

COURSE SYLLABUS

Course Title:	Network Essentials II		Date submitted:	Spring 2014 (AAC: 14-28)
Department:	Business and Technology			
Curriculum:	Computer Information Systems			
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101)	CST*230	Prerequisites:	
	Course Type:	X	C- or better in Network Essentials I (CST*130)	
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: Internship M: Seminar P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/Clinical/Lab Z: Combined Lecture/Studio			
	Elective Type:	G		
	AH: Art History E: English FA: Fine Arts FL: Foreign Language G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science			
	Credit Hours:	3	Corequisites:	
	Developmental: (yes/no)	No	None	
	Lecture:	2		
	Clinical:	0		
	Lab:	1		
Studio:	0			
Contact Hours:	Other: 0			
	TOTAL: 3	Other Requirements:		
Class Maximum:	24	None		
Semesters Offered:	F/Sp			
Catalog Course Description:	This course builds on the knowledge gained in Network Essentials I. Topics covered will include network security, wireless and optical networking, voice over IP, and designing and maintaining campus and industrial networks. Hands-on network simulation software will be used throughout the course.			
Topical Outline: List course content in outline format.	<ol style="list-style-type: none"> 1. Configuring and Managing the Campus Network 2. Applying the OSI Model <ol style="list-style-type: none"> a. Executing a troubleshooting methodology b. Employing fault isolation at each layer 3. Network Security 4. Building Wireless Networking <ol style="list-style-type: none"> a. Setting up the access point b. Configuring the SSID(service set identifier) on a client c. Securing the wireless traffic 5. Defining and Implementing VLANs 6. Optical Networking 7. Voice over IP 			

	<p>8. Network Server Management 9. Linux Networking 10. Industrial Networks</p>
<p>Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>Upon successful completion of this course, the student will be able to do the following:</p> <p>COURSE:</p> <ol style="list-style-type: none"> design and maintain a campus and industrial network identify and resolve OSI layer issues implement basic network security structures manage IP address assignments and subnetting understand basics of wireless network configure, setup and maintain a basic Linux server and network configure a basic wireless or optical network <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i> Computer Information Systems Associate Degree</p> <p>NETWORKING</p> <ol style="list-style-type: none"> Knowledge of industry standard networking and communication technology Analyze and evaluate a networking scenario and recommend appropriate solutions <p>GENERAL EDUCATION: <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <ol style="list-style-type: none"> Critical Analysis/ Logical Thinking - Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes. <p>Demonstrates: Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions.</p> <p>Does Not Demonstrate: Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.</p>
<p>Evaluation: List how the above outcomes will be assessed.</p>	<p>Assessment will be based on the following criteria:</p> <ol style="list-style-type: none"> Assignments and case studies Simulation labs A comprehensive project for inclusion in the student's ePortfolio
<p>Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p>	<p>Required: Networking Lab (Room 314)</p> <p>Desired:</p>
<p>Textbook(s)</p>	<p>Refer to current academic year printout.</p>

