

COCONINO COMMUNITY COLLEGE
COURSE OUTLINE

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Status: Permanent
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September 28, 1992
Fall 2002
Fall 2008
Fall 2010
December 21, 2016
February 9, 2017

A. Identification:

1. Subject Area: Computer Information Systems (CIS)
2. Course Number: 130
3. Course Title: Digital Technology Repair and A+ Introduction
4. Credit Hours: 4
5. Course Description: A comprehensive overview of digital devices and software applications with an introduction to advanced concepts aligned with CompTIA A+ certification objectives. CIS 130 is for students pursuing careers in IT who want practical knowledge and troubleshooting skills required of entry level IT professionals. Digital devices and software includes, but not limited to, Desktop PCs, mobile devices, printers, common software applications, operating system installation/upgrade for laptops/workstations and mobile devices, networking concepts, IT security, and hands-on troubleshooting. Student engagement includes: Instructor led lectures, interactive learning experience with hands-on labs, virtual lab simulations and assessments. Four lecture. May be taken for S/U.

- B. Course Goals: Course goals are to develop the skills required to purchase, upgrade and repair digital devices (including select peripheral equipment) and installation of operating systems and administration. The student will be provided with extensive hands-on activities, lectures, and testing software, which will be utilized to develop a technical knowledge base and hands-on comfort-level with digital devices. This course will allow the student to demonstrate basic knowledge of digital devices and related operating systems with emphasis on: digital device upgrades, operating system installation and/or upgrades, digital device and operating system configuration, troubleshooting, and repairing digital devices.

C. Course Outcomes:

Upon successful completion of this course, students will:

1. select the appropriate digital components to build, repair, or upgrade digital devices;
2. explain the purpose of safe working conditions and safe lab procedures;
3. install components to build, repair, or upgrade digital devices;
4. explain how to perform preventive maintenance and troubleshooting on digital devices;
5. perform installation of Microsoft Windows and Linux based operation systems;
6. perform configuration, management, maintenance, and troubleshooting of Microsoft Windows and Linux based operating systems;
7. configure devices to connect to LANs, the Internet, and Cloud services;
8. explain how to configure, repair, upgrade, maintain and troubleshoot laptops and mobile devices;
9. explain how to configure, secure and troubleshoot mobile, Mac, and Linux operating;
10. install a printer to meet requirements;
11. implement basic host, data, and network security;
12. explain the roles and responsibilities of the IT professional;

13. and troubleshoot advanced digital device and software problems.

D. Course Outcomes Assessment will include:

1. self-assessment chapter quizzes;
2. web based chapter exams;
3. hands-on lab assessment for each applicable chapter;
4. web Final Exam covering material from the entire semester;
5. and final Practical Exam (working on used PC's).

E. Course Content will include:

1. digital devices and related Components;
2. safety procedures, preventative maintenance and tools;
3. component configuration, set up and installation process;
4. troubleshooting techniques and diagnostic procedures;
5. installation and upgrade of operating systems;
6. operating System configuration, management, maintenance;
7. LANs, the Internet, and Cloud services;
8. laptops and mobile devices OS Fundamentals;
9. printers;
10. digital security basic;
11. and roles and responsibilities of an IT Professional.