
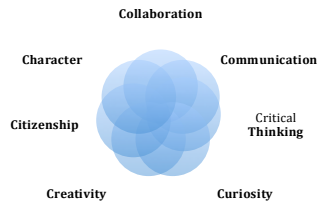


Content Area Agriscience DRAFT	Course: Horse Management Year B	Grade Level: 11/12
	R14 The Seven Cs of Learning 	
Unit Titles	Length of Unit	
<ul style="list-style-type: none"> Maintenance and Safety 	1-2 weeks	
<ul style="list-style-type: none"> Pasture Management 	4-6 weeks	
<ul style="list-style-type: none"> Feeds and Nutrition 	6 -8 weeks	
<ul style="list-style-type: none"> Equine Business 	6 - 8 weeks	
<ul style="list-style-type: none"> Supervised Agricultural Experience (SAE) Proficiencies 	1 - 2 weeks	
<ul style="list-style-type: none"> Equine Health 	6 - 8 weeks	
<ul style="list-style-type: none"> Equine Facility Design 	4 - 6 weeks	



Strands	Course Level Expectations
Maintenance	<ul style="list-style-type: none"> Students can maintain equipment, facility and daily essential care of horses.
Inquiry	<ul style="list-style-type: none"> Students understand safe operation of equipment and safety when working around horses.
Safety	<ul style="list-style-type: none"> Students can determine why and how to use information for the health and well being of the horse.
Research	<ul style="list-style-type: none"> Students can create a process for research and ask key questions. Students will know how to solve the problem. Students will know what is the key question?

Unit Title	Maintenance and Safety	Length of Unit	1-2 weeks
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Inquiry Questions (Engaging & Debatable)	<ul style="list-style-type: none"> • Why is safety around horses essential? • How does knowledge of farm management help us to create a safe environment? • Why is maintenance and organization important?
Standards*	<p>Animal Systems (AS): AS.02.01.01.c. Implement and evaluate quality-assurance programs and procedures for animal production. AS.02.01.02.c. Devise, implement and evaluate safety procedures and plans for working with animals by species using information based on animal behavior and responses. AS.02.02.01.c. Select, evaluate and defend the use of specific tools, technology or equipment used to perform animal husbandry and welfare tasks.</p>
Unit Strands & Concepts	Maintenance, inquiry, safety horse behavior, barn rules and requirements, organization of barn, barn chores, safe equipment operation, Management careers
Key Vocabulary	Flight or fight, horse handling, routine, cleanliness, teamwork, maintenance

* The agriculture, food and natural resources (AFNR) industry standards.

Unit Title	Maintenance and Safety	Length of Unit	1 -2 weeks
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Critical Content: My students will Know ...	Key Skills: My students will be able to (Do) ...
<ul style="list-style-type: none"> • why a well run barn has rules for work and rules for safety • horse behavior patterns • where tools, equipment and feed are located in the barn • safe operation of equipment 	<ul style="list-style-type: none"> • explain the barn rules to each other • conduct a barn tour • identify tools and equipment needed for essential tasks • maintain facility and horses on a daily basis • operate tractors and equipment safely

Assessments:	<ul style="list-style-type: none"> • Performance Assessment - Barn Manager for the Day • Tractor Driving Review, • Barn Chores Review
Teacher Resources:	<ul style="list-style-type: none"> ❖ Parker, Rick. Equine Science 2nd edition, Delmar Publishers Inc. 2003 ❖ Various Primary and Industry sources ❖ TheHorse.com

Unit Title	Pasture Management	Length of Unit	4-6 weeks
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Inquiry Questions (Engaging & Debatable)	<ul style="list-style-type: none"> • How can we use best management practices on our farm? • What can pastures provide for horses? • How can we keep our pastures productive?
Standards	<p>Plant Systems (PS) & Animal Systems (AS):</p> <p>PS.01.03.06.c. Devise a plan to meet plant nutrient needs based on environmental factors present.</p> <p>AS.08.01.01.c. Devise a plan that includes measures to reduce the impact of animal agriculture on the environment.</p> <p>AS.01.01.01.c. Evaluate the implications of animal adaptations on production practices and the environment.</p> <p>AS.01.03.02.c. Select, evaluate and defend the use of sustainable practices in animal agriculture.</p>
Unit Strands & Concepts	Comparative analysis, identification, organization and reasoning, land measurement, topographic map features, identification of toxic plants, environmental science careers, soil testing, understand toxic dangers to horses
Key Vocabulary	Best management practices, runoff, forages, topographic map, toxic plants, sacrifice area

