

COURSE SYLLABUS

Course Title:	Network Essentials I		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*130	Prerequisites: C- or better in Integrated Reading and Writing II (ENG*075) OR Introduction to College Reading & Writing (ENG*093) OR Introduction to College English (ENG*096) OR Reading & Writing VI (ESL*162), or placement into Composition (ENG*101) [including embedded ENG*101]	
	Course Type: A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: M: Seminar Internship P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/Clinical/Lab Z: Combined Lecture/Studio	X		
	Elective Type:	G	Corequisites: None	
	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	Other Requirements: None	
	Developmental: (yes/no)	No		
	Lecture:	3		
	Clinical:	0		
	Lab:	0		
	Studio:	0		
Contact Hours:	0			
Other:	0			
TOTAL:	3			
Class Maximum:	24	Other Requirements: None		
Semesters Offered:	F/S			
Catalog Course Description:	Introduces students to the underlying concepts of data communications, telecommunications, and networking. Provides a general overview of computer networks and focuses on terminology and current networking environment technologies. Topics to be covered include network topologies, protocols, architectures, and components.			
Topical Outline: List course content in outline format.	1. Introduction to Computer Networks and Computer Fundamentals 2. Physical Layer Cabling: Twisted Pair 3. Interconnecting the LANs 4. TCP/IP 5. Introduction to Router Configuration 6. Routing Protocols 7. Wide Area Networking			
Outcomes: Describe measurable skills or knowledge that students should be able	Upon successful completion of this course, the student will be able to do the following: COURSE: 1. describe the OSI model and associate how various protocols comply with the model			

<p>to demonstrate as evidence that they have mastered the course content.</p>	<ol style="list-style-type: none"> 2. identify and describe LAN topologies, protocols, standards and architectures 3. identify and describe the appropriate use of LAN hardware components such as routers, switches and gateways 4. design a LAN topology and architecture based on a given set of criteria <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i></p> <p><u>Computer Information Systems Associate Degree</u></p> <p>NETWORKING</p> <ol style="list-style-type: none"> 2. Knowledge of industry standard networking and communication technology 3. 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"> 2. 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 style="margin-left: 40px;">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 style="margin-left: 40px;">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> 3. Ethical Dimensions (embedded) - Students will identify ethical principles that guide individual and collective actions and apply those principles to the analysis of contemporary social and political problems. <p style="margin-left: 40px;">Demonstrates: Identifies and reflects critically on ethical issues presented in classroom instruction or in assigned co-curricular or civic activities and/or professional internships and practica.</p> <p style="margin-left: 40px;">Does Not Demonstrate: Does not sufficiently identify or reflect critically on ethical issues presented in classroom instruction or in assigned co-curricular or civic activities and/or professional internships and practica.</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"> 1. Assignments and case studies 2. Simulation labs 3. 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) Desired: None</p>
<p>Textbook(s)</p>	<p>Refer to current academic year printout.</p>