

VoCATS Course Blueprint

Technology Education

8125 Communication Systems

*Public Schools of North Carolina
State Board of Education • Department of Public Instruction
Curriculum and School Reform Services
Division of Instructional Services*

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*This blueprint has been reviewed by business
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VoCATS Course Blueprint

A course blueprint is a document laying out the framework of the curriculum for a given course.

Shown on the blueprint are the units of instruction, the core competencies in each unit, and the specific objectives for each competency. The blueprint illustrates the recommended sequence of units and competencies and the cognitive and performance weight of the objective within the course.

The blueprint should be used by teachers to plan the course of work for the year, preparing daily lesson plans, and construct instructionally valid interim assessments. Statewide assessments are aligned directly with the course blueprint

For additional information about this blueprint, contact program area staff. For additional information about the VoCATS, contact program area staff or VoCATS, Career and Technical, Division of Instructional Services, North Carolina Department of Public Instruction, 6360 Mail Service Center, Raleigh, North Carolina 27699-6358, 919.807.3876, email: rwelfare@dpi.state.nc.us.

Interpretation of Columns on VoCATS 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.
3	Time Hrs	Space for teachers to calculate time to be spent on each objective based on the course blueprint, their individual school schedule, and the students' performance on preassessments.
4&5	<u>Course Weight</u> Cognitive Performance	Shows the relative importance of each objective, competency, and unit. Weight is broken down into two components: cognitive and performance. Add the cognitive and performance weights shown for an objective in columns 4 and 5 to determine its total course weight. Course weight is used to help determine the percentage of total class time that is spent on each objective. The breakdown in columns 4 and 5 indicates the relative amount of class time that should be devoted to cognitive and performance activities as part of the instruction and assessment of each objective. Objectives with performance weight should include performance activities as part of instruction and/or assessment.
6	Type Behavior	Classification of outcome behavior in competency and objective statements. (C=Cognitive; P=Performance)
7	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.
8	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..

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TECHNOLOGY EDUCATION
COURSE BLUEPRINT for 8125 COMMUNICATIONS SYSTEMS
(Recommended hours of instruction: 135-180 Hours)

Comp # Obj #	Unit Titles/Competency and Objective Statements (The Student will be able to:)	Time Hours	Course Weight		Type Behavior	Integrated Skill Area	Core Supp
			Cognitive 4	Performance 5			
1	2				6	7	
	TOTAL COURSE WEIGHT		100%				
			44%	56%			
A	OVERVIEW		12%	9%			
CS001.00	Evaluate the major concepts that are essential to understanding communication systems.		6%	3%	C3P	SC/SS	CORE
CS001.01	<i>Define the major concepts that are essential to understanding communication technology.</i>		3%		C1	SC/SS	CORE
CS001.02	<i>Analyze the foundational technical developments in communication technology.</i>		3%		C3	SC/SS	CORE
CS001.03	<i>Evaluate the impact of communication messages on the individual and society.</i>			3%	C3P	SC/SS	CORE
CS002.00	Participate in a responsible manner as an individual or group member to plan, organize, and implement activities and projects.		6%	6%	C3P	C	CORE
CS002.01	<i>Describe appropriate classroom and laboratory safety rules.</i>		3%		C1	H	CORE
CS002.02	<i>Apply appropriate safety rules in the classroom and laboratory.</i>			3%	C3P	C	CORE
CS002.03	<i>Describe selected management and communication skills</i>		3%		C1	H	CORE
CS002.04	<i>Apply selected management and communication skills.</i>			3%	C3P	C	CORE
B	TOOLS OF COMMUNICATION		10%	9%			
CS003.00	Apply the fundamental principles of computer systems.		7%	6%	C3P	SC/C	CORE
CS003.01	<i>Analyze the hardware and networking components of computer systems.</i>		4%		C3	SC/C	CORE
CS003.02	<i>Describe operating systems and software.</i>		3%		C1	SC/C	CORE
CS003.03	<i>Access and utilize hardware and software applications.</i>			3%	C3P	SC/C	CORE

Comp # Obj #	Unit Titles/Competency and Objective Statements (The Student will be able to:)	Time Hours	Course Weight		Type Behavior	Integrated Skill Area	Core Supp
			Cognitive 4	Performance 5			
1	2				6	7	
CS003.04	<i>Demonstrate the ability to access and utilize Internet resources</i>			3%	C3P	SC/C	CORE
CS004.00	Apply the fundamental principles of visualization techniques and technical sketching to express ideas.		3%	3%	C3P	C	CORE
CS004.01	<i>Describe the principles of visualization and sketching.</i>		3%		C1	C	CORE
CS004.02	<i>Communicate ideas through visualization and sketching.</i>			3%	C3P	C	CORE
C	DESIGN		22%	18%			
CS005.00	Apply visual design principles to communicate a message.		5%	3%	C3P	C	CORE
CS005.01	<i>Analyze the fundamental elements and principles of visual design,</i>		5%		C3	C	CORE
CS005.02	<i>Collect, Critique, and redesign a visual message.</i>			3%	C3P	C	CORE
CS006.00	Apply the fundamental principles of electronic communication devices.		4%	3%	C3P	SC	CORE
CS006.01	<i>Describe the fundamental concepts of electronic communication devices.</i>		4%		C1	SC	CORE
CS006.02	<i>Demonstrate the fundamental principles of electronic communication devices.</i>			3%	C3P	SC	CORE
CS007.00	Apply the fundamental principles of optical tools.		4%	3%	C3P	SC	CORE
CS007.01	<i>Describe the concepts, terms, and scientific principles related to the use of optical devices to communicate.</i>		4%		C1	SC	CORE
CS007.02	<i>Demonstrate the understanding of the fundamental principles by utilizing optical devices.</i>			3%	C3P	SC	CORE

Comp # Obj #	Unit Titles/Competency and Objective Statements (The Student will be able to:)	Time Hours	Course Weight		Type Behavior	Integrated Skill Area	Core Supp
			Cognitive 4	Performance 5			
1	2		4	5	6	7	8
CS008.00	Apply fundamental design elements and principles to communicate an audio and/or visual message		6%	3%	C3P	C	CORE
CS008.01	<i>Describe the concepts, terms, and principles of audio and/or visual communication.</i>		6%		C1	C	CORE
CS008.02	<i>Critique the effectiveness of a message using audio and/or visual elements and principles.</i>			3%	C3P	C	CORE
CS008.03	<i>Produce and evaluate a message using audio and/or visual principles.</i>			3%	C3P	C	CORE
CS009.00	Analyze future communication trends and issues.		3%	6%	C3P	SC/SS	CORE
CS009.01	<i>Describe concepts and principles related to communication trends and issues.</i>		3%		C1	SC/SS	CORE
CS009.02	<i>Analyze and present a technology assessment.</i>			3%	C3P	SC/SS	CORE
CS009.03	<i>Assess individual opportunities in communications systems.</i>			3%	C3P	SS	CORE
D	MODES OF COMMUNICATION			20%			
CS010.00	Design, produce, and evaluate a multi-media, graphic, technical drawing, and/or electronic product that effectively communicate a message using the technology of communication.			20%	C3P	C	CORE
CS010.01	<i>Design a communication product</i>			6%	C3P	C	CORE
CS010.02	<i>Produce a communication product.</i>			10%	C3P	C	CORE
CS010.03	<i>Evaluate a communication product.</i>			4%	C3P	C	CORE