in the “Product Summary Sheet.”
  - ☐ Statement of situation, circumstances, location, etc.
  - ☐ Features of the product
  - ☐ Service availability
  - ☐ Warranty
  - ☐ Demonstration of function
  - ☐ Competitors and pertinent information
  - ☐ Closing statement or method
4. You may not use source material word for word and must provide a complete bibliography of the sources along with your report.
5. Assessment will focus on the quality of the report, including how well each of the seven specific points is covered.
  - a. Criteria to be considered include content, accuracy of details, and thoroughness.
  - b. Spelling, grammar, punctuation, and capitalization will also be factors in the assessment.



## Agribusiness Sales, Marketing, and Management

### Unit VI—Preparing for a Sale Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Statement of Situation, Circumstances, etc.	<input type="checkbox"/> Content <input type="checkbox"/> Details <input type="checkbox"/> Thoroughness	Failed	Poor	Fair	Good	Excellent	X 3.25	
Features of Product	<input type="checkbox"/> Content <input type="checkbox"/> Details <input type="checkbox"/> Thoroughness	Failed	Poor	Fair	Good	Excellent	X 3.25	
Service Availability	<input type="checkbox"/> Content <input type="checkbox"/> Details <input type="checkbox"/> Thoroughness	Failed	Poor	Fair	Good	Excellent	X 3.25	
Warranty	<input type="checkbox"/> Content <input type="checkbox"/> Details <input type="checkbox"/> Thoroughness	Failed	Poor	Fair	Good	Excellent	X 3.25	
Demonstration of Function	<input type="checkbox"/> Content <input type="checkbox"/> Details <input type="checkbox"/> Thoroughness	Failed	Poor	Fair	Good	Excellent	X 3.25	
Competitors and Pertinent Information	<input type="checkbox"/> Content <input type="checkbox"/> Details <input type="checkbox"/> Thoroughness	Failed	Poor	Fair	Good	Excellent	X 3.25	
Closing Statement or Method	<input type="checkbox"/> Content <input type="checkbox"/> Details <input type="checkbox"/> Thoroughness	Failed	Poor	Fair	Good	Excellent	X 3.25	

Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.25	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:

# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** VII. Making a Sale

**Unit Objective:**

Students will demonstrate appropriate techniques of salesmanship by performing a sales presentation.

**Show-Me Standards:** 2.6, CA6

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Videos on salesmanship are available from Career and Technical Education Resources (CATER), 573-882-1470 or 800-392-7217 (Missouri only), <http://cater.missouri.edu/>. Two examples are *Successful Selling* (MCE Video 127) and *Fundamentals of Effective Selling: Building a Successful Business* (MCE Video 273).

Students will use research done for the performance-based assessment in the previous unit, Preparing for a Sale.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 2.1, Open-Ended and Close-Ended Questions; and AS 4.2, Preparing a Sales Presentation.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. VII-4 and VII-25.

**Performance-Based Assessment:**

Using the research and knowledge gained in the previous unit about a specific product, each student will perform a sales presentation for that product. The presentation will be made to a hypothetical customer portrayed by a fellow student.

Assessment will be based on the quality of the sales presentation, the sales representative's familiarity with the customer and the product, the sales

representative's appearance, and the quality of verbal and nonverbal communication with the customer.

### **Unit VII—Making a Sale**

#### **Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Using the research and knowledge gained in carrying out his or her performance-based assessment in Unit VI, each student will plan and execute a 5- to 10-minute sales presentation for a hypothetical customer.
  - a. The subject of the presentation will be the same product that the student wrote a report on for the previous unit.
  - b. The student will team up with a fellow student, and each will play the role of the customer in the other's presentation.
2. As a sales representative, the student will demonstrate proper sales techniques, including the following:
  - ☐ Establishing rapport with the customer
  - ☐ Demonstrating an understanding of customer needs
  - ☐ Noting and/or demonstrating the benefits of the product
  - ☐ Handling customer objections
  - ☐ Closing the sale
  - ☐ Paving the way to continued customer contact by establishing a schedule for customer service
3. If possible, have the students videotape their sales presentations. A videotape can serve immediately as a mechanism for self-critique and serve later as an example for analysis by future students in Unit V, Communication Skills.
4. Assessment will focus on the quality of the coverage of the previous six points of effective sales presentations. Also to be evaluated are the following:
  - ☐ Appropriate appearance, compatible with the environment of the presentation (A business office setting would demand business attire, whereas a farm setting would permit more informal working attire. Know the setting and the customer.)
  - ☐ Connecting product capabilities and customer needs
  - ☐ Quality and effectiveness of verbal and nonverbal communication





### Unit VII—Making a Sale

#### Student Handout

1. Using research and knowledge gained in carrying out your performance-based assessment in Unit VI, plan and execute a 5- to 10-minute sales presentation for a hypothetical customer.
  - a. The subject of the presentation will be the same product that you wrote a report on for the previous unit.
  - b. Team up with a fellow student, and you will each play the role of the customer in the other's sales presentation.
2. As a sales representative, you will demonstrate proper sales techniques, including the following:
  - ☐ Establishing rapport with the customer
  - ☐ Demonstrating an understanding of customer needs
  - ☐ Noting and/or demonstrating the benefits of the product
  - ☐ Handling customer objections
  - ☐ Closing the sale
  - ☐ Paving the way to continued customer contact by establishing a schedule for customer service
3. Assessment will focus on the quality of your coverage of the previous six points of effective sales presentations. Also to be evaluated are the following:
  - ☐ Appropriate appearance, compatible with the environment of the presentation (A business office setting would demand business attire, whereas a farm setting would permit more informal working attire. Know the setting and the customer.)
  - ☐ Connecting product capabilities and customer needs
  - ☐ Quality and effectiveness of verbal and nonverbal communication



# Agribusiness Sales, Marketing, and Management

## Unit VII—Making a Sale Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Establishing Customer Rapport	<input type="checkbox"/> How well is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 3.5	
Understanding Customer Needs	<input type="checkbox"/> How well is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 3.5	
Product Benefits	<input type="checkbox"/> How well is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 3.5	
Handling Customer Objections	<input type="checkbox"/> How well is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 3.5	
Closing the Sale	<input type="checkbox"/> How well is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 3.5	
Customer Service Schedule	<input type="checkbox"/> How well is this point addressed?	Failed	Poor	Fair	Good	Excellent	X 3.5	
Technical Considerations	<input type="checkbox"/> Appropriate appearance <input type="checkbox"/> Connecting product and customer <input type="checkbox"/> Verbal communication <input type="checkbox"/> Nonverbal communication	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 4	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** VIII. Promotional Tools

**Unit Objective:**

Students will demonstrate an understanding of promotional techniques by creating a radio or television commercial as part of an advertising campaign for an agriculture-related product.

**Show-Me Standards:** 4.1, CA1

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Baldwin, H. *How to Create Effective TV Commercials*, 2<sup>nd</sup> ed. Lincolnwood, IL: NTC Business Books, 1989.

Book, A. C. *The Radio and Television Commercial*, 2<sup>nd</sup> ed. Chicago, IL: Crain Books, 1984.

Redmond, M. *60 Second Sells: 99 Hot Radio Spots for Retail Businesses*. Jefferson, NC: McFarland & Co., 1993.

Schulberg, B. *Radio Advertising: The Authoritative Handbook*. Lincolnwood, IL: NTC Business Books, 1989.

Stewart, D. W. *Effective Television Advertising: A Study of 1000 Commercials*. Lexington, MA: Lexington Books, 1986.

Students will use the product research they did in the previous two performance-based assessments.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 3.
- Students will complete AS 1.1, Promotional Campaigns; and AS 4.2, Preparing a Newspaper Ad.

- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. VIII-5 (1) and p. VIII-16 (2).

### **Performance-Based Assessment:**

Using research and knowledge gained in the two previous units about a specific product, company, and industry, students will form teams to create a 30-second or 60-second commercial promoting an agriculture-related product.

Assessment will be based on the quality of the overall production and will take into consideration the appropriateness of the message for the target audience, the appropriateness of the message for the intended medium, the quality of the written script, and the technical quality of the production (i.e., production values).

### **Unit VIII—Promotional Tools**

#### **Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Students will form groups of two to five people to discuss ideas for promoting an agriculture-related product and to produce a 30-second or 60-second radio or TV commercial.
2. Each group should compile a list of agriculture-related products researched by its members in Units VI and VII, and then select one product from that list to serve as the subject of the commercial.
3. Each group should conduct one or more brainstorming sessions to identify or select the following:
  - ☐ The product's target audience for which the advertising message will be designed
  - ☐ The medium (Is the target audience better reached via radio or TV?)
  - ☐ The theme or message of the commercial (What are the basic idea, the product benefit, and the desired audience action to be conveyed in the commercial?)
4. After agreeing on the three elements in step 3 above, students should write a short paragraph citing their selections. This paragraph will be submitted to the teacher along with the final script and audio or videotape of the finished commercial.
5. Group members should meet to write a script for the commercial, which would include dialogue and descriptions of any sound (e.g., music, sound effects, etc.) or visual elements (e.g., the setting, props, etc.) that will appear in the commercial.
6. Group members should meet to produce the commercial as it is scripted.
  - a. For a radio commercial, use an audiotape recorder or other audio recording device.
  - b. For a TV commercial, use a videotape recorder or other video recording device.

7. Assessment will be based on the quality of the three elements submitted by each group: the short paragraph from the brainstorming session, the script, and the final taped commercial.
  - a. The assessment will focus on the appropriateness of target audience identification, medium selection, message (script) quality, and production values.
  - b. Technical aspects of the written portion of the assignment, such as grammar, spelling, punctuation, and capitalization will be factors in the assessment.



### Unit VIII—Promotional Tools

#### Student Handout

1. Form groups of two to five people to discuss ideas for promoting an agriculture-related product and to produce a 30-second or 60-second radio or TV commercial.
2. Compile a list of agriculture-related products researched by your group's members in Units VI and VII, and then select one product from that list to serve as the subject of your commercial.
3. Conduct one or more brainstorming sessions to identify or select the following:
  - ☐ The product's target audience for which the advertising message will be designed
  - ☐ The medium (Is the target audience better reached via radio or TV?)
  - ☐ The theme or message of the commercial (What are the basic idea, the product benefit, and the desired audience action to be conveyed in the commercial?)
4. After agreeing on the three elements in step 3 above, write a short paragraph citing your selections. This paragraph will be submitted to the teacher along with your final script and audio or videotape of the finished commercial.
5. Write a script for the commercial, which should include dialogue and descriptions of any sound (e.g., music, sound effects, etc.) or visual elements (e.g., the setting, props, etc.) that will appear in the commercial.
6. Produce the commercial.
  - a. For a radio commercial, use an audiotape recorder or other audio recording device.
  - b. For a TV commercial, use a videotape recorder or other video recording device.
7. Assessment will be based on the quality of the three elements submitted by your group: the short paragraph from the brainstorming session, the script, and the final taped commercial.
  - a. The assessment will focus on the appropriateness of target audience identification, medium selection, message (script) quality, and production values.
  - b. Technical aspects of the written portion of the assignment, such as grammar, spelling, punctuation, and capitalization will be factors in the assessment.



# Agribusiness Sales, Marketing, and Management

## Unit VIII—Promotional Tools Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Target Audience	<input type="checkbox"/> Is the message appropriate for the audience?	Failed	Poor	Fair	Good	Excellent	X 4	
Advertising Medium	<input type="checkbox"/> Is the message appropriate for the medium?	Failed	Poor	Fair	Good	Excellent	X 4	
Message (i.e., Script)	<input type="checkbox"/> What is the quality of the writing?	Failed	Poor	Fair	Good	Excellent	X 7.25	
Production Values (e.g., sound and sound effects/ music in radio; picture image and special visual effects in TV)	<input type="checkbox"/> How good is the production from a technical standpoint?	Failed	Poor	Fair	Good	Excellent	X 7.25	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Agribusiness Sales, Marketing, and Management**

**Curriculum Guide:** *Agribusiness Sales, Marketing, and Management*

**Unit:** IX. Entrepreneurship

**Unit Objective:**

Students will demonstrate their understanding of standard business principles by applying those principles to the planning and operation of an actual business enterprise.

**Show-Me Standards:** 3.8, MA3

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

Brown, C. *Nobody's Business but Your Own: A Business Start-Up Guide With Advice From Today's Most Successful Young Entrepreneurs*. New York: Hyperion, 1999.

Croft, M. J. *Market Segmentation: A Step-by-Step Guide to a Profitable New Business*. New York: Routledge, 1994.

Csordos, M. D. *Business Lessons for Young Entrepreneurs: 35 Things I Learned Before the Age of 30*. Thomson Learning, 2003.

Lieber, R. *Upstart Start-Ups!: How 34 Young Entrepreneurs Overcame Youth, Inexperience, and Lack of Money to Create Thriving Businesses*. New York: Broadway Books, 1998.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 8.
- Students will complete AS 3.1, Business Opportunities; AS 3.2, Business Plan; AS 6.1, Identifying Income and Expenses; and AS 8.1, Preparing a Budget.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. IX-33, p. IX-101, and p. IX-108.

### **Performance-Based Assessment:**

Each student will join a group of five to eight students to plan, organize, and execute a school-based fund-raising activity. The activity will follow the steps presented in the appendix following Unit IX in the instructor guide.

The major focus of the assessment will be on the planning, preparation, execution, and outcome of the business plan. These four factors will be reflected in a final written report covering administration, operations, finance, and sales and promotion. Extra points will be awarded for a positive outcome (i.e., the business shows a profit).

