

**King Fahd University of Petroleum & Minerals**  
**Electrical Engineering Department**  
**EE 390-Digital System Engineering (Term 071)**

**Instructor:** Dr. Sheikh Sharif Iqbal (cordinator)      **Subject:** EE 390-51      **Room:** 59-0050  
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**Office Hour:** **SMW 11:10 - 11:40 AM** and **UT 10:10-10:50 AM** OR by appointment

Week	DATE	LAB Experiments
1	Sept. 8 -12	<b>No Lab.</b>
2	Sept. 15 - 19	LAB: PC Hardware and Operating System
3	Sept. 22 - 26	-----
4	Sept. 29 – Oct.3	LAB 1: Introduction to Debug and Turbo Debugger
5	Oct. 20- 24	<b>Tutorial</b>
6	Oct. 27- 31	LAB 2: Addressing modes and data transfer instructions
7	Nov. 3-7 <b>Lec. Exam 1</b>	LAB 3: Arithmetic instructions
8	Nov. 10-14	LAB 4: Shift and rotate instructions
9	Nov. 17-21	LAB 5: Using BIOS Services & DOS functions Part 1: <u>Text</u> -based Gr
10	Nov. 24-28	LAB 6: Using BIOS Services & DOS functions Part II: <u>Pixel</u> -based gra
11	Dec. 1-5	LAB 7: Introduction to Flight86 Microprocessor Trainer .....
12	Dec. 8-12	LAB 8: Flight86 Application I – Traffic Lights
13	Dec. 29- Jan. 2	LAB 9: Flight86 Application II – Motor Control
14	Jan. 5- 9 <b>Lec.Exam 2</b>	LAB 10: Introduction to the 8051 Microcontroller (demo)
15	Jan. 12- 16	LAB FINAL

**Textbook :** ‘The 8088 and 8086 Microprocessors’ by Triebel and Singh latest edition.

**Grading:** (Lab-performance+CW+HW) = 2, Lab Report = 6, Prelab = 3, Quizes = 3 , Lab final = 6,