

Computer Information Department Course Outline

NTWK 2203 Command-Line Scripting (On Demand)

Catalog Description

This course teaches IT students and professionals how to manage computer and networking operating systems in a command line environment. The command line environment is essential in efficiently managing today's complex OSs and NOSs. Students will become familiar with Microsoft PowerShell Command line functions that are advanced in detail and complexity and learn how to apply these utilities in OS and NOS management.

Prerequisites

CISQ 1103 Introduction to Computer Information
NTWK 2014 Network & Information Systems
PROG 1003 Intro to Programming Logic
NTWK 2023 Networking Admin 1
or Consent of Instructor

Credit Hours/Contact Hours/Load Hours: 3/3/3

Student Learning Outcomes

Students completing this course will:

- Be familiar with a coverage of commands and functions that the student will not find in other GUI-based administrative utilities
- Understand usage and syntax for each command
- Be familiar with commands and functions that make your job easier, faster, and more efficient.
- Be familiar with NTFS Access Control List and the management of file access in PowerShell
- Be familiar with remote Active Directory Administration
- Determine appropriate functions in a non-GUI based environment for specific needs.
- Application of appropriate techniques to resolve server errors.
- Listening, reading, and writing skills will be enhanced.
- Identify the implications of human error in execution of a network design.
- Identify the need for security in a 'wired' world.
- Create security certificate and "sign" a script

Topics

- Introduction to PowerShell
- Invoking .NET and COM software
- Certificate creation and signing files
- Managing Files
- Batch and Automation
- System Administration
- Disk and Data Management
- User Administration and Data Security
- Introduction to Networking
- Networking a Server
- Manipulating Network Resources
- Active Directory
- Security Active Directory
- Name Resolution Using DNS, WINS, and DHCP
- Advanced Networking Commands

Forms of Assessment

Quizzes, exams, homework assignments, lab assignments, and a hands-on final exam.
The final exam is worth 20% to 30% of the final grade.

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