Subject	Chapter 130. Career and Tech	nnical Education					
Course Title	§130.7. Advanced Animal Sci	130.7. Advanced Animal Science (One Credit).					
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement			

(a) General requirements. This course is recommended for students in Grade 12. Recommended prerequisite: a minimum of one credit from the courses in the Agriculture, Food, and Natural Resources cluster. To receive credit in science, students must meet the 40% laboratory and fieldwork requirement identified in §74.3(b)(2)(C) of this title (relating to Description of a Required Secondary Curriculum).

(b) Introduction.

- (1) Advanced Animal Science. To be prepared for careers in the field of animal science, students need to attain academic skills and knowledge, acquire knowledge and skills related to animal systems, and develop knowledge and skills regarding career opportunities, entry requirements, and industry standards. To prepare for success, students need opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings. This course examines the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.
- (2) Nature of science. Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.
- (3) Scientific inquiry. Scientific inquiry is the planned and deliberate investigation of the natural world. Scientific methods of investigation are experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked.
- (4) Science and social ethics. Scientific decision making is a way of answering questions about the natural world. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).
- (5) Science, systems, and models. A system is a collection of cycles, structures, and processes that interact. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(c) Knowledge and Skills.				
(1) The student, for at least	(A) demonstrate safe practices	(1) demonstrate safe practices		
40% of instructional time,	during field and laboratory	during field investigations		
conducts field and laboratory	investigations			
investigations using safe,				
environmentally appropriate,				
and ethical practices. These				
investigations must involve				
actively obtaining and				
analyzing data with physical				
equipment, but may also				
involve experimentation in a				
simulated environment as well				
as field observations that				
extend beyond the classroom.				
The student is expected to:				
(1) The student, for at least	(A) demonstrate safe practices	(2) demonstrate safe practices		
40% of instructional time,	during field and laboratory	during laboratory		
conducts field and laboratory	investigations	investigations		
investigations using safe,				
environmentally appropriate,				
and ethical practices. These				
investigations must involve				
actively obtaining and				
analyzing data with physical				
equipment, but may also				
involve experimentation in a				
simulated environment as well				
as field observations that				
extend beyond the classroom.				
The student is expected to:				

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) The student, for at least	(B) demonstrate an	(1) demonstrate an		
40% of instructional time,	understanding of the use and	understanding of the use of		
conducts field and laboratory	conservation of resources and	resources		
investigations using safe,	the proper disposal or			
environmentally appropriate,	recycling of materials			
and ethical practices. These				
investigations must involve				
actively obtaining and				
analyzing data with physical				
equipment, but may also				
involve experimentation in a				
simulated environment as well				
as field observations that				
extend beyond the classroom.				
The student is expected to:				
(1) The student, for at least	(B) demonstrate an	(2) demonstrate an		
40% of instructional time,	understanding of the use and	understanding of the		
conducts field and laboratory	conservation of resources and	conservation of resources		
investigations using safe,	the proper disposal or			
environmentally appropriate,	recycling of materials			
and ethical practices. These				
investigations must involve				
actively obtaining and				
analyzing data with physical				
equipment, but may also				
involve experimentation in a				
simulated environment as well				
as field observations that				
extend beyond the classroom.				
The student is expected to:				

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Subject	Chapter 130. Career and Tecl	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(1) The student, for at least	(B) demonstrate an	(3) demonstrate an		
40% of instructional time,	understanding of the use and	understanding of the proper		
conducts field and laboratory	conservation of resources and	disposal or recycling of		
investigations using safe,	the proper disposal or	materials		
environmentally appropriate,	recycling of materials			
and ethical practices. These				
investigations must involve				
actively obtaining and				
analyzing data with physical				
equipment, but may also				
involve experimentation in a				
simulated environment as well				
as field observations that				
extend beyond the classroom.				
The student is expected to:				
` '	(A) know the definition of			
methods and equipment	science and understand that it			
during field and laboratory	has limitations, as specified in			
investigations. The student is	subsection (b)(2) of this			
expected to:	section			
(2) The student uses scientific	(B) know that scientific	(1) know that scientific		
methods and equipment	hypotheses are tentative and	hypotheses are tentative		
during laboratory and field	testable statements that must	statements that must be		
investigations. The student is	be capable of being supported	capable of being supported of		
expected to:	or not supported by	not supported by observation	al	
	observational evidence.	evidence		
	Hypotheses of durable			
	explanatory power which have			
	been tested over a wide			
	variety of conditions are			
	incorporated into theories			

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Subject	Chapter 130. Career and Tech	nnical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(2) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(B) know that scientific hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories	(2) know that scientific hypotheses are testable statements that must be capable of being supported or not supported by observational evidence			
(2) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(B) know that scientific hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories	(3) [know that] Hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories			
(2) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	` ,	(1) know scientific theories are based on natural phenomena			

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) The student uses scientific	(C) know scientific theories are	` '		
methods and equipment		based on physical phenomena		
during laboratory and field	phenomena and are capable			
investigations. The student is	of being tested by multiple			
expected to:	independent researchers.			
	Unlike hypotheses, scientific			
	theories are well-established			
	and highly-reliable			
	explanations, but they may be			
	subject to change as new			
	areas of science and new			
	technologies are developed			
(2) The student uses scientific	(C) know scientific theories are	(3) know scientific theories are		
methods and equipment	based on natural and physical	capable of being tested by		
during laboratory and field	phenomena and are capable	multiple independent		
investigations. The student is	of being tested by multiple	researchers		
expected to:	independent researchers.			
	Unlike hypotheses, scientific			
	theories are well-established			
	and highly-reliable			
	explanations, but they may be			
	subject to change as new			
	areas of science and new			
	technologies are developed			
(2) The student uses scientific	(C) know scientific theories are	(4) [know that] Unlike		
methods and equipment	based on natural and physical	hypotheses, scientific theories		
during laboratory and field	phenomena and are capable	are well-established and highly-		
investigations. The student is	of being tested by multiple	reliable explanations, but they		
expected to:	independent researchers.	may be subject to change as		
	Unlike hypotheses, scientific	new areas of science and new		
	theories are well-established	technologies are developed		
	and highly-reliable			
	explanations, but they may be			
	subject to change as new			
	areas of science and new			
	technologies are developed			