### **Unit IX—Entrepreneurship Instructor Guide**

**The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.**

1. Have students form teams of five to eight members to organize, plan, and execute a school-based fund-raising activity. To help guide the activity, provide the appendix that follows Unit IX in the instructor guide.
2. Team members must first assess possible business opportunities and select the specific fund-raising activity to pursue from a list of possibilities appropriate for the school community. Suggestions appear on p. A-1 in the instructor guide.
3. The team will devise a method to assign jobs/tasks to its members.
  - a. Jobs/tasks to be assigned might include president, vice president for operations, vice president for finance, vice president for sales and promotion, and various support staff for administrative, production, and sales tasks.
  - b. Because of the limited number of personnel in the venture, officers should also cover support staff positions.
  - c. The president's responsibilities will focus on administering the overall team effort, including documenting all team activities and submitting the team's final written report.
  - d. Operations will be responsible for producing or procuring the goods or services to be sold for the fund-raising activity.
  - e. Finance will tackle the tasks of securing financial backing, projecting expenses and income, and accounting for expenses and income.
  - f. Sales and promotion will market, advertise, and sell the product or service.
4. At the conclusion of the effort, the president's written report should describe the planning, preparation, execution, and outcome of each function of the chosen fund-raising activity.
5. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their report.

## **Agribusiness Sales, Marketing, and Management**

---

6. Assessment will focus primarily on the final written report, which will be evaluated for planning, preparation, execution, and outcome of each business function: administration, operations, finance, and sales and promotion.
  - a. Technical factors (spelling, grammar, punctuation, and capitalization) also will be assessed.
  - b. Extra points are possible if the fund-raising activity demonstrates a profit.



### Unit IX—Entrepreneurship

#### Student Handout

1. Join a team with five to eight fellow students to organize, plan, and execute a school-based fund-raising activity. Your instructor will provide the steps to guide you.
2. Your team's members must first assess possible business opportunities and select the specific fund-raising activity to pursue from a list of possibilities appropriate for your school community.
3. Your team will devise a method to assign jobs/tasks to its members.
  - a. Jobs/tasks to be assigned might include president, vice president for operations, vice president for finance, vice president for sales and promotion, and various support staff for administrative, production, and sales tasks.
  - b. Because of the limited number of personnel in the venture, officers should also cover support staff positions.
  - c. The president's responsibilities will focus on administering the overall team effort, including documenting all team activities and submitting the team's final written report.
  - d. Operations will be responsible for producing or procuring the goods or services to be sold for the fund-raising activity.
  - e. Finance will tackle the tasks of securing financial backing, projecting expenses and income, and accounting for expenses and income.
  - f. Sales and promotion will market, advertise, and sell the product or service.
4. At the conclusion of your team's effort, the president's written report should describe the planning, preparation, execution, and outcome of each function of the chosen fund-raising activity.
5. You may not use the source material word for word and must provide a complete bibliography of the sources along with your report.
6. Assessment will focus primarily on the final written report, which will be evaluated for planning, preparation, execution, and outcome of each business function: administration, operations, finance, and sales and promotion.
  - a. Technical factors (spelling, grammar, punctuation, and capitalization) also will be assessed.
  - b. Extra points are possible if the fund-raising activity demonstrates a profit.



# Agribusiness Sales, Marketing, and Management

## Unit IX—Entrepreneurship Scoring Guide

Fund Raising Activity \_\_\_\_\_

Team members \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Administration	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Operations	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Finance	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Sales and Promotion	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	

Positive Outcomes	<input type="checkbox"/> Profit	Loss or break even					Profit	X 2.5	Extra <u>Points</u>
<b>TOTAL</b>									

**Final Assessment Total** \_\_\_\_\_/100 pts.

**Extra Points** \_\_\_\_\_/10 pts.

**Comments:**

# **Advanced Livestock Production & Management**





# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** I. Issues in Animal Agriculture

**Unit Objective:**

Students will evaluate current issues in animal agriculture by researching a position on the use of biotechnology in agriculture and defending the position in a classroom debate.

**Show-Me Standards:** 2.3, CA6

**References:**

*A Guide to Parliamentary Debate*. American Parliamentary Debate Association. Accessed May 8, 2003, from <http://www.apdaweb.org/guide/>.

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Biotechnology. Accessed May 8, 2003, from <http://www.foodsafety.gov/~fsg/biotech.html>.

Biotechnology Portal. College of Agriculture and Life Sciences, University of Arizona. Accessed May 8, 2003, from <http://cals.arizona.edu/biotechnology/education.html>.

Pork Science and Technology. National Pork Board. Accessed May 8, 2003, from <http://www.porkscience.org/default.asp>.

*Science*. American Association for the Advancement of Science. Accessed May 9, 2003, from <http://www.sciencemag.org/>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lesson 1.
- Students will complete AS 1.1, Survey of Consumer's Views of Animal Agriculture; and AS 1.2, Current Issues Affecting Animal Agriculture.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. I-6 (1, 2).

### **Performance-Based Assessment:**

The instructor will randomly assign each student a position either in favor of or opposed to the use of biotechnology in animal agriculture. Students will research their position and take part in a classroom debate. The instructor will mediate the debate.

Assessment will be based on the thoroughness of the student's research, ability to clearly and persuasively defend the assigned position, and participation in the debate.



### Unit I—Issues in Animal Agriculture Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Randomly assign each student a position either in favor of or opposed to the use of biotechnology in animal agriculture.
2. Have students research their position and take part in a classroom debate.
3. Lead a class discussion prior to the debate to help students focus their research. Discussion topics could include general principles of biotechnology, as well as any current specific biotechnology issues. Sample topics could include questions such as the following:
  - ☐ Are bioengineered foods safe or potentially unsafe for consumers or the environment? What evidence supports your conclusion?
  - ☐ What are the potential economic advantages of using bioengineered foods? What are the potential disadvantages?
  - ☐ Should all bioengineered food require labeling? Why or why not?
4. Use the topics discussed in class as the framework for the debate.
  - a. Structure the debate formally or informally, as desired.
  - b. If a formal debate style is preferred, such as a policy debate or parliamentary debate, information about conducting and judging debates can be accessed on the Internet. For example, information about parliamentary debate can be found at the American Parliamentary Debate Association, accessed May 9, 2003, from <http://www.apdaweb.org/guide/>.
5. Students may use material found in the unit or discussed in class as well as additional outside material to prepare for the debate.
6. Students should arrange their findings into an outline form.
7. Students may refer to their outline during the debate but should present their evidence in their own words.
8. Guide the debate as needed to encourage the students to apply their research.

## **Advanced Livestock Production and Management**

---

9. Have students turn in their outline and a complete bibliography of their sources following the debate.
10. Students must take part in the debate to receive full points for this activity.
11. The final assessment score will be based on the thoroughness of the student's research, ability to clearly and persuasively defend the assigned position and respond to the questions, and participation in the debate.

### **Unit I—Issues in Animal Agriculture Student Handout**

1. The instructor will randomly assign you a position either in favor of or opposed to the use of biotechnology in animal agriculture.
2. You will research your position and take part in a classroom debate.
3. You may use material found in the unit or discussed in class as well as additional outside material to prepare for the debate.
4. Arrange your findings into an outline form.
5. You may refer to your outline during the debate but should present your evidence in your own words.
6. Turn in your outline and a complete bibliography of your sources following the debate.
7. You must take part in the debate to receive full points for this activity.
8. Your final assessment score will be based on the thoroughness of your research, your ability to clearly and persuasively defend your assigned position and respond to the questions asked, and your participation in the debate.



## Advanced Livestock Production and Management

### Unit I—Issues in Animal Agriculture Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Outline	<input type="checkbox"/> Thorough and well researched <input type="checkbox"/> Addresses the issues and questions <input type="checkbox"/> Provides good supporting evidence <input type="checkbox"/> Well organized <input type="checkbox"/> Spelling and grammar are correct	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 19	
Debate	<input type="checkbox"/> Takes part in debate <input type="checkbox"/> Persuasive <input type="checkbox"/> Speaks clearly <input type="checkbox"/> Listens and responds directly and constructively to other participants	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 6	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** II. Enterprises

**Unit Objective:**

Students will use management principles developed in the unit to explain, in an oral report, how basic resources – market, land, capital, labor, and management – should be applied to establish and maintain a successful livestock enterprise.

**Show-Me Standards:** 2.1, CA6

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

*Missouri Farm Facts*. Accessed January 21, 2003, from <http://agebb.missouri.edu/mass/farmfact/>.

MU Extension. University of Missouri-Columbia. Accessed January 21, 2003, from <http://muextension.missouri.edu/explore/agguides/>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 2.1, Preparing a Beef Enterprise Budget; AS 3.1, Preparing a Dairy Enterprise Budget; AS 3.2, Considerations for Starting a Dairy Enterprise; AS 4.1, Describing Swine Enterprises; AS 4.2, Preparing a Swine Enterprise Budget; AS 5.1, Preparing a Sheep Enterprise Budget; AS 5.2, Resources Necessary for Sheep Enterprises; AS 6.1, Interviewing a Horse Producer; AS 6.2, Horse Breeds; and AS 7.1, Poultry Enterprise Internet Search.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. II-5 (1, 2), p. II-17, p. II-29 (1, 2), p. II-43 (1, 2), p. II-56, p. II-69, and p. II-82 (1, 2).

### **Performance-Based Assessment:**

Students will be divided into groups with each group assigned to report on one of the enterprises discussed in the unit – beef cattle, dairy cattle, swine, sheep, horses, and poultry. The groups will use management principles to determine how basic resources – market, land, capital, labor, and management – should be applied to establish and maintain a successful livestock enterprise and present their findings to the class in an oral report.

Assessment will be based on the overall content and presentation of the report. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.



### Unit II—Enterprises Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide the class into groups and assign each group one of the livestock enterprises discussed in the unit – beef cattle, dairy cattle, swine, sheep, horses, and poultry.
2. Have the groups determine how basic resources should be used and applied to establish and maintain a successful livestock enterprise.
3. Have students present their findings to the class in an oral report.
4. Have students use the five required resources discussed in the unit to form the outline of their report. Students should address the following resources:
  - ☐ Market
  - ☐ Land
  - ☐ Capital
  - ☐ Labor
  - ☐ Management
5. Students may use material found in the unit or discussed in class, such as the enterprise budget activity sheets (p. II-21, p. II-33, p. II-61), as well as additional outside material to complete their report.
  - a. For example, additional information can be found in *Missouri Farm Facts*, accessed January 21, 2003, from <http://agebb.missouri.edu/mass/farmfact/> and at the University of Missouri Extension web site at <http://muextension.missouri.edu/explore/agguides/>, accessed January 21, 2003.
  - b. Students may not use the source material word for word and must provide a complete bibliography of their sources following their report.
  - c. Students should also incorporate other elements, such as illustrations or charts, and make use of presentation software or other equipment or material as needed to make the report interesting and informative.
  - d. Students should be prepared to answer questions about their report.

## **Advanced Livestock Production and Management**

---

6. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in completing the report. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
7. The final assessment score will be a combination of the student's report score and final peer evaluation score.

### **Unit II—Enterprises**

#### **Student Handout**

1. The instructor will divide the class into groups and assign each group a livestock enterprise.
2. Determine the resources you would need and how they should be used in order to establish and maintain a successful livestock enterprise. Be sure to address the following resources:
  - ☐ Market
  - ☐ Land
  - ☐ Capital
  - ☐ Labor
  - ☐ Management
3. You may use material found in the unit or discussed in class as well as additional outside material to complete your report.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources following your report.
  - b. You should also incorporate other elements, such as illustrations or a chart, and make use of presentation software or other equipment or material as needed to make the report interesting and informative.
  - c. Be prepared to answer questions from your instructor and classmates regarding your report.
4. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the report.
  - a. Following the report, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
5. Your final assessment score will be a combination of your report score and your final peer evaluation score.



## Advanced Livestock Production and Management

### Unit II—Enterprises Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Enterprise Evaluation	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Addresses all five required resources <input type="checkbox"/> Answers questions from the instructor or students correctly <input type="checkbox"/> Provides a thorough overview of a successful enterprise	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 16	
Presentation of Report	<input type="checkbox"/> Well organized <input type="checkbox"/> Emphasizes key points <input type="checkbox"/> Uses correct grammar; no spelling or grammar errors in charts or other written elements <input type="checkbox"/> Good use of supporting material	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Delivery of Oral Report	<input type="checkbox"/> Holds audience interest <input type="checkbox"/> Speaks clearly <input type="checkbox"/> Good posture <input type="checkbox"/> Maintains eye contact	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



---

## Advanced Livestock Production and Management

---

### Unit II—Enterprises Peer Evaluation

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)





# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** III. Selection

**Unit Objective:**

Students will apply principles of animal selection developed in the unit to judge classes of livestock and explain their judgments using appropriate terminology.

**Show-Me Standards:** 1.10, CA1

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Lipsey, J. *Livestock Judging Techniques*. University of Missouri-Columbia Extension. Accessed January 23, 2003, from <http://muextension.missouri.edu/explore/agguides/ansci/g02952.htm>.

Livestock Judging. Agripedia. University of Kentucky, College of Agriculture. Accessed May 5, 2003, from <http://www.ca.uky.edu/agripedia/agmania/livestock/index.htm>.

*Missouri CDE Handbook*. Accessed January 23, 2003, from [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm#CDE%20Event](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm#CDE%20Event).

Virtual Livestock Judging Contest. Accessed May 5, 2003, from <http://www.swine.net/vljc.htm>.

Sources for livestock judging videos include the Career and Technical Education Resources (CATER) library, University of Missouri-Columbia, accessed May 5, 2003, from <http://mvrc.coe.missouri.edu/>, and the Academic Support Center, University of Missouri-Columbia, accessed May 5, 2003, from <http://media.asc.missouri.edu/htbin/wwform/145/wwk770>.

