UNITED INTERNATIONAL UNIVERSITY

Department of Computer Science and Engineering (CSE)

Course Syllabus

1	**Course Title**	Digital Logic Design Laboratory
2	**Course Code**	CSE 1326
3	**Trimester and Year**	Summer, 2023
4	**Pre-requisites**	None
5	**Credit Hours**	1
6	**Section**	M, S, X, Y
7	**Class Hours**	Saturday : 11:11 am - 01:40 pm (M) Sunday : 11:11 am - 01:40 pm (S) Tuesday : 11:11 am - 01:40 pm (X) Tuesday : 02:00 pm - 04:30 pm (Y)
8	**Class Room**	508 (Sec-M), 504 (Sec-S), 503 (Sec-X), 504(Sec-Y)
9	**Instructor's Name**	Md. Muhyminul Haque
10	**Email**	muhyminul@cse.uiu.ac.bd **(Preferred)**
11	**Office**	919
12	**Contact no.**	01789926815 **(only in case of emergency)**
13	**Counselling Hours**	

Day	Time [CNH]
Saturday	1:40 pm - 4:30 pm
Sunday	8:30 am – 9:50 am 1:40 pm - 4:30 pm
Monday	
Tuesday	
Wednesday	8:30 am – 9:50 am 11:10 am - 4:30 pm

14	**Text Book**	Logic and Computer Design Fundamentals. M. Morris Mano and Charles R. Kime, 5th Edition.
15	**Reference**	None
16	**Course Contents (approved by UGC)**	Laboratory work based on CSE 1325
17	**Teaching Methods**	Lecture, Laboratory exercise and reports.

18 CO with Assessment Methods

CO	Assessment Method	(%)
-	Attendance	10%
CO1, CO2, CO3	Class Performance	20%
-	Report	10%
	Setup Test	20%
CO1	Mid Term/Viva	15%
CO2	Final Exam	25%

19 Lab Outline

Class	Topics/Assignments	COs	Lab Outcomes/Activities
Lab1	Identify the Basic Gates (AND, OR, NOT) & Some other Gates (NOR, NAND, XOR, XNOR).	CO1, CO3	Able to identify the Basic Gates (AND, OR, NOT) & Some other Gates (NOR, NAND, XOR, XNOR).
Lab2	Simplify and implement functions with necessary gates.	CO1, CO3	Able to simplify and implement functions with necessary gates.
Lab3	Implement a 3-bit Binary-to-Gray code convertor circuit with required gates.	CO1, CO3	Able to implement a 3-bit Binary-to-Gray code convertor circuit with required gates.
Lab4	Implement Full Adder circuits	CO1, CO3	Able to implement multiple bit Full Adders.
Lab5	Implement functions using decoder and gates.	CO1, CO3	Able to implement functions using decoder and gates.
Lab6	Implement functions using multiplexers.	CO1, CO3	Able to implement functions using multiplexers.
Week 7: MIDTERM VIVA/QUIZ			
Lab7	Implement registers. (Week 7)	CO2, CO3	Able to implement registers.
Lab8	Implement Ripple Counters.	CO2, CO3	Able to implement Ripple Counter.
Lab9	Implement Arbitrary Synchronous Counters.	CO2, CO3	Able to implement Arbitrary Synchronous Counters.
Lab10	Implement a sequence recognizer ‘1011’	CO2, CO3	Able to implement sequence recognizers.
Week 11: SETUP TEST			
Week 12: FINAL QUIZ			

Appendix 1: Assessment Methods

Assessment Types	Marks
Attendance	10%
Class Performance	20%
Report	10%
Setup test/ Presentation (on Project)	20%
Mid Term (Viva)	15%
Final Exam	25%

Regarding Assessment Methods