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Subject	Chapter 130. Career and Tech	nnical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(D) distinguish between scientific hypotheses and scientific theories				
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	plan descriptive investigations, including asking questions			
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(2) plan descriptive investigations, including formulating testable hypotheses			
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(3) plan descriptive investigations, including selecting equipment			
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(4) plan descriptive investigations, including selecting technology			

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Subject	Chapter 130. Career and Tecl	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout Elemen	nt	Subelement
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(5) plan comparative investigations, including asking questions		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(6) plan comparative investigations, including formulating testable hypotheses		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(7) plan comparative investigations, including selecting equipment		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(8) plan comparative investigations, including selecting technology		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(9) plan experimental investigations, including asking questions		

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Subject	Chapter 130. Career and Technical Education					
Course Title	§130.7. Advanced Animal Sci	130.7. Advanced Animal Science (One Credit).				
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	St	ubelement	
during field and laboratory	descriptive, comparative, and	(10) plan experimental investigations, including formulating testable hypotheses				

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(11) plan experimental investigations, including selecting equipment		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(12) plan experimental investigations, including selecting technology		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(13) implement descriptive investigations, including asking questions		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(14) implement descriptive investigations, including formulating testable hypotheses		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(15) implement descriptive investigations, including selecting equipment		

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Subject	Chapter 130. Career and Tecl	hnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills) (2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	Student Expectation (E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	Breakout (16) implement descriptive investigations, including selecting technology	Element	Subelement
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(17) implement comparative investigations, including asking questions		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(18) implement comparative investigations, including formulating testable hypotheses		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(19) implement comparative investigations, including selecting equipment		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(20) implement comparative investigations, including selecting technology		

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(21) implement experimental investigations, including asking questions			
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(22) implement experimental investigations, including formulating testable hypotheses			
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(23) implement experimental investigations, including selecting equipment			
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(24) implement experimental investigations, including selecting technology			
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools and equipment	(1) collect qualitative data			

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) The student uses scientific	(F) collect and organize	(2) collect quantitative data		
methods and equipment	qualitative and quantitative			
during field and laboratory	data and make measurements			
investigations. The student is	with accuracy and precision			
expected to:	using tools and equipment			
(2) The student uses scientific	(F) collect and organize	(3) organize qualitative data		
methods and equipment	qualitative and quantitative			
during field and laboratory	data and make measurements			
investigations. The student is	with accuracy and precision			
expected to:	using tools and equipment			
(2) The student uses scientific	(F) collect and organize	(4) organize quantitative data		
methods and equipment	qualitative and quantitative			
during field and laboratory	data and make measurements			
investigations. The student is	with accuracy and precision			
expected to:	using tools and equipment			
(2) The student uses scientific	(F) collect and organize	(5) make measurements with		
methods and equipment	qualitative and quantitative	accuracy using tools		
during field and laboratory	data and make measurements			
investigations. The student is	with accuracy and precision			
expected to:	using tools and equipment			
(2) The student uses scientific	(F) collect and organize	(6) make measurements with		
methods and equipment	qualitative and quantitative	accuracy using equipment		
during field and laboratory	data and make measurements			
investigations. The student is	with accuracy and precision			
expected to:	using tools and equipment			
(2) The student uses scientific	. ,	(7) make measurements with		
methods and equipment	qualitative and quantitative	precision using tools		
during field and laboratory	data and make measurements			
investigations. The student is	with accuracy and precision			
expected to:	using tools and equipment			
(2) The student uses scientific	(F) collect and organize	(8) make measurements with		
methods and equipment	qualitative and quantitative	precision using equipment		
during field and laboratory	data and make measurements			
investigations. The student is	with accuracy and precision			
expected to:	using tools and equipment			

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(1) analyze trends from data		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(2) evaluate trends from data		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(3) make inferences from data		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(4) predict trends from data		
(2) The student uses scientific methods and equipment during field and laboratory investigations. The student is expected to:	(H) communicate valid conclusions supported by the data through methods such as lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports	(1) communicate valid conclusions supported by the data		

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) The student uses critical	(A) in all fields of science,	(1) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	analyze scientific explanations		
and problem solving to make	scientific explanations by using	by using empirical evidence,		
informed decisions within and	empirical evidence, logical	including examining all sides of		
outside the classroom. The	reasoning, and experimental	scientific evidence of those		
student is expected to:	and observational testing,	scientific explanations, so as		
	including examining all sides of	to encourage critical thinking		
	scientific evidence of those	by the student		
	scientific explanations, so as			
	to encourage critical thinking			
	by the student			
(3) The student uses critical	(A) in all fields of science,	2) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	analyze scientific explanations		
and problem solving to make	scientific explanations by using	by using logical reasoning,		
informed decisions within and		including examining all sides of		
outside the classroom. The	reasoning, and experimental	scientific evidence of those		
student is expected to:	•	scientific explanations, so as		
	including examining all sides of			
		by the student		
	scientific explanations, so as			
	to encourage critical thinking			
	by the student			
(3) The student uses critical	(A) in all fields of science,	(3) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique			
and problem solving to make	scientific explanations by using			
informed decisions within and		including examining all sides of		
outside the classroom. The		scientific evidence of those		
student is expected to:	•	scientific explanations, so as		
	including examining all sides of	_		
		by the student		
	scientific explanations, so as			
	to encourage critical thinking			
	by the student			

