Course ID: CIMN 110
Cat ID: 429296.00
State ID: CCC000608650

College:	A	Saddleback College
Division/School:	BS	Business Science
Department:	CIM	Computer Information Management
Program:	CIMNAD	Network Administrator
Subject:	CIMNAD	Network Administrator

O F F I C I A L C O U R S E O U T L I N E

HISTORY AND STATUS

Course Status: A Active (Fully Approved)
Course Originator: Tom DeDonno

Board of Trustees	10/28/19
State Approval	06/28/13
Curriculum Committee Approval	09/05/19
Division Approval	09/05/19
Tech Review Approval	09/05/19

Technical Change Date: 03/05/01

Technical Change Comment:
3/5/01-taxonomy 2/25/13-fr CIM 252 to CIMN 210; 10/21/19 fr 546309 to 608650

Comments:
moe, assign, txt

BRIEF DESCRIPTION

Short Title: COMPTIA A+ IT
Full Title: NETWORKING ESSENTIALS AND TECHNOLOGIES FOR IT CYBERSECURITY

BRIEF DESCRIPTION

Catalog Description:

Presents LAN and WAN technologies and also covers network operations, design concepts, and protocols. This course also provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level Information Communication Technology (ICT) professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, cybersecurity, networking and the responsibilities of an ICT professional will be introduced. Preparation for the CompTIA A+ certification exams (formerly CIMN 210).

Prerequisite:

None

Enrollment Limitation:

None

Corequisite:

None

Recommended Preparation:

None

COURSE FUNCTIONS

Course Prior to:	Y	Not Applicable
Course Classification:	Y	Credit Course
SC/IVC GE Code:	NA - Not Applicable	
CSU GE Code:	NA	Not Applicable
IGETC GE Code:	NA - Not Applicable	
UC Transferable Course:	N	No UC credit
Comparable SC/IVC:		
Comparable CSU:	CSU CSU San Bernardino IST 101 - Introduction to Information Technology	
Comparable UC:		
Comparable CCC Baccalaureate:		
TOP Code:	0708.10	Network Administrator
SAM Code:	D	Possibly Occupational
CAN Number:		
CID Number:		

COURSE OPTIONS

Grading Option:	GR	Letter Grade or Pass/No Pass
Open Entry:	N	No
Fixed, Optional or Variable Units:	F	Fixed Units
Repeatability Status:	N	No
Repeatability Model:		
Repeatability Limit:	0	
Cross-Listed Courses:	NONE	
Cross-Listed Parent:	No	

COURSE VALUES

Method of Instruction:	L-L	Lecture/Lab Combination	
Maximum Enrollment:	45	Maximum WSCH:	225
Average Enrollment:	22	Average WSCH:	110

	Lecture	Lab	Learn Ctr	Total
WFCH	2.00	3.00	0.00	5.00
TFCH	33.20	49.80	0.00	83.00
TSCH	33.20	49.80	0.00	83.00
LHE	2.00	2.50	0.00	4.50
FTEF	13.33	16.67	0.00	30.00
UNITS	2.00	1.00	0.00	3.00

Schedule Description:

Preparation for the CompTIA A+ certification exams. Presents LAN and WAN technologies, network operations,and protocols. Fundamentals of computer hardware/software and advanced concepts such as security networking and responsibilities of an ICT professional. (formerly CIMN 210)

COURSE CONTENT
(Topics Covered)

Lecture Topics:

I. PC Hardware
II. Networking
    A. Introducing computer Local Area Network (LAN) and Wide Area Network (WAN) networking
    B. LAN communications
    C. Hub and switch networks
    D. WAN protocols
    E. Internet Protocol (IP) subnetting
III. Laptops, Printers
IV. Operational Procedures
V. Operating Systems, Security and Cybersecurity
VI. Mobile Devices
VII. Troubleshooting

Lab/Learning Center Content:

I. Assemble components on a PC
II. Maintain and configure PC software and devices
III. Troubleshoot command hardware and software issues
IV. Use Windows utilities, perform connectivity tests
V. Use various software, perform numerous lab activities

COURSE CONTENT
(Learning Objectives)

Students participating in this class will:

1. Identify and assemble components based on customer requirements.
2. Install, configure and maintain devices, PCs and software for end users..
3. List and describe the basic elements of computer networking, security, cybersecurity, and forensics.
4. Properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills
5. Describe and evaluate implementation of five common network services within various organizational scenarios.
6. Understand the basics of virtualization, desktop imaging, and deployment.
7. Evaluate implementation of common network and internetwork connectivity devices according to a given organizational scenario.
8. Identify and describe the basic functions of network managements.

COURSE CONTENT
(Student Learning Outcomes)

Students completing this course satisfactorily will be able to:

1. Explain types of network basic network component and connections.
2. Explain basic procedures in troubleshooting nework issues.
3. Describe PC and mobile device issues including application security support.

COURSE CONTENT
(Methods of Evaluation)

Evaluation of the student will be based upon the following items:

1. Writing Assignments
   term or other paper(s)
   written assignments
   other (specify)
   a. Written reports which require the student to demonstrate the ability to locate, evaluate, synthesize, use, and communicate information in its various formats

2. Problem Solving Demonstrations
   exams
   quizzes
   other (specify)
   a. Computer hands-on projects requiring the student to use network simulation software to design and develop computer networks, protocol analyzer software to analyze data on a network, and terminal software to access hardware for programming purposes.

3. Skill Demonstrations
   class performance(s)

performance (exam)
other (specify)
a. Computer hands-on projects requiring the student to demonstrate proficiency in the use of terminal software, protocol analyzer software, and network simulation software.

4. Examinations
multiple choice, true/false
other (specify)
a. Exams evaluating student’s ability to practically apply concepts related to network design and construction. Sample exam of questions for CompTIA A+ exam.

5. Other
other (specify)
a. Evaluation will include hands-on projects and a combination of examinations, presentations, discussions, or problem-solving assignments.

COURSE CONTENT
(In and Out-of-Class Assignments)

1. Typical Reading Assignments:
   a) College-level text b) Journals c) Magazines

2. Typical Writing Assignments:
   Report defining various aspects of networking techniques

3. Typical Oral Assignments:
   Class discussions on network design

COURSE CONTENT
(Other Requirements)

Textbooks / Supplies:
Meyers, M, Mike Meyers' CompTIA A+ Guide to Managing and Troubleshooting PCs, Fifth Edition (Exams 220-901 & 220-902) 5th Edition, 5th Edition Ed. McGraw-Hill Education. 2016
Andrews, J, Lab Manual for Andrews' A+ Guide to Hardware, 9th , 9th Ed. Cengage Learning. 2016
Cisco Networking Academy, IT Essentials Companion Guide v6 (6th Edition, 6th Ed. Cisco Press. 2016

Material Fees: $ 0.00 Transaction Code:

VALIDATION
(Corequisite, Limitation on Enrollment,
Prerequisite and Recommended Preparation)