



Benha University

Logic Circuits ECE 224C

Computer Systems Engineering
Electrical Engineering Department



Faculty of Engineering
(at Shoubra)

Course Title: Logic Circuits
Course Code: ECE 224C
Instructor: Dr. Islam ElShaarawy
Main Textbook: M. Morris Mano and Michael D. Ciletti. *Digital Design: With an Introduction to the Verilog HDL*. 5th Edition¹, Prentice Hall, 2012, ISBN 978-0132774208.