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Science			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) The student uses critical	(A) in all fields of science,	(4) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	analyze scientific explanations		
and problem solving to make	scientific explanations by using	by using observational testing,		
informed decisions within and	empirical evidence, logical	including examining all sides of		
outside the classroom. The	reasoning, and experimental	scientific evidence of those		
student is expected to:	and observational testing,	scientific explanations, so as		
	including examining all sides of	to encourage critical thinking		
	scientific evidence of those	by the student		
	scientific explanations, so as			
	to encourage critical thinking			
	by the student			
(3) The student uses critical	(A) in all fields of science,	(5) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	evaluate scientific		
and problem solving to make	scientific explanations by using	explanations by using		
informed decisions within and	empirical evidence, logical	empirical evidence, including		
outside the classroom. The	reasoning, and experimental	examining all sides of scientific		
student is expected to:	and observational testing,	evidence of those scientific		
	including examining all sides of	explanations, so as to		
	scientific evidence of those	encourage critical thinking by		
	scientific explanations, so as	the student		
	to encourage critical thinking			
	by the student			
(3) The student uses critical	(A) in all fields of science,	(6) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	evaluate scientific		
and problem solving to make	scientific explanations by using	explanations by using logical		
informed decisions within and	empirical evidence, logical	reasoning, including examining		
outside the classroom. The	reasoning, and experimental	all sides of scientific evidence		
student is expected to:	and observational testing,	of those scientific		
	including examining all sides of	explanations, so as to		
	scientific evidence of those	encourage critical thinking by		
	scientific explanations, so as	the student		
	to encourage critical thinking			
	by the student			

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) The student uses critical	(A) in all fields of science,	(7) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	evaluate scientific		
and problem solving to make	scientific explanations by using	explanations by using		
informed decisions within and	empirical evidence, logical	experimental testing, including		
outside the classroom. The	reasoning, and experimental	examining all sides of scientific		
student is expected to:	and observational testing,	evidence of those scientific		
	including examining all sides of	explanations, so as to		
	scientific evidence of those	encourage critical thinking by		
	scientific explanations, so as	the student		
	to encourage critical thinking			
	by the student			
(3) The student uses critical	(A) in all fields of science,	(8) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	evaluate scientific		
and problem solving to make	scientific explanations by using	explanations by using		
informed decisions within and	empirical evidence, logical	observational testing, including		
outside the classroom. The	reasoning, and experimental	examining all sides of scientific		
student is expected to:	and observational testing,	evidence of those scientific		
	including examining all sides of	explanations, so as to		
	scientific evidence of those	encourage critical thinking by		
	scientific explanations, so as	the student		
	to encourage critical thinking			
	by the student			
(3) The student uses critical	(A) in all fields of science,	(9) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	critique scientific explanations		
and problem solving to make	scientific explanations by using	by using empirical evidence,		
informed decisions within and	empirical evidence, logical	including examining all sides of		
outside the classroom. The	reasoning, and experimental	scientific evidence of those		
student is expected to:	and observational testing,	scientific explanations, so as		
	including examining all sides of	to encourage critical thinking		
	scientific evidence of those	by the student		
	scientific explanations, so as			
	to encourage critical thinking			
	by the student			

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) The student uses critical	(A) in all fields of science,	(10) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique			
and problem solving to make	scientific explanations by using	by using logical reasoning,		
informed decisions within and		including examining all sides of		
outside the classroom. The		scientific evidence of those		
student is expected to:		scientific explanations, so as		
	including examining all sides of			
		by the student		
	scientific explanations, so as			
	to encourage critical thinking			
	by the student			
(3) The student uses critical	(A) in all fields of science,	(11) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique	·		
and problem solving to make	scientific explanations by using			
informed decisions within and		including examining all sides of		
outside the classroom. The	3,	scientific evidence of those		
student is expected to:		scientific explanations, so as		
	including examining all sides of			
		by the student		
	scientific explanations, so as			
	to encourage critical thinking			
(0) =	by the student	(10)		
(3) The student uses critical	(A) in all fields of science,	(12) in all fields of science,		
thinking, scientific reasoning,	analyze, evaluate, and critique			
and problem solving to make	scientific explanations by using			
informed decisions within and		including examining all sides of		
outside the classroom. The	•	scientific evidence of those		
student is expected to:		scientific explanations, so as		
	including examining all sides of	9		
		by the student		
	scientific explanations, so as			
	to encourage critical thinking			
(2) The student uses oritical	by the student	(1) communicate acientific		
(3) The student uses critical	(B) communicate and apply	(1) communicate scientific		
thinking, scientific reasoning,		information extracted from		
and problem solving to make informed decisions within and	from various sources such as	various sources		
	current events, news reports,			
outside the classroom. The	published journal articles, and			
student is expected to:	marketing materials			

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(B) communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles, and marketing materials	(2) apply scientific information extracted from various sources		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(C) draw inferences based on data related to promotional materials for products and services	(1) draw inferences based on data related to promotional materials for products		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(C) draw inferences based on data related to promotional materials for products and services	(2) draw inferences based on data related to promotional materials for services		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(D) evaluate the impact of scientific research on society and the environment	(1) evaluate the impact of scientific research on society		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(D) evaluate the impact of scientific research on society and the environment	(2) evaluate the impact of scientific research on the environment		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(E) evaluate models according to their limitations in representing biological objects or events			

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(F) research and describe the history of science and contributions of scientists	(1) research the history of science		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(F) research and describe the history of science and contributions of scientists	(2) research the contributions of scientists		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(F) research and describe the history of science and contributions of scientists	(3) describe the history of science		
(3) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	` '	(4) describe the contributions of scientists		
(4) The student evaluates the employability characteristics of an employee. The student is expected to:	(A) identify career development and entrepreneurship opportunities in the field of animal systems	(1) identify career development opportunities in the field of animal systems		
(4) The student evaluates the employability characteristics of an employee. The student is expected to:	(A) identify career	(2) identify entrepreneurship opportunities in the field of animal systems		
(4) The student evaluates the employability characteristics of an employee. The student is expected to:		(1) apply competencies related to resources in animal systems		

