CS 3340-002 - Computer Architecture
Spring 2017

1. INSTRUCTOR: Dr Kang Zhang, Room: ECSS 3.227, Phone: 972-883-6351, kang.zhang@utd.edu

2. CLASS TIME: 10:00 am -12:45 pm, Fridays, in ECSS 2.306

3. OFFICE TIME: 8:30-9:30 am, Fridays

4. SYLLABUS:

1	Numbering Systems, Signed and Unsigned Numbers (*Notes, Sec.3.1-3.2*)
2	Introduction to Computer Organization (*Notes, Chap.1*)
3	MIPS Assembly Language (*Sec.2.1-2.9*)
4	Roles of Compiler, Assembler and Linker (*Sec.2.10-2.15*)
5	Performance Calculation (*Sec.4.1-4.3*)
6	Processor Datapath (*Chap.5*)
7	Pipelining (*Chap.6*)
8	Memory Hierarchy (*Chap.7*)

5. TEXT AND REFERENCE BOOKS:

Text: David Patterson and John Hennessy*, Computer Organization and Design – The Hardware/Software Interface*, Morgan-Kaufmann, 4th or 5th Edition, 2008/2016.

References: William J. Pervin, *A Programmer's Guide to Assembler*, McGraw-Hill Custom Publishing, 2005.
William B. Jones, *Assembly Language for the IBM PC Family*, Scott/Jones, 2nd Edition, 1997.

6. ASSESSMENT:

Grades will be determined by pop-up quizzes, 5 assignments, a mid-term exam and a final exam, with the following weightings:

Pop-up quizzes:	5%	
Assignments:	30%	
Mid-term:	30%	10:00 am, Friday, 24 February 2017 (Week 7)
Final:	35%	10:00 am, Friday, 28 April 2017 (Week 15)

A student must perform satisfactorily in **both** the assignments and the examinations in order to pass the course.

7. GENERAL RULES:

- Cheating will not be tolerated. Those who are caught on cheating will be subject to the university's discipline code.
- There will be no supplementary exams. Exceptional cases, such as illness and accidents, will be handled on an individual basis (Instructor must be notified prior to the exam and proof presented – otherwise a score of zero will be given).
- Students will have one week, after the result of each assignment and after the mid-term exam is returned, to seek corrections on grading. After that week, no changes will be made to scores. Exams will be graded by the instructor and assignments by the TA. Late assignment submissions will not be accepted.
- eLearning will be used for communications between the instructor/TA and students, and for students' project submissions.
- Students should attend all the classes by the department policy. Three consecutive absences leads to one letter grade drop. Four consecutive absences lead to an F. If you decide to stop attending class, be sure to drop the course since you will not be dropped automatically.