Students may use additional outside sources to complete this activity.

## **Advanced Livestock Production and Management**

---

### **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 8.
- Students will complete AS 1.1, Livestock Terminology; AS 2.1, Selecting Livestock Based on Performance Data; AS 4.2, Udder Characteristics; AS 5.2, Selecting the Best Boar; AS 6.1, Selecting Ewes and Rams; AS 7.1, Selecting the Appropriate Horse; and AS 8.1, Judging Laying Hens Based on Pigmentation.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. III-54 (1, 3, 4), pp. III-71-III-72 (1, 2, 3, 5), p. III-90 (1, 2), p. III-110 (1, 2), p. III-127 (1), and p. III-148 (3).

### **Performance-Based Assessment:**

Students will judge a class of animals from each type of livestock covered in the unit – beef cattle, dairy cattle, swine, sheep, horses, and poultry. Students must place the classes and provide written reasons for their placement by using appropriate terminology and techniques developed in the lesson.

Assessment will be based on the student’s placement of the classes and ability to clearly and persuasively defend the placement.

### Unit III—Selection Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Using video, live animals, or both, present students with a class of animals from each type of livestock covered in the unit – beef cattle, dairy cattle, swine, sheep, horses, and poultry.
2. Have students place each class and provide a written set of notes for their placement of each class.
3. Students should apply selection criteria described in the unit to place each class and use correct terminology to explain their placement.
4. This activity should help prepare students for the Livestock Judging, Horse Evaluation, Dairy Cattle, and Poultry Career Development Events. Have students use the same style and format they would use for filling out notes for these events.
  - a. Explain or review event guidelines and livestock judging as needed.
  - b. Refer to the *Missouri CDE Handbook* for guidelines regarding Career Development Events. The *Missouri CDE Handbook* is available from the Missouri Department of Elementary and Secondary Education at [http://www.dese.state.mo.us/divvoted/ag\\_cde\\_guidelines.htm#CDE%20Event](http://www.dese.state.mo.us/divvoted/ag_cde_guidelines.htm#CDE%20Event).
  - c. Additional information regarding livestock judging can be found at the University of Missouri Extension web site, such as *Livestock Judging Techniques*, accessed January 23, 2003, from <http://muextension.missouri.edu/explore/agguides/ansci/g02952.htm>.
5. The final assessment score will be based on the student's placement of the classes and ability to clearly and persuasively explain the placement.



### **Unit III—Selection Student Handout**

1. The instructor will present a class of animals from each type of livestock covered in the unit—beef cattle, dairy cattle, swine, sheep, horses, and poultry.
2. Place each class and provide a written set of notes for your placement of each class.
3. Apply selection criteria described in the unit to place each class and use correct terminology to explain your placement.
4. Turn in your placements and notes.
5. Your final assessment score will be based on your placement of the classes and ability to clearly and persuasively explain your placement.



## Advanced Livestock Production and Management

### Unit III—Selection Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Overall Class Placement Skills and Presentation	<input type="checkbox"/> Makes accurate observations and judgments <input type="checkbox"/> Emphasizes key points <input type="checkbox"/> Uses correct terminology <input type="checkbox"/> Well organized <input type="checkbox"/> No spelling or grammar errors	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 10	
<b>TOTAL</b>								/40 pts.

Assessment Area	Beef Cattle 0-10 Points	Dairy Cattle 0-10 Points	Swine 0-10 Points	Sheep 0-10 Points	Horses 0-10 Points	Poultry 0-10 Points	Total
Individual Classes of Livestock and Poultry							
<b>TOTAL</b>							/60 pts.

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** IV. Breeding

**Unit Objective:**

Students will demonstrate an understanding of principles of livestock breeding by explaining in an oral report the factors that affect the conception rate for a type of livestock or the hatchability rate for poultry.

**Show-Me Standards:** 2.1, SC4

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Agriculture Publications. MU Extension. University of Missouri-Columbia. Accessed May 16, 2003, from <http://muextension.missouri.edu/explore/agguides/>.

*FBMA Beef Management* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2001.

*FBMA Horse Management for Adults* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2002.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 7.
- Students will complete AS 1.1, Exploring Breeding Systems; AS 2.1, Artificial Insemination of Swine; AS 4.1, Improving Conception Rates; AS 5.1, Planning for Breeding; and AS 7.1, Evaluating Eggs for Fertility.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. IV-5, p. IV-32 (2, 3), p. IV-67, and p. IV-81 (1, 2).

### **Performance-Based Assessment:**

Students will be divided into groups. Each group will develop an oral report that explains the factors that affect the conception rate for a type of livestock or the hatchability rate for poultry. The presentation should be 15 minutes long and include appropriate visual elements.

Assessment will be based on the overall content and presentation of the oral report. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.

### **Unit IV—Breeding Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide the class into groups and assign each group one of the types of livestock discussed in the unit – cattle, sheep, swine, horses, and poultry.
2. Have each group develop an oral report that explains the factors that affect the conception rate for one of the types of livestock or the hatchability rate for poultry and give the report to the class. The report should be 15 minutes long.
3. Have students incorporate appropriate visuals into their report, such as drawings, illustrations from magazines, a handout, transparency masters, a slide show using presentation software, or a combination of these elements. Indicate to students which of these supporting elements are acceptable or preferred.
4. Students may use material found in the unit or discussed in class as well as additional outside material to complete their report.
5. Students may not use the source material word for word and must provide a complete bibliography of their sources following their report.
6. Students should be prepared to answer questions about their topic.
7. Guide or correct the students' presentations, if needed.
8. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing their report. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.

## **Advanced Livestock Production and Management**

---

- c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
9. The final assessment score will be based on the overall content and presentation of the report and final peer evaluation score.

### **Unit IV—Breeding Student Handout**

1. The instructor will divide the class into groups and assign each group one of the types of livestock discussed in the unit.
2. Develop an oral report that explains the factors that affect the conception rate for your assigned type of livestock. For poultry, develop a report about factors that affect the hatchability rate.
3. Present your report to the class. Reports should be 15 minutes long.
4. Include appropriate visuals in your report, such as drawings, illustrations from magazines, a handout, a slide show using presentation software, or a combination of these or other supporting materials indicated by the instructor.
5. You may use material found in the unit or discussed in class as well as additional outside material to complete your report.
6. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources following your report.
7. Be prepared to answer questions from the instructor and your classmates regarding your topic.
8. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the report.
  - a. Following the presentation, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
9. Your final assessment score will be based on the content and presentation of your report and your final peer evaluation score.



## Advanced Livestock Production and Management

### Unit IV—Breeding Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Report	<ul style="list-style-type: none"> <li><input type="checkbox"/> Provides a thorough overview and addresses all key topics</li> <li><input type="checkbox"/> Facts are accurate</li> <li><input type="checkbox"/> Well organized</li> <li><input type="checkbox"/> Supporting materials emphasize and clarify key points</li> <li><input type="checkbox"/> Answers questions from the instructor or students correctly</li> </ul>	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 18.5	
Presentation of Report	<ul style="list-style-type: none"> <li><input type="checkbox"/> Speaks clearly and holds audience interest</li> <li><input type="checkbox"/> Maintains good posture and eye contact</li> <li><input type="checkbox"/> No grammar errors in presentation; no spelling, grammar, or punctuation errors in any written material</li> <li><input type="checkbox"/> Needs little or no prompting from the instructor</li> </ul>	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





---

## Advanced Livestock Production and Management

---

### Unit IV—Breeding Peer Evaluation

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** V. Parturition

**Unit Objective:**

Students will apply parturition management strategies by devising a birthing checklist for one of the types of livestock discussed in the unit and providing a written explanation for the items and steps they included on their checklist.

**Show-Me Standards:** 1.8, SC3

**Reference:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 1.1, Assisting With Abnormal Births; AS 2.1, Farrowing Information; AS 3.1, Assisting With Lambing; AS 4.1, Assisting With Abnormal Presentations; and AS 5.1, Incubating and Hatching Eggs.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. V-6 (1) and p. V-27 (2).

**Performance-Based Assessment:**

Each student will develop a parturition checklist for one of the types of livestock discussed in the unit. The checklist will include equipment they will need and steps they should take before and after parturition. Students will also provide a written explanation for the items and steps they included on their checklist.

Assessment will be based on the overall content and presentation of the checklist and explanations.



### **Unit V—Parturition Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Randomly assign each student one of the following types of livestock: cattle, swine, sheep, horses, or poultry.
2. Have students develop a parturition checklist for their assigned type of livestock.
3. Explain that the checklist should include the equipment they will need and steps they should take 24 hours before and after parturition. If this time period is less critical for a particular type of livestock, adjust the time accordingly. For example, students who are assigned poultry could develop a general hatching and incubation checklist.
4. The checklist should include only key words and phrases and fit on one 8 1/2-by-11-inch sheet of paper so that it could be easily posted or carried.
5. Have students write, on separate paper, a brief explanation for each piece of equipment and step that tells why they included it on their checklist.
6. Explanations should be in complete sentences and use correct spelling and grammar.
7. Have students turn in their explanations along with their checklists.
8. The final assessment score will be based on the overall content and presentation of the checklist and explanations.



### **Unit V—Parturition**

#### **Student Handout**

1. The instructor will assign you a type of livestock.
2. Develop a parturition checklist for your assigned type of livestock that includes the equipment you will need and steps you should take before and after parturition.
3. The checklist should include only key words and phrases and fit on one 8 1/2-by-11-inch sheet of paper so that it could be easily posted or carried.
4. On separate paper, write a brief explanation for each piece of equipment and step that tells why you included it on your checklist.
5. Explanations should be in complete sentences and use correct spelling and grammar.
6. Turn in your explanations along with your checklist.
7. Your final assessment score will be based on the overall content and presentation of your checklist and explanations.





# Advanced Livestock Production and Management

## Unit V—Parturition Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness	Checklist and explanations are complete	Failed	Poor	Fair	Good	Excellent	X 8.75	
Accuracy	Information and explanations are accurate	Failed	Poor	Fair	Good	Excellent	X 8.75	
Organization	Checklist is well organized and emphasizes key points	Failed	Poor	Fair	Good	Excellent	X 5	
Technical Considerations	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** VI. Animal Health

**Unit Objective:**

Students will demonstrate an understanding of animal health issues by researching a common livestock health problem and designing a poster and handout that outline its symptoms, causes, treatment, and prevention.

**Show-Me Standards:** 1.8, SC4

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

NetVet Veterinary Resources and the Electronic Zoo. Accessed April 4, 2003, from <http://netvet.wustl.edu>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 10.
- Students will complete AS 1.1, Identifying Symptoms; AS 1.2, Understanding Health Problems in Cattle; AS 2.1, Developing a Dairy Herd Health Plan; AS 2.2, Lifecycle of Internal Parasites; AS 2.3, Controlling Parasites; AS 3.1, Researching Vaccines; AS 4.1, Herd Health and Quality Assurance; AS 5.1, Understanding Sheep Health Problems; AS 8.1, Researching Vaccines; AS 8.2, Internal and External Parasites of Horses; and AS 9.1, Evaluating Health Problems in the Poultry Flock.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. VI-11 (1, 2, 3, 4), p. VI-33 (1, 2), p. VI-67, p. VI-89, p. VI-103 (1, 2), p. VI-118, p. VI-130 (1, 2), p. VI-147, and p. VI-158 (1).

### **Performance-Based Assessment:**

Each student will research a common livestock health problem and design a poster that outlines its symptoms, causes, treatment, and prevention. Students will also create a handout that summarizes their poster and can be given to their classmates. Students can assemble these handouts in a notebook to keep as a reference source following the poster presentation.

Assessment will be based on the overall content and presentation of the poster and handout.

### **Unit VI—Animal Health Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Choose a type of livestock from those discussed in the unit, preferably one that is prominent in the area.
2. Assign a disease or parasite that is common to that type of animal to each student. Students could also choose their topic, if preferred.
3. Have students research their assigned health problem and create a poster explaining its symptoms, causes, treatment, and prevention.
4. Have students create a handout that summarizes their poster.
5. Instruct students to print handouts on standard 8 1/2-by-11-inch paper so that they can assemble the handouts in a notebook as a reference source following the poster presentation.
6. Have students hang their posters on the walls and visit each poster to read what their classmates have written and pick up a handout.
7. Students may use additional outside material to complete their posters and handouts.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources along with a copy of their handout.
  - b. Students should also incorporate other elements, such as photos, as needed to make the poster and handout interesting and informative.
8. After students have visited all the posters, give them the opportunity to ask questions they have regarding any of the posters or handouts.
9. Students should be prepared to answer questions about their poster and handout.
10. Correct or supplement the students' information or answers, if needed.
11. Discuss any diseases or parasites not addressed by the posters, if necessary.

12. The final assessment score will be based on the overall content and presentation of the poster and handout.

### **Unit VI—Animal Health**

#### **Student Handout**

1. The instructor will choose a type of livestock and assign you a disease or parasite that is common to it.
2. Research your assigned disease or parasite and create a poster explaining its symptoms, causes, treatment, and prevention.
3. Create a handout that summarizes the information contained in your poster.
  - a. Print your handouts on standard 8 1/2-by-11-inch paper so they can be easily assembled in a notebook as a reference source following the poster presentation.
  - b. Make enough handouts for each member of your class and your instructor to have a copy.
4. Hang your poster on the wall and visit all the posters to read what your classmates have written and pick up a handout for each poster.
5. You may use additional outside material to complete your poster and handout.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with a copy of your handout.
  - b. Incorporate other elements, such as photos, as needed to make your poster and handout interesting and informative.
6. After visiting all the posters, you will have the opportunity to ask questions you have regarding any of the posters or handouts.
7. Be prepared to answer questions from the instructor and your classmates regarding your topic.
8. Your final assessment score will be based on the overall content and presentation of your poster and handout.