Unit Title	Pasture Management	Length of Unit	4-6 weeks
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Critical Content: My students will Know ...	Key Skills: My students will be able to (Do) ...
<ul style="list-style-type: none"> • best management practices for pasture and waste products and water runoff • how to identify common northeast pasture forages • how to recognize toxic plants for horses • topographic map features 	<ul style="list-style-type: none"> • evaluate pastures for ideal conditions • perform a soil test for pH, N, P, K • identify common northeast pasture forages • read and use a topographic map for evaluating land use • determine the area of a piece of land • identify toxic plants for horses

Assessments:	<ul style="list-style-type: none"> • Unit Test: Unit Terms and Content Knowledge • Performance Assessment - Pasture Management Project, soil testing, forage identification, toxic plant project
Teacher Resources:	<ul style="list-style-type: none"> ❖ Parker, Rick. Equine Science 2nd edition, Delmar Publishers Inc. 2003 ❖ Various Primary and Industry sources

Unit Title	Feeds and Nutrition	Length of Unit	6-8 weeks
Inquiry Questions (Engaging & Debatable)	<ul style="list-style-type: none"> • Why is it important to know about nutrition? • How are the nutritional needs of horses different? • Why do I need to be able to identify feeds? 		
Standards	<p>Animal Systems (AS): AS.03.03.03.c. Research and recommend technology improvements to provide proper nutrition to animals. AS.03.03.03.b. Analyze technologies used to provide animal nutrition and summarize their potential benefits and consequences. AS.03.03.03.a. Examine the use of technology to provide animal nutrition tasks. AS.03.02.01.a. Compare and contrast common types of feedstuffs and the roles they play in the diets of animals. AS.03.02.02.c. Select and utilize animal feeds based on nutritional requirements, using rations for maximum nutrition and optimal economic production. AS.03.02.03.c. Make and defend decisions regarding whether to use feed additives and growth promotants after researching and considering scientific evidence, production system needs and goals, and input from industry professionals. AS.03.01.01.c. Assess nutritional needs for an individual animal based on its growth stage and production system. AS.03.01.02.b. Correlate a species' nutritional needs to feedstuffs that could meet those needs.</p>		
Unit Strands & Concepts	Management practices, identification processes, functional anatomy, Nutrition careers		
Key Vocabulary	Roughages, concentrates, supplements, classes of work, essential nutrients, modified monogastric,		

Unit Title	Feeds and Nutrition	Length of Unit	6 - 8 weeks
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Critical Content: My students will Know ...	Key Skills: My students will be able to (Do) ...
<ul style="list-style-type: none"> • how the equine digestive system works • what essential nutrients are needed by horses • how to identify different feedstuffs for equines • why feeding practices are important • careers in nutrition 	<ul style="list-style-type: none"> • identify the major structures and functions of the equine digestive system • evaluate roughages • identify common feedstuffs for horses • select supplements based on needs of the horse • develop a feed program for a herd of horses • explain feeding management practices for horses • explore nutrition related careers

Assessments:	<ul style="list-style-type: none"> • Summative Assessment: Content Area Foundations • Interim Assessment: Digestive System, Feedstuffs, Article Review • Performance Task: Digestive System Project, Evaluate Hay Samples, feeds chart for identification, Develop Herd Feeding Program,
Teacher Resources:	<ul style="list-style-type: none"> ❖ Parker, Rick. Equine Science 2nd edition, Delmar Publishers Inc. 2003 ❖ Various Primary and Industry sources ❖ Guest speaker (Feed Company Representative)

Unit Title	Equine Business	Length of Unit	8 - 10 weeks
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Inquiry Questions (Engaging & Debatable)	<ul style="list-style-type: none"> • What does it take to run a successful business? • Why do most businesses fail? • Who can help me with my business?
Standards	<p>Agribusiness Systems (ABS): ABS.04.01.03.c. Prepare a business plan for an AFNR business. ABS.01.03.01.c. Devise strategies to improve the operation of AFNR businesses using management skills. ABS.04.02.01.c. Make recommendations to improve operational plans for an AFNR business based on best practices.</p>
Unit Strands & Concepts	<p>Understanding through Inquiry, Researching the Equine Business Teamwork, business plan, decision making, self reflection, research, agriculture business careers, business cycles</p>
Key Vocabulary	Sole proprietorship, partnership, limited liability corporation, financials, business cycle, insurance

Unit Title	Equine Business	Length of Unit	8 - 10 weeks
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Critical Content: My students will Know ...	Key Skills: My students will be able to (Do) ...
<ul style="list-style-type: none"> • ways of doing business • the business cycle • how to write a business plan • careers in agri-business • equine insurance • resume writing • interview skills 	<ul style="list-style-type: none"> • determine personal strengths and weaknesses • develop an equine business plan • explore careers in Agri-business • write a resume and cover letter • practice interview skills

