

SYLLABUS

DIVISION: Business and Engineering Technology

REVISED: SPRING 2014

CURRICULA IN WHICH COURSE IS TAUGHT: IST, Information Systems Technology

COURSE NUMBER AND TITLE: ITN 102 – Introduction to Client Operating Systems

CREDIT HOURS: 4 **HOURS/WK LEC:** 3 **HOURS/WK LAB:** 2 **LEC/LAB COMB:** 5

I. CATALOG DESCRIPTION: ITN 102 - Provides instruction in installation, configuration, administration, and troubleshooting of client operating systems. These systems currently include Windows8/7/ and Linux platforms in a networked data communications environment.

II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES: ITN 103 will address the following Information Technology Outcomes:

- Implement Information Technology skills required by software applications.
- Apply methodologies to stay current in IT offerings, trends and certifications.
- Apply analytical and problem solving skills for computer system design, planning and support.
- Design, code, test, debug, and document software needed for computer system implementation and maintenance.
- Apply current IT industry standards, protocols, and techniques.
- Use instructional applications and material which could lead towards industry certification.

Please Note: The overall Learner Outcomes from all of the course requirements for the A.A.S. Degrees in IT are more in-depth than those of the Career Studies Certificates. However, the IT courses that are the same in both the A.A.S. Degrees and the Certificate Programs carry the same Learner Outcomes and are identical in content. Please review the DCC Catalog or visit the DCC Web Site for more details.

III. REQUIRED BACKGROUND: ITE 221/115

IV. COURSE CONTENT:

- Basic concepts in local area networking using the Windows 8 network operating system as the platform of choice
- Network topologies, protocols, components, cabling, network operating systems, directories, security, printing, data backup, and installation of file servers, workstations and applications
- Installation, configuration, and administration, monitoring, and troubleshooting Windows 7

V. THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE. STUDENTS WILL:

- X Communication
- X Critical Thinking
- Cultural and Social Understanding Information Literacy
- X Personal Development
- X Quantitative Reasoning
- X Scientific Reasoning

VI. LEARNER OUTCOMES**VII. EVALUATION**

Upon conclusion of this course the student will be able to define, discuss, and demonstrate knowledge in the following concepts.	
Plan for workstation hardware	Lab exercises and written test – Discuss CPU, RAM, Video, Hard Drive types, budgets
Plan network protocols, compatibility, and security	Lab exercises and written test – Configure TCP/IP, determine workgroup compatibility, and User permission/access
Install Workstation Operating System	Lab exercises and written test – Perform installation of Windows operating system.
Configure Workstation installation	Lab exercises and written test – Configure Display, Network, and other OS dependent software.
Configure Storage, backup, and performance	Lab exercises and written test – Analyze storage options, utilize backup/restore software provide in OS, utilize Task Manager to determine performance criteria.
Set up accounts and client connectivity	Lab exercises and written test – Create user accounts in OS and assign proper memberships
Set up groups, folders, files	Lab exercises and written test – Create group accounts in OS and assign users as necessary.
Manage disk quotas, and software installation/configuration	Lab exercises and written test – Create user disk quota in OS and install/configure necessary software.
Install and manage printers	Lab exercises and written test - Install networked printer and drivers
Configure Remote Access	Lab exercises and written test – Configure Remote Desktop support in OS and perform Remote Assistance and Remote Desktop scenarios.
Configure Internet access including wireless and wired network interoperability's	Lab exercises and written test – Configure OS to access Internet using both wired and wireless network interface cards. On wireless discuss and configure the SSID of the router being accessed.
Configure Network monitoring and optimization	Lab exercises and written test – Configure OS Performance Monitor and utilize Task Manager to demonstrate network and system performance.
Building Networks – Design	Class Project – Utilize network diagramming software to build a custom network design that reflects an enterprise network environment. Submit design for grading