CSC 231 Systems Administration

General Information

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Department
Computing Sciences

Course Prefix
CSC

Course Number
231

Course Title
Systems Administration

Course Information

Credit Hours
3

Lecture Contact Hours
3

Lab Contact Hours
0

Other Contact Hours
Catalog Description
The interconnections of computer systems, including hardware, software, and networks, on both small and large scales, requires a systems administrator's management and troubleshooting skills. The installation and maintenance of clients and servers, storage, backup, processing, and in some cases, networking, fall square on the shoulders of the systems administrator. When things go wrong and are in immediate need of a fix, the systems administrator's problem solving skills are tested, usually with no time to spare and lots of stress. This extensive hands-on course is designed to provide students the essential knowledge and skills to be successful system administrators. Students will install and configure a network operating system (NOS); use Active Directory to manage accounts; configure, manage, and troubleshoot resource access; configure network printing; configure and manage data storage; manage network services; configure remote access services; secure operating systems; monitor servers and networks; and manage system reliability and availability. In addition, virtualization software, Hyper-V, will be installed, configured, and used.

Key Assessment
This course does not contain a Key Assessment for any programs

Prerequisites
CSC 260

Co-requisites
None

Grading Scheme
Letter

First Year Experience/Capstone Designation
This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education
This course is designated as satisfying a requirement in the following SUNY Gen Ed category
None

FLCC Values

Institutional Learning Outcomes Addressed by the Course
Vitality
Inquiry
Perseverance

Course Learning Outcomes

Course Learning Outcomes
1. Install and configure a network operating system
2. Configure and manage network services
Outline of Topics Covered

I. Introduction to a network operating system
II. Installing a network operating system
III. Configuring the Environment
IV. Introduction to Active Directory and Account Management
V. Configuring, Managing, and Troubleshooting Resource Access
VI. Configuring Printing
VII. Configuring and Managing Data Storage
VIII. Managing Network Services
IX. Configuring Remote Access Services
X. Securing a network operating system
XI. Server and Network Monitoring
XII. Managing System Reliability and Availability

3. Troubleshoot problematic services