



Career & Technology Equine Science

Academic Alignment with TEKS	CTE TEKS	Content/Vocabulary	Guiding Questions	Activities	Resources and Web links
<p>Math §111.36. 1,2</p> <p>English §110.31. 1,2,8,13,14,17, 18,19,26</p> <p>§110.32. 1,2,8,13,14,17, 18,19,26</p> <p>§110.33. 1,2,8,13,14,17, 18,19,26</p> <p>§110.34. 1,2,8,13,14,17, 18,19,26</p> <p>Science §112.43. 4,7,8</p> <p>Social Studies §113.32. 1,2,3</p> <p>§113.37. 10</p>	<p>The student analyzes equine science as it relates to the selection of horses.</p>	<p>Mechanical revolution Economy Careers Industry World horse population Western riding English Riding Halter western pleasure English pleasure hunter jump reining hunter under saddle revenue Income Expenses</p>	<p><i>(A) recognize the importance of the equine industry; and</i> <i>(B) evaluate and select horses.</i></p> <p>How were horses important to the industrial revolution?</p> <p>What ways does the equine industry boost the economy?</p> <p>Why are their different types of horses?</p> <p>How does the type of horse determine the function of it?</p> <p>How does genetic improvement effect the selection of horses?</p> <p>What equestrian events have you attended?</p> <p>How could your career choice be linked to the equine industry?</p> <p>What expenses might a horse owner encounter?</p>	<p>Class lecture Class discussion on what ways they have seen a change in the equine industry Answer essay question about the effects of the equine industry on the American economy Evaluate classes of horses-halter, western pleasure, English pleasure, hunter jump, reining, hunter under saddle, Create presentation about one change that has occurred in the industry.</p>	<p>USDA.org</p>



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<p>Math §111.33 1,2,3</p> <p>§111.36. 3,6</p> <p>English §110.31. 1,13,18,19, 26</p> <p>§110.32. 1,13,18,19, 26</p> <p>§110.33. 1,13,18,19, 26</p> <p>§110.34. 1,13,18,19, 26</p> <p>Science §112.42. 1,2</p> <p>§112.43. 1,2,3,4,9,10</p> <p>Social Studies §113.36. 5</p>	<p>The student knows how to provide proper nutrition using accepted protocols and processes to maintain animal performance.</p>	<p>Nutrition, Diseases, Forage Concentrate, Colic, Feed ration, Digestive system Crude protein, Fiber, Mcal, Kilogram, Gram, Pound, Conversion, Feed source, Mouth, Esophagus, Stomach Cecum, Colon, Rectum, Intestines, Saliva, Amino acid, Protein, Calorie, Carbohydrate, TDN- total digestible nutrient, Vitamins, Minerals, supplements, dry matter, immunity, antibodies, body temperature, pulse rate, reparation rate, abortion, coggins test, bot, parasites, tapeworm, wormer, biological, control, vaccinations, founder, fractures, farrier, hoof, sole, white line, cannon bone, frog, sensitive lamena, vertebrae, scapula, humerus, ulna, carpus, pastern, fetlock, stifle, femur, fibula, tibula, ribs, skeleton, flank, hock, gaskin, poll, crest, forelock, coronet, withers, float teeth</p>	<p><i>(A) determine nutritional requirements of horses;</i></p> <p>Why do horses need proper nutrients?</p> <p>Do all horses have the same requirements?</p> <p>What are the signs of colic?</p> <p>How do you balance a feed ration?</p> <p>What are the two types of feed sources?</p> <p>How does proper nutrition affect the health of a horse?</p> <p>Why does a horse colic?</p> <p>Where are certain nutrients absorbed?</p> <p><i>(B) describe the anatomy and physiology of horses; and</i></p> <p>What are the external parts of a horse?</p> <p>What are the skeletal parts of a horse?</p> <p>Why does a horse run so fast?</p> <p>How does the structure of a horse affect its movement?</p> <p>Why is the maintenance and structure of the hoof important?</p> <p>What are the parts of the hoof?</p> <p><i>(C) explain methods of maintaining horse</i></p>	<p>Guest speaker Farrier demonstration Notes PowerPoint Gee wiz kids video Identify parts of a real horse Balance rations Dissection of a hoof Create digestive system with balloons Identify different feed sources ID of skeletal parts ID of external parts Create song about digestion Health check on horses Create and present health care of a horse</p>	
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			<p><i>health and soundness.</i></p> <p>What vaccines does a horse require?</p> <p>How can you tell if a horse needs their teeth floated?</p> <p>What is the purpose of a farrier?</p> <p>How can a veterinarian aide in the health of your horse?</p> <p>What steps should you take on a yearly, monthly and daily basis to ensure good health for your horse?</p>		
<p>Math §111.36. 1,4,5</p> <p>English §110.31. 1,10,13,17, 18,19,21,2 3,24,25,26</p> <p>§110.32. 1,10,13,17, 18,19,21,2 3,24,25,26</p> <p>§110.33. 1,10,13,17, 18,19,21,2 3,24,25,26</p> <p>§110.34.</p>	<p>The student analyzes equine science as it relates to the management of horses</p>	<p>English saddle, Western saddle, tree, horn, fenders, stirrups, irons, girth, belly girth, saddle pad, breast collar, splint boots, crop/whip, bridle, bit, tie-down, reins, halter, lead rope, hackamore, lunge line, lunge whip, side reins, draw reins, split reins, round pen, pasture, stall, turnout pen/run, stallion, mare, foal, colt, filly, artificial insemination (AI), embryo transfer (ET), teasing, heat, estrus, stables, boarding facility, aqua therapy, trailer</p>	<p><i>(A) select equipment and facilities for horses;</i></p> <p>What is the difference between an English saddle and a Western saddle?</p> <p>What is a dressage saddle? A jumping saddle?</p> <p>What are the different types of bridles?</p> <p>What disciplines are different bits/hackamores used for?</p> <p>How do splint boots protect horses' legs?</p> <p>Why would you free-lunge a horse in a round pen?</p> <p>How does a tie-down help a horse balance when running a speed event?</p>	<p>ID parts of tack Students demonstrate proper use of equipment Video on training facilities in KY I-search on different types of facilities Students approach, saddle, and work with horses</p>	