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Subject	Chapter 130. Career and Technical Education				
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(4) The student evaluates the	(B) apply competencies related	(2) apply competencies related			
employability characteristics of	to resources, information,	to information in animal			
an employee. The student is	interpersonal skills, and	systems			
expected to:	systems of operation in animal				
	systems				
(4) The student evaluates the		(3) apply competencies related			
employability characteristics of	to resources, information,	to interpersonal skills in animal			
an employee. The student is	interpersonal skills, and	systems			
expected to:	systems of operation in animal				
	systems				
(4) The student evaluates the		(4) apply competencies related			
employability characteristics of		to systems of operation in			
an employee. The student is		animal systems			
expected to:	systems of operation in animal				
	systems				
(4) The student evaluates the	(C) demonstrate knowledge of				
employability characteristics of		personal safety in the			
an employee. The student is		workplace			
expected to:	the workplace				
(4) The student evaluates the		(2) demonstrate knowledge of			
employability characteristics of		occupational safety in the			
an employee. The student is		workplace			
expected to:	the workplace				
(4) The student evaluates the		(3) demonstrate knowledge of			
employability characteristics of		health practices in the			
an employee. The student is	safety and health practices in	workplace			
expected to:	the workplace	(4) 14 (25 1 1			
(4) The student evaluates the	(D) identify employers'	(1) identify employers'			
	expectations, including	expectations, including			
an employee. The student is		appropriate work habits			
expected to:	ethical conduct, legal				
	responsibilities, and good				
	citizenship skills				

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(4) The student evaluates the	(D) identify employers'	(2) identify employers'		
employability characteristics of		expectations, including ethical		
an employee. The student is	appropriate work habits,	conduct		
expected to:	ethical conduct, legal			
	responsibilities, and good			
	citizenship skills			
(4) The student evaluates the	(D) identify employers'	(3) identify employers'		
employability characteristics of		expectations, including legal		
an employee. The student is	appropriate work habits,	responsibilities		
expected to:	ethical conduct, legal	·		
	responsibilities, and good			
	citizenship skills			
(4) The student evaluates the	(D) identify employers'	(4) identify employers'		
employability characteristics of		expectations, including good		
an employee. The student is	appropriate work habits,	citizenship skills		
expected to:	ethical conduct, legal			
·	responsibilities, and good			
	citizenship skills			
(=) =				
(5) The student demonstrates	(A) evaluate market classes	(1) evaluate market classes of		
principles relating to the human, scientific, and	and grades of livestock	livestock		
technological dimensions of				
scientific animal agriculture				
and the resources necessary				
for producing domesticated				
animals. The student is				
expected to:				

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sc			
TEKS (Knowledge and Skills)	Student Expectation	Breakout Eleme	nt	Subelement
(5) The student demonstrates principles relating to the human, scientific, and technological dimensions of scientific animal agriculture and the resources necessary for producing domesticated animals. The student is expected to:	(A) evaluate market classes and grades of livestock	(2) evaluate grades of livestock		
(5) The student demonstrates principles relating to the human, scientific, and technological dimensions of scientific animal agriculture and the resources necessary for producing domesticated animals. The student is expected to:	(B) identify animal products and consumption patterns relative to human diet and health issues	(1) identify animal products relative to human diet		
(5) The student demonstrates principles relating to the human, scientific, and technological dimensions of scientific animal agriculture and the resources necessary for producing domesticated animals. The student is expected to:	(B) identify animal products and consumption patterns relative to human diet and health issues	(2) identify animal products relative to health issues		
(5) The student demonstrates principles relating to the human, scientific, and technological dimensions of scientific animal agriculture and the resources necessary for producing domesticated animals. The student is expected to:	(B) identify animal products and consumption patterns relative to human diet and health issues	(3) identify consumption patterns relative to human diet		

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci			
TEKS (Knowledge and Skills)	Student Expectation	Breakout E	Element	Subelement
(5) The student demonstrates principles relating to the human, scientific, and technological dimensions of scientific animal agriculture and the resources necessary for producing domesticated animals. The student is expected to:	and consumption patterns relative to human diet and health issues	(4) identify consumption patterns relative to health issues		
(5) The student demonstrates principles relating to the human, scientific, and technological dimensions of scientific animal agriculture and the resources necessary for producing domesticated animals. The student is expected to:	(C) describe the growth and development of livestock as a global commodity			
(6) The student applies the principles of reproduction and breeding to livestock improvement. The student is expected to	(A) describe reproductive cycles and relate them to breeding systems	(1) describe reproductive cycles		
(6) The student applies the principles of reproduction and breeding to livestock improvement. The student is expected to:	(A) describe reproductive cycles and relate them to breeding systems	(2) relate [reproductive cycles] to breeding systems		
(6) The student applies the principles of reproduction and breeding to livestock improvement. The student is expected to:	(B) explain the embryo transfer process and how it can impact the livestock industries			