## Advanced Livestock Production and Management

### Unit VI—Animal Health Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Overall Health Program	Addresses symptoms, causes, treatment, and prevention	Failed	Poor	Fair	Good	Excellent	X 7.5	
Information and Content	Complete and accurate	Failed	Poor	Fair	Good	Excellent	X 7.5	
Handout	Summarizes key elements of health program	Failed	Poor	Fair	Good	Excellent	X 2.5	
Organization	Well organized	Failed	Poor	Fair	Good	Excellent	X 2.5	
Technical Considerations	Spelling, grammar, and punctuation	Failed	Poor	Fair	Good	Excellent	X 2.5	
Supporting Material	Good use of photos or other supporting material	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** VII. Facilities and Equipment

**Unit Objective:**

Students will demonstrate an understanding of the facility needs of livestock by devising a farm plan and explaining it to the class in an oral report that includes appropriate visuals.

**Show-Me Standards:** 1.8, CA6

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Agriculture Publications. MU Extension. University of Missouri-Columbia. Accessed May 12, 2003, from <http://muextension.missouri.edu/explore/agguides/>.

NASCO On-Line Catalogs. Accessed May 12, 2003, from <http://www.enasco.com/prod/Home>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete AS 1.1, Designing Beef Cattle Facilities; AS 3.1, Swine Facilities and Equipment Collage; AS 4.1, Dogs as Sheep Equipment; AS 5.1, Saddles, Bits, and Bridles; and AS 6.1, Designing a Poultry Production Facility.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. VII-8, p. VII-27, p. VII-39, p. VII-56 (1, 2), and p. VII-93 (1, 2, 3).

## **Advanced Livestock Production and Management**

---

### **Performance-Based Assessment:**

Students will be divided into groups. Each group will develop a farm plan for one of the types of livestock discussed in the unit – beef cattle, dairy cattle, swine, sheep, horses, and poultry – and explain the plan to the class in an oral report that includes visuals of the facilities and equipment they will need.

Assessment will be based on the overall content and presentation of the report. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.

### **Unit VII—Facilities and Equipment Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide the class into groups and assign each group one of the types of livestock discussed in the unit—beef cattle, dairy cattle, swine, sheep, horses, and poultry.
2. Have each group develop an oral report about the facility and equipment requirements for that type of livestock and present the report to the class.
3. Have students incorporate appropriate visuals into their presentation, such as illustrations from magazines, a handout or map, transparency masters, a slide show using presentation software, or a combination of these elements. Indicate to students which of these supporting elements are acceptable or preferred.
4. Have students explain how the facilities work together for the operation of the whole farm. For example, students could organize their report as if they were giving a tour of the farm.
5. Students may use material found in the unit or discussed in class as well as additional outside material to complete their presentations.
6. Students may not use the source material word for word and must provide a complete bibliography of their sources following their report.
7. Guide or correct the students' presentations, if needed.
8. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing their report. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.

## **Advanced Livestock Production and Management**

---

- b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
9. The final assessment score will be based on the overall content and presentation of the report and final peer evaluation score.

### **Unit VII—Facilities and Equipment Student Handout**

1. The instructor will divide the class into groups and assign each group one type of livestock discussed in the unit.
2. Develop an oral report about the facility and equipment requirements for your assigned type of livestock and present the report to the class.
3. Include appropriate visuals in your report, such as illustrations from magazines, a handout or map, a slide show using presentation software, or a combination of these or other supporting materials indicated by the instructor.
4. Explain how the facilities work together for the operation of the whole farm. For example, the report could be organized as if you were giving a tour of the farm.
5. You may use material found in the unit or discussed in class as a starting point as well as additional outside material to complete your presentation.
6. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources following your report.
7. Be prepared to answer questions from your instructor and classmates regarding your topic.
8. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the report.
  - a. Following the report, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
9. Your final assessment score will be based on the overall content and presentation of your report and your final peer evaluation score.





# Advanced Livestock Production and Management

## Unit VII—Facilities and Equipment Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Report	<input type="checkbox"/> Provides a thorough overview and addresses all key topics <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Well organized <input type="checkbox"/> Supporting materials emphasize and clarify key points <input type="checkbox"/> Answers questions from the instructor or students correctly	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 18.5	
Presentation of Report	<input type="checkbox"/> Speaks clearly and holds audience interest <input type="checkbox"/> Maintains good posture and eye contact <input type="checkbox"/> No grammar errors in presentation; no spelling, grammar, or punctuation errors in any written material <input type="checkbox"/> Needs little or no prompting from the instructor	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Peer Evaluation							6 pts. maximum	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



---

## Advanced Livestock Production and Management

---

### Unit VII—Facilities and Equipment Peer Evaluation

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** VIII. Animal Feeding

**Unit Objective:**

Students will demonstrate an understanding of livestock nutritional requirements by explaining the feeding options available for a type of livestock on a display board that will be exhibited in class.

**Show-Me Standards:** 1.8, SC4

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Agriculture Publications. MU Extension. University of Missouri-Columbia. Accessed May 16, 2003, from  
<http://muextension.missouri.edu/explore/agguides/>.

*FBMA Beef Management* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2001.

*FBMA Horse Management for Adults* (CD). University of Missouri-Columbia, Farm Business Management Analysis, 2002.

Missouri Dairymen's Resource Guide. University of Missouri Outreach & Extension. Accessed May 20, 2003, from  
<http://agebb.missouri.edu/dairy/index.htm>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 2.
- Students will complete AS 1.1, Selecting High Quality Roughage.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. VIII-9 (1, 2, 3, 4) and VIII-22 (1, 2).

### **Performance-Based Assessment:**

Students will be divided into groups. Each group will develop a display board that explains the feeding options available for one of the types of livestock discussed in the unit – beef cattle, dairy cattle, swine, sheep, horses, and poultry. The display boards will be exhibited in class.

Assessment will be based on the overall content and presentation of the display board. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.

### Unit VIII—Animal Feeding Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide the class into groups and assign each group one of the types of livestock discussed in the unit – beef cattle, dairy cattle, swine, sheep, horses, and poultry.
2. Have each group develop a display board that explains the feeding options available for its assigned type of livestock.
3. Have students incorporate appropriate visuals into their display board, such as drawings or other illustrations, as well as written summaries of key information, and other supporting elements as needed to make the display interesting and informative. Indicate to students what kinds of supporting elements are acceptable or preferred.
4. There are study questions in Lesson 2 of this unit that address the feeding options for each type of livestock. Have students use the class discussion of their livestock's feeding options as the basis of their display board.
5. Exhibit completed display boards in class.
6. Students may use material found in the unit or discussed in class as well as additional outside material to complete their display board.
7. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their display board.
8. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing their display board. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.

## **Advanced Livestock Production and Management**

---

- b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
9. The final assessment score will be based on the overall content and presentation of the display board and final peer evaluation score.



### **Unit VIII—Animal Feeding Student Handout**

1. The instructor will divide the class into groups and assign each group one type of livestock discussed in the unit.
2. Develop a display board that explains the feeding options available for your assigned type of livestock. Completed display boards will be exhibited in class.
3. Incorporate appropriate visuals into your display board, such as drawings or other illustrations, as well as written summaries of key information, and other supporting elements indicated by your instructor.
4. Use the class discussion of your livestock's feeding options as the basis of your display board.
5. You may also use additional outside material to complete your display board.
6. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources along with your display board.
7. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the project.
  - a. Once your display board has been set up in class, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
8. Your final assessment score will be based on the overall content and presentation of your display board and your final peer evaluation score.



## Advanced Livestock Production and Management

### Unit VIII—Animal Feeding Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Display Board	Addresses all key topics; information is complete; facts are accurate	Failed	Poor	Fair	Good	Excellent	X 16	
Presentation	Well organized; good use of supporting materials	Failed	Poor	Fair	Good	Excellent	X 5	
Technical Considerations	No spelling, grammar, or punctuation errors	Failed	Poor	Fair	Good	Excellent	X 2.5	
Peer Evaluation							6 pts. maximum	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



---

## Advanced Livestock Production and Management

---

### Unit VIII—Animal Feeding Peer Evaluation

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0 – no contribution
- 1 – minimal contribution
- 2 – average contribution
- 3 – excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)



# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** IX. Herd/Flock Management

**Unit Objective:**

Students will demonstrate an understanding of livestock management practices by explaining an assigned management practice and demonstrating how it is correctly performed by giving an oral presentation to the class.

**Show-Me Standards:** 2.1, CA6

**References:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Agriculture Publications. MU Extension. University of Missouri-Columbia. Accessed May 13, 2003, from <http://muextension.missouri.edu/explore/agguides/>.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 10.
- Students will complete AS 2.1, Planning for Replacement Stock; AS 3.1, Developing a Beef Breeding Herd Management Plan; AS 5.2, Ear Notching; AS 6.1, Developing a Swine Management Record System; AS 7.1, Developing a Management Calendar; AS 8.1, Management Activities for Breeding Stock; AS 9.1, Management Activities for Horses; and AS 10.1, Designing a Poultry Enterprise.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. IX-6 (1, 2), p. IX-23 (1, 2), p. IX-33, p. IX-45 (1, 2), p. IX-64, p. IX-85 (1, 2), p. IX-95 (1, 2), p. IX-107, and p. IX-118 (2).

**Performance-Based Assessment:**

Students will be divided into groups. Each group will explain a management practice discussed in the unit, such as dehorning cattle or docking lambs' tails, and demonstrate how the procedure is correctly performed by giving an oral presentation to the class.

## **Advanced Livestock Production and Management**

---

Assessment will be based on the overall content and presentation of the oral report and demonstration. At the instructor's discretion, students will contribute to the assessment process by providing a brief evaluation of the performance of the other members of their group.



### Unit IX—Herd/Flock Management Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide the class into groups and assign each group a management practice discussed in the unit, such as dehorning cattle, docking lambs' tails, ear-notching pigs, halter-training foals, or trimming the beaks of chicks.
  - a. Select an activity for each type of livestock discussed in the unit.
  - b. Assign additional activities for some types of livestock as needed, depending on the size of the class.
2. Have each group explain how its assigned management practice is correctly performed by giving an oral report and demonstration of the procedure. As part of their report, students should explain the following:
  - ☐ Tools and materials needed for the procedure
  - ☐ Why the procedure is performed
  - ☐ When it should be performed
  - ☐ How it is done
3. As part of their demonstration, students should include appropriate visual elements, such as examples or pictures of the tools and materials needed for the procedure or illustrations of how the procedure is correctly performed. Indicate to students what demonstration activities are acceptable or preferred. Sample demonstration activities are listed below.
  - a. Students could pass the equipment around to classmates.
  - b. Students could develop a class-participation activity that simulates the activity, such as giving students cardboard or paper pigs' ears to notch.
  - c. Students could perform the procedure on live animals, if appropriate. Students should consult the instructor prior to any activity involving live animals and should only perform activities the instructor determines are suitable and safe. Demonstrations involving live animals should only be performed by qualified individuals with the permission and supervision of the instructor.
4. Students should be prepared to answer questions regarding their presentation.
5. Guide or correct the students' presentations, if needed.

## **Advanced Livestock Production and Management**

---

6. Students may use material found in the unit or discussed in class as well as additional outside material to complete their presentations.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources, including sources of illustrations.
  - b. Students should make use of presentation software or other equipment or materials as needed to make the presentation interesting and informative.
7. If desired, have students contribute to the assessment process by completing a short evaluation of their teammates' performance in developing their report. A peer evaluation form is included following the scoring guide.
  - a. Have students complete the peer evaluation form by following the instructions listed at the top. Students should base their assessment on how much each person contributed to the project.
  - b. If tasks are divided so that students do only one type of task to contribute to the project, have students adjust their peer evaluation form by disregarding the category that does not apply to a particular teammate. Instead of assessing teammates on two categories worth 0 to 3 points, students will assess teammates on one category worth 0 to 6 points.
  - c. To determine the final peer evaluation score, add up the scores that a student receives from the other members of the group and divide the total by the number of scores received. The maximum number of points possible for each student is 6.
8. The final assessment score will be based on the overall content and presentation of the demonstration and final peer evaluation score.

### **Unit IX—Herd/Flock Management Student Handout**

1. The instructor will divide the class into groups and assign each group a livestock management practice discussed in the unit.
2. Explain how your assigned procedure is correctly performed by presenting an oral report and demonstration to the class. As part of your report, be sure to explain the following:
  - ☐ Tools and materials needed for the procedure
  - ☐ Why the procedure is performed
  - ☐ When it should be performed
  - ☐ How it is done
3. Include appropriate visual elements in your demonstration, such as examples or pictures of the tools and materials used for the procedure or illustrations of how the procedure is correctly performed.
4. You may use material found in the unit or discussed in class as well as additional outside material to complete your report and demonstration.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources, including sources of illustrations.
  - b. You should make use of presentation software or other equipment or materials as needed to make the report and demonstration interesting and informative.
5. Be prepared to answer questions from your instructor and classmates regarding your presentation.
6. If requested, you will contribute to the assessment process by completing a short evaluation of your teammates' performance in developing the presentation.
  - a. Following the report and demonstration, fill out the peer evaluation score sheet.
  - b. Give the completed score sheet to your instructor.
7. Your final assessment score will be based on the overall content and delivery of your report and demonstration and your final peer evaluation score.



