TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	University of Anbar
2. University Department/Centre	College of Computer Science and Information Technology – Information System Department
3. Course title/code	Logic Design 2
4. Programme(s) to which it contributes	Bachelors of Information System
5. Modes of Attendance offered	Electronic attendance
6. Semester/Year	Second semester 2022-2023
7. Number of hours tuition (total)	48
8. Date of production/revision of this specification	
9. Aims of the Course	
• The student should understand encoder , decoder and multiplexers	
• The student should understand synchronous logic circuit	
• The student should understand flip-flops and how to use them	
• The student should understand registers and their types	
• The student should understand counters and their types	
• The student should understand ROM and PLA implementation	

10· Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Knowledge and Understanding

A1. The student should understand encoder, decoder and multiplexers
A2. The student should understand flip-flops and how to use them.
A3. The student should understand registers and their types.
A4. The student should understand counters and their types.
A5. The student should understand ROM and PLA implementation.

B. Subject-specific skills

B1.
B2.
B3.

Teaching and Learning Methods

- The student should use utilities in the lab to apply scientific experiment
- The ability to design a logic circuit.

Assessment methods

Notes	Date	%	Assessment	
	6th week	%١٠	First Month exam	١
	10th week	%١٠	Second Month exam	٢
	16th week	%١٠	Third Month exam	٣
	All weeks	%٥	Attendance and HW	٤
	At end of each experiment	%١٥	Reports and Lab exam	٥
	End of semester	%٥٠	Final exam	٦
		١٠٠ %	Sum	

C. Thinking Skills

C1.
C2.
C3.
C4.

Teaching and Learning Methods

Assessment methods

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1.
D2.
D3.
D4.

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2 Theory + 2 Practical		Synchronous logic gates		
2	2 Theory + 2 Practical		Adder and subtractor circuits		
3	2 Theory + 2 Practical		Comparator circuits		
4	2 Theory + 2 Practical		Encoders and multiplexers		
5	2 Theory + 2 Practical		Multiplexers		
6	2 Theory + 2 Practical		First month exam		
7	2 Theory + 2 Practical		Flip-flops		
8	2 Theory + 2 Practical		SR flip flop and j k flip flop		
9	2 Theory + 2 Practical		T flip flop and D flip flop		
10	2 Theory + 2 Practical		Second month exam		
11	2 Theory + 2 Practical		Registers design		
12	2 Theory + 2 Practical		Counters design		
13	2 Theory + 2 Practical		ROM		
14	2 Theory + 2 Practical		PLA		
15	2 Theory + 2 Practical		State plan		
16	2 Theory + 2 Practical		Final exam		

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	- Lectures - Home works - Case study in the Lab - Weekly reports

Special requirements (include for example workshops, periodicals, IT software, websites)	- "Digital Design" 4th Edition by M. Morris Mano and Michael D. Ciletti - Fundamentals of logic design by J. Roth
Community-based facilities (include for example, guest Lectures , internship , field studies)	

13. Admissions	
Pre-requisites	Fundamental of English and Mathematics and Logic design 1 course.
Minimum number of students	25
Maximum number of students	40

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