

DESE Model Curriculum: Network Administration (CIP Code: 11.0103)

GRADE LEVEL/UNIT TITLE: 11-12/Basic Computer Concepts

COURSE INTRODUCTION						
A knowledge and understanding of networking concepts prepare students for the career area of network administration. As technology advances, the demand will continue to increase for employees who are able to resolve computer network problems.						
Students apply problem-solving skills to business situations exploring computer maintenance activities. Students will analyze software problems, install software applications programs and customize defaults, connect components of a local area network, use basic network protocol, and troubleshoot network problems.						
UNIT DESCRIPTION					SUGGESTED UNIT TIMELINE	
Students will learn how computers are used, common operating systems, and the importance of computer maintenance.					2 weeks	
					CLASS PERIOD (min.)	
					50 minutes	
ESSENTIAL QUESTIONS						
<ol style="list-style-type: none"> How are computers used? Why is there more than one common operating system? Why is periodic maintenance important? 						
ESSENTIAL MEASURABLE LEARNING OBJECTIVES		NBEA STANDARD				DOK
1. Demonstrate ethical conduct in everyday procedures (e.g., piracy, licensing, intellectual property, etc.)		IT-I.1	IT-111.2	IT-V.1	MGMT-V-A.2	
		IT-I.2	IT-III.3m	IT-V.2	MGMT-V-A.3	
		IT-I.3	IT-III.4	IT-VI.1	MGMT-V-A.4	
		IT-I.4	IT-IV.1	IT-VI.2	MGMT-VIII-A.1	
		IT-VIII.1	IT-IV.2	IT-XV.1	MGMT-VIII-A.2	
		IT-VIII.2	IT-IV.3	IT-XV.2	MGMT-VIII-A.3	
		IT-IX.1	IT-IV.4	MGMT-V-A.1	MGMT-VIII-A.4	
		IT-III.1				
		2. Use basic computer terminology correctly		IT-I.1	IT-III.4	
IT-I.2	IT-IV.1			COMM-I-A.1	COMM-I-C.3	
IT-I.3	IT-IV.2			COMM-I-A.2	COMM-I-C.4	
IT-I.4	IT-IV.3			COMM-I-A.3	COMM-I-D.1	
IT-VIII.1	IT-IV.4			COMM-I-A.4	COMM-I-D.2	
IT-VIII.2	IT-V.1			COMM-I-B.1	COMM-I-D.3	
IT-IX.1	IT-V.2			COMM-I-B.2	COMM-I-D.4	
IT-III.1	IT-VI.1			COMM-I-B.3	COMM-IV.1	
IT-111.2	IT-VI.2			COMM-I-C.1	COMM-IV.2	
IT-III.3m	IT-XV.1					

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3. Identify parts of a computer (components and media)	IT-I.1 IT-I.2 IT-I.3 IT-I.4 IT-VIII.1 IT-VIII.2 IT-IX.1 IT-II.1 IT-II.2	IT-II.3 IV-V.1 IT-V.2 IT-VI.1 IT-VI.2 IT-XII.2 IT-XII.3 COMM-I-A.1	COMM-I-A.2 COMM-I-A.3 COMM-I-A.4 COMM-I-B.1 COMM-I-B.2 COMM-I-B.3 COMM-I-C.1 COMM-I-C.2	COMM-I-C.3 COMM-I-C.4 COMM-I-D.1 COMM-I-D.2 COMM-I-D.3 COMM-I-D.4 COMM-IV.1 COMM-IV.2	
4. Identify components of input, processing, output, and storage	IT-I.1 IT-I.2 IT-I.3 IT-I.4 IT-VIII.1 IT-VIII.2 IT-IX.1 IT-II.1 IT-II.2	IT-II.3 IT-VI.1 IT-VI.2 IT-V.1 IT-V.2 IT-XII.2 IT-XII.3 COMM-I-A.1	COMM-I-A.2 COMM-I-A.3 COMM-I-A.4 COMM-I-B.1 COMM-I-B.2 COMM-I-B.3 COMM-I-C.1 COMM-I-C.2	COMM-I-C.3 COMM-I-C.4 COMM-I-D.1 COMM-I-D.2 COMM-I-D.3 COMM-I-D.4 COMM-IV.1 COMM-IV.2	
5. Compare mainframes, servers, desktops, laptops, and mobile devices	IT-I.1 IT-I.2 IT-I.3 IT-I.4 IT-VIII.1 IT-VIII.2 IT-IX.1 IT-II.1 IT-II.2 IT-II.3 IT-III.1 IT-III.2	IT-III.3 IT-III.4 IT-XII.2 IT-XII.3 IT-XV.1 IT-XV.2 COMM-I-A.1 COMM-I-A.2 COMM-I-A.3 COMM-I-A.4 COMM-I-B.1 COMM-I-B.2	COMM-I-B.3 COMM-I-C.1 COMM-I-C.2 COMM-I-C.3 COMM-I-C.4 COMM-I-D.1 COMM-I-D.2 COMM-I-D.3 COMM-I-D.4 COMM-IV.1 COMM-IV.2 COMM-I.1	COMP-II.1 COMP-II.2 COMP-III.1 COMP-III.2 COMP-IV.1 COMP-IV.2 COMP-V.2 COMP-VI-G.1 COMP-VI-G.2 COMP-VI-G.3 COMP-VI-K.2 COMP-VI-K.3	