# Advanced Livestock Production and Management

## Unit IX—Herd/Flock Management Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content	<input type="checkbox"/> Information is complete <input type="checkbox"/> Facts are accurate <input type="checkbox"/> Supporting materials emphasize and clarify key points <input type="checkbox"/> Well organized <input type="checkbox"/> Answers questions from the instructor or students correctly	0 criteria met	1-2 criteria met	3 criteria met	4 criteria met	All 5 criteria met	X 18	
Delivery of Presentation	<input type="checkbox"/> Holds audience interest <input type="checkbox"/> Speaks clearly and uses correct grammar <input type="checkbox"/> Maintains good posture and eye contact <input type="checkbox"/> Needs little or no prompting from the instructor	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.5	
Peer Evaluation						6 pts. maximum		
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



---

## Advanced Livestock Production and Management

---

### Unit IX—Herd/Flock Management Peer Evaluation

Name \_\_\_\_\_

Write your name on the line above. Fill in the names of your teammates in the spaces provided below. For each category listed below, give each teammate a score from 0 to 3 based on his or her contribution to the project. Use the following guide.

- 0—no contribution
- 1—minimal contribution
- 2—average contribution
- 3—excellent contribution

Add the person's score in each category and place the total in the column at the right. Give the completed score sheet to your instructor.

Project development includes tasks such as planning and research. Project completion includes writing, assembling, or presenting the project. If tasks are divided so that you or your teammates do only one type of task to contribute to the project, consult the instructor about how to adjust your evaluation form.

Name of Teammate	Project Development 0-3 Points	Project Completion 0-3 Points	Total (6 Points Max.)





# **Advanced Livestock Production and Management**

**Curriculum Guide:** *Advanced Livestock Production and Management*

**Unit:** X. Marketing

**Unit Objective:**

Students will demonstrate an understanding of market planning principles by developing marketing plans for two different types of livestock and explaining the anticipated similarities and differences between the two plans in a written report.

**Show-Me Standards:** 1.2, CA4

**Reference:**

*Advanced Livestock Production and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 2000.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lesson 1.
- Students will complete AS.1.1, Developing a Marketing Plan for a Livestock Enterprise; and AS 1.2, Analyzing a Stocker Cattle Operation.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. X-9 (1, 2, 5).

**Performance-Based Assessment:**

Students will complete AS 1.1, Developing a Marketing Plan for a Livestock Enterprise, as part of the instructional activities of the unit. For the performance-based assessment, they will develop a marketing plan for a second type of livestock and compare the two by explaining anticipated similarities and differences in marketing methods, factors affecting enterprise selection, time of year for implementing the plan, and expected results. Students will present their work in a written report.

Assessment will be based on the overall content and presentation of the report.



### **Unit X—Marketing Instructor Guide**

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. As part of the instructional activities for the unit, have students complete AS 1.1, Developing a Marketing Plan for a Livestock Enterprise, for one type of livestock.
2. For the performance-based assessment, have students use the activity sheet to develop a marketing plan for a second type of livestock and compare the two in a written report.
3. Have students use the questions from the activity sheet to form the outline of their report. Students should explain anticipated similarities and differences in the following:
  - ☐ Marketing methods
  - ☐ Factors affecting enterprise selection
  - ☐ Time of year for implementing the plan
  - ☐ Price you expect to receive
4. Students may use material found in the unit or discussed in class as well as additional outside material to complete their report.
  - a. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their report.
  - b. Students should make use of presentation software or other equipment or material as needed to make the report interesting and informative.
5. The final assessment score will be based on the overall content and presentation of the report.



### Unit X—Marketing Student Handout

1. Develop a marketing plan for two different types of livestock discussed in the unit. Fill out two copies of AS 1.1, one for each type of livestock.
2. Compare the two marketing plans in a written report.
3. Use the questions from the activity sheet to form the outline of your report. Explain anticipated similarities and differences in the following:
  - ☐ Marketing methods
  - ☐ Factors affecting enterprise selection
  - ☐ Time of year for implementing the plan
  - ☐ Price you expect to receive
4. You may use material found in the unit or discussed in class as well as additional outside material to complete your report.
  - a. You may not use the source material word for word and must provide the instructor with a complete bibliography of your sources, including any interviews.
  - b. You should make use of presentation software or other equipment or material as needed to make the report interesting and informative.
5. Your final assessment score will be based on the overall content and presentation of your report.



# Advanced Livestock Production and Management

## Unit X—Marketing Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Thoroughness	Addresses marketing methods, selection factors, time of implementation, and expected price for both enterprises	Failed	Poor	Fair	Good	Excellent	X 8.75	
Accuracy	Comparisons are accurate based on information presented	Failed	Poor	Fair	Good	Excellent	X 8.75	
Organization	Well organized	Failed	Poor	Fair	Good	Excellent	X 5	
Presentation	Spelling, grammar, and punctuation are correct	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# **Agricultural Management and Economics**





# **Agricultural Management and Economics**

**Curriculum Guide:** *Agricultural Management and Economics*

**Unit:** I. Economic Principles in Agriculture

**Unit Objective:**

Students will demonstrate their understanding of basic economic principles by producing and presenting a short lesson on a principle and identifying examples that illustrate that principle.

**Show-Me Standards:** 4.6, CA6

**References:**

*Agricultural Management and Economics*, University of Missouri-Columbia, Instructional Materials Laboratory, 1988.

Morgan, J. N. *Making Your Choices Count: Economic Principles for Everyday Decisions*. Ann Arbor, MI: University of Michigan Press, 1982.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete AS 1.3, Effects of Hiring Additional Employees in a Lawn Mowing Service; AS 2.1, Classification of Costs; AS 3.2, Substituting Types of Advertising; AS 4.2, Return on Investment for a Cooperative Store; AS 5.1, Supply and Demand Curves; and AS 6.1, Time Value of Money.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. I-46 and p. I-64.

**Performance-Based Assessment:**

Students will work in teams of three to five to research, teach, and identify examples of one of six economic principles: supply and demand, diminishing returns, fixed and variable costs, substitution of inputs, opportunity cost, and time value of money. Each team will develop an outline to distribute to classmates, and produce and present a lesson as a PowerPoint presentation to other members of the class.

Assessment will be conducted on each team's effort and will be based on the thoroughness and understandability of the lesson presentation and outline.

## **Agricultural Management and Economics**

---

Items to be evaluated will be content, organization, details (including examples), and clarity. Spelling, grammar, punctuation, and capitalization will be factors in the assessment.

### Unit I—Economic Principles in Agriculture Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Students will work in teams of three to five to focus on one of six economic principles covered in this unit: supply and demand, diminishing returns, fixed and variable costs, substitution of inputs, opportunity cost, and time value of money.
2. Team members will work as a unit to research and identify examples of the economic principle assigned by the teacher.
3. Students may use material found in the unit and additional outside material to complete their presentations. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their presentation.
4. After completing research, the team will develop, outline, script, and present a PowerPoint-based lesson to teach other members of the class about the topic.
  - a. The presentation should effectively explain the principle, provide examples to illustrate it, and make it understandable to members of the class.
  - b. The presentation should be thorough, but concise, and range between 10 and 15 minutes, including time for questions and answers.
  - c. Immediately preceding the presentation, the team will submit copies of a sentence outline of the lesson to serve as a reference and study guide for members of the class.
5. Assessment will evaluate the team's effort (both presentation and outline/study guide) and will be based on thoroughness of subject matter and understandability of the lesson.
  - a. Items to be evaluated will be content, organization, details (including examples), and clarity.
  - b. Spelling, grammar, punctuation, and capitalization will be factors in the evaluation.



### Unit I—Economic Principles in Agriculture Student Handout

1. Work in a team of three to five students to focus on one of six economic principles covered in this unit: supply and demand, diminishing returns, fixed and variable costs, substitution of inputs, opportunity cost, and time value of money.
2. You and your teammates will work as a unit to research and identify examples of the assigned economic principle.
3. You may use material found in the unit and additional outside material to complete the presentation. You may not use the source material word for word and must provide a complete bibliography of your sources along with the presentation.
4. After completing research, your team will develop, outline, script, and present a PowerPoint-based lesson to teach other members of the class about your topic.
  - a. Your presentation should effectively explain the principle, provide examples to illustrate it, and make it understandable to members of the class.
  - b. The presentation should be thorough, but concise, and range between 10 and 15 minutes, including time for questions and answers.
  - c. Immediately preceding the presentation, your team will submit copies of a sentence outline of the lesson to serve as a reference and study guide for members of the class.
5. Assessment will evaluate the team's effort (both presentation and outline/study guide) and will be based on thoroughness of subject matter and understandability of the lesson.
  - a. Items to be evaluated will be content, organization, details (including examples), and clarity.
  - b. Spelling, grammar, punctuation, and capitalization will be factors in the evaluation.





## Agricultural Management and Economics

### Unit I—Economic Principles in Agriculture

#### Scoring Guide

Team Topic/Members \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
PowerPoint Presentation	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Details and examples <input type="checkbox"/> Clarity	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 15	
Outline/Study Guide	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Details and examples <input type="checkbox"/> Clarity	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:



# **Agricultural Management and Economics**

**Curriculum Guide:** *Agricultural Management and Economics*

**Unit:** II. Business Management

**Unit Objective:**

Students will demonstrate an understanding of agricultural business management by delivering an oral report and leading a class discussion on one of the 17 factors of business management covered in Unit II.

**Show-Me Standards:** 2.1, SS4

**References:**

*Agricultural Management and Economics*. University of Missouri-Columbia, Instructional Materials Laboratory, 1988.

James, S. C. *Economic & Business Principles in Farm Planning and Production*. Ames, IA: Iowa State University Press, 2000.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 17.
- Students will complete AS 1.1, Business Organizational Structures; AS 2.1, Legal Description Exercise Problem; AS 8.1, Problems in Figuring Sales Tax; AS 9.1, Problems in Figuring Sales Tickets; AS 10.1, Rate Yourself as a Credit Risk; and AS 12.1, The Agricultural Business Corporation.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. II-35, p. II-43 (2), p. II-62, p. II-70, p. II-79, p. II-139, p. II-157, p. II-177, p. II-194 (1), p. II-205, p. II-213.

**Performance-Based Assessment:**

Each student, individually or as a team of two, will deliver a 10- to 15-minute oral presentation on one of the 17 business management topics covered in Unit II. The individual or team will research the topic, develop and distribute a study guide/outline to classmates, make the presentation, and lead a class discussion and address questions about the topic. Each individual and team has the option of producing a PowerPoint presentation to aid in the delivery of the oral presentation.

## **Agricultural Management and Economics**

---

Assessment will be conducted on the oral presentation and the written study guide/outline, and will be based on the thoroughness and understandability of the presentation and outline. Items to be evaluated will be content, organization, details (including examples), and clarity. Spelling, grammar, punctuation, and capitalization also will be factors in the assessment. Extra points (maximum of 10) may be awarded based on the quality of the subsequent class discussion and question and answer period.

### Unit II—Business Management Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Students will work individually or in teams of two to research, report, and lead a class discussion on one of the 17 topics listed in Unit II.
  - a. The topics are as follows:
    - 1) Ways of organizing a business
    - 2) Steps in buying land
    - 3) Starting an agricultural business
    - 4) Using contracts in agriculture
    - 5) Business procedures
    - 6) Agribusiness records
    - 7) Managing inventory and determining selling price
    - 8) Agricultural business customer transactions
    - 9) Preparation and importance of sales tickets
    - 10) Customer credit
    - 11) Loans for agricultural businesses
    - 12) Conducting a financial analysis
    - 13) Effects of income tax on the agricultural business
    - 14) Calculating depreciation for tax purposes
    - 15) Managing risk in the agricultural business
    - 16) Insurance needs in the agricultural business
    - 17) Cooperating agencies in agriculture
  - b. Assign a topic or ask students to volunteer for a topic.
2. Students may use material in the units and additional outside material to complete their report. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their report.
3. After completing research on the topic, each individual or team will develop an oral presentation, write a study guide/outline, and lead a class discussion on the topic.
  - a. The presentation should effectively explain the topic, provide examples to illustrate it, and make it understandable to members of the class.
  - b. The presentation should be thorough, but concise, and range between 10 and 15 minutes.

## **Agricultural Management and Economics**

---

- c. Immediately preceding the presentation, the individual or team will submit copies of a study guide/outline on the topic to serve as a reference for members of the class.
  - d. After the presentation, the individual or team will lead a class discussion of the topic and address questions from classmates.
- 4. Assessment will cover the overall effort (both oral presentation and study guide/outline) and will be based on how thoroughly the subject matter is covered and the understandability of the presentation and the study guide/outline.
  - a. Items to be evaluated will be content, organization, details (including examples), and clarity.
  - b. Spelling, grammar, punctuation, and capitalization will be assessed on the written portion.
  - c. Extra points (maximum of 10) will be awarded based on the quality of the subsequent class discussion and question and answer period. Factors include staying on topic, guiding the discussion, answering most questions correctly, and demonstrating mastery of the subject matter.

**Unit II—Business Management  
Student Handout**

1. You will work individually or in teams of two to research, report, and lead a class discussion on one of the 17 topics listed in Unit II.
  - a. The topics are as follows:
    - 1) Ways of organizing a business
    - 2) Steps in buying land
    - 3) Starting an agricultural business
    - 4) Using contracts in agriculture
    - 5) Business procedures
    - 6) Agribusiness records
    - 7) Managing inventory and determining selling price
    - 8) Agricultural business customer transactions
    - 9) Preparation and importance of sales tickets
    - 10) Customer credit
    - 11) Loans for agricultural businesses
    - 12) Conducting a financial analysis
    - 13) Effects of income tax on the agricultural business
    - 14) Calculating depreciation for tax purposes
    - 15) Managing risk in the agricultural business
    - 16) Insurance needs in the agricultural business
    - 17) Cooperating agencies in agriculture
  - b. Volunteer for a topic or one will be assigned by the teacher.
2. You may use material in the units and additional outside material to complete your report. You may not use the source material word for word and must provide a complete bibliography of the sources along with your report.
3. After completing research on the topic, you or your team will develop an oral presentation, write a study guide/outline, and lead a class discussion on the topic.
  - a. Your presentation should effectively explain the topic, provide examples to illustrate it, and make it understandable to members of the class.
  - b. Your presentation should be thorough, but concise, and range between 10 and 15 minutes.
  - c. Immediately preceding the presentation, you or your team will distribute copies of a study guide/outline on the topic to serve as a reference for members of the class.
  - d. After the presentation, you or your team will lead a class discussion of the topic and address questions from classmates.

