

# Career and Technical Education Course Blueprint of Essential Standards

## Agriculture Education

### *AA22 Animal Science II*

Public Schools of North Carolina  
State Board of Education • Department of Public Instruction  
Division of Career and Technical Education  
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Raleigh, North Carolina  
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This blueprint was created through the assistance of various agricultural education instructors across the state. Input for the updated version of the blueprint was supplied through an anonymous survey. Thank you to those teachers who provided feedback through this survey.

Any individuals who reviewed content, contributed activities, or provided other direct assistance in the development of the instructional outline are listed in the acknowledgements section of the curriculum guide.

This blueprint has been reviewed by business and industry representatives for technical content and appropriateness for the industry. Contact [agedcourses@ncsu.edu](mailto:agedcourses@ncsu.edu) for more information.

## Updated CTE Course Blueprint of Essential Standards

This document lays out the essential standards and objectives for the course and reflects the intended level of learning as C1, C2, or C3. Essential standards are big, powerful ideas necessary and essential for students to know to be successful in a course and translate to the next level of education or world of work. They identify the appropriate verb and cognitive process intended for the student to accomplish.

This document will help teachers plan for curriculum delivery for the course by providing the relative weights of the units, essential standards, and objectives within the course to help teachers prepare daily lesson plans, and construct valid formative, benchmark, and summative assessments. Assessment for this course is written at the level of the objective.

Career and Technical Student Organizations (CTSO) are an integral part of this curriculum. CTOS are strategies used to teach course content, develop leadership, citizenship, responsibility, and proficiencies related to workplace needs.

For additional information about this blueprint, contact the Division of Career and Technical Education, North Carolina Department of Public Instruction, 6361 Mail Service Center, Raleigh, North Carolina 27699-6361.

**Interpretation of Columns on the NCDPI Updated CTE Course Blueprint**

No.	1	2	3	4	5	6
Heading	Essential Std # Obj #	Unit Titles, Essential Standards, and Indicators	Local Use	Course Weight	Cognitive Process	Core or Supplemental
<b>Column information</b>	Essential standard and objective numbers.	Statements of unit titles, essential standards per unit, and specific objectives per essential standard. If applicable, includes % for each objective.	Space for use by Local Education Agencies.	Shows the relative importance of each unit and essential standard. Course weight is used to help determine the percentage of total class time to be spent on each essential standard.	Classification of outcome behavior in essential standards and objectives: C1 is Remember C2 is Understand C3 is Apply, analyze, evaluate.	Indicates whether the content is core (essential for student learning) or supplemental (enhances student learning beyond core). Only core content is included on CTE post assessments.

*Career and Technical Education conducts all activities and procedures without regard to race, color, creed, national origin, gender, or disability. The responsibility to adhere to safety standards and best professional practices is the duty of the practitioners, teachers, students, and/or others who apply the contents of this document.*

## Updated CTE Course Blueprint of Essential Standards for AA22 Animal Science II

(Recommended hours of instruction: 135 block, 150 regular)

ES # Obj. #	Units, Essential Standards, and Objectives (The Learner will be able to:)	Local Use	Course Weight	Cognitive Process	Core or Supplemental
1	2	3	4	5	6
	<b>Total Course Weight</b>		<b>100%</b>		
<b>A</b>	<b>LEADERSHIP &amp; SUPERVISED AGRICULTURAL EXPERIENCE</b>		<b>20%</b>		
<b>1.00</b>	<b>Understand leadership qualities involved in successful employment.</b>		<b>10%</b>	<b>C2</b>	<b>Core</b>
1.01	<i>Understand leadership qualities and career building techniques desired by the animal science industry.</i>		5%	C2	Core
1.02	<i>Understand parliamentary procedure.</i>		5%	C2	Core
<b>2.00</b>	<b>Understand Supervised Agricultural Experience</b>		<b>10%</b>	<b>C2</b>	<b>Core</b>
2.01	<i>Understand SAE components and application to work-based learning.</i>		5%	C2	Core
2.02	<i>Understand a financial statement.</i>		5%	C2	Core
<b>B.</b>	<b>ANIMAL ANATOMY &amp; PHYSIOLOGY</b>		<b>20%</b>		
<b>3.00</b>	<b>Understand anatomy and physiology of agriculture animals.</b>		<b>12%</b>	<b>C2</b>	<b>Core</b>
3.01	<i>Classify anatomy of body systems.</i>		6%	C2	Core
3.02	<i>Summarize physiology of body systems.</i>		6%	C2	Core
<b>4.00</b>	<b>Understand reproductive and digestive physiology.</b>		<b>8%</b>	<b>C2</b>	<b>Core</b>
4.01	<i>Understand reproductive physiology</i>		4%	C2	Core
4.02	<i>Understand digestive physiology</i>		4%	C2	Core
<b>C.</b>	<b>ANIMAL MANAGEMENT</b>		<b>32%</b>		
<b>5.00</b>	<b>Understand management of agriculture animals.</b>		<b>21%</b>	<b>C2</b>	<b>Core</b>
5.01	<i>Classify animal housing, facilities and waste management.</i>		7%	C2	Core
5.02	<i>Classify preventative maintenance and diseases.</i>		7%	C2	Core
5.03	<i>Exemplify reproductive management practices.</i>		4%	C2	Core
5.04	<i>Understand biotechnology in livestock production.</i>		3%	C2	Core
<b>6.00</b>	<b>Apply rations for livestock animals.</b>		<b>11%</b>	<b>C3</b>	<b>Core</b>
6.01	<i>Apply rations to agriculture animals.</i>		7%	C3	Core
6.02	<i>Exemplify feed additives and hormone implants.</i>		4%	C2	Core
<b>D.</b>	<b>ANIMAL EVALUATION AND PROCESSING</b>		<b>28%</b>		
<b>7.00</b>	<b>Evaluate agriculture animals.</b>		<b>21%</b>	<b>C3</b>	<b>Core</b>
7.01	<i>Critique agriculture animals.</i>		7%	C3	Core
7.02	<i>Interpret genetics.</i>		7%	C3	Core
7.03	<i>Apply the use of evaluation records.</i>		7%	C3	Core
<b>8.00</b>	<b>Understand the harvesting process for livestock</b>		<b>7%</b>	<b>C2</b>	<b>Core</b>
8.01	<i>Understand food safety regulations.</i>		3%	C2	Core
8.02	<i>Understand the livestock and poultry harvesting process.</i>		4%	C2	Core