



Annual Course Report

(LOGIC DESIGN-1)

A- Basic Information

- 1- Title and Code Logic Design-1/ CS121
- 2- Programme(s) on which this course is given CS, IS, OR and IT
- 3- Academic year / Level of programme 1st year -2nd Semester
- 4- Units/Weekly hours

Lecture Tutorial/Practical Total

5- Names of lecturers contributing to the delivery of the course

1- Prof. Fawzy Ali Torkey

Course co-ordinator: Prof. Fawzy Ali Torkey

External evaluators: Not assigned yet.

B- Statistical Information

No. of students attending the course: No. %

No. of students completing the course: No. %

Results:

Passed: No. % Failed: No. %

Grading of successful students:

Excellent: No. % Very Good: No. %

Good : No. % Pass: No. %

C- Professional Information

1- Course Teaching

Topics actually taught	No. of hours	Lecturer
1 Introduction	3	Prof. Fawzy Ali Torkey
2 Number systems and Codes <ul style="list-style-type: none">• Binary, Octal and Hex Number Systems• Number Systems Conversions.• BCD, Gray and Alphanumeric Codes.• Error Detection.	12	Prof. Fawzy Ali Torkey
3 Digital Arithmetic <ul style="list-style-type: none">• Binary addition and Subtraction.• Binary Multiplication and Division.• BCD Addition and Hex. Arithmetic	6	Prof. Fawzy Ali Torkey
4 Logic Gates <ul style="list-style-type: none">• Boolean Constants and Variables.• Truth Tables.• OR, AND, and NOT Operations.• Logic Algebra and Logic Implementation.• NOR and NAND Gates.	9	Prof. Fawzy Ali Torkey
5 Boolean Algebra and Logic Simplification <ul style="list-style-type: none">• Boolean and Demorgan's Theorems.• Universality of NAND and NOR Gates.• Alternative Representations.• Labeling Logic Signals.• SOP and POS Forms.• Simplifying Logic Circuits using algebra and K-maps.	15	Prof. Fawzy Ali Torkey
6 Combinational Logic <ul style="list-style-type: none">• Introduction• Basic Circuits and Design Procedure.• Using NAND and NOR gates in Design.• Display Devices	6	Prof. Fawzy Ali Torkey
7 Programmable Logic <ul style="list-style-type: none">• Introduction• Programmable arrays• Programmable Array logic• Generic Array Logic• The GALs 22V10 and 16V8• Introduction to CPLDs and FPGAs	6	Prof. Fawzy Ali Torkey

8 Combinational Circuits <ul style="list-style-type: none"> • Introduction. • Arithmetic Circuits and Comparators. • Decoders and Encoders. • Multiplexers and Demultiplexers. 	12	Prof. Fawzy Ali Torkey
9 Combinational Logic Programming. <ul style="list-style-type: none"> • Introduction • Describing Logic circuits • Development Software • Description languages and Programming Languages • Implementing Logic Circuits using PLDs • VHDL Format and Syntax • Intermediate signals in VHDL • Representing Data in VHDL • Truth Tables using VHDL • Decision Control Structures • Implementing Adders, Decoders, Encoders, Multiplexers, Demultiplexers, Magnitude Comparators, Code Converters. 	12	Prof. Fawzy Ali Torkey
10 Logic Families <ul style="list-style-type: none"> • Introduction. • Diode, RTL, DTL, ECL, and TTL Logic. • CMOS Logic. 	3	Prof. Fawzy Ali Torkey

Topics taught as a percentage of the content specified:

>90 %
 70-90 %
 <70%

2- Teaching and Learning Methods:

- Lectures:
- Practical Training/ Laboratory:
- Seminar/Workshop:
- Class Activity:
- Case Study:
- Other Assignments/Homework:

3- Student Assessment:

Method of Assessment	Percentage of total
Written examination	60
Oral examination	10
Practical/laboratory work	10
Other Assignments/class work	20
Total	100 %

Members of Examination Committee:

Prof. Fawzy Ali Torkey

Mr. Abd El-Alem Kamal

Role of external evaluator:

External evaluator not assigned yet.

4- Facilities and Teaching Materials:

Totally adequate

Adequate to some extent

Inadequate

5- Administrative Constraints

- Period time of Practical Training /laboratory per week not enough.
- Needing a maintenance team for Logic Laboratory.
- Needing more funds for more devices needed by course co-ordinator.

6- Student Evaluation of the course:

Response of Course Team

Need more time to execute their exercises in lab

Talking with administration to increase time for staying students in lab.

7- Comments from external evaluator(s):

External evaluator not assigned yet.

8- Course Enhancement:

Progress on actions identified in the previous year's action plan:

No previous years action plan

Role of external evaluator:

External evaluator not assigned yet

9- Action Plan for Academic Year 2006 – 2007

Actions Required	Completion Date	Person Responsible
Get more FPGA boards for student to implement cryptography algorithms on it.	2008	Prof. fawzy ali Torkey

Course Coordinator: Prof. fawzy ali Torkey

Signature:

Date / /

