Career and Technical Education Course Blueprint

Family and Consumer Sciences Education

7075 Foods II-Food Technology (Revision of Foods II-Foods Science)

Public Schools of North Carolina
State Board of Education • Department of Public Instruction
Academic Services and Instructional Support
Division of Career and Technical Education
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CTE Course Blueprint

A CTE Course Blueprint lays out the framework of the curriculum for a given course.

The CTE Course Blueprint includes units of instruction, competencies in each unit, and the specific objectives for each competency. The CTE Course Blueprint illustrates the relative weight of the units, competencies, and objectives within the course. Each competency and objective reflects the intended level of learning through two dimensions that reflect the Revised Bloom's Taxonomy (RBT). The Knowledge Dimension is represented with letters A-D, and the Cognitive Process Dimension is represented by numbers 1-6.

The CTE Course Blueprint should be used by teachers to plan the course of work for the year, prepare daily lesson plans, and construct instructionally valid interim assessments. Statewide assessments are aligned directly with the CTE Course Blueprint. This CTE Course Blueprint and other aligned curriculum products and assessments are developed using the Revised Bloom's Taxonomy.

For additional information about this blueprint, contact Career and Technical Education, North Carolina Department of Public Instruction, 6358 Mail Service Center, Raleigh, North Carolina 27699-6358.

Reference: Anderson, Lorin W. (Ed.), Krathwohl, David R. (Ed.), et al., *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives,* Addison Wesley Longman, Inc., New York, 2001.

Interpretation of Columns on CTE Course Blueprints

No.	Heading	Column information
1	Comp# Obj.#	Comp=Competency number (two digits); Obj.=Objective number (unique course identifier plus competency number and two-digit objective number).
2	Unit Titles/Competency and Objective Statements	Statements of unit titles, competencies per unit, and specific objectives per competency. Each competency statement or specific objective begins with an action verb and makes a complete sentence when combined with the stem "The learner will be able to. . ." (The stem appears once in Column 2.) Outcome behavior in each competency/objective statement is denoted by the verb plus its object.
	Local Use	Space for use by Local Education Agencies
4	Course Weight	Shows the relative importance of each objective, competency, and unit. Course weight is used to help determine the percentage of total class time that is spent on each objective.
5	RBT Designation	Classification of outcome behavior in competency and objective statements in Dimensions according to the Revised Bloom's Taxonomy. (Cognitive Process Dimension: 1 Remember, 2 Understand, 3 Apply, 4 Analyze, 5 Evaluate, 6 Create) (Knowledge Dimension: A Factual Knowledge, B Conceptual Knowledge, C Procedural Knowledge, D Metacognitive Knowledge)
6	Integrated Skill Area	Shows links to other academic areas. Integrated skills codes: A=Arts; E=English Language Arts; CD=Career Development; CS=Information/Computer Skills; H=Healthful Living; M=Math; SC=Science; SS=Social Studies
7	Core Supp	Designation of the competencies and objectives as Core or Supplemental. Competencies and objectives designated "Core" must be included in the Annual Planning Calendar and are assessed on the statewide 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.

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.

FAMILY AND CONSUMER SCIENCES EDUCATION
COURSE BLUEPRINT for 7075 Food Technology
(Recommended hours of instruction: 135-180 of hours)

