COLORADO MESA UNIVERSITY

Department of Computer Science, Mathematics and Statistics
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CSCI 104 Intro to Computer Hardware

I.	Course prefix and number	CSCI 104
I.	Number of semesters hours	1
III.	Pre-requisites	None
IV.	Location of classroom and time course meets	WS 118 MTWR 12:00pm-3:45pm Jan 9-12
V.	Instructor name Office location phone email address	Mr. Karl Castleton WS 119H 970-462-7280 kcastlet@coloradomesa.edu
VI.	Office hours	TR 4:00pm-4:30pm
VII.	Course Description	Computer hardware introduction. Includes purchase, maintenance and repair of computer hardware (desktops, laptops, servers and mobile devices, wired and wireless network hardware) in individual and corporate settings.
VIII.	Textbook and materials	Internet resources will be used as reference material Colorado Mesa University Computer Account
IX.	Course Objectives	To give lower division students an opportunity to work with and learn the fundamentals of modern computer hardware.
X.	Methods	A combination of lecture and hands on experimentation with computer hardware will be used to teach. Students will be expected to spend time outside class reading additional materials and trying to source component parts. Tests will be given to given to judge student and class progress.
XI.	Policy on absences and tardies	The instructor needs to be informed of all absences before the missed class. An attendance sheet will be passed around at the beginning of class. If your name is missing you are absent. You will not be allowed to sign the attendance sheet 10 minutes after the instructor hands it out. More than 1 absences will reduce your grade by 10%. More than 2 absences and the instructor will consider dropping the student.
XII.	Policy on late work	If a student needs more time on an assignment, the instructor needs to be contacted before the assignment is due. At most an additional

		week of time will be given for assignments. All arrangements for missed tests must be made by the student contacting the instructor before the next scheduled class meeting. If no arrangement is made the student will have earned a 0 for the test.
XIII.	Policy on academic dishonesty	Academic dishonesty will be treated in accordance with Colorado Mesa University rules. The professor will be gathering information that will facilitate checking that students are doing their own work.
XIV.	Disability Arrangements	Any requirements that are not satisfied by the typical instructor preparation need only be brought to the instructors attention. The instructor feels it is important that all students have the ability to learn the material.
XV.	Evaluation and grading	Tests and assignments will be graded on a combination of objective and subject basis. Students that do more than is required on an assignment, and demonstrate the knowledge of web page development will achieve higher grades. Your final grade will be computed by the following method. Grade=(Final Grade + Mid-Term Grade + Average of Assignments + Average of test)/4 * Attendance factor. (100%-90%) A , (90%-80%) B, (80%-70%) C, (70%-60%) D, (50%-) F
XVI.	Major Assignments	Assignments will be about 1 or 2 a every week. The assigments will be given out at least a week before they are due. 2 Tests will be given during the semester. A midterm and a final will also be given in class.

XVII.	Course Outline	1. Safety when working with computer hardware
		2. Fundamentals of Binary Computer Systems
		3. Bus architecture and tri-state devices
		4. Hardware interrupts
		5. Powersupplies
		6. Address selection of input/output interface cards
		7. Legacy hardware ports Parallel ports/Serial ports/Keyboard
		8. Modern hardware ports USB/FireWire
		9. Video Graphics RGB/HDMI
		10. Network interfaces Wired/Wireless
		11. Hard drive functionality and maintenance
		12. Sophisticated Hard drive configuration RAID 0, RAID 1, ...
		13. Sophisticated Operating system installation
		  1. Dual Boot
		  2. Virtualization
		14. Computer hardware security devices
		15. Experimental hardware devices Arduino/HDI devices