United International University
Department of Computer Science and Engineering
CSE 236: Assembly Programming Language
Course Outline: Fall 2018

Instructor: S.M.Farabi Mahmud [SMFM]
Lecturer, Department of Computer Science & Engineering,
United International **University**
Room#0426
United International University, Satarkul, Badda
Phone: +880 1677 559594
Mail: farabi@cse.uiu.ac.bd

Course Objectives

- Understand the hardware of personal computers
- Understand the concept of Machine Language code and hexadecimal code
- Understand the machine organization and instruction set of IBM PC
- Implement programs in assembly with basic arithmetic and logical operations
- Understand the concept of conditional logic flows, procedure calls and string operations using assembly

Course Website

- All course materials will be provided in the eLMS site http://elms.uiu.ac.bd
- You should be automatically enrolled in the course for this semester.
- If password is asked then enter the default password '183CSE236'
- Continuous assessment will be uploaded in eLMS

Class Time

Section	Day	Time	Room Number
B	Sun	08:30 AM - 11:00 AM	Computer Lab 3
C	Wed	08:30 AM - 11:00 AM	Computer Lab 4

Counseling Time

Days	Time
Sunday	1:30 PM - 3:00 PM
Wednesday	1:30 PM - 3:00 PM

Text Book

- Yu, Ytha Y., and Charles Marut. *Assembly Language Programming and Organization IBM PC.* McGraw-Hill Higher Education, 1992.
- Mazidi, Muhammad Ali, and Janice Mazidi. *80x86 IBM PC and Compatible Computers: Assembly Language, Design and Interfacing.* Prentice Hall PTR, 2000.
- Irvine, Kip R. *Assembly language for x86 processors.* Prentice Hall, 2011.

Evaluation

Segment	Percentage
Class Performance	40%
Assignments	10%
Mid Term Examination	15%
Final Examination	25%
Project	20%

Grading Policy

Class Performance

- Class performance will be evaluated on the basis of online exams
- Questions for online examination will be based on previous class lectures

Assignments

- There will be multiple take home assignments
- Each assignments will carry equal marks
- Assignments have to be submitted to eLMS assignment submission window
- No late assignment will be considered for grading

Mid Term Examination

- There will be Written exams
- Detailed syllabus of the mid term examination will be announced on the 6th week

Final Examination

- There will be both written and practical part
- Detailed Syllabus of the Final Quiz will be announced before the 13th week

Project

- There will be an group project
- Project should be submitted by the 13th week of the semester

Course Outline

Week	Online Exam	Assignment	Lecture	Textbook Reference
1	-	Simple IO Practice in 8086	Introduction to IBM PC Assembly Language	4.1 - 4.12
2	-	-	The FLAGS Register; Conditional Jumps, The JMP Instruction, Branching, Looping	5.1 - 5.3, 6.2 - 6.5
3	Branching & Looping	-	Nested Loops in 8086	6
4	Nested Loops	Binary & Hexadecimal Output	Logic, Shift, and Rotate Instructions	7.1-7.3
5	Logic, Shift, and Rotate Instructions	-	Stack & Procedures	8.1 - 8.5
6	Mid Term Examination Lecture 1-5	-	-	-
7	**Mid Term Week**	Project Proposal Submission & Confirmation	-	-
8	-	Multiplication and Division	Multiplication and Division	91 - 9.5
9	Multiplication and Division	-	Arrays and Addressing Modes	10.1 - 10.3
10	Array	String Functions	String Instructions	11.1 - 11.6
11	String	-	Color Graphics	16.4 - 16.6
12	Color Graphics	-	Mouse and Keyboard	INT 16h, INT 33h
13	Project Evaluation & Final Exam	-	-	-