University of Computer Studies, Yangon
B.C.Sc./B.C.Tech.

CT-306	**: Microprocessor Architecture and Interfacing**	**Second Semester**
Text book	**:** Microprocessor Architecture, Programming and Applications with the 8085" (6^{th} Edition) by Ramesh Gaonkar	
Period	**:** 45 periods for 15 weeks (3 periods/week) (Lecture + Lab)	

Course Description

Created for one/two semester undergraduate level courses in Introduction to Microprocessors offered in electrical and computer technology departments; requires a prerequisite course in digital logic, but assumes no knowledge of programming. The first of its kind to offer an integrated treatment of both the hardware and software aspects of the microprocessor, this comprehensive and thoroughly updated text focuses on the 8085 microprocessor family to teach the basic concepts underlying programmable devices.

Course objectives

- To provide the knowledge of microprocessor based system design
- To introduce 8085 architecture and programming in assembly language.
- To introduce basic concepts of interfacing memory and peripheral devices to a icroprocessor.
- To introduce serial and parallel bus standards.

Assessment Plan for the Course

Paper Exam: 60%

Attendance: 10%

Test/ Quiz: 10%

Lab: 10%

Lab Assessment: 10%

Tentative Lecture Plan

No.	Chapter		Page	Period	Description
	Microprocessor-Based Systems: Hardware and Interfacing			**13**	
1.	Chapter 1	Microprocessors, Microcomputers, and Assembly Language	3-30	1	Review
2.	Chapter 2	Introduction to 8085 Assembly Language Programming	31-56	2	Briefly
3.	Chapter 3	Microprocessor Architecture and Microcomputer Systems	57-94	2	Briefly
4.	Chapter 4	8085 Microprocessor Architecture and Memory Interfacing	95-138	4	
5.	Chapter 5	Interfacing I/O Devices	139-172	4	
	Programming the 8085			**30**	
6.	Chapter 6	Introduction to 8085 Instructions	175-186, 196-225	3	
7.	Chapter 7	Programming Techniques with Additional Instructions	227-274	4	
8.	Chapter 8	Counters and Time Delays	275-294	4	
9.	Chapter 9	Stack and Subroutines	295-322	4	
10.	Chapter10	Code Conversion, BCD Arithmetic, and 16-Bit Data Operations	323-350	4	
11	Chapter 12	Interrupts	375-390	5	
12	Chapter 13	Interfacing data converters	403-421	6	
14.		Revision		**2**	