4. Assessment will cover the overall effort (both oral presentation and study guide/outline) and will be based on how thoroughly the subject matter is covered and the understandability of the presentation and the study guide/outline.
  - a. Items to be evaluated will be content, organization, details (including examples), and clarity.
  - b. Spelling, grammar, punctuation, and capitalization will be assessed on the written portion.
  - c. Extra points (maximum of 10) will be awarded based on the quality of the subsequent class discussion and question and answer period. Factors include staying on topic, guiding the discussion, answering most questions correctly, and demonstrating mastery of the subject matter.



## Agricultural Management and Economics

### Unit II—Business Management Scoring Guide

Name(s) \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Oral Presentation	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Details and examples <input type="checkbox"/> Clarity	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 15	
Study Guide/Outline	<input type="checkbox"/> Content <input type="checkbox"/> Organization <input type="checkbox"/> Details and examples <input type="checkbox"/> Clarity	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Technical Considerations for Written Elements	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
Class Discussion	<input type="checkbox"/> Stays on topic <input type="checkbox"/> Guides discussion <input type="checkbox"/> Answers most questions correctly <input type="checkbox"/> Demonstrates mastery of subject matter	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	Extra Points
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.  
Extra Points \_\_\_\_\_/10 pts.

Comments:



# Agricultural Management and Economics

**Curriculum Guide:** *Agricultural Management and Economics*

**Unit:** III. Planning the Farm Business

**Unit Objective:**

Students will demonstrate their understanding of farm business principles by applying those principles to the planning and operation of an actual business enterprise.

**Show-Me Standards:** 3.8, MA3

**References:**

*Agribusiness Sales, Marketing, and Management*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

*Agricultural Management and Economics*. University of Missouri-Columbia, Instructional Materials Laboratory, 1988.

James, S. C. *Economic & Business Principles in Farm Planning and Production*. Ames, IA: Iowa State University Press, 2000.

*Missouri Farm Business Planning Handbook*. University of Missouri-Columbia, University Extension, 1990.

Students may use additional outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 9.
- Students will complete AS 2.1, Manager Self-Evaluation; AS 4.1, Determining Total Costs of a Tillage Operation; AS 6.1, Example Labor Budget; AS 8.1, Estimating Income Taxes and Social Security Taxes; and AS 9.1, Farm Plan Grade Sheet.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. III-5, p. III-39, p. III-52, p. III-69 (3), and p. III-81.

**Performance-Based Assessment:**

Each student will join a group of five to eight students to plan, organize, and execute a school-based fund-raising activity. The activity will follow the steps presented in the appendix following Unit IX in the *Agribusiness Sales, Marketing, and Management* Instructor Guide.

The major focus of the assessment will be on the planning, preparation, execution, and outcome of the business plan. These four factors will be reflected in a final written report covering administration, operations, finance, and sales and promotion. Extra points will be awarded for a positive outcome (i.e., the business shows a profit).

### Unit III—Planning the Farm Business Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Have students form teams of five to eight members to organize, plan, and execute a school-based fund-raising activity.
  - a. When conducting this activity, students will gain experience in goal setting; situation evaluation; equipment, labor, and capital needs determination; income estimation; and plan revision.
  - b. To help guide the activity, provide the appendix that follows Unit IX in the *Agribusiness Sales, Marketing, and Management* Instructor Guide.
2. Team members must first assess possible business opportunities and select the specific fund-raising activity to pursue from a list of possibilities appropriate for the school community. Suggestions appear on p. A-1 in the *Agribusiness Sales, Marketing, and Management* Instructor Guide.
3. The team will devise a method to assign jobs/tasks to its members.
  - a. Jobs/tasks to be assigned might include president, vice president for operations, vice president for finance, vice president for sales and promotion, and various support staff for administrative, production, and sales tasks.
  - b. Because of the limited number of personnel in the venture, officers should also cover support staff positions.
  - c. The president's responsibilities will focus on administering the overall team effort, including documenting all team activities and submitting the team's final written report.
  - d. Operations will be responsible for producing or procuring the goods or services to be sold for the fund-raising activity.
  - e. Finance will tackle the tasks of securing financial backing, projecting expenses and income, and accounting for expenses and income.
  - f. Sales and promotion will market, advertise, and sell the product or service.
4. At the conclusion of the effort, the president's written report should describe the planning, preparation, execution, and outcome of each function of the chosen fund-raising activity.

## **Agricultural Management and Economics**

---

5. Students may not use the source material word for word and must provide a complete bibliography of their sources along with their report.
6. Assessment will focus primarily on the final written report, which will be evaluated for planning, preparation, execution, and outcome of each business function: administration, operations, finance, and sales and promotion.
  - a. Technical factors (spelling, grammar, punctuation, and capitalization) also will be assessed.
  - b. Extra points are possible if the fund-raising activity demonstrates a profit.

**Unit III—Planning the Farm Business  
Student Handout**

1. Join a team with five to eight fellow students to organize, plan, and execute a school-based fund-raising activity. Your instructor will provide the steps to guide you.
2. Your team's members must first assess possible business opportunities and select the specific fund-raising activity to pursue from a list of possibilities appropriate for your school community.
3. Your team will devise a method to assign jobs/tasks to its members.
  - a. Jobs/tasks to be assigned might include president, vice president for operations, vice president for finance, vice president for sales and promotion, and various support staff for administrative, production, and sales tasks.
  - b. Because of the limited number of personnel in the venture, officers should also cover support staff positions.
  - c. The president's responsibilities will focus on administering the overall team effort, including documenting all team activities and submitting the team's final written report.
  - d. Operations will be responsible for producing or procuring the goods or services to be sold for the fund-raising activity.
  - e. Finance will tackle the tasks of securing financial backing, projecting expenses and income, and accounting for expenses and income.
  - f. Sales and promotion will market, advertise, and sell the product or service.
4. At the conclusion of your team's effort, the president's written report should describe the planning, preparation, execution, and outcome of each function of the chosen fund-raising activity.
5. You may not use the source material word for word and must provide a complete bibliography of the sources along with your report.
6. Assessment will focus primarily on the final written report, which will be evaluated for planning, preparation, execution, and outcome of each business function: administration, operations, finance, and sales and promotion.
  - a. Technical factors (spelling, grammar, punctuation, and capitalization) also will be assessed.
  - b. Extra points are possible if the fund-raising activity demonstrates a profit.





# Agricultural Management and Economics

## Unit III—Planning the Farm Business Scoring Guide

Fund Raising Activity \_\_\_\_\_

Team members \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Administration	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Operations	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Finance	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Sales and Promotion	<input type="checkbox"/> Planning <input type="checkbox"/> Preparation <input type="checkbox"/> Execution <input type="checkbox"/> Outcome	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5.625	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	

Positive Outcomes	<input type="checkbox"/> Profit	Loss or break even				Profit	X 2.5	Extra <u>Points</u>
<b>TOTAL</b>								

**Final Assessment Total** \_\_\_\_/100 pts.

**Extra Points** \_\_\_\_/10 pts.

**Comments:**

# **Agricultural Management and Economics**

**Curriculum Guide:** *Agricultural Management and Economics*

**Unit:** IV. Operating the Agricultural Business

**Unit Objective:**

Students will demonstrate an understanding of the promotional aspects of running an agricultural business by designing either a promotional display for their supervised agricultural experience (SAE) or a sales display for a local business.

**Show-Me Standards:** 4.5, CA6

**References:**

*Agricultural Management and Economics*. University of Missouri-Columbia, Instructional Materials Laboratory, 1988.

McGuire, J. E. *Advertising and Display in Agribusiness*. New York: McGraw-Hill, 1979.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete AS 3.1, Rate Your Sales Personality; and AS 4.1, The Cost of Media Advertising.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. IV-5, p. IV-35 (1), and p. IV-57.

**Performance-Based Assessment:**

Each student will design a plan for a promotional display. The display could be related to his or her SAE or it could be for a local business. The design must account for the following factors: theme, subject matter, setting, layout, graphic devices, and a plan of action/construction. The design will consist of a short report, sketches, photos, and copy blocks.

Assessment will review all factors of the design for elements such as unity, communication value, and simplicity. Spelling, grammar, punctuation, and capitalization will also be assessed on the written portion.



### Unit IV—Operating the Agricultural Business Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will work individually to design either a promotional display for his or her SAE or a sales display for a local business.
2. The student's display design will take into account the following six factors:
  - ☐ Theme—The student must determine the central idea of the display that will unify all of its elements.
  - ☐ Subject matter—The student must decide what specific thing(s) should be promoted.
  - ☐ Setting—Where does the student intend the display to appear? For what occasion is the display intended? What are the physical limitations of the space in which the display will appear?
  - ☐ Layout—What is the format of the display? What is the pattern of the display? How do the various elements (e.g., illustrations, copy blocks) of the display relate to each other thematically and physically? What are plans for scale and color? Will sound or animation be used in the display?
  - ☐ Graphic devices—Display elements, such as copy blocks, photos, and illustrations, should contribute to the theme and subject matter.
  - ☐ Plan of action/construction—What supplies and tools are needed for construction? How long will construction take? Will the display be portable, or is it a onetime effort to be built on the site where it will be displayed?
3. Each student will submit his or her design with these four elements:
  - ☐ A 400- to 600-word report that addresses the six factors stated previously
  - ☐ Rough sketches that help illustrate the physical layout of the display
  - ☐ Three to six photos or illustrations to be used in the display that support the theme and help illustrate the subject matter (Note that this part could help students create photos to submit with their proficiency award applications.)
  - ☐ Copy blocks to be used in the display in conjunction with photos or other illustrations

4. Assessment will examine the following areas:
  - a. The six factors of design
    - 1) Theme–Is it unifying and easily understandable?
    - 2) Subject matter–Is it appropriately tied to the theme and does it have communication value?
    - 3) Setting–Is it appropriate for the theme and the message of the subject matter?
    - 4) Layout–Is it simple, straightforward, and uncluttered? Do sketches effectively illustrate the design?
    - 5) Graphic devices–Do display elements, such as copy blocks, photos, and illustrations, contribute to the theme and subject matter?
    - 6) Plan of action/construction–Is it simple? Is it appropriate for the setting and subject matter?
  - b. Spelling, grammar, punctuation, and capitalization

**Unit IV—Operating the Agricultural Business**  
**Student Handout**

1. You will work individually to design either a promotional display for your SAE or a sales display for a local business.
2. Your display design will take into account the following six factors:
  - ☐ Theme—You must determine the central idea of the display that will unify all of its elements.
  - ☐ Subject matter—You must decide what specific thing(s) should be promoted.
  - ☐ Setting—Where do you intend the display to appear? For what occasion is the display intended? What are the physical limitations of the space in which the display will appear?
  - ☐ Layout—What is the format of the display? What is the pattern of the display? How do the various elements (e.g., illustrations, copy blocks) of the display relate to each other thematically and physically? What are plans for scale and color? Will sound or animation be used in the display?
  - ☐ Graphic devices—Display elements, such as copy blocks, photos, and illustrations, should contribute to the theme and subject matter.
  - ☐ Plan of action/construction—What supplies and tools are needed for construction? How long will construction take? Will the display be portable, or is it a onetime effort to be built on the site where it will be displayed?
3. You will submit your design with these four elements:
  - ☐ A 400- to 600-word report that addresses the six factors stated previously
  - ☐ Rough sketches that help illustrate the physical layout of the display
  - ☐ Three to six photos or illustrations to be used in the display that support the theme and help illustrate the subject matter
  - ☐ Copy blocks to be used in the display in conjunction with photos or other illustrations
4. Assessment will examine the following areas:
  - a. The six factors of design
    - 1) Theme—Is it unifying and easily understandable?
    - 2) Subject matter—Is it appropriately tied to the theme and does it have communication value?
    - 3) Setting—Is it appropriate for the theme and the message of the subject matter?
    - 4) Layout—Is it simple, straightforward, and uncluttered? Do sketches effectively illustrate the design?

- 5) Graphic devices–Do display elements, such as copy blocks, photos, and illustrations, contribute to the theme and subject matter?
- 6) Plan of action/construction–Is it simple? Is it appropriate for the setting and subject matter?
- b. Spelling, grammar, punctuation, and capitalization



# Agricultural Management and Economics

## Unit IV—Operating the Agricultural Business Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Theme	<input type="checkbox"/> Unifying and easily understandable	Failed	Poor	Fair	Good	Excellent	X 3.75	
Subject Matter	<input type="checkbox"/> Appropriately ties to theme and exhibits communication value	Failed	Poor	Fair	Good	Excellent	X 3.75	
Setting	<input type="checkbox"/> Appropriate for theme and subject matter	Failed	Poor	Fair	Good	Excellent	X 3.75	
Layout	<input type="checkbox"/> Simple, straightforward, and uncluttered <input type="checkbox"/> Sketches illustrate design	Failed	Poor	Fair	Good	Excellent	X 3.75	
Graphic Devices	<input type="checkbox"/> Contribute to communication of theme and subject matter	Failed	Poor	Fair	Good	Excellent	X 3.75	
Plan of Action/Construction	<input type="checkbox"/> Simple and appropriate for setting and subject matter	Failed	Poor	Fair	Good	Excellent	X 3.75	
Technical Considerations	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 2.5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_/100 pts.

