

Document:	Computer Organization II Course Administration			
Revised:	November 3, 2009			
Course Title:	Computer Organization II			
Course Number:	CMSC 3833			
Section:	CRN 14198 Tuesday and Thursday 4:15 – 5:30 p.m. MCS 113			
Instructor:	Dr. Thomas R. Turner; Office: MCS 134; Work Phone: 974-5383, e-mail: trturner@uco.edu			
Office Hours:	Time	Monday	Wednesday	Friday
	10:00 – 10:50 p.m.	Office Hours MCS 134	Office Hours MCS 134	Office Hours MCS 134
	Time	Tuesday	Thursday	
	3:15 – 4:15 p.m.	Office Hours MCS 134	Office Hours MCS 134	
	Please make an appointment to visit me during my office hours.			
Text:	1. Mano, M. Morris and Kime, Charles; <i>Logic and Computer Design Fundamentals, 4th Ed Chapters 7,8,10,12,&13.</i> ; Prentice-Hall, Inc. 2009 ISBN: 0558290027			
References:	<ol style="list-style-type: none"> 1. Mano, M. Morris and Ciletti, Michael D. <i>Digital Design, 4th Ed.</i> Pearson Prentice Hall 2007 ISBN 0-13-198924-3 2. Tannenbaum, A., <i>Structured Computer Organization 4th Ed.</i> Prentice Hall, 1999, ISBN: 0-13-095990-1 3. Fletcher, W. <i>An Engineering Approach to Digital Design.</i> Prentice-Hall, 1980, ISBN: 0-13-277699-5. 4. Stroustrup, B. <i>The C++ Programming Language 3rd Ed.</i>; Addison-Wesley 1997 ISBN 0-201-88954-4 			
Prerequisites:	1. CMSC 2833, Computer Organization I			
Assignments:	<i>You may turn in your report or your project early if you know you cannot attend class on the day it is due. . If you cannot turn in an assignment in class deliver the assignment to the department administrative assistant in the Computing Science Office, MCS 117. One-quarter of the value of the assignment will be deducted if it is slipped under my office door.</i>			
Course Scoring:	Task	Date		Value
	Test 1	9-17		150
	Test 2	10-29		150
	Final Test	12-10		300
	Quizzes	Table 2		100
	Projects	Table 3		150
	Reports	Table 4		50
	Total			900
Grading:	A: 90% (810-900); B: 80-89% (720-809); C: 70-79% (630-719); D: 60-69% (540-629); F: 59% (0-539) and below.			
Notice:	Beepers and cellular phones are prohibited in class.			
Caveat:	This lecture schedule, programming projects, reports, quizzes, tests, and due dates are all subject to change. Changes are presented in class You are responsible for the material presented in class.			
Class Web Page:	The course administration and assignments can be found on URL http://www.comsc.uco.edu/~trt/cs3833.html			
Course Directory	The course directory is on the department computer (cs.uco.edu). You can find project test data files in the course directory. ~trt/cs3833/			
Student Disabilities:	Students with disabilities who require accommodations may contact Disability Support Services. http://bronze.uco.edu/disability_support/			

Excused absences:	<p>Students need an excused absence to submit an assignment or report after it is due. Students need an excused absence to take a quiz or test after it has been given. Students are encouraged to attend every class but a student will not be asked to provide documentation warranting an excused absence unless the student wishes to submit an assignment or report after it is due or take a test after it has been given. Excused absences are granted when the conditions of notification, qualification, and documentation are satisfied.</p> <ol style="list-style-type: none">1. Notification.<ol style="list-style-type: none">1.1. You <i>must</i> notify your instructor, <i>in writing, as soon as possible</i>, if your absence is cause for submitting an assignment or report after it is due. In the same way, you must notify your instruction <i>in writing, as soon as possible</i>, if you wish to take a quiz or test after it has been collected. Written notification is very important.1.2. Please notify your instructor <i>before</i> your absence whenever possible. Notification after an assignment, report, quiz, or test was due will be accepted only in emergency situations such as a <i>sudden, serious</i> illness.1.3. Please send a note to trturner@uco.edu indicating the date of absence and your reason for absence.2. Qualification. The following circumstances are accepted as valid reasons for excused absences:<ol style="list-style-type: none">2.1. Travel considered part of the instructional program of the university; and requiring absence from class (e.g. field trips, research presentations, etc.)2.2. Invited participation in activities directly sponsored by and in the interest of the university (e.g. athletic teams, debate teams, dance company, etc.)2.3. Military obligation2.4. Serious illness or injury2.5. Death or serious illness in immediate family3. Documentation. Appropriate documentation for absences is <i>always</i> required. For example, a note from your doctor can serve as adequate documentation if you are seriously ill or injured. An obituary is a appropriate for a death in the family.
Academic Honesty and Collaboration:	<p>Students are encouraged to collaborate. However, each student must make a unique contribution to any joint effort and that unique contribution must be visible in the work submitted by the student. Partially or completely copied assignments shall be considered a prima facie case for academic dishonesty.</p>

