

SYLLABUS

COURSE IDENTIFICATION: TITLE: A+ Computer Repair Part 1

ACADEMY: Engineering and Design

ROOM: 114

COURSE INSTRUCTOR: N. Ramsey

PHONE: 896-5600 EXT.: 5805

EMAIL: nramsey@rrhs.rrps.k12.nm.us

PREREQUISITE (S): Business Computer Applications

TEXTBOOK: CompTIA A+ Certification by Michael Meyers

SUPPLIES: Folder or Binder, pens, pencils, thumb drive.

LAB FEE: \$20

WEBPAGE: <http://www.rrps.net/NEWrrhs/TeacherPages/ED/ramsey.htm>

COURSE DESCRIPTION: Students in this class are introduced to a variety of topics from hard disk management to upgrading and maintaining hardware and software. The curriculum for this course is delivered via local area network and includes hand-on practical experiences. Upon successful completion (of both Computer Repair I and II) students will be able to sit for the **A+ Essentials** Exam and either **IT Technician**, **Help Desk Technician**, or **Depot Technician** Exam

COURSE EXIT STANDARDS:

Upon completion of this course students will:

1. Be able to identify basic elements of a PC and their functionality
2. Be able to troubleshoot the hardware of a PC
3. Be able to troubleshoot the software of a PC
4. Be able to upgrade a PC

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COURSE OUTLINE (subject to change):

WEEK	THEME/CHAPTER(S)/ADDITIONAL MATERIALS	ACTIVITIES/MAJOR PROJECTS	EXIT STD(s)
1-2	The Visible PC	An intro to the elements of a PC	1
3-5	Microprocessors	History, Mechanics	1
6-8	RAM	Mechanics and history of RAM	1
8-10	BIOS and CMOS	Functions, Utilities, POST, errors	2, 4
11-14	Expansion Bus	History, Mechanics, Installation	1, 2, 4
15-18	Motherboard	Layout, Installation and replacement	1, 2
19-21	Power Supplies	Electricity, Connections, Switches	1, 2, 4
22-24	Hard Drives Technologies	Mechanics, Formatting, Fixing	1, 2, 3, 4
25-27	Implementing Hard Drives		1, 2, 3, 4
28-30	Removable Media	History, Care, Installation	1, 2, 4
31-35	Installing and Upgrading Windows		4
36	Cumulative Review, Exam		All

CRITERIA FOR EVALUATION: Evaluation will be based on Multiple Choice tests (similar to those used by the A+ licensure exams), various labs, and class participation. Grading is weighted:

60% - Assignments, Labs, Class Participation

40% - Test average

GRADING SCALE: See the student handbook for descriptions of performance levels.

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = Performance below 60

OTHER: Due to time limitations, this course alone will not prepare the students for the A+ licensure test. Students will need to take the 2nd A+ course to be prepared for certification.