COURSE OUTLINE

Course code: CSE206

Course Title: CSE206: Digital Logic Design Sessional

Level/Term: 2/1

Academic Session: 2020-2021

Course Teachers:

Name	Office/Room	Email
Mahmuda Naznin (MN)	ECE 320	mahmudanaznin@cse.buet.ac.bd
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Course Outline:

Lab works based on Digital Logic Design.

Course Learning Outcomes/Objectives:

Upon successful completion of this course, students should be able to:

1. Understand the basic components of a digital circuit.
2. Construct, analyze, and debug simple combinational and sequential circuits.
3. Apply Boolean algebra techniques to digital circuit analysis.
4. Measure and record the experimental data, analyze results, and prepare a formal laboratory report

Tentative Assessments:

- Assignments (Lab Assignment/Online Assignment/Home Assignment): 60%
- Attendance: 10%
- Quiz: 30%

References:

I. Microprocessor Data Hand book.
II. Digital Logic and Computer Design by M. Morris Mano
III. Digital Design by E. L. Johnson and M.A.Karim
IV. Digital Fundamentals by Thomas L. Floyd
V. Switching and Finite Automata Theory by ZVI Kohavi

Guidelines:

◆ The lab works will be focused on Lab Assessment. However, Home Assignments will be given in some classes.
◆ The lab works will be done open book or close book which will be specified by concerned teachers before beginning of the lab assignment.
◆ The weight of all the lab assignments will be the same or variable.
◆ In case of home assignment, late submission is not allowed in general.
◆ Pending submission of Lab assignment is not allowed in general.
◆ Concerned Lab teachers have the authority to alter the order of the online assignments listed below (e.g. in case the topic has not yet been covered in Theory class etc.)
◆ In case of reproduction of code (copy), the policy of CSE Department will be followed.

Weekly schedule (Tentative):

Week	Topics	Type
Week 1	Introduction to Logisim and IC Series- 74XX	**Practice Performance (PP)**
Week 2	Implementing circuits with basic gates.	**Lab Assignment (LA).**
Week 3	Truth tables and simplification using Boolean Algebra.	**LA**
Week 4	Truth tables and K-maps.	**Lab Assignment (LA).**
Week 5	Arithmetic circuit design.	**LA.**
Week 6	Break	
Week 7	Circuit design using IC 7483.	**Online Assignment (OA).**
Week 8	Encoder and Decoder Circuits.	**OA**
Week 9	Design using Multiplexers.	**OA**
Week 10	Flip-Flops & Registers	**HA**
Week 11	Counter	**OA**
Week 12	Quiz	**Online Exam (OE)**
Week 13	Reserve Week	

Prepared by:

Name	Rayhan Rashed
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