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(6) The student applies the	(B) explain the embryo transfer			
principles of reproduction and	process and how it can impact			
breeding to livestock	the livestock industries	the livestock industries		
improvement. The student is				
expected to:				
(6) The student applies the	(C) recognize the significance			
principles of reproduction and	of meiosis to sexual			
breeding to livestock	reproduction			
improvement. The student is				
expected to				
(6) The student applies the	(D) evaluate animal behavior	(1) evaluate animal behavior		
principles of reproduction and breeding to livestock	and its relationship to livestock management			
improvement. The student is	management			
expected to:				
(6) The student applies the	(D) evaluate animal behavior	(2) evaluate [the] relationship		
principles of reproduction and	and its relationship to livestock	[of animal behavior] to		
breeding to livestock	management	livestock management		
improvement. The student is				
expected to:				
(7) The student applies the	(A) explain Mendel's laws of	(1) explain Mendel's laws of		
principles of molecular	inheritance by predicting	inheritance by predicting		
genetics and heredity. The	genotypes and phenotypes of	genotypes of offspring using		
student is expected to:	offspring using the Punnett	the Punnett square		
(7) The student applies the	square (A) explain Mendel's laws of	(2) explain Mendel's laws of		
principles of molecular	inheritance by predicting	inheritance by predicting		
genetics and heredity. The	genotypes and phenotypes of	phenotypes of offspring using		
student is expected to:	offspring using the Punnett	the Punnett square		
	square	1		
(7) The student applies the	(B) explain the inheritance of	(1) explain the inheritance of		
principles of molecular	sex-linked characteristics and	sex-linked characteristics		
genetics and heredity. The	provide some examples found	found in animals		
student is expected to:	in animals			

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(7) The student applies the principles of molecular genetics and heredity. The student is expected to:	(B) explain the inheritance of sex-linked characteristics and provide some examples found in animals	(2) provide some examples [of sex-linked characteristics] found in animals			
(7) The student applies the principles of molecular genetics and heredity. The student is expected to:	(C) identify and compare the three parts of nucleic acids	(1) identify the three parts of nucleic acids			
(7) The student applies the principles of molecular genetics and heredity. The student is expected to:	(C) identify and compare the three parts of nucleic acids	(2) compare the three parts of nucleic acids			
(7) The student applies the principles of molecular genetics and heredity. The student is expected to:	(D) explain the functions of nucleic acids				
(7) The student applies the principles of molecular genetics and heredity. The student is expected to:	(E) describe how heredity is used in the selection of livestock				
(7) The student applies the principles of molecular genetics and heredity. The student is expected to:	(F) explain how traits are passed from parent to offspring through genetic transfer and the implications of breeding practices				
(7) The student applies the principles of molecular genetics and heredity. The student is expected to:	(F) explain how traits are passed from parent to offspring through genetic transfer and the implications of breeding practices	(2) explain the implications of breeding practices			

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Subject	Chapter 130. Career and Technical Education				
Course Title	§130.7. Advanced Animal Science (One Credit).				
TEKS (Knowledge and Skills)	Student Expectation	Breakout Element	Subelement		
(8) The student examines and	(A) identify and compare the	(1) identify the external			
compares animal anatomy and	external anatomy of a variety	anatomy of a variety of			
physiology in livestock	of livestock species	livestock species			
species. The student is	•				
expected to:					
	(A) identify and compare the	(2) compare the external			
compares animal anatomy and		anatomy of a variety of			
physiology in livestock	of livestock species	livestock species			
species. The student is					
expected to:					
(8) The student examines and		(1) compare the anatomy of			
compares animal anatomy and		the skeletal systems of			
physiology in livestock	muscular, reproductive,	animals			
species. The student is	digestive, circulatory, genito-				
expected to:	urinary, respiratory, nervous,				
	and endocrine systems of				
(0) Ti	animals	(0)			
	(B) compare the anatomy and	(2) compare the anatomy of			
compares animal anatomy and		the muscular systems of			
physiology in livestock	muscular, reproductive,	animals			
species. The student is	digestive, circulatory, genito-				
expected to:	urinary, respiratory, nervous,				
	and endocrine systems of animals				
(8) The student examines and	(B) compare the anatomy and	(3) compare the anatomy of			
compares animal anatomy and		the reproductive systems of			
physiology in livestock	muscular, reproductive,	animals			
species. The student is	digestive, circulatory, genito-	ariirrais			
expected to:	urinary, respiratory, nervous,				
expedied to.	and endocrine systems of				
	animals				
(8) The student examines and	(B) compare the anatomy and	(4) compare the anatomy of			
compares animal anatomy and		the digestive systems of			
physiology in livestock	muscular, reproductive,	animals			
species. The student is	digestive, circulatory, genito-				
expected to:	urinary, respiratory, nervous,				
•	and endocrine systems of				
	animals				
·					

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(8) The student examines and	(B) compare the anatomy and	(5) compare the anatomy of		
compares animal anatomy and	physiology of the skeletal,	the circulatory systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			
	(B) compare the anatomy and	(6) compare the anatomy of		
compares animal anatomy and		the genitourinary systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			
	(B) compare the anatomy and	(7) compare the anatomy of		
compares animal anatomy and		the respiratory systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
,,, <u> </u>	animals			
(8) The student examines and		(8) compare the anatomy of		
compares animal anatomy and		the nervous systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
(9) The student evenings and	animals	(0) compare the eneterm of		
(8) The student examines and	, ,	(9) compare the anatomy of		
compares animal anatomy and		the endocrine systems of animals		
physiology in livestock species. The student is	muscular, reproductive, digestive, circulatory, genito-	aliiliais		
expected to:	urinary, respiratory, nervous,			
expected to.	and endocrine systems of			
	and endocrine systems of animals			
	animais			

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(8) The student examines and	(B) compare the anatomy and	(10) compare the physiology of		
compares animal anatomy and	physiology of the skeletal,	the skeletal systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			
	(B) compare the anatomy and	(11) compare the physiology of		
compares animal anatomy and		the muscular systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			
	(B) compare the anatomy and	(12) compare the physiology of		
compares animal anatomy and		the reproductive systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			
` '	(B) compare the anatomy and	(13) compare the physiology of		
compares animal anatomy and	1	the digestive systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
(0) =	animals			
` '	(B) compare the anatomy and	(14) compare the physiology of		
compares animal anatomy and		the circulatory systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			

