

Lecture Plan for EEE315: Microprocessor and Interfacing

3 Credits, 3 hours/week

Course Teachers: **Dr. Kazi Mujibur Rahman** and **K. M. Masum Habib**

Text Book(s):

- [1] Douglas V. **Hall**, "Microprocessor and Interfacing Programming and Hardware."

References:

- [2] Mohammed **Rafiquzzaman**, "Microprocessors and Microcomputer-Based System Design," 2nd Edition.
- [3] Ytha Yu and Charles **Marut**, "Assembly Language Programming and Organization of the IBM PC."
- [4] Barry B. **Brey**, "The Intel Microprocessors," 6th Edition.
- [5] MTS-51 Microcomputer Trainer Manual
- [6] M. A. **Mazidi**, J. G. Mazidi, R. D. McKinlay, "The 8051 Microcontroller and Embedded Systems."
- [7] Albert P. **Malvino** and Jerald A. Brown, "Digital Computer Electronics," 3rd Edition
- [8] The Internet

Lecture Plan

Week	Class	Topics	Reference
1	1	Introduction and History of Computers	8
1-2	2-6	Introduction to Microprocessors: SAP Computer	7
3	7	Intel 8086 Microprocessor: History & Introduction	8, 1
3-4	8-10	Intel 8086 Microprocessor: Architecture	1, 3
4	11-12	Intel 8086 Microprocessor: Interrupt System	4
5-6	13-18	Intel 8086 Microprocessor: System Design	4
7	19-20	Intel 8086 Microprocessor: Addressing Modes	2
7-9	21-26	Intel 8086 Microprocessor: Instruction Set and Assembly Language Programming	2
9-10	27-30	Intel 8086 Interfacing: Introduction, Programmable Peripheral Interface	3, 4
11	31	Intel 8086 Interfacing: Keyboard and Display Interface	3, 4
11	32-33	Intel 8086 Interfacing: Programmable Timer	4
12	34-35	Intel 8086 Interfacing: Serial Communication Interface	4
12-13	36-37	Intel 8086 Interfacing: Programmable Interrupt Controller	4
13	38	Intel 8086 Interfacing: Direct Memory Access	3, 4
13-14	39-41	Introduction to Microcontrollers: 8051	5, 6

Marks Distribution:

Attendance: 10%

Class Tests and Assignment: 10%+10% = 20%

Term Final: 70%

Course Website (For Section-B): http://teacher.buet.ac.bd/masum_habib/section/9/40/