EE 3310 -- Microprocessors Spring 1993 -- Section 001 MW 1:00 - 2:20 am

Instructor: J. H. Losh

Office: 142b EB-II Phone: (817) 794-5661 FAX #: (817) 273-2253 Internet: losh@ee.uta.edu Hours: 2:30- MW, or by appt.

Textbook: Hall, Douglas, V., <u>Microprocessors and Interfacing</u> -- <u>Programming</u> and <u>Hardware</u>, 2nd ed., Glencoe, 1992. ISBN 0-07-025742-6.

References: Uffenbeck, John, <u>Microcomputers and Microprocessors -- The</u> 8085, and Z80, Prentice Hall, 1985. ISBN 0-13-580309-8.

<u>8080,</u>

Uffenbeck, John, <u>The 8086/8088 Family</u> - <u>Design</u>, <u>Programming</u>, <u>Interfacing</u>, Prentice Hall, 1987. ISBN 0-13-246752-6.

<u>and</u>

<u>iAPX 86/88, 186/188 User's Manual: Hardware Reference,</u> Intel Literature Department, 1985. ISBN 0-917017-36-6.

<u>iAPX 86/88, 186/188 User's Manual: Programmers Reference,</u> Intel Literature Department, 1985. ISBN 1-55512-010-5.

Liu, Yu-cheng, *et. al.*, <u>Microcomputer Systems</u>: <u>The 8086/8088 Family</u>: <u>Architecture</u>, <u>Programming</u>, <u>and Design</u>, Second ed., 1986. ISBN 0-13-580499-X.

Prentice Hall,

Coffron, James W., <u>Programming the 8086/8088</u>, Sybex Publishing, 1983. ISBN 0-89588-120-9.

Grade A (90-100), B (80-89), C (70-79), D (60-69), F(0-59) **Structure:**

	Method 1	Method 2
Quizzes	25%	20%
Test 1	25%	20%
Test 2	0%	20%
S/W Project	25%	20%
H/W Project	25%	20%
(Take the best of the two methods)		

- **Course** A) The last undergraduate day to drop with an automatic grade **Info:** of W is Wednesday, 26 Feb 1993.
 - B) The absolute last day to withdraw passing (WP) is Thursday, 15 April 1993.
 - C) There are no make-ups for quizzes for any reason.
 - D) No grade of incomplete (X) will be awarded for any reason.
 - E) All exams are open book/notes.
 - F) Any cheating will result in a grade of zero on the work

submitted and subsequent filing for disciplinary action with
Associate Dean of Engineering.

G) It is very important that you work the assigned homework. It will <u>not</u> be graded or submitted to me, but the homework will be highly respective of the quiz questions.

Grading: Quizes and Test1: Any grievances with the assigned grades should be in writing and submitted within 1 week of the date of return.

<u>Test2</u>: The exams will be retained by me and will be available for examination on the first days of the Fall semester.

<u>Project</u>: Although the project may be split between two students, both are responsible for knowing the function of the entire project.

Submissions will result in a grade of zero for all parties involved.

Availability of Final Grades: Due to the Privacy Act of 1974, no grades, in coded or other form can be posted, without exception. I will mail grade information to you if you provide a SASE at the time of the final.

Computer The projects in this class will be based around the use of the PC **Use:** Lab in Room 242 of EB II. The primary packages used will be OrCAD SDT and VST and various languages (C, C++, Pascal, FORTRAN, MASM, and Turbo Assembler).

Prereqs: 1) Combinational Logic Design

- 2) Synchronous State Machine Design
- 3) Knowledge of Gates, Flip-flops, Decoders, Buffers, ...
- 4) Knowledge of a major programming language.
- 5) Knowledge of operational amplifiers and bi-polar transistor switching circuits.

Topics: 1) Microprocessor Architecture Evolution

- 2) OpCodes, Instructions, and Program Execution
- 3) Assembly Language Programming
- 4) Hardware Overview
- 5) Microprocessor System Design
- 6) Interfacing Topics