

NASSAU BOCES - ADULT EVENING PROGRAM
Joseph M. Barry Career & Technical Education Center
1196 Prospect Ave.
Westbury, NY 11590

COURSE OUTLINE

Course Name: **Computer Repair I**
Weeks: 10
Sessions: 20
Hours 60
Days/Time Tue/Thu, 7-10 pm
Instructor: Robert Cheeseman
Required Textbook: COMP TIA A+ Complete Study Guide: Exams (Essentials) and Practical Applications
 ISBN: 9780470486481
Prerequisites: None
Adult evening Office: (516) 622-6950

Course Overview:

This course will introduce students to the basic elements of computer theory and personal computer hardware, and is designed for hardware novices. Topics will include CPU, storage media, CD-ROM, memory, monitor interface, system teardown, upgrading and troubleshooting.

Computer Technology Certificate: Requires Computer Repair I and Computer Repair II for a total of 120 hours. Upon completing the certificate program the student will have obtained sufficient operating system and product knowledge to sit for the nationally-recognized A+ Certification exam (Student is responsible for arrangements and exam fee).

Course Topics

Session 1-2 Operating System Fundamentals
 Introduction, Operating System Basics
 Microsoft Disk Operating Systems
 Basic Memory Management
 Window 9x Functions, Structures and Major Files
 Window NT/2000 Structures and Major Functions

Session 3-4 Navigating Operating Systems
 Introduction
 Working from the Command Line
 Navigating Window 9x
 Navigating Windows NT/2000

Session 5-6 Creating and Managing Files
 Introduction
 Files and Filenames
 MS-DOS Files
 DOS Shortcuts
 Window NT/2000 Files

- File Encryptions and Compression
- Windows Explorer

Session 7-8

Basic Disk Management

Introduction

Microsoft Disk Structures

- Drive Partitioning
- Window NT File System
- DSS Utilities

Operating System Utilities

- Windows 98 Troubleshooting Tools
- Windows 2000 System Tools
- Windows Help Files

Session 9-10

Installing and Upgrading Operating Systems

Introduction

Disk Preparation

Installing Windows 95

Installing Windows 98

Installing Windows NT/2000

Installing Windows 2000 Professional

Operating System Upgrading

Dual Booting

Session 11-12

Starting the System

Introduction

The Boot Process

Plug-and-Play

MS-DOS Bootup

Windows 9x Startup

Windows NT Startup

Windows 2000 Startup

Self-Booting Disks

Session 13-14

Working with Devices, Application and Printers

Introduction

Loading and Adding Device Drivers

Working with Applications

Printing in Windows

Session 15-16 Troubleshooting OS Setup/Startup Problems

Introduction

Troubleshooting Setup Problems

Troubleshooting Startup Problems

Session 17-18 Common OS Operational Problems
Introduction
Common OS Operational Problems
Windows-Related Printing Problems
Viruses
- Common Viruses
- Virus Symptoms
Networking with Windows
Introduction
Network Hardware
Resource Sharing
Networking with Window 9x
Network Printing with Windos 9x
Networking with Windows 2000

Session 19 Internet Concepts
Introduction
Wide Area Networks
- The Internet
- ISDN
- Digital Subscriber Lines
- The World Wide Web
- Web Browsers
- File Transfer Protocol
- Email
Wide Area Networking with Windows 9x
Wide Area Networking with Windows NT/2000

Session 20 Final Review
- Core Hardware Service Technician Exam
- Operating System Technologies Exam
- Study and Exam Prep Tips