

# Career and Technical Education Course Blueprint of Essential Standards

## Health Science Education

### *7240 Health Science I*

*Public Schools of North Carolina  
State Board of Education • Department of Public Instruction  
Academic Services and Instructional Support  
Division of Career and Technical Education  
Joan Thompson, Project Director*

*Raleigh, North Carolina  
Summer 2012*

*Special thanks to the following educators who developed this blueprint.*

*Allison Vogt – Apex High School  
Lynn Wooster-McCoy - Pamlico High School  
Lynn Smith – Cary High School  
Mary Kidwell – Mooresville High School  
Nancy Check – North Davidson High School*

*This blueprint has been reviewed by business and industry representatives for technical content and appropriateness for the industry. Contact [HealthScience@dpi.nc.gov](mailto:HealthScience@dpi.nc.gov) for more information.*

## CTE Course Blueprint of Essential Standards

A course blueprint lays out the framework of the curriculum for a given course.

The blueprint includes units of instruction, competencies in each unit, and the specific objectives for each competency. The blueprint illustrates the relative weight of the units, competencies, and objectives within the course. Since skill development is not always linear, and often complex, it is not required that objectives be taught in the order they appear on the blueprint. 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 1-7.

The 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 course blueprint. This blueprint and other aligned curriculum products and assessments are developed using the Revised Bloom's Taxonomy.

For additional information about this blueprint, contact the Division of Career and Technical Education, North Carolina Department of Public Instruction, 6359 Mail Service Center, Raleigh, North Carolina 27699-6359

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 of Essential Standards

No.	Heading	Column information
1	Ess. Std.# 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.
3	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-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*

**HEALTH SCIENCE EDUCATION**  
**COURSE BLUEPRINT OF ESSENTIAL STANDARDS for 7240 HEALTH SCIENCE I**  
 (Hours of Instruction: 135-180)

ES # Obj #	Unit Titles/Essential Standards and Objective Statements (The Learner will be able to:)	Local Use	Course Weight	RBT Designation	Integrated Skill Areas	Core Supp
1	2	3	4	5	6	7
	<b>Total Course Weight</b>		<b>100%</b>			
<b>A</b>	<b>HUMAN BODY'S SUPPORT, MOVEMENT AND USE OF NUTIENTS</b>		<b>52%</b>			
<b>1.00</b>	<b>Understand the body's systems of support and movement</b>		<b>17%</b>	<b>B2</b>	<b>H/SC/M</b>	<b>Core</b>
1.01	<i>Remember structural organization.</i>		5%	A1	H/SC	Core
1.02	<i>Remember the structures of the skeletal system.</i>		2%	A1	H/SC	Core
1.03	<i>Understand the functions and disorders of the skeletal system.</i>		4%	B2	H/SC	Core
1.04	<i>Remember the structures of the muscular system.</i>		2%	A1	H/SC	Core
1.05	<i>Understand the functions and disorders of the muscular system.</i>		4%	B2	H/SC/M	Core
<b>2.00</b>	<b>Understand the body's use of nutrients</b>		<b>35%</b>	<b>B2</b>	<b>H/SC/M</b>	<b>Core</b>
2.01	<i>Remember the structures of the circulatory system.</i>		4%	A1	H/SC	Core
2.02	<i>Understand the functions and disorders of the circulatory system.</i>		10%	B2	H/SC/M	Core
2.03	<i>Remember the structures of the lymphatic system.</i>		2%	A1	H/SC	Core
2.04	<i>Understand the functions and disorders of the lymphatic system.</i>		3%	B2	H/SC	Core
2.05	<i>Remember the structures of the respiratory system.</i>		2%	A1	H/SC	Core
2.06	<i>Understand the functions and disorders of the respiratory system.</i>		6%	B2	H/SC	Core
2.07	<i>Remember the structures of the digestive system.</i>		2%	A1	H/SC	Core
2.08	<i>Understand the functions and disorders of the digestive system.</i>		6%	B2	H/SC	Core
<b>B</b>	<b>HUMAN BODY'S COMMUNICATION AND HORMONE CONTROL SYSTEMS</b>		<b>48%</b>	<b>B2</b>	<b>H/SC/M</b>	<b>Core</b>
<b>3.00</b>	<b>Understand the body's communication systems</b>		<b>20%</b>	<b>B2</b>	<b>H/SC/M</b>	<b>Core</b>
3.01	<i>Remember the structures of the nervous system.</i>		2%	A1	H/SC	Core
3.02	<i>Understand the functions and disorders of the nervous system.</i>		7%	B2	H/SC	Core
3.03	<i>Remember the structures of the sensory system.</i>		2%	A1	H/SC	Core
3.04	<i>Understand the functions and disorders of the sensory system.</i>		3%	B2	H/SC	Core
3.05	<i>Remember the structures of the integumentary system.</i>		2%	A1	H/SC	Core
3.06	<i>Understand the functions and disorders of the integumentary system.</i>		4%	B2	H/SC/M	Core

ES # Obj #	Unit Titles/Essential Standards and Objective Statements (The Learner will be able to:)	Local Use	Course Weight	RBT Designation	Integrated Skill Areas	Core Supp
1	2	3	4	5	6	7
<b>4.00</b>	<b>Understand the body's systems of hormone control</b>		<b>28%</b>	<b>B2</b>	<b>H/SC/M</b>	<b>Core</b>
4.01	<i>Remember the structures of the urinary system.</i>		2%	A1	H/SC	Core
4.02	<i>Understand the functions and disorders of the urinary system.</i>		5%	B2	H/SC/M	Core
4.03	<i>Remember the structures of the endocrine system.</i>		3%	A1	H/SC	Core
4.04	<i>Understand the functions and disorders of the endocrine system.</i>		6%	B2	H/SC/M	Core
4.05	<i>Remember the structures of the reproductive system.</i>		4%	A1	H/SC	Core
4.06	<i>Understand the functions and disorders of the reproductive system.</i>		8%	B2	H/SC/M	Core