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<p>1,10,13,17, 18,19,21,2 3,24,25,26</p> <p>Science §112.43. 5,6,10</p> <p>Social Studies §113.37. 3,4</p>			<p><i>(B) demonstrate methods of handling horses safely; and</i></p> <p>How should you approach a horse?</p> <p>How would you walk around a horse?</p> <p>How do you tie a horse securely yet still be able to release it quickly in case of emergency?</p> <p>How do you approach a spooky/scared horse?</p> <p>How do you handle an injured horse?</p> <p><i>(C) identify the procedures for breeding horses.</i></p> <p>Why do breeders look for superior stallions for their mares?</p> <p>What are the benefits of artificial insemination? Embryo transfer?</p> <p>How/Why do you tease a stallion?</p> <p>How can you tell when a mare is in heat?</p>		
<p>Math §111.36. 1</p> <p>English §110.31. 1,10,13,14, 16,18,19</p>	<p>The student compares and contrasts issues affecting the equine industry.</p>	<p>Bio-engineering, artificial insemination, embryo transfer, genetics, pedigree, genetically modified organisms, gene splicing, DNA transfer, PETA, abuse, neglect</p>	<p><i>(A) describe issues concerning biotechnology related to the equine industry</i></p> <p>What advancements have been made in equine pedigrees?</p> <p>How has artificial insemination affected the genetics of equine?</p>	<p>Powerpoint Research project Presentation AI- video</p>	



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<p>Math §111.36. 1</p> <p>English §110.31. 1,10,13,14,16, 18,19</p> <p>§110.32. 1,10,13,14,16, 18,19</p>	<p>The student learns the employability characteristics of a successful employee.</p>	<p>Careers in the equine industry</p> <p>Veterinarian Farrier Trainer Breeder Genetics Jockey Horse Racing Rider Rodeo events</p>	<p><i>(A) identify career development and entrepreneurship opportunities in the field of equine science;</i></p> <p>Why do you need to use a farrier?</p> <p>What is the purpose of veterinary care for a horse?</p> <p>How could you find a way to volunteer and work with an equine veterinarian?</p>	<p>Research project on possible equine careers</p> <p>Guest speakers Farrier Students in Vet program Race horse owner Trainer</p>	



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<p>§110.33. 1,10,13,14,16, 18,19</p> <p>§110.34. 1,10,13,14,16, 18,19</p> <p>Science §112.43. 1,2,4,10</p> <p>Social Studies §113.36 1,2,3,4</p> <p>§113.37. 1,4,8</p>		<p>Work ethic Skills Horsemanship Safety precautions</p>	<p><i>(B) demonstrate competencies related to resources, information, interpersonal skills, and systems of operation in equine science;</i></p> <p><i>(C) demonstrate knowledge of personal and occupational health and safety practices in the workplace;</i></p> <p>What types of safety precautions should someone take when working with and around horses?</p> <p><i>(D) identify employers' expectations, including appropriate work habits, ethical conduct, legal responsibilities, and good citizenship skills; and</i></p> <p>How should someone act as a veterinarian's assistant when dealing with clients and patients?</p> <p><i>(E) access and navigate the Internet for research.</i></p> <p>What type of prior research could a person do to better prepare them to work at a veterinary clinic?</p>		
<p>Math §111.36. 1</p> <p>English §110.31. 1,10,13,14,16, 17,18,19,21</p>	<p>The student develops an improved supervised agricultural experience program as it relates to agriculture, food, and natural resources.</p>	<p>Supervised Agricultural Experience Placement Entrepreneurship Research Exploratory Improvement Supplemental</p>	<p><i>(A) plan, propose, conduct, and evaluate entrepreneurship; placement; exploratory; research, either experimental or analytical; improvement; supplementary; laboratory-based; or other identified, supervised agricultural experience as an experiential learning activity;</i></p>	<p>SAE PowerPoint Set up record book on computer 35 hours of out of class time spent learning about Equine Science</p>	<p>www.theaet.com www.ffa.org</p>



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<p>§110.32. 1,10,13,14,16, 17,18,19,21</p> <p>§110.33. 1,10,13,14,16, 17,18,19,21</p> <p>§110.34. 1,10,13,14,16, 17,18,19,21</p> <p>Science §112.43. 4,5</p> <p>Social Studies §113.37. 1,3,4,8</p>	<p>Record book</p>	<p><i>(B) apply proper record-keeping skills as they relate to a supervised experience;</i></p> <p><i>(C) design and use a customized record-keeping system for the individual supervised experience;</i></p> <p><i>(D) participate in youth leadership opportunities to create a well-rounded experience program in agriculture; and</i></p> <p><i>(E) produce a challenging approach for a local program of activities in agriculture.</i></p>		
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