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Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
	(B) compare the anatomy and	(15) compare the physiology of		
compares animal anatomy and	physiology of the skeletal,	the genitourinary systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			
(8) The student examines and		(16) compare the physiology of		
compares animal anatomy and		the respiratory systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
	animals			
	(B) compare the anatomy and	(17) compare the physiology of		
compares animal anatomy and		the nervous systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is	digestive, circulatory, genito-			
expected to:	urinary, respiratory, nervous,			
	and endocrine systems of			
(O) The set of s	animals	(40)		
		(18) compare the physiology of		
compares animal anatomy and		the endocrine systems of		
physiology in livestock	muscular, reproductive,	animals		
species. The student is expected to:	digestive, circulatory, genito- urinary, respiratory, nervous,			
expected to.	and endocrine systems of			
	animals			
(8) The student examines and	(C) describe interactions	(1) describe interactions		
compares animal anatomy and	` ,	among various body systems		
physiology in livestock	such as circulatory,	among various body systems		
species. The student is	respiratory, and muscular			
expected to:	systems			
(8) The student examines and	(D) identify and describe the	(1) identify the functions of		
compares animal anatomy and		epithelial tissue		
physiology in livestock	connective, and muscular	•		
species. The student is	tissue and relate these to			
expected to:	animal body systems			

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sc			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:	(D) identify and describe the functions of epithelial, connective, and muscular tissue and relate these to animal body systems	(2) identify the functions of connective tissue		
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:	(D) identify and describe the functions of epithelial, connective, and muscular tissue and relate these to animal body systems	(3) identify the functions of muscular tissue		
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:	(D) identify and describe the functions of epithelial, connective, and muscular tissue and relate these to animal body systems	(4) describe the functions of epithelial tissue		
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:	(D) identify and describe the functions of epithelial, connective, and muscular tissue and relate these to animal body systems	(5) describe the functions of connective tissue		
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:	(D) identify and describe the functions of epithelial, connective, and muscular tissue and relate these to animal body systems	(6) describe the functions of muscular tissue		
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:	(D) identify and describe the functions of epithelial, connective, and muscular tissue and relate these to animal body systems	(7) relate [the functions of epithelial tissue] to animal body systems		

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:	• •	(8) relate [the functions of connective tissue] to animal body systems		
(8) The student examines and compares animal anatomy and physiology in livestock species. The student is expected to:		(9) relate [the functions of muscular tissue] to animal body systems		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(A) describe the structures and functions of the digestive system of ruminant and non-ruminant animals, including poultry and cattle	(1) describe the structures of the digestive system of ruminant animals, including poultry		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(A) describe the structures and functions of the digestive system of ruminant and non-ruminant animals, including poultry and cattle	(2) describe the structures of the digestive system of non- ruminant animals, including cattle		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(A) describe the structures and functions of the digestive system of ruminant and non-ruminant animals, including poultry and cattle	(3) describe the functions of the digestive system of ruminant animals, including poultry		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(A) describe the structures and functions of the digestive system of ruminant and non-ruminant animals, including poultry and cattle	(4) describe the functions of the digestive system of non- ruminant animals, including cattle		

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Subject	Chapter 130. Career and Tech	nnical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(1) identify sources of nutrients			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(2) identify classes of feeds			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(3) describe sources of nutrients			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(4) describe classes of feeds			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(5) relate [the sources of nutrients] to the ruminant animals			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(6) relate [the sources of nutrients] to the non-ruminant animals			

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(7) relate [the classes of feeds] to the ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(B) identify and describe sources of nutrients and classes of feeds and relate to the ruminant and non-ruminant animals	(8) relate [the classes of feeds] to the non-ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(1) identify vitamins		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(2) identify how [vitamins] relate to the nutritional requirements of ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(3) identify how [vitamins] relate to the nutritional requirements of non-ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(4) identify minerals		

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Subject	Chapter 130. Career and Technical Education				
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(5) identify how [minerals] relate to the nutritional requirements of ruminant animals			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(6) identify how [minerals] relate to the nutritional requirements of non-ruminant animals			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(7) identify feed additives			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(8) identify how [feed additives] relate to the nutritional requirements of ruminant animals			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(9) identify how [feed additives] relate to the nutritional requirements of non-ruminant animals			

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Subject	Chapter 130. Career and Tecl	hnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(10) describe vitamins		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(11) describe how [vitamins] relate to the nutritional requirements of ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(12) describe how [vitamins] relate to the nutritional requirements of non-ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(13) describe minerals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(14) describe how [minerals] relate to the nutritional requirements of ruminant animals		

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(15) describe how [minerals] relate to the nutritional requirements of non-ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(16) describe feed additives		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(17) describe how [feed additives] relate to the nutritional requirements of ruminant animals		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(C) identify and describe vitamins, minerals, and feed additives and how they relate to the nutritional requirements of ruminant and non-ruminant animals	(18) describe how [feed additives] relate to the nutritional requirements of non-ruminant animals		

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Subject	Chapter 130. Career and Tech	nnical Education		
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
TEKS (Knowledge and Skills) (9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	Student Expectation (D) formulate rations based on different nutritional requirements	Breakout	Element	Subelement
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(E) analyze feeding practices in relation to nutritional requirements of animals			
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(F) analyze feed quality issues and determine their effect on animal health	(1) analyze feed quality issues		
(9) The student determines nutritional requirements of ruminant and non-ruminant animals. The student is expected to:	(F) analyze feed quality issues and determine their effect on animal health	(2) determine [feed quality issues] effect on animal health		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(A) identify factors that influence the health of animals such as geographic location, age, genetic composition, and inherited diseases to a particular species	(1) identify factors that influence the health of animals		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(B) identify pathogens and describe the effects that diseases have on various body systems	(1) identify pathogens		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(B) identify pathogens and describe the effects that diseases have on various body systems	(2) describe the effects that diseases have on various body systems		