Comp # Obj #	Unit Titles/Competency and Objective Statements (The learner will be able to:)	Local Use	Course Weight	RBT Designation	Integrated Skill Area	Core Supp
1	**2**	**3**	**4**	**5**	**6**	**7**
	Total Course Weight		**100%**			
A	**BASIC FOOD TECHNOLOGY PRINCIPLES**		**20%**			
FT01.00	**Understand food analysis.**		**10%**	**B2**	**E/CS/H/M/SC**	
FT01.01	*Understand objective methods in a food analysis laboratory.*		*5%*	*B2*	*E/CS/H/M/SC*	*Core*
FT01.02	*Understand subjective methods in a food analysis laboratory.*		*5%*	*B2*	*E/CS/H/M/SC*	*Core*
FT02.00	**Understand the physical and chemical properties of food.**		**10%**	**B2**	**E/CS/H/M/SC**	
FT02.01	*Understand changes to physical properties of food.*		*5%*	*B2*	*E/CS/H/M/SC*	*Core*
FT02.02	*Understand the changes to the chemical properties of food.*		*5%*	*B2*	*E/CS/H/M/SC*	*Core*
B	**FOOD CONSTITUENTS**		**30%**			
FT03.00	**Understand the functions of food constituents.**		**24%**	**B2**	**E/CS/H/M/SC**	
FT03.01	*Understand the functions of water in food.*		*3%*	*B2*	*E/CS/H/M/SC*	*Core*
FT03.02	*Understand the functions of nutrients in food.*		*16%*	*B2*	*E/CS/H/M/SC*	*Core*
FT03.03	*Understand the functions of enzymes and phytochemicals.*		*5%*	*B2*	*E/CS/H/M/SC*	*Core*
FT04.00	**Understand food additives and food substitutes.**		**6%**	**B2**	**E/CS/H/M/SC**	
FT04.01	*Understand food additives and food substitutes.*		*3%*	*B2*	*E/CS/H/M/SC*	*Core*
FT04.02	*Understand government regulations related to food additives and food substitutes.*		*3%*	*B2*	*E/CS/H/M/SC*	*Core*
C	**FOOD MICROBIOLOGY AND FOOD SAFETY**		**20%**			
FT05.00	**Understand how microorganisms affect food quality and safety.**		**13%**	**B2**	**E/CS/H/M/SC**	
FT05.01	*Understand microorganisms associated with food quality and safety.*		*9%*	*B2*	*E/CS/H/M/SC*	*Core*
FT05.02	*Understand fermentation and its influence on food quality and safety.*		*4%*	*B2*	*E/CS/H/M/SC*	*Core*
FT06.00	**Understand non-microbial food hazards and allergen labeling**		**7%**	**B2**	**E/CS/H/M/SC**	
FT06.01	*Understand non-microbial food hazards and allergen labeling.*		*3%*	*B2*	*E/CS/H/M/SC*	*Core*
FT06.02	*Understand ways to control common food hazards.*		*4%*	*B2*	*E/CS/H/M/SC*	*Core*

D	FOOD PRODUCTION, BIOTECHNOLOGY, AND FOOD PROCESSING		30%			
FT07.00	**Understand food production systems.**		**6%**	**B2**	**CD/E/CS/H/M/SC**	
FT07.01	*Understand "farm to table" as related to food production.*		*3%*	*B2*	*CD/E/CS/H/M/SC*	*Core*
FT07.02	*Compare organically-produced foods to conventionally-produced foods.*		*3%*	*B2*	*E/CS/H/M/SC*	*Core*
FT08.00	**Understand the impact of biotechnology on the food industry.**		**7%**	**B2**	**CD/E/CS/H/M/SC**	
FT08.01	*Understand how biotechnology affects the quality and safety of food.*		*4%*	*B2*	*E/CS/H/M/SC*	*Core*
FT08.02	*Understand the ethical issues of biotechnology and its use in the food industry.*		*3%*	*B2*	*CD/E/CS/H/M/SC*	*Core*
FT09.00	**Apply procedures to get a new food product to market.**		**17%**	**C3**	**E/CS/H/M/SC**	
FT09.01	*Understand the types of preservation methods used in food product development.*		*3%*	*B2*	*E/CS/H/M/SC*	*Core*
FT09.02	*Classify food packaging procedures used in product development.*		*3%*	*B2*	*E/CS/H/M/SC*	*Core*
FT09.03	*Implement steps to get a new food product to market.*		*11%*	*C3*	*E/CS/H/M/SC*	*Core*