



Passaic County Community College  
Academic Year: 2023-2024  
Standard Syllabus

Department Chair: Merille Siegel  
Program Coordinator: Adeleye Bamkole

---

**Course Code:** CIS 281

**Course Title:** Network Administration I

**Department:** CIS/Engineering

**Semesters Offered:** Fall Day, Spring Evening

**Course Description:**

This course provides students with the knowledge and skills necessary to plan, install, and configure a Client Operating System (Windows 10). Students learn to perform day-to-day administration tasks such as managing user accounts, groups, and policies, as well as printing services. Students also learn how to use the desktop interface and tools necessary for implementing and configuring an industrial-strength Client OS, which administers small or large networks. Successful completion of this course prepares students to take the appropriate Industry Certification exam. Offered days only in Fall; offered nights only in Spring.

**Prerequisites:** CIS 180

**Credits:** 3      **Lecture Hours:** 3      **Lab/Studio Hours:** 0      **Clinical/Fieldwork Hours:** 0

---

**Required Textbook/Materials::** Microsoft® Specialist Guide to Microsoft® Windows 10 Configuring Windows Devices by Byron Wright and Leon Plesniarski, Course Technology

**Reference:** Hands – on NETWORKING ESSENTIALS with projects, By Michael J. Palmer, Course Technology

**Advanced Networking Concepts** Michael J. Palmer and Robert Sinclair, Course Technology

**Additional Time and Supplemental Requirements:** Based on a 15 week semester, students are expected to complete approximately 6 hours per week of assigned work outside of class.

**Course Learning Outcomes:**

**Upon successful completion of this course, students will**

- Set up hardware and software for network client workstations.
- Install and configure Windows 10 Professional or other client NOS
- Set up and manage user accounts and user groups.
- Manage security, access rights, and permissions.
- Set up and manage network printers.
- Audit resources.
- Implement server and Client backups and restores.
- Set up domain clients.

**General Education Outcomes:** This is not a general education course.

**Grading Standards:**

Students will be graded on the basis of testing and an evaluation of projects assigned by the instructor. The grade will be determined by the following: 40% written tests, 20% Lab Projects/ Assignments, 30% Final Exam and 10% attendance

**Course Content:**

(Schedule and suggested topics, readings, and assignments subject to change based on instructor and instructional resource)

<b><u>Topics</u></b>	<b><u>Chapter</u></b>
<b>Introduction to Windows 10</b>	<b>1</b>
Windows 10 Versions	
New and Enhanced Features of Windows 10	
Application Support	
<b>Case and hands-on Project 1</b>	
 <b>Installing Windows 10</b>	 <b>2</b>
Windows 10 Installation Methods	
Windows 10 Installation Types	
Image-Based Installation	
<b>Case and Hands-on Project 2</b>	
 <b>Using The System Utilities</b>	 <b>3</b>
Administrative Tools	
Hardware Management	
Power Management	

## **Managing Disks And File Systems**

4 and 5

Disk Technology

Partition Styles

Virtual Disk Management Tasks

### **Case and Hands-on Project 3**

#### **User Management**

User Accounts

Creating and Managing User Accounts

Network Integration

## **Windows 10 Security Features**

6

Security Policies

User Account Control

Malware Protection

### **Case and Hands-on Project 4**

*Test 1 Ch. (1, 2, 3, 4, 5, and 6)*

## **Networking**

7

Networking Overview

IP Version 4

IP Version 6

### **Case and Hands-on project 5**

## **User Productivity Tools**

8

File Explorer

Printing

Web Browsers

## **Case and Hands-on Project 6**

### **Windows 10 Application Support** 9

Application Environments

The Registry

App Compatibility

## **Case and Hands-on project 7**

### **Performance Tuning and System Recovery** 10

Performance Tuning Overview

Task Manager

Performance Options

### ***Test 2 Ch. (7, 8, 9 and 10)***

### **Microsoft Intune Device Management** 11

Microsoft Intune Overview

Supporting Mobile Devices

Supporting Client Computers

## **Hands-on Project 8**

### **Client Hyper-V** 12

Overview of Hyper-V

Creating Virtual Machines

Virtual Networking

## **Enterprise Computing**

13

Active Directory

Group policy

Enterprise Management Tools

## **Remote Access and Client Support**

14

Overview of Remote Data Access

Configuring VPN Clients

Synchronizing Data

***Test 3 Ch. (11, 12, 13 and 14)***

**Review + Final Exam**

### **College Policies:**

For Information regarding:

- PCCC's Academic Integrity Code
- Student Conduct Code
- Student Grade Appeal Process

Please refer to the PCCC Student Handbook and PCCC Catalog

### **Panther Alert:**

The College will announce delayed openings, closings, and other emergency situations through the Panther Alert System. Students are encouraged to sign up for Panther Alert Notifications by logging into their student accounts through the PCCC website at [www.pccc.edu](http://www.pccc.edu) and following Panther Alert System instructions.

### **Notification for Students with Learnings Disabilities:**

If you have a disability, and believe you need accommodations in this class, please contact the Office of Accessibility Services at 973-684-6395, or email [ods@pccc.edu](mailto:ods@pccc.edu). You should do so as soon as possible at the start of each semester. If you require testing accommodations, you must remind me (the instructor) one week in advance of each test.