Table 1. Lecture Schedule			
Lecture	Date	Topic	Reference
1	8-18	Course Administration Registers and Load Enable Register Transfer	Lecture 1, Mano & Kime 7-1 Lecture 2, Mano & Kime 7-2
2	8-20	Register Transfer Operations A Note for VHDL and Verilog Users Only Microoperations	Lecture 3, Mano & Kime 7-3 Lecture 4, Mano & Kime 7-4 Lecture 5, Mano & Kime 7-5
3	8-25	Microoperations on a Single Register Distribute Practice Quiz	Lecture 6, Mano & Kime 7-6
4	8-27	Register-Cell Design Submit Practice Quiz	Lecture 7, Mano & Kime 7-7
5	9-1	Register-Cell Design Distribute Quiz 1	Lecture 7, Mano & Kime 7-7
6	9-3	Multiplexer and Bus-Based Transfers for Multiple Registers Submit Quiz 1	Lecture 8, Mano & Kime 7-8
7	9-8	Serial Transfer and Microoperations Microprogrammed Control Distribute Quiz 2	Lecture 9, Mano & Kime 7-9 Lecture 10, Mano & Kime 7-13
8	9-10	Memory Definitions Random Access Memory Submit Quiz 2	Lecture 11, Mano & Kime 8-1 Lecture 12, Mano & Kime 8-2
9	9-15	SRAM Integrated Circuits Array of SRAM ICs Distribute Quiz 3	Lecture 13, Mano & Kime 8-3 Lecture 14, Mano & Kime 8-4
10	9-17	DRAM ICs Submit Quiz 3	Lecture 15, Mano & Kime 8-5
11	9-22	Test 1 Report r01 due	Lectures 1-14
12	9-24	DRAM Types Arrays of Dynamic RAM ICs	Lecture 16, Mano & Kime 8-6 Lecture 17, Mano & Kime 8-7
13	9-29	Computer Architecture Concepts Operand Addressing Distribute Quiz 4	Lecture 18, Mano & Kime 10-1 Lecture 19, Mano & Kime 10-2
14	10-1	Addressing Modes Instruction Set Architectures Submit Quiz 4	Lecture 20, Mano & Kime 10-3 Lecture 21, Mano & Kime 10-4
15	10-6	Data-Transfer Instructions Distribute Quiz 5	Lecture 22, Mano & Kime 10-5
16	10-8	Data Manipulation Instructions Floating-Point Computations Submit Quiz 5	Lecture 23, Mano & Kime 10-6 Lecture 24, Mano & Kime 10-7
17	10-13	Program Control Instructions Program Interrupt	Lecture 25, Mano & Kime 10-8 Lecture 26, Mano & Kime 10-9
18	10-20	Computer I/O Sample Peripherals Distribute Quiz 6	Lecture 27, Mano & Kime 12-1 Lecture 28, Mano & Kime 12-2
19	10-22	I/O Interfaces Submit Quiz 6	Lecture 29, Mano & Kime 12-3
20	10-27	Project p01 due	
21	10-29	Test 2	Lectures 15-27

Lecture	Date	Topic	Reference
22	11-3	Test 2 Reprise	
23	11-5	Serial Communication Modes of Transfer Priority Interrupt	Lecture 30, Mano & Kime 12-4 Lecture 31, Mano & Kime 12-5 Lecture 32, Mano & Kime 12-6
24	11-10	Direct Memory Access Distribute Quiz 7	Lecture 33, Mano & Kime 12-7
25	11-12	Memory Hierarchy Locality of Reference Submit Quiz 7	Lecture 34, Mano & Kime 13-1 Lecture 35, Mano & Kime 13-2
26	11-17	Cache Memory	Lecture 36, Mano & Kime 13-3
27	11-19	Distribute Quiz 8	
28	11-24	Virtual Memory Submit Quiz 8	Lecture 37, Mano & Kime 13-4
29	12-1	Distribute Quiz 9	
30	12-3	Margin Submit Quiz 9	
31	12-11	<i>Final Exam, 3:00 – 4:50 p.m. Thursday, December 10, 2009</i>	<i>Comprehensive</i>

Quizzes	Due	Value	Description
Practice Quiz	8-27		Lectures 1-5
q01	9-3	10	Lectures 6-7
q02	9-10	10	Lectures 8-10
q03	9-17	10	Lectures 11-14
q04	10-1	10	Lectures 15-18
q05	10-8	10	Lectures 19-21
q06	10-22	10	Lectures 22-26
q07	11-5	10	Lectures 27-30
q08	11-12	10	Lectures 31-32
q09	11-24	10	Lecture 34-36
q10	12-3	10	Lecture 37
Total		100	

Report	Due	Value	Description
p01	10-22	150	
Total		150	

Report	Due	Value	Description
r01	9-22	50	Library research report
Total		50	