Assessments:	<ul style="list-style-type: none"> • Interim: Each system will have a unit test or project • Formative: worksheets, diagrams • Performance:
Teacher Resources:	<ul style="list-style-type: none"> ❖ Parker, Rick. Equine Science 2nd edition, Delmar Publishers Inc. 2003 ❖ Various Primary and Industry sources ❖ TheHorse.com

Unit Title	Equine Health	Length of Unit	6- 8 weeks
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Inquiry Questions (Engaging & Debatable)	<ul style="list-style-type: none"> • How can I keep my horse healthy? • What are biosecurity measures for an equine facility? • How can I stay safe when working around horses?
Standards	<p>Animal Systems (AS):</p> <p>AS.07.01.02.c. Determine when an animal health concern needs to be referred to an animal health professional.</p> <p>AS.07.01.01.c. Select and use tools and technology to meet specific animal health management goals. AS.07.01.03.c. Treat common diseases, parasites and physiological disorders of animals according to directions prescribed by an animal health professional.</p> <p>AS.07.01.04.c. Design and implement a health maintenance and a disease and disorder prevention plan for animals in their natural and/or confined environments.</p> <p>AS.07.01.05.c. Identify and describe surgical and nonsurgical veterinary treatments and procedures to meet specific animal health care objectives.</p>
Unit Strands & Concepts	Research, decision making, management practices, hands-on skills, Performing health and first aid checks, Developing a health program, biosecurity measures on Farms.
Key Vocabulary	Biosecurity, vaccination, infectious, systemic, parasites, lameness, emergency, vital signs, restraint

Unit Title	Equine Health	Length of Unit	6 - 8 weeks
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Critical Content: My students will Know ...	Key Skills: My students will be able to (Do) ...
<ul style="list-style-type: none"> • normal vital signs of the horse • restraint techniques • emergency Care • lameness and the healthy hoof • infectious diseases and systemic conditions • internal parasites • vaccination schedules • biosecurity measures for horse farms • careers in equine health 	<ul style="list-style-type: none"> • perform vital signs check on a horse • demonstrate methods of restraint • perform first aid procedures • identify the external and internal structures of the horse hoof • explore many diseases and conditions of the horse • complete a fecal egg count • develop a herd health program (vaccination schedule, parasite control) • biosecurity for horse farms

Assessments:	<ul style="list-style-type: none"> • Unit Content Assessments • Performance Tasks: fecal egg count, first aid practices, restraint techniques, vital signs check, disease presentations
Teacher Resources:	<ul style="list-style-type: none"> ❖ Parker, Rick. Equine Science 2nd edition, Delmar Publishers Inc. 2003 ❖ Various Primary and Industry sources ❖ TheHorse.com

Unit Title	Equine Facility Design	Length of Unit	4 - 6 weeks
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Inquiry Questions (Engaging & Debatable)	<ul style="list-style-type: none"> • What do I need to know to plan a horse facility? • How can I prepare for a disaster/emergency at my farm?
Standards	<p>Animal Systems (AS):</p> <p>AS.08.02.02.c. Devise and improve plans to establish favorable environmental conditions for animal growth and performance based on a variety of factors (e.g., economic feasibility, environmental sustainability, impact on animals, etc.).</p> <p>AS.05.01.01.c. Design an animal facility focusing on animal requirements, economic efficiency, sustainability, safety and ease of handling.</p> <p>AS.05.01.02.c. Select, use and evaluate equipment, technology and handling procedures to enhance sustainability and production efficiency.</p> <p>AS.05.02.02.c Evaluate the impact of laws pertaining to animal systems.</p>
Unit Strands & Concepts	Researching designs for facilities, Using inquiry to make plans, Design, cost effectiveness, planning, building options
Key Vocabulary	Zoning, disasters, scale drawing, space requirements, welfare, safety, environment, ventilation

Unit Title	Equine Facility Design	Length of Unit	4 - 6 weeks
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Critical Content: My students will Know ...	Key Skills: My students will be able to (Do) ...
<ul style="list-style-type: none"> • horse housing requirements • local zoning for horses • disaster preparation for horse facilities • different barn designs • careers in farm design 	<ul style="list-style-type: none"> • visit barns with a design checklist • do a scale drawing of a barn floor plan • develop a farm layout design • produce a farm brochure • draw up a disaster plan for an equine facility

Assessments:	<ul style="list-style-type: none"> • Performance Tasks: barn visits, scale drawing of barn, disaster plan
Teacher Resources:	<ul style="list-style-type: none"> ❖ Parker, Rick. Equine Science 2nd edition, Delmar Publishers Inc. 2003 ❖ Various Primary and Industry sources ❖ TheHorse.com