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Student Expectation Clo explain the methods of prevention, control, and treatment for diseases	Subject	Chapter 130. Career and Tech	nnical Education		
(10) The student evaluates (C) explain the methods of animal diseases and parasites. prevention, control, and treatment for diseases (10) The student evaluates (C) explain the methods of animal diseases and parasites. prevention, control, and treatment for diseases (10) The student evaluates (C) explain the methods of treatment for diseases (10) The student evaluates (C) explain the methods of animal diseases and parasites. prevention, control, and treatment for diseases (10) The student evaluates (D) describe the process of animal diseases and parasites. The student is expected to: (10) The student evaluates (D) describe the process of animal diseases and parasites. It is student is expected to: (10) The student evaluates (D) describe the process of animal diseases and parasites. It is student is expected to: (10) The student evaluates (D) describe the process of animal diseases and parasites. The student is expected to: (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted and the effect they have on the host (E) explain hom parasites are transmitted and the effect they have on the host (E) explain hom parasites are transmitted and the effect they have on the host (E) explain hom parasites are transmitted and the effect they have on the host (E) explain hom parasites are transmitted and the effect they have on the host (E) explain hom parasites are transmitted and the effect they have on the host	Course Title	§130.7. Advanced Animal Sci	ence (One Credit).		
animal diseases and parasites. (C) explain the methods of control for diseases (C) explain the methods of prevention, control, and treatment for diseases (C) explain the methods of control for diseases (C) explain the methods of prevention, control, and treatment for diseases (C) explain the methods of control for diseases (C) explain the methods of prevention, control, and treatment for diseases (C) explain the methods of prevention, control, and treatment for diseases (C) explain the methods of prevention, control, and treatment for diseases (C) explain the methods of prevention, control, and treatment for diseases (C) explain the methods of prevention, control, and treatment for diseases (D) describe the process of immunity and disease transmission (D) describe the process of immunity and disease transmission (D) describe the process of disease transmission (D) descr	TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (10) The student evaluates animal diseases and parasites. The student is expected to: (11) Evalian the methods of prevention, control, and prevention of internal parasite	(10) The student evaluates		\		
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(10) The student evaluates animal diseases and parasites. The student evaluates animal diseases and parasites. The student evaluates animal diseases and parasites. The student is expected to: (E) explain how parasites are transmitted and the effect they have on the host (E) explain how parasites are transmitted (E) explain the effect (parasites) have on the host (I) explain the effect (parasites) have on the host (I) explain the effect (parasites) have on the host (II) explain the effect (parasites) have on the host (II) explain the methods of prevention, control, and treatment of internal parasites	•		disease transmission		
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Animal diseases and parasites. Transmitted and the effect they have on the host [parasites] have on the host [parasites] have on the host (10) The student evaluates animal diseases and parasites. The student is expected to: (F) explain the methods of prevention, control, and treatment of internal and	The student is expected to:	have on the host			
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(10) The student evaluates animal diseases and parasites. The student is expected to: (F) explain the methods of prevention, control, and prevention of internal parasites (1) explain the methods of prevention of internal parasites			[parasites] have on the host		
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Subject	Chapter 130. Career and Tecl	hnical Education		
Course Title	§130.7. Advanced Animal Sci	ience (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(10) The student evaluates animal diseases and parasites. The student is expected to:	(F) explain the methods of prevention, control, and treatment of internal and external parasites	(2) explain the methods of prevention of external parasites		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(F) explain the methods of prevention, control, and treatment of internal and external parasites	(3) explain the methods of control of internal parasites		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(F) explain the methods of prevention, control, and treatment of internal and external parasites	(4) explain the methods of control of external parasites		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(F) explain the methods of prevention, control, and treatment of internal and external parasites	(5) explain the methods of treatment of internal parasites		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(F) explain the methods of prevention, control, and treatment of internal and external parasites	(6) explain the methods of treatment of external parasites		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(G) describe the life cycles of various parasites and relate them to animal health issues	(1) describe the life cycles of various parasites		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(G) describe the life cycles of various parasites and relate them to animal health issues	(2) relate the [life cycles of various parasites] to animal health issues		
(10) The student evaluates animal diseases and parasites. The student is expected to:	(H) conduct parasite diagnostic tests			

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Subject	Chapter 130. Career and Tech	nnical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(A) compare cells from different parts of animals, including epithelia, muscles, and bones, to show specialization of structure and function	(1) compare cells from different parts of animals, including epithelia to show specialization of structure			
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(A) compare cells from different parts of animals, including epithelia, muscles, and bones, to show specialization of structure and function	(2) compare cells from different parts of animals, including epithelia to show specialization of function			
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(A) compare cells from different parts of animals, including epithelia, muscles, and bones, to show specialization of structure and function	(3) compare cells from different parts of animals, including muscles to show specialization of structure			
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(A) compare cells from different parts of animals, including epithelia, muscles, and bones, to show specialization of structure and function	(4) compare cells from different parts of animals, including muscles to show specialization of function			
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(A) compare cells from different parts of animals, including epithelia, muscles, and bones, to show specialization of structure and function	(5) compare cells from different parts of animals, including bones to show specialization of structure			

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci	ience (One Credit).		
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(A) compare cells from different parts of animals, including epithelia, muscles, and bones, to show specialization of structure and function	(6) compare cells from different parts of animals, including bones to show specialization of function		
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(B) describe and explain cell differentiation in the development of organisms	(1) describe cell differentiation in the development of organisms		
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(B) describe and explain cell differentiation in the development of organisms	(2) explain cell differentiation in the development of organisms		
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(C) sequence the levels of organization in animals and relate the parts to each other and to the whole	(1) sequence the levels of organization in animals		
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(C) sequence the levels of organization in animals and relate the parts to each other and to the whole	(2) relate the parts [of organization in animals] to each other		
(11) The student defines how an organism grows and how specialized cells, tissues, and organs develop. The student is expected to:	(C) sequence the levels of organization in animals and relate the parts to each other and to the whole	(3) relate the parts [of organization in animals] to the whole		

