I. COURSE INFORMATION
   A. Computer Science 275 Computer Repair-Operating Systems
   B. 3 credit hours
   D. Prerequisites: None

II. COURSE DESCRIPTION
This course is designed to provide hands on skills in the area of computer troubleshooting and repair in accordance with the Comp-TIA A+ certification operating systems objectives.

III. LEARNING OUTCOMES
   A. Compare and contrast the features and requirements of various Microsoft Operating Systems
   B. Given a scenario complete the following:
      - install, and configure the operating system using the most appropriate method
      - use appropriate command line tools
      - use appropriate operating system features and tools
      - use Control Panel utilities (the items are organized by “classic view/large icons” in Windows)
   C. Setup and configure Windows networking on a client/desktop
   D. Perform preventive maintenance procedures using appropriate tools
   E. Explain the differences among basic OS security settings
   F. Explain the basics of client-side virtualization
   G. Apply and use common prevention methods
   H. Compare and contrast common security threats
   I. Implement security best practices to secure a workstation
   J. Given a scenario complete the following:
      - use the appropriate data destruction/disposal method
      - secure a SOHO wireless network
      - secure a SOHO wired network
   K. Explain the basic features of mobile operating systems
   L. Establish basic network connectivity and configure email
   M. Compare and contrast methods for securing mobile devices
   N. Compare and contrast hardware differences in regards to tablets and laptops
   O. Execute and configure mobile device synchronization
   P. Explain the troubleshooting theory
   Q. Given a scenario troubleshoot the following:
      - common problems related to motherboards, RAM, CPU and power with appropriate tools
      - hard drives and RAID arrays with appropriate tools
      - common video and display issues
      - wired and wireless networks with appropriate tools
      - operating system problems with appropriate tools
      - common security issues with appropriate tools and best practices
      - common issues and repair laptops while adhering to the appropriate procedures
      - printers with appropriate tools

IV. MAJOR CONTENT AREAS
   A. Operating systems
B. Security
C. Mobile devices
D. Troubleshooting

I. ASSIGNMENTS (may include but are not limited to)
   A. Chapter examinations
   B. Hand-on labs

II. EVALUATION METHODS (may include but are not limited to)
    A. Examinations
    B. Lab participation