

COURSE OUTLINE

Course Code: CSE 316

Course Title: Microprocessors, Microcontrollers and Embedded Systems Sessional

Level/Term: 3/1

Section: A & B

Academic Session: January, 2021

Course Teacher(s):

Name:	Office/Room:	E-mail and Telephone:
Dr. A. B. M. Alim Al Islam		
Dr. Atif Hasan Rahman		
Mahjabin Nahar		
Md. Tareq Mahmood		
Md. Masum Mushfiq		
Tahmid Hasan		

Course Outline:

Laboratory works based on CSE 315.

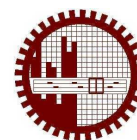
Learning Outcomes/Objectives:

After undergoing this course, students should be able to:

1. Get acquainted with x86 instruction set (assembly language)
2. Create simple digital systems with microcontroller and various sensor and actuators
3. Teamwork

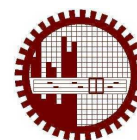
Text and Reference books:

1. ATmega Datasheet (Weblink: [ATmega32/L Datasheet](#))
2. Barry B Brey, The Intel Microprocessors 8086/8088, 80186/80188, 80286, 80386, 80486, Pentium, and Pentium Pro Processor Architecture, Programming, and Interfacing, 8th Edition
3. Douglas V Hall, Microprocessors and Interfacing Programming and hardware, 2nd Edition



Weekly schedule:

Week	Topics	Teacher's Initial
Week 1 (27/02/2021 - 03/03/2021)	Course Overview + Lecture on basic assembly + Assignment 1	MMM + HT
Week 2 (06/03/2021 - 10/03/2021)	Assignment 1 Evaluation + Assignment 2	AHR
Week 3 (13/03/2021 - 17/03/2021)	Assignment 2 Evaluation + Assignment 3	AAI
Week 4 (20/03/2021 - 24/03/2021)	Assignment 3 Evaluation + Assignment 4	MNP
Week 5 (27/03/2021 - 31/03/2021)	Assignment 4 Evaluation + ATmega32 Proteus Simulation	TM
Week 6 (03/04/2021 - 07/04/2021)	Experiment on ATmega32 Microcontroller: Basic I/O and Interrupt	TM + MMM
Break		
Week 7 (22/05/2021 - 26/05/2021)	Refresher class + Project Discussion	
Week 8 (29/05/2021 - 02/06/2021)	Evaluation on ATmega32 Microcontroller: Led Matrix	TM + MMM
Week 9 (05/06/2021 - 09/06/2021)	Evaluation on ATmega32 Microcontroller: ADC + LCD Display	MMM + HT
Week 10 (12/06/2021 - 16/06/2021)	Project proposal submission (on microcontroller)	
Week 11 (19/06/2021 - 23/06/2021)	Project Update – 1 Demonstration (Circuit Diagram, Block Diagram)	



Week 12 (26/06/2021 - 30/06/2021)		
Week 13 (03/07/2021 - 07/07/2021)	Project Update – 2 Demonstration (At least one working module)	
Week 14 (10/07/2021 - 14/07/2021)	Quiz	
Break		
Week 15 (24/07/2021 - 28/07/2021)	Project Final Submission	

Prepared by :	
All the instructors of CSE316 Jan 2021	