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<p>6. Differentiate between common operating systems, including file systems</p>	<p>IT-I.1 IT-I.2 IT-I.3 IT-I.4 IT-VIII.1 IT-VIII.2 IT-IX.1 IT-III.1 IT-III.2 IT-III.3 IT-III.4 IT-II.1 IT-II.2</p>	<p>IT-II.3 IV-XV.1 IT-XV.2 MGMT-VIII-A.1 MGMT-VIII-A.2 MGMT-VIII-A.3 MGMT-VIII-A.4 COMM-I-A.1 COMM-I-A.2 COMM-I-A.3 COMM-I-A.4 COMM-I-B.1 COMM-I-B.2</p>	<p>COMM-I-B.3 COMM-I-C.1 COMM-I-C.2 COMM-I-C.3 COMM-I-C.4 COMM-I-D.1 COMM-I-D.2 COMM-I-D.3 COMM-I-D.4 COMM-IV.1 COMM-IV.2 COMP-I.1</p>	<p>COMP-II.1 COMP-II.2 COMP-III.1 COMP-III.2 COMP-IV.1 COMP-IV.2 COMP-V.2 COMP-VI-G.1 COMP-VI-G.2 COMP-VI-G.3 COMP-VI-K.2 COMP-VI-K.3</p>	
<p>7. Perform basic computer filing tasks (e.g., naming, saving, deleting, and moving files)</p>	<p>IT-I.1 IT-I.2 IT-I.3 IT-I.4 IT-VIII.1 IT-VIII.2 IT-IX.1 IT-III.1 IT-III.2</p>	<p>IT-III.3 IT-III.4 IT-IV.1 IT-IV.2 IT-IV.3 IT-IV.4 IT-II.1 IT-II.2 IT-II.3</p>	<p>IT-V.1 IT-V.2 IT-VI.1 IT-VI.2 IT-VII.1 IT-VII.2 IT-XI.2 IT-XI.3 IT-XIV.1</p>	<p>IT-XIV.2 IT-XV.1 IT-XV.2 MGMT-VIII-A.1 MGMT-VIII-A.2 MGMT-VIII-A.3 MGMT-VIII-A.4 COMM-I-A.1 COMM-I-A.</p>	
<p>8. Perform basic computer maintenance (including disk maintenance, software updates, and physical cleaning)</p>	<p>IT-I.1 IT-I.2 IT-I.3 IT-I.4 IT-VIII.1 IT-VIII.2 IT-IX.1 IT-III.1 IT-III.2 IT-III.3 IT-III.4 IT-IV.1</p>	<p>IT-IV.2 IT-IV.3 IT-IV.4 IT-II.1 IT-II.2 IT-IT.3 IT-VI.1 IT-VI.2 IT-VII.1 IT-VII.2 IT-XIV.1 IT-XIV.2</p>	<p>IT-XV.1 IT-XV.2 MGMT-VIII-A.1 MGMT-VIII-A.2 MGMT-VIII-A.3 MGMT-VIII-A.4 COMM-I-A.1 COMM-I-A.2 COMM-I-A.3 COMM-I-A.4 COMM-I-B.1 COMM-I-B.2</p>	<p>COMM-I-B.3 COMM-I-C.1 COMM-I-C.2 COMM-I-C.3 COMM-I-C.4 COMM-I-D.1 COMM-I-D.2 COMM-I-D.3 COMM-I-D.4 COMM-IV.1 COMM-IV.2</p>	

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Obj. #	INSTRUCTIONAL STRATEGIES
1-8	Teacher demonstrates and lectures on basic computer information, including personal computers, printers, scanners, laptops, and portable devices.
	Most instructional activities in network administration curricula are vendor specific and copyrighted, suggested vendors are Cisco, Microsoft, and Comp-TIA.
Obj. #	INSTRUCTIONAL ACTIVITIES
1-8	Students take notes and demonstrate knowledge of basic computer information.