

## Course Outline

**Fall 2005**

<b>Division:</b> Information Technology			
<b>Program/Dept:</b> Network Design and Administration			
<b>Course Number:</b>	NET 120	<b>Credits:</b>	5.0
<b>Variable:</b>			
<b>Course Title:</b> Network Essentials – CompTIA Network +			
<b>Inst. Intent:</b>	21 Vocational Preparatory	<b>CIP:</b>	11.0901
<b>Fee:</b> Yes		<b>Type:</b> Computer Lab Fee	

<b>Degree/Certificate Requirement:</b> Yes			
<b>Name of Degree/</b> Network Administration – Certificate, AAS-T and Cisco			
<b>Certificate Requirements:</b> programs			
<b>Distribution Requirement for AA/AAS:</b> Yes			
<b>Transfer Status to 4-year institution:</b> No			
<b>If yes, please describe:</b>			
<b>Course Length:</b> Based on 11 wks/qtr.		<b>Class Size:</b> 24	
<b>Course Contact Hours:</b> 55			
<b>Lecture:</b> 55		<b>Lab:</b>	<b>Clinical:</b>
<b>Other:</b>			
<b>Prerequisite:</b> Yes			
<b>If yes, please describe:</b> MIC 101 (or ability to use MS Office)			
<b>Required Placement Tests:</b> No			
<b>If yes, please describe:</b>			
<b>Comments:</b>			

### Course Description:

This course is designed to provide students with the background necessary to understand networking technologies. The course serves as a general introduction for students who need a foundation in current networking technology for local area networks (LANs), wide area networks (WANs) and the Internet.

**Course Outcomes/Learning Objectives:**

At the end of the quarter the student will:

1. Demonstrate an understanding of network fundamentals and terminology.
2. Differentiate the types and uses of network interfaces.
3. Explain basic network infrastructure components.
4. Explain distinct server platforms and types.
5. Explain Network topology and configuration.
6. Explain the OSI model.
7. Explain communications services.
8. Explain protocols and software.

**SCCC General Education Outcomes and/or Related Instructional Outcomes (for technical courses) Met by Course: (list each outcome):**

- Outcome 1. Think critically in reading and writing.
- A. Develop the attitudes that support troubleshooting skills.
  - B. To apply thinking skills.
- Outcome 6. Work and communicate effectively in groups.
- A. To demonstrate effective listening skills.
  - C. To integrate with a group effectively.

**Topical Outline and/or Major Divisions:**

- I. Introduction to Networks
  - A. Network History
  - B. Network Terminology and Fundamentals
- II. Network Media
  - A. Overview of media types
  - B. Communication Services
- III. Network Interfaces
  - A. Common Interfaces
  - B. Transceiver
- IV. Overview of other Network Equipment
  - A. Modem
  - B. Hub
  - C. Switch
  - D. Bridge
  - E. Router
- V. Server Platforms and Types
  - A. Domain Servers
  - B. Application Servers, Exchange, SQL, et.,
  - C. Peer-to-peer

- VI. Network Models
  - A. Open System Interconnection (OSI)
  - B. TCP/IP DARPA MODEL
- VII. Network Configuration
  - A. Topology
  - B. Basic Configurations – BUS, TOKEN RING, FDDI
- VIII. Network Standards
  - A. Institute of Electrical and Electronics Engineering - IEEE Standards
  - B. Consultative Committee on International Telephone and Telegraph-CCITT Standards.

**Course Requirements (Expectation of Students):**

1. Attend class sessions.
2. Participate in class activities.
3. Complete assignments and exams as indicated by instructor.

**Methods of Assessment/Evaluation:**

Case/lab performance and written exams.

**Required Text(s) and/or Materials:**

As recommended by instructor.

**Supplemental Text(s) and/or Materials:**

At the instructor's initiative.

**Outline Developed by:** Vince Offenback  
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Lisa Sandoval

**Date:** 10/00  
**Date:** 10/00, 12/4/00, 2/1/01, 9/11/03,  
10,23,03, 12/19/05  
8/05