Comments:



# **Developing Programs of Supervised Agricultural Experience**





# **Developing Programs of Supervised Agricultural Experience**

## **Curriculum Guide:**

*Developing Programs of Supervised Agricultural Experience*

## **Unit: I. Developing an SAE Program**

### **Unit Objective:**

Students will demonstrate an understanding of the steps involved in developing an SAE program by completing one of two forms in the *Missouri Agricultural Record Book for Secondary Students*.

### **Show-Me Standards: 1.8, CA4**

### **References:**

*Developing Programs of Supervised Agricultural Experience*. University of Missouri-Columbia, Instructional Materials Laboratory, 1989.

*Missouri Agricultural Record Book for Secondary Students*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

### **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 4.
- Students will complete WS 2.1, Supervised Agricultural Experience Programs; and WS 3.1, Goals of My SAE Program.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following location: p. I-38 (1, 2).

### **Performance-Based Assessment:**

Each student will design a supervised agricultural experience (SAE) for himself or herself, based on the points covered in Unit I. Students will describe their design by completing a form: either Form 100 (Ownership Business Agreement) or Form 101 (A Placement Training Agreement) from the *Missouri Agricultural Record Book for Secondary Students*.

Assessment will be based on the quality and completeness of the information in the selected form.

## **Developing Programs of Supervised Agricultural Experience**

---

---

## Developing Programs of Supervised Agricultural Experience

---

### Unit I—Developing an SAE Program Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will work individually to research, design, and describe a supervised agricultural experience for his or her own use.
2. Each student must complete one of two forms from the *Missouri Agricultural Record Book for Secondary Students*: Form 100 (Ownership Business Agreement) or Form 101 (A Placement Training Agreement), whichever is appropriate for the student's SAE.
- 3A. Student's submitting Form 100 must complete the following sections, being as specific and detailed as possible.
  - ☐ Kind, size, and duration of project
  - ☐ What I will furnish
  - ☐ What the other party will furnish
  - ☐ What part of the returns I will receive
  - ☐ What part of the returns the other party will receive
  - ☐ Other agreements
  - ☐ Approvals/signatures

OR

- 3B. Student's submitting Form 101 must complete the following sections, being as specific and detailed as possible.
  - ☐ Introductory information
  - ☐ The student agrees to:
  - ☐ The teacher-coordinator, in behalf of the school, agrees to:
  - ☐ The parent agrees to:
  - ☐ The employer agrees to:
  - ☐ All parties agree to:
  - ☐ Approvals/signatures
4. Assessment will be based on the quality and completeness of information in each section of the selected form.





---

## Developing Programs of Supervised Agricultural Experience

---

### Unit I—Developing an SAE Program Student Handout

1. Work individually to research, design, and describe a supervised agricultural experience designed for your own use.
2. Complete one of two forms from the *Missouri Agricultural Record Book for Secondary Students*: Form 100 (Ownership Business Agreement) or Form 101 (A Placement Training Agreement), whichever is appropriate for your SAE.
- 3A. When submitting Form 100 complete the following sections, being as specific and detailed as possible.
  - ☐ Kind, size, and duration of project
  - ☐ What I will furnish
  - ☐ What the other party will furnish
  - ☐ What part of the returns I will receive
  - ☐ What part of the returns the other party will receive
  - ☐ Other agreements
  - ☐ Approvals/signatures

OR

- 3B. When submitting Form 101 complete the following sections, being as specific and detailed as possible.
  - ☐ Introductory information
  - ☐ The student agrees to:
  - ☐ The teacher-coordinator, in behalf of the school, agrees to:
  - ☐ The parent agrees to:
  - ☐ The employer agrees to:
  - ☐ All parties agree to:
  - ☐ Approvals/signatures
4. Assessment will be based on the quality and completeness of information in each section of the selected form.



## Developing Programs of Supervised Agricultural Experience

**Unit I—Developing an SAE Program**  
**Scoring Guide: Form 100**

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Kind, Size, and Duration of Project	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
What I Will Furnish	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
What Other Party Will Furnish	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
What Part of Returns I Will Receive	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
What Part of Returns Other Party Will Receive	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
Other Agreements	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
Approvals/Signatures	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 1	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_/100 pts.

**Comments:**



## Developing Programs of Supervised Agricultural Experience

**Unit I—Developing an SAE Program**  
**Scoring Guide: Form 101**

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Introductory Information	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
The Student Agrees to:	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
The Teacher-Coordinator Agrees to:	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
The Parent Agrees to:	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
The Employer Agrees to:	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
All Parties Agree to:	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 4	
Approvals/Signatures	<input type="checkbox"/> Quality and completeness	Failed	Poor	Fair	Good	Excellent	X 1	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_/100 pts.

**Comments:**



# **Developing Programs of Supervised Agricultural Experience**

## **Curriculum Guide:**

*Developing Programs of Supervised Agricultural Experience*

**Unit:** II. Using the *Missouri Agricultural Record Book for Secondary Students*

## **Unit Objective:**

Students will demonstrate the ability to use selected forms in the *Missouri Agricultural Record Book for Secondary Students* by using a list of sample entries to complete the applicable forms in the book.

**Show-Me Standards:** 1.8, MA1

## **References:**

*Developing Programs of Supervised Agricultural Experience*. University of Missouri-Columbia, Instructional Materials Laboratory, 1989.

*Missouri Agricultural Record Book for Secondary Students*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

*Sample Entries for High School Record*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

## **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete WS 2.1, Developing a Budget for a Sample Ownership SAE Project; and WS 2.2, Developing a Budget for a Sample Placement SAE Project.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. II-4 (2), p. II-31, p. II-38 (1), and p. II-47 (1).

## **Performance-Based Assessment:**

Each student will complete the applicable forms in the *Missouri Agricultural Record Book for Secondary Students* with information derived from a list of sample entry items.

Assessment will be based on the degree of accuracy and thoroughness of the completed forms.

## **Developing Programs of Supervised Agricultural Experience**

---



---

## Developing Programs of Supervised Agricultural Experience

---

### Unit II—Using the Missouri Agricultural Record Book for Secondary Students Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Using a list of sample entries, each student will place the sample entries in the applicable forms of the *Missouri Agricultural Record Book for Secondary Students*.
  - a. The teacher will provide the list of sample entries.
  - b. The list will cover a year of an ownership production operation.
2. Each student will accurately and thoroughly complete the following forms:
  - ☐ Receipts (Forms 1 and 2)
  - ☐ Expenditures (Forms 3 and 4)
  - ☐ Cash Flow (Form 5)
  - ☐ Depreciation Schedule Capital Machinery, Equipment, and Land (Form 6)
  - ☐ Capital Livestock/ Animals Purchased (Form 7)
  - ☐ Capital Raised (Non-depreciable) & Non-Breeding Livestock/ Animals (Form 8)
  - ☐ Inventory of Crops, Supplies, Capital Machinery, Buildings, and Land (Form 9)
  - ☐ Beginning of Year Balance Sheet (Form 10b)
  - ☐ Ending of Year Balance Sheet (Form 10e)
  - ☐ Profit or Loss Statement (Form 11)
3. Assessment will be based on the accuracy and thoroughness of the recorded data.



## **Developing Programs of Supervised Agricultural Experience**

---

### **Unit II—Using the Missouri Agricultural Record Book for Secondary Students Student Handout**

1. Using a list of sample entries, you will place the sample entries in the applicable forms of the *Missouri Agricultural Record Book for Secondary Students*.
  - a. Your teacher will provide the list of sample entries.
  - b. The list will cover a year of an ownership production operation.
2. You will accurately and thoroughly complete the following forms:
  - ☐ Receipts (Forms 1 and 2)
  - ☐ Expenditures (Forms 3 and 4)
  - ☐ Cash Flow (Form 5)
  - ☐ Depreciation Schedule Capital Machinery, Equipment, and Land (Form 6)
  - ☐ Capital Livestock/ Animals Purchased (Form 7)
  - ☐ Capital Raised (Non-depreciable) & Non-Breeding Livestock/ Animals (Form 8)
  - ☐ Inventory of Crops, Supplies, Capital Machinery, Buildings, and Land (Form 9)
  - ☐ Beginning of Year Balance Sheet (Form 10b)
  - ☐ Ending of Year Balance Sheet (Form 10e)
  - ☐ Profit or Loss Statement (Form 11)
3. Assessment will be based on the accuracy and thoroughness of the recorded data.



## Developing Programs of Supervised Agricultural Experience

### Unit II—Using the Missouri Agricultural Record Book for Secondary Students Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Form 1: Receipts	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 2: Receipts	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 3: Expenditures	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 4: Expenditures	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 5: Cash Flow	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 6: Depreciation Schedule Capital Machinery, Equipment, and Land	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 7: Capital Livestock/ Animals Purchased	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	

Form 8: Capital Raised (Non-depreciable) & Non-Breeding Livestock/ Animals	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 9: Inventory of Crops, Supplies, Capital Machinery, Buildings, and Land	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 10b: Beginning of Year Balance Sheet	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 10e: Ending of Year Balance Sheet	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
Form 11: Profit or Loss Statement	How thoroughly and accurately are entries recorded?	Failed	Poor	Fair	Good	Excellent	X 2.0834	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_/100 pts.

Comments:

# **Developing Programs of Supervised Agricultural Experience**

## **Curriculum Guide:**

*Developing Programs of Supervised Agricultural Experience*

## **Unit:** III. Analyzing the SAE Program

### **Unit Objective:**

Students will demonstrate an understanding of the process and value of analyzing SAE data by completing an FFA State Proficiency Award application.

### **Show-Me Standards:** 1.8, CA4

### **References:**

*Developing Programs of Supervised Agricultural Experience*. University of Missouri-Columbia, Instructional Materials Laboratory, 1989.

FFA State Proficiency Award application forms (entrepreneurship or placement)

[http://www.dese.state.mo.us/divvoted/ag\\_ffa\\_applications\\_awards.htm](http://www.dese.state.mo.us/divvoted/ag_ffa_applications_awards.htm).

*Missouri Agricultural Record Book for Secondary Students*. University of Missouri-Columbia, Instructional Materials Laboratory, 1997.

### **Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. III-5 and p. III-26 (1).

### **Performance-Based Assessment:**

Each student will complete an FFA State Proficiency Award application using data derived from an actual SAE project or from a hypothetical project developed for Unit II, Using the Missouri Agricultural Record Book for Secondary Students.

Assessment will be based on the degree of accuracy and thoroughness of the completed application.

## **Developing Programs of Supervised Agricultural Experience**

---



### Unit III—Analyzing the SAE Program Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will complete an FFA State Proficiency Award application form.
  - a. Each student must download the award application form from the DESE website  
([http://www.dese.state.mo.us/divvoted/ag\\_ffa\\_applications\\_awards.htm](http://www.dese.state.mo.us/divvoted/ag_ffa_applications_awards.htm)).
  - b. To complete the form the student will use personal information and data recorded in his or her *Missouri Agricultural Record Book for Secondary Students*.
2. Accurately and thoroughly complete the following sections:
  - ☐ General information (p. 1)
  - ☐ Scope (p. 2)
  - ☐ Income and Expense Summary (p. 2)
  - ☐ Achievements (p. 3)
  - ☐ Inventory (p. 3)
  - ☐ Income (p. 4)
  - ☐ Net Worth (p. 4)
  - ☐ FFA Leadership Activities (p. 4)
  - ☐ Other Activities (p. 4)
  - ☐ Project Story (p. 5)
  - ☐ Supporting Documentation (pp. 6-11) (Note: Supporting pictures are not required of applicants with hypothetical SAEs.)
3. Assessment will be based on the thoroughness and accuracy of the completed sections.



### Unit III—Analyzing the SAE Program Student Handout

1. Complete an FFA State Proficiency Award application form.
  - a. You must download the award application form from the DESE website ([http://www.dese.state.mo.us/divvoted/ag\\_ffa\\_applications\\_awards.htm](http://www.dese.state.mo.us/divvoted/ag_ffa_applications_awards.htm)).
  - b. To complete the form you will use personal information and data recorded in your *Missouri Agricultural Record Book for Secondary Students*.
2. Accurately and thoroughly complete the following sections:
  - ☐ General information (p. 1)
  - ☐ Scope (p. 2)
  - ☐ Income and Expense Summary (p. 2)
  - ☐ Achievements (p. 3)
  - ☐ Inventory (p. 3)
  - ☐ Income (p. 4)
  - ☐ Net Worth (p. 4)
  - ☐ FFA Leadership Activities (p. 4)
  - ☐ Other Activities (p. 4)
  - ☐ Project Story (p. 5)
  - ☐ Supporting Documentation (pp. 6-11) (Note: Supporting pictures are not required of applicants with hypothetical SAEs.)
3. Assessment will be based on the thoroughness and accuracy of the completed sections.



## Developing Programs of Supervised Agricultural Experience

### Unit III—Analyzing the SAE Program Scoring Guide: Proficiency Award Application

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
General Information	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Scope	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Income and Expense Summary	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Achievements	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Inventory	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Income	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Net Worth	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
FFA Leadership Activities	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	

Other Activities	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Project Story	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.25	
Supporting Documentation	How thoroughly and accurately is the section completed?	Failed	Poor	Fair	Good	Excellent	X 2.5	
<b>TOTAL</b>								

**Final Assessment Total \_\_\_\_/100 pts.**

**Comments:**

# **Leadership & Personal Development**







# Leadership and Personal Development

**Curriculum Guide:** *Leadership and Personal Development*

**Unit:** I. Leadership I

**Unit Objective:**

Students will discover and understand the benefits of FFA membership by interviewing a current FFA member and reporting findings in a “top 10 list” of benefits.

