CIT 101. PC MANAGEMENT AND MAINTENANCE.
Credit Hours: 5
Scheduled hours per week
   Lecture: 4
   Lab: 2
   Other: 0

Catalog Course Description: This is an introductory course on PC management, maintenance and troubleshooting. Topics covered include operating systems and OS architecture, software/hardware relationships.

Pre-requisites: N/A
Co-requisites: N/A

Course Learning Outcomes:
• Maintain, troubleshoot, and repair PCs
• Install various operating systems
• Manage customer relations, techniques, and principles
• Recognize social and ethical issues related to the information society, such as privacy, licensing, copyright and job placement

Topics to be studied:
• Major Operating Systems Used on PC’s
• Software and Hardware Relationships
• Computer Hardware
• Information Storage Devices
• Memory management
• Printers
• Networking essentials
• Preventive maintenance
• Troubleshooting
• Mobile devices
• Security
• Customer relations

Relationship of Course to Program or Discipline Learning Outcomes:

| Identify and describe layers of the OSI and TCP/IP models, and use them effectively in troubleshooting |
| Describe and apply LAN and WAN technologies in wired and wireless environments |
| Demonstrate ability to apply workstation and server installation, configuration, management and troubleshooting techniques |
| Demonstrate ability to install, configure, manage, and maintain routing and switching technologies |
| Describe and discuss different operating systems and their relationship with hardware, their functions, advantages and disadvantages, and their respective tools and software packages |
| Explain Information Systems and choose appropriate systems based on requirements |
| Describe basic information security and computer ethics |
Relationship of Course to General Education Learning Outcomes:

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<thead>
<tr>
<th>General Education Area</th>
<th>Description</th>
<th>X</th>
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<tbody>
<tr>
<td>Composition and Rhetoric</td>
<td>Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.</td>
<td>X</td>
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<tr>
<td>Science &amp; Technology</td>
<td>Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.</td>
<td>X</td>
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<tr>
<td>Mathematics &amp; Quantitative Skills</td>
<td>Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.</td>
<td>X</td>
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<tr>
<td>Society, Diversity, &amp; Connections</td>
<td>Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.</td>
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<tr>
<td>Human Inquiry &amp; the Past</td>
<td>Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.</td>
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<tr>
<td>The Arts &amp; Creativity</td>
<td>Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.</td>
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5/3/2016

Special requirements of the course:
- Project 1, in which students will be required to successfully assemble a computer system, including the operating system.
- Project 2, in which individual students will be required to troubleshoot a malfunctioning computer and repair it.

Additional information: This course is designed to prepare the student for a career in the computer industry. Along with the above stated course objectives this course will prepare the student to take their actual A+ certification exam.

Prepared by: Doug Rhodes

Date: 10/20/2017