## MOHAWK VALLEY COMMUNITY COLLEGE

**UTICA AND ROME, NEW YORK**

### Course Outline

**IS 208 Practical Computing for the 21st Century Professional (Educator) C-3, P-0, Cr-3**

**Prerequisite**: IS 101 Computer Applications & Concepts I

Or IS 100 Introduction to Computer Applications & Concepts

**Course Description:**

This course introduces the concepts and issues related to the use of computers in the professional environment today. It examines the history of computer information systems as well as local and wide-area networking, file formats, data compression, operating systems, and the application of internet technologies. It covers basic procedures for selecting, installing, configuring, and maintaining hardware and software components.

Students will be required to complete a series of computer-based training (CBT’s) in addition to the coursework.

**Student Learning Outcomes:**

The student should be able to:

1. Define relevant terminology.
2. Identify and describe the history of computer information systems.
3. Identify and describe important considerations for selecting and purchasing computer systems.
4. Identify and describe different operating systems.
5. Identify and describe aspects of networking environments.
6. Identify and describe principles of processing images and graphics.
7. Identify and describe ethical, social and gender equity issues in the field of computer systems.
8. Identify and distinguish between the various internet technologies.
9. Identify and demonstrate knowledge of common file formats.
10. Demonstrate knowledge of data compression and decompression.
11. Demonstrate knowledge of the procedures for installing, configuring and maintaining hardware and software.

**Major Topics:**

1. Integrating Educational Technology into the Curriculum

* Computer, information and integration   
  literacy
* The evolution of computers and digital   
  media

  2. Communications, Networks,   
 the Internet, WWW   
 - Networking the classroom, school and  
 District  
 - Benefits of using the computer in the  
 Classroom  
 - The Internet and the WWW

  3. System and Application Software:  
 Productivity tools for Educators   
 The role of the operating system  
 - Operating systems: Windows, Mac. Linux etc  
 - Application Software: word processing, spreadsheets,  
 - databases, presentation graphics, DTP etc

4. Hardware for Educators   
 - The components of the system unit  
 - motherboard, memory, ports etc.  
 - Input. Output and storage devices

5. Integrating Digital Media and Educational Software Applications  
 - What is digital media?  
 - Digital media applications  
 - CAI, educational games, tutorials  
 - Educational simulations  
 - Integrated Learning Systems

6. Technology, Digital media and Curriculum Integration /   
 Evaluating Educational Technology and Integration Strategies   
 - Curriculum standards and benchmarks  
 - Barriers to technology integration  
 - Strategies for integrating technology   
 - into the classroom  
 - Planning lessons with technology  
 - Evaluating educational technology  
 - Curriculum integration activities

7. Security issues, ethics, equity issues, emerging technologies   
 - Computer security

* Computer viruses, firewalls
* Hardware, software, information theft
* Computer ethics, copyright laws
* Parental, educational controls
* Computers and health issues
* Ergonomics
* Emerging technologies

**Revised 1/17**