**Show-Me Standards:** 2.1, CA1

**References:**

*Leadership and Personal Development*, University of Missouri-Columbia, Instructional Materials Laboratory, 1991.

*Official FFA Manual*. National FFA Organization. (Students should use the most current manual as a reference.)

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete WS 2.1, History and Traditions of the FFA; and WS 3.1, Opportunities for Individuals in the FFA.
- Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations: p. I-4 (3) and p. I-58 (1).

**Performance-Based Assessment:**

Students will interview a current FFA member and write a “top 10 list” based upon the interview. The list will highlight the benefits of FFA membership as cited by the interviewee.

Assessment will be based on the overall content of the list and technical considerations such as correct spelling.



### Unit I—Leadership I Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Each student will identify a current FFA member to be interviewed, schedule the interview, and conduct the interview.
2. During the interview, the student should guide the interviewee to discuss his or her reasons for joining FFA and how FFA membership will help his or her career development.
3. Based on the notes derived from the interview, the student will write a “top 10 list” of benefits of FFA membership.
4. Assessment will be based on the quantity listed (10 benefits required), the overall content of the list, and the correct spelling of each benefit listed.
5. Suggested exercise extension: As a nongraded, group participation effort, this exercise could be extended to have the class compare all of the “top 10 lists” to discover the most frequently mentioned (or #1) benefit of FFA membership.



### Unit I—Leadership I Student Handout

1. Identify a current FFA member to be interviewed, schedule the interview, and conduct the interview.
2. During the interview, you should guide the interviewee to discuss his or her reasons for joining FFA and how FFA membership will help his or her career development.
2. Based on the notes derived from the interview, write a “top 10 list” of benefits of FFA membership.
4. Assessment will be based on the quantity listed (10 benefits required), the overall content of the list, and the correct spelling of each benefit listed.



Leadership and Personal Development

Unit I—Leadership I  
Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criterion	Points										Weight	Total
		1	2	3	4	5	6	7	8	9	10		
List Element	Describes Benefits of FFA Membership (1 point per benefit listed)											X 9	
Technical Considerations	Spelling (1 point for each benefit spelled correctly)											X 1	
Total													

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:





# Leadership and Personal Development

**Curriculum Guide:** *Leadership and Personal Development*

**Unit:** II. Leadership II

**Unit Objective:**

Students will familiarize themselves with activities related to FFA by developing, organizing, and presenting a panel discussion on a general theme related to an aspect of FFA.

**Show-Me Standards:** 2.3, 4.6, CA6

**References:**

*Leadership and Personal Development*. University of Missouri-Columbia, Instructional Materials Laboratory, 1991.

National FFA Organization. Accessed February 12, 2003, from <http://www.FFA.org>.

*Official FFA Manual*. National FFA Organization. (Students should use the most current manual as a reference.)

Students may use other outside sources to complete this activity.

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 6.
- Students will complete WS 1.2, Developing a New Fairground.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. II-17 (2) and p. II-31 (1).

**Performance-Based Assessment:**

Students will form groups of four or five to decide on a general theme of interest on which group members will conduct research. Based on the research, each member will deliver an oral report as part of a group panel discussion. General themes will relate to any aspect of FFA activities.

Assessment will be based on the overall content of each oral presentation, the written script of each presenter, and the subsequent group discussion. Significant weight will be given to the thoroughness, informativeness, and organization of each individual presentation. Spelling, grammar, punctuation, and capitalization will be major assessment focuses of the written portion of the assignment.



### Unit II—Leadership II Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Divide students into groups of four or five to select a general theme of interest and to identify specific topics for individual reports related to the theme of a panel discussion.
  - a. General themes can relate to any aspect of FFA activities.
  - b. These can include, but not be confined to, such topics as the following: FFA history, organizational makeup, officer titles and duties, parliamentary procedure, other groups' organization and activities as compared to FFA, and application of FFA experiences to career and personal goals.
2. The group will assign to each member one of the specific topics to research. Each member will deliver an oral report of 4-6 minutes in length, based on his or her research.
  - a. Students may not use source material word for word and must provide a complete bibliography of the sources along with their report.
  - b. After delivery of all individual reports, the panel will discuss pertinent points related to those individual reports and the group's general theme.
  - c. Panel members may ask questions or make comments regarding topics covered in the individual presentations.
  - d. Panel discussion should serve to unify individual topics as elements of the group's general theme.
  - e. Questions from other students in the class and from the teacher may be solicited during the panel discussion.
3. Assessment will be based on the overall content of each oral presentation, the written script of each presenter, and the subsequent group discussion.
  - a. Significant weight will be given to the thoroughness, informativeness, and organization of each individual presentation.
  - b. Spelling, grammar, punctuation, and capitalization will be major assessment focuses of the written portion of the assignment.
  - c. Participation in the group discussion following the individual presentations is critical to the success of the group effort. Failure by an individual to participate in some manner in the group discussion should result in a reduction (by one full letter grade) in that individual's final score.



### Unit II—Leadership II Student Handout

1. Work in groups of four or five students to select a general theme of interest and to identify specific topics for individual reports related to the theme of a panel discussion.
  - a. General themes can relate to any aspect of FFA activities.
  - b. The group will assign to each member one of the specific topics to research.
  - c. You may not use source material word for word and must provide the instructor with a complete bibliography of your sources along with your written script.
  - d. Each member will deliver an oral report of 4-6 minutes in length, based on his or her research.
2. After delivery of all individual reports, members of your panel will discuss pertinent points related to the individual reports and your group's general theme.
  - a. You, as a panel member, may ask questions or make comments regarding topics covered in the individual presentations.
  - b. Panel discussion should serve to unify individual topics as elements of the group's general theme.
  - c. Other students in the class and the teacher may ask questions during the panel discussion.
3. Assessment will be based on the overall content of your oral presentation, the written script of your presentation, and the subsequent group discussion.
  - a. Significant weight will be given to the thoroughness, informativeness, and organization of your presentation.
  - b. Spelling, grammar, punctuation, and capitalization will be major assessment focuses of the written portion of the assignment.
  - c. Participation in the group discussion following the individual presentations is critical to the success of the group effort. If you fail to participate in some manner in the group discussion, your final score may be reduced by one full letter grade. Examples of participation include asking or answering questions, contributing explanatory or enlightening comments, and defending your position from critics.



## Leadership and Personal Development

### Unit II—Leadership II Scoring Guide

Name \_\_\_\_\_

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Information and Content of Oral Presentation	<div><input type="checkbox"/> Information complete</div> <div><input type="checkbox"/> All facts are accurate</div> <div><input type="checkbox"/> Covers subject thoroughly</div> <div><input type="checkbox"/> Describes or demonstrates the selected subject</div>	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 12.5	
Delivery of Oral Presentation	<div><input type="checkbox"/> Well organized</div> <div><input type="checkbox"/> Engages interest of listener</div> <div><input type="checkbox"/> Informs audience</div> <div><input type="checkbox"/> Clearly presented</div>	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 6.25	
Technical Considerations	<div><input type="checkbox"/> Grammar</div> <div><input type="checkbox"/> Spelling</div> <div><input type="checkbox"/> Punctuation</div> <div><input type="checkbox"/> Capitalization</div>	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 6.25	
Group Discussion	<div><input type="checkbox"/> Contributes to the group discussion following delivery of oral presentations</div>	Participated				Did not participate	X (-2.5)	Negative <u>Points</u>
TOTAL								

Final Assessment Total \_\_\_\_\_/100 pts.

Negative Points \_\_\_\_\_/-10 pts.

Comments:





# Leadership and Personal Development

**Curriculum Guide:** *Leadership and Personal Development*

**Unit:** III. Leadership and Personal Development for Advanced Students

**Unit Objective:**

Students will explore a career area by investigating entry-level job opportunities at a local agricultural business and writing a résumé and letter of application for a position.

**Show-Me Standards:** 4.8, SS6

**References:**

Agricultural Sales Contest (Career Development Event). Job Description and Resume Score Card, p. 11. Accessed April 14, 2003, from <http://www.dese.state.mo.us/divvoted/AG/CDE/AgSales.pdf>.

*Leadership and Personal Development*. University of Missouri-Columbia, Instructional Materials Laboratory, 1991.

Local or regional business directory

**Instructional Strategies/Activities:**

- Students will engage in study questions in lessons 1 through 5.
- Students will complete WS 4.1, Grooming Self-Analysis.
- Additional activities that relate to the unit objective can be found under the heading "Other Activities" in the following locations: p. III-17 (4) and p. III-25 (3, 6).

**Performance-Based Assessment:**

Students will form groups based on general areas of occupational interest in agriculture. Each group will select a specific agricultural business in the area and identify a manager in that business to interview about the entry-level positions in that business. Based on the information session, each student will write a résumé and letter of application for one of the entry-level positions.

Assessment will be based on the overall content of the résumé and letter of application. Significant weight will be given to the organization, details, and persuasiveness of the résumé and the letter. Spelling, grammar, punctuation, and capitalization will be critical assessment focuses of the assignment.



### Unit III—Leadership and Personal Development for Advanced Students Instructor Guide

The instructor should assign the performance-based assessment activity at the beginning of the unit. Students will work toward completing the activity as they progress through the unit lessons. The assessment activity will be due at the completion of the unit.

1. Direct students to form occupational interest groups.
  - a. To facilitate completion of the assignment, groups should range in size between three and six students.
  - b. Each group should be based on a general area of occupational interest, such as production, marketing, logistics, sales, etc.
2. Members of each group will select a specific agricultural business in the county or region that corresponds to the group's area of occupational interest.
  - a. Group members will then identify a specific manager at the selected business who is willing and able to conduct an information session regarding full-time, entry-level positions at that business.
  - b. The group will schedule a mutually agreeable meeting place and time with the manager to conduct the information session.
3. Based on the information derived from the meeting, each of the group's members will identify a specific job to apply for.
4. The application will consist of a résumé detailing the following:
  - ☐ Applicant's general area of occupational interest
  - ☐ Educational background (including applicable educational courses)
  - ☐ Work experience (volunteer and paid)
  - ☐ Extracurricular activities and interestsFor further guidance, have students refer to the résumé score card on page 11 of the Agricultural Sales Contest at <http://www.dese.state.mo.us/divvoted/AG/CDE/AgSales.pdf>.
5. The application will also consist of a letter of application that will focus on the specific position the student is applying for and will contain the following:
  - ☐ An explanation as to why the applicant is interested in the position
  - ☐ Reasons for applying for this particular job
  - ☐ Specific details to support the applicant's contention that he or she is qualified for the position
  - ☐ Reasons why he or she would be a positive addition to the firm's staff

## **Leadership and Personal Development**

---

6. Assessment will be based on the overall content of the résumé and the letter of application.
  - a. Significant weight will be given to the organization, details, neatness, and persuasiveness of both items.
  - b. Spelling, grammar, punctuation, and capitalization are critical factors in which errors should not be tolerated.

### Unit III—Leadership and Personal Development for Advanced Students Student Handout

1. You will be directed to form occupational interest groups with fellow students.
  - a. Groups should range in size between three and six students.
  - b. Each group should be based on a general area of occupational interest, such as production, marketing, logistics, sales, etc.
2. Work to select a specific agricultural business in the county or region that corresponds to your group's area of occupational interest.
  - a. Identify a specific manager at the selected business who is willing and able to conduct an information session regarding full-time, entry-level positions at that business.
  - b. Schedule a mutually agreeable meeting place and time with the manager to conduct the information session.
3. Based on the information derived from the meeting, you should identify a specific job to apply for.
4. The application will consist of a résumé detailing the following:
  - ☐ Applicant's general area of occupational interest
  - ☐ Educational background (including applicable educational courses)
  - ☐ Work experience (volunteer and paid)
  - ☐ Extracurricular activities and interests
5. The application will also consist of a letter of application that will focus on the specific position you are applying for and will contain the following:
  - ☐ An explanation as to why you are interested in the position
  - ☐ Reasons for applying for this particular job
  - ☐ Specific details to support the contention that you are qualified for the position
  - ☐ Reasons why you would be a positive addition to the firm's staff
6. Assessment will be based on the overall content of the résumé and the letter of application.
  - a. Significant weight will be given to the organization, details, neatness, and persuasiveness of both items.
  - b. Spelling, grammar, punctuation, and capitalization are critical factors in which errors will not be tolerated.



## Leadership and Personal Development

### Unit III—Leadership and Personal Development for Advanced Students Scoring Guide

Name \_\_\_\_\_

◆ Page 7 ◆

Assessment Area	Criteria	0 Points	1 Point	2 Points	3 Points	4 Points	Weight	Total
Content of Résumé	<input type="checkbox"/> Organization <input type="checkbox"/> Details <input type="checkbox"/> Neatness <input type="checkbox"/> Persuasiveness	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Technical Considerations for Résumé (No Errors Should be Tolerated)	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
Content of Letter of Application	<input type="checkbox"/> Organization <input type="checkbox"/> Details <input type="checkbox"/> Neatness <input type="checkbox"/> Persuasiveness	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 7.5	
Technical Considerations for Letter of Application (No Errors Should be Tolerated)	<input type="checkbox"/> Spelling <input type="checkbox"/> Grammar <input type="checkbox"/> Punctuation <input type="checkbox"/> Capitalization	0 criteria met	1 criterion met	2 criteria met	3 criteria met	All 4 criteria met	X 5	
<b>TOTAL</b>								

Final Assessment Total \_\_\_\_\_/100 pts.

Comments:

