# **King Fahd University of Petroleum & Minerals**

College of Computer Science & Engineering
Department of Computer Engineering

**COE 205: Computer Organization and Assembly Language** 

**Sections: 51-52 (Term 043)** 

# **Syllabus**

**<u>Lab Instructor:</u>** Masud-ul-Hasan

**Location:** 22/330 **Phone**: 3880

E-mail: masud@kfupm.edu.sa

Home Page: <a href="http://www.ccse.kfupm.edu.sa/~masud">http://www.ccse.kfupm.edu.sa/~masud</a>

**Office Hours:** S U M T 11:15 AM -12:05 PM (or by appointment)

# **Grading Policy:**

Lab work + Assignments	10%
Project	10%
Total	20%

# **Lab Experiments**

#	Experiment Title
1	Introduction to Assembly Language Programming
2	Introducing the MASM Environment
3	Program Structure and Data Representation
4	Input/Output and Basic Instructions
5	Segmentation and Addressing Modes
6	Array Indexing. Pentium Addressing Modes
7	Arithmetic Instructions
8	Bitwise Instructions
9	Branching Instructions
10	Procedures and Macros
11	String Handling Instructions
12	Interrupts
13	Graphics and Video Memory
14	Using the Mouse
15	Serial Communications

## **Lab Policy**

## 1. Lab Sessions

- Concepts are explained at the beginning of the lab session.
- In every lab session, a couple of programs are given to the students for learning purposes.
- Students are also assigned a challenging programming problem and are required to finish it during lab time, unless the instructor decides otherwise if the program needs more time.

#### 2. Late Assignments

- Programming assignments are supposed to be finished during lab time.
- Any **late-submitted work** will be ignored and results in a 0 score.

## 3. How to Prepare

- Study the related material from your class notes and textbook.
- Try to write run and understand the sample programs in the lab manual.
- Should you face any problems see your lab instructor during office hours.
- Also try to understand the assigned programs at the end of the experiment.

## 4. Absence

- Attendance is mandatory and there will be 1% deduction for each unexcused absence
- An official excuse must be presented to the instructor no later than one week following the absence.
- Three (3) unexcused absences lead to a **DN** grade.
- In case of an absence, a make up can be arranged provided that:
  - 1. The student has a valid excuse.
  - 2. Both the student lab instructor and the instructor of the section in which the student is making up his lab mutually agree on the make up.
  - 3. The mark for that lab is sent by the instructor with whom the student made up the lab with.

#### 5. Lab Project

- A project is assigned in the last quarter of the term.
- The project is worth 10 % of the whole course.
- Save all programs that you develop during the term as these will be used for the project.
- The project will mainly consist of using the programming skills you have learned during the whole course.

#### 6. General Notes

- Cheating is not allowed. Severe measures will be taken by the instructor.
- Any use of the <u>internet</u> during lab time is <u>prohibited and results in zero score</u> in the lab work.
- Mobile phones **must** be turned off or made silent during the lab session.