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Subject	Chapter 130. Career and Tech	nnical Education			
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(12) The student recognizes policies and issues in animal science. The student is expected to:		(1) discuss the impacts of biotechnology on the production of livestock			
(12) The student recognizes policies and issues in animal science. The student is expected to:		(1) analyze the issues surrounding animal welfare			
(12) The student recognizes policies and issues in animal science. The student is expected to:		(2) analyze the issues surrounding the humane treatment of livestock			
(12) The student recognizes policies and issues in animal science. The student is expected to:	(C) apply principles of nutrition to maximize feed efficiency for livestock				
(12) The student recognizes policies and issues in animal science. The student is expected to:	(D) design, conduct, and complete research to solve a self-identified problem in scientific animal agriculture	(1) design research to solve a self-identified problem in scientific animal agriculture			
(12) The student recognizes policies and issues in animal science. The student is expected to:	(D) design, conduct, and complete research to solve a self-identified problem in scientific animal agriculture	(2) conduct research to solve a self-identified problem in scientific animal agriculture			
(12) The student recognizes policies and issues in animal science. The student is expected to:		(3) complete research to solve a self-identified problem in scientific animal agriculture			

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Subject	Chapter 130. Career and Technical Education				
Course Title	§130.7. Advanced Animal Sci				
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element		Subelement
(13) The student discusses livestock harvesting operations. The student is expected to:	(A) map the stages of animal growth and development as it relates to market readiness				
(13) The student discusses livestock harvesting operations. The student is expected to:	(B) describe the harvesting process				
(13) The student discusses livestock harvesting operations. The student is expected to:	(C) describe federal and state meat inspection standards such as safety, hygiene, and quality control	(1) describe federal meat inspection standards			
(13) The student discusses livestock harvesting operations. The student is expected to:	(C) describe federal and state meat inspection standards such as safety, hygiene, and quality control	(2) describe state meat inspection standards			
(13) The student discusses livestock harvesting operations. The student is expected to:	(D) identify retail and wholesale cuts of meat and meat by-products and correlate to major muscle groups	(1) identify retail cuts of meat	t		
(13) The student discusses livestock harvesting operations. The student is expected to:	(D) identify retail and wholesale cuts of meat and meat by-products and correlate to major muscle groups	(2) identify wholesale cuts of meat			
(13) The student discusses livestock harvesting operations. The student is expected to:	(D) identify retail and wholesale cuts of meat and meat by-products and correlate to major muscle groups	(3) identify meat by-products			

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Subject	Chapter 130. Career and Technical Education				
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(13) The student discusses livestock harvesting operations. The student is expected to:	(D) identify retail and wholesale cuts of meat and meat by-products and correlate to major muscle groups	(4) correlate [retail cuts of meat] to major muscle groups			
(13) The student discusses livestock harvesting operations. The student is expected to:	(D) identify retail and wholesale cuts of meat and meat by-products and correlate to major muscle groups	(5) correlate [wholesale cuts of meat] to major muscle groups			
(13) The student discusses livestock harvesting operations. The student is expected to:	(D) identify retail and wholesale cuts of meat and meat by-products and correlate to major muscle groups	(6) correlate [meat by- products] to major muscle groups			
(14) The student explores methods of marketing livestock. The student is expected to:	(A) compare various methods of marketing livestock				
(14) The student explores methods of marketing livestock. The student is expected to:	(B) describe methods of marketing meat and meat products	(1) describe methods of marketing meat			
(14) The student explores methods of marketing livestock. The student is expected to:	(B) describe methods of marketing meat and meat products	(2) describe methods of marketing meat products			

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Subject	Chapter 130. Career and Technical Education			
Course Title	§130.7. Advanced Animal Sci			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(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	(1) plan entrepreneurship; placement; exploratory; research, either experimental or analytical; improvement; supplementary; laboratory-based; or other identified, supervised agricultural experience as an experiential learning activity		
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(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	(2) propose entrepreneurship; placement; exploratory; research, either experimental or analytical; improvement; supplementary; laboratory-based; or other identified, supervised agricultural experience as an experiential learning activity		
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(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	(3) conduct entrepreneurship; placement; exploratory; research, either experimental or analytical; improvement; supplementary; laboratory-based; or other identified, supervised agricultural experience as an experiential learning activity		

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Subject	Chapter 130. Career and Technical Education				
Course Title	§130.7. Advanced Animal Sci	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(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	(4) evaluate entrepreneurship; placement; exploratory; research, either experimental or analytical; improvement; supplementary; laboratory-based; or other identified, supervised agricultural experience as an experiential learning activity			
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(B) apply proper record- keeping skills as they relate to a supervised experience				
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(C) design and use a customized record-keeping system for the individual supervised experience	(1) design a customized record- keeping system for the individual supervised experience			
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(C) design and use a customized record-keeping system for the individual supervised experience	(2) use a customized record- keeping system for the individual supervised experience			

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Subject	Chapter 130. Career and Technical Education				
Course Title	§130.7. Advanced Animal Science	ence (One Credit).			
TEKS (Knowledge and Skills)	Student Expectation	Breakout	Element	Subelement	
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(D) participate in youth leadership opportunities to create a well-rounded experience program in agriculture				
(15) The student develops an advanced supervised agriculture experience program as it relates to agriculture, food, and natural resources. The student is expected to:	(E) produce a challenging approach for a local program of activities in agriculture				

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