

Career and Technical Education Course Blueprint of Essential Standards

Agricultural Education

AU10 Agriscience Applications

Public Schools of North Carolina
State Board of Education • Department of Public Instruction
Division of Career and Technical Education
Doug Vernon, Project Director

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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 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. CTSOs 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 Objectives	Local Use	Course Weight	Cognitive Process	Core or Supplemental
Column information	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 AU10 AGRISCIENCE APPLICATIONS

(Recommended hours of instruction: 135-180)

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
	Total Course Weight		100%		
A	INTRODUCTION TO AGRICULTURE		28%		
1.00	Understand leadership opportunities and SAE related to the agriscience industry.		20%	C2	Core
1.01	<i>Understand the history, opportunities and structure of organizations related to the agriscience industry.</i>		5%	C2	Core
1.02	<i>Understand effective leadership and communication skills.</i>		8%	C2	Core
1.03	<i>Understand the importance of SAE to work-based learning.</i>		7%	C2	Core
2.00	Understand global agriculture.		8%	C2	Core
2.01	<i>Understand the history of global agriculture.</i>		5%	C2	Core
2.02	<i>Compare the current and future issues in global agriculture.</i>		3%	C2	Core
B	AGRISCIENCE INDUSTRIES		72%		
3.00	Understand the plant industry.		18%	C2	Core
3.01	<i>Remember careers in the plant industry.</i>		3%	C1	Core
3.02	<i>Understand biotechnology in the plant industry.</i>		5%	C2	Core
3.03	<i>Understand basic horticultural (ornamental, fruit and vegetable) and agronomic principles and practices.</i>		8%	C2	Core
3.04	<i>Remember tools and their safety practices related to the plant industry.</i>		2%	C1	Core
4.00	Understand the animal industry (large animal, equine and aquaculture).		18%	C2	Core
4.01	<i>Remember careers in the animal industry.</i>		3%	C1	Core
4.02	<i>Understand biotechnology in the animal industry.</i>		3%	C2	Core
4.03	<i>Understand basic animal principles and practices.</i>		10 %	C2	Core
4.04	<i>Remember tools and their safety practices related to the animal industry.</i>		2%	C1	Core
5.00	Understand the environmental science industry (water, soils, wildlife and forestry).		18%	C2	Core
5.01	<i>Remember careers in the environmental science industry.</i>		3%	C1	Core
5.02	<i>Understand biotechnology in the environmental science industry.</i>		3%	C2	Core
5.03	<i>Understand basic environmental principles and practices.</i>		10%	C2	Core
5.04	<i>Remember tools and their safety practices related to the environmental science industry.</i>		2%	C1	Core
6.00	Understand the agricultural engineering industry.		18%	C2	Core
6.01	<i>Remember careers in the agricultural mechanics industry.</i>		2%	C1	Core
6.02	<i>Understand basic agricultural engineering principles and practices.</i>		12%	C2	Core
6.03	<i>Remember tools and their safety practices related to the agricultural mechanics industry.</i>		4%	C1	Core