

VoCATS Course Blueprint

Business and Information Technology Education

6514-DIGITAL COMMUNICATION SYSTEMS

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

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This blueprint has been reviewed by business and industry representatives for technical content and appropriateness for the industry. Contact cskinner@dpi.state.nc.us for more information.

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, prepare daily lesson plans, 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 VoCATS, contact program area staff or VoCATS, Career-Technical Education, Division of Instructional Services, North Carolina Department of Public Instruction, 6358 Mail Service Center, Raleigh, North Carolina 27699-6358, 919/807-3876, e-mail: 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 analysis of students' previous knowledge on the topic.
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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BUSINESS AND INFORMATION TECHNOLOGY EDUCATION
COURSE BLUEPRINT for 6514-DIGITAL COMMUNICATION SYSTEMS
 (Recommended hours of instruction: 135-180)

Comp # Obj #	Unit Titles/Competency and Objective Statements (The Learner will be able to:)	Time Hours	Course Weight		Type Behavior	Integrated Skill Area	Core Supp
			Cognitive	Performance			
1	2		4	5	6	7	8
			100%				
	Total Course Weight		50%	50%			
A	DIGITAL INPUT CONCEPTS/TECHNIQUES		11%	6%			
DC01.00	Explore computer systems.		7%		C2	C/M/SC/SS	Core
<i>DC01.01</i>	<i>Describe the purposes, components, and use of computer hardware and software.</i>		2%		C1	C	Core
<i>DC01.02</i>	<i>Describe operating system functions.</i>		1%		C1	C	Core
<i>DC01.03</i>	<i>Discuss security, confidentiality, and ethical issues related to data, hardware, and software.</i>		1%		C2	C/M/SS	Core
<i>DC01.04</i>	<i>Discuss alternative input devices.</i>		3%		C2	C	Core
DC02.00	Use the touch method in operating a keyboard.				C3P	C	Supp
<i>DC02.01</i>	<i>Use the touch method to operate alphabetic keys.</i>				C3P	C	Supp
<i>DC02.02</i>	<i>Use the touch method to operate the 10-keypad and number keys.</i>				C3P	C	Supp
<i>DC02.03</i>	<i>Use the symbolic, function, and operational keys.</i>				C3P	C	Supp
DC03.00	Use speech recognition to input data.		4%	6%	C3P	C	Core
<i>DC03.01</i>	<i>Describe the purposes, components, and use of speech recognition systems.</i>		2%		C1	C	Core
<i>DC03.02</i>	<i>Train the system and input simple documents using speech writing techniques.</i>		1%	3%	C3P	C	Core
<i>DC03.03</i>	<i>Use speech commands to edit and format documents.</i>		1%	3%	C3P	C	Core
B	ALTERNATIVE COMMUNICATION INPUT DEVICES AND CONNECTIVITY		12%	8%			
DC04.00	Examine alternative input devices and connectivity.		12%	8%	C3P	C/M/SC/SS	Core
<i>DC04.01</i>	<i>Explain the uses of current and emerging alternative input devices.</i>		7%		C2	C/M/SC/SS	Core
<i>DC04.02</i>	<i>Explain the uses of handheld devices.</i>		2%	4%	C3P	SC/SS	Core
<i>DC04.03</i>	<i>Use handheld devices to input, transfer, and share data.</i>		3%	4%	C3P	C/M/SC/SS	Core

C	FUNDAMENTAL WORD PROCESSING		17%	26%			
DC05.00	Create documents using traditional and alternative input devices.		17%	26%	C3P	C	Core
<i>DC05.01</i>	<i>Enhance documents using font attributes.</i>		1%	1%	C3P	C	Core
<i>DC05.02</i>	<i>Use editing tools.</i>		1%	1%	C3P	C	Core
<i>DC05.03</i>	<i>Input letters in acceptable styles.</i>		5%	5%	C3P	C	Core
<i>DC05.04</i>	<i>Input memos using templates and e-mail environments.</i>		1%	2%	C3P	C	Core
<i>DC05.05</i>	<i>Input reports and supporting documents in acceptable styles.</i>		3%	9%	C3P	C	Core
<i>DC05.06</i>	<i>Input data using templates and web forms.</i>		2%	2%	C3P	C	Core
<i>DC05.07</i>	<i>Input and manipulate table data.</i>		2%	3%	C3P	C	Core
<i>DC05.08</i>	<i>Input other business documents in acceptable form.</i>		2%	3%	C3P	C	Core
D	SPREADSHEETS		5%	5%			
DC06.00	Use spreadsheet software with traditional and alternative input devices.		5%	5%	C3P	C/M/SC/SS	Core
<i>DC06.01</i>	<i>Explain spreadsheet fundamentals.</i>		3%		C2	C/M/SC/SS	Core
<i>DC06.02</i>	<i>Use labels, values, and formulas in spreadsheets.</i>		2%	5%	C3P	C/M/SC/SS	Core
E	DATABASES		5%	5%			
DC07.00	Use database software with traditional and alternative input methods.		5%	5%	C3P	C/M/SC/SS	Core
<i>DC07.01</i>	<i>Explain database fundamentals.</i>		3%		C2	C/M/SC/SS	Core
<i>DC07.02</i>	<i>Create, sort, edit, and query a database.</i>		2%	5%	C3P	C/M/SC/SS	Core
F	SPEED AND ACCURACY						
DC08.00	Produce straight-copy materials rapidly and accurately with traditional and handwriting and speech recognition devices.				C3P	C/M/SC/SS	Supp
<i>DC08.01</i>	<i>Key from straight copy for five minutes with a minimum of 30 wpm and five or less errors while making all corrections.</i>				C3P	C/M	Supp
<i>DC08.02</i>	<i>Dictate from straight copy for three minutes with a minimum of 100 wpm and 97% accuracy while making all corrections.</i>				C3P	C/M	Supp
<i>DC08.03</i>	<i>Input using handwriting recognition from straight copy for one minute with a minimum of 30 wpm and 95% accuracy.</i>				C3P	C/M	Supp
G	CAREER AND LEADERSHIP DEVELOPMENT						
DC09.00	Demonstrate leadership and employability skills.				C3P	C	Supp
<i>DC09.01</i>	<i>Exhibit effective leadership and team skills.</i>				C3P	C	Supp
<i>DC09.02</i>	<i>Identify procedures for planning and organizing a business or organization meeting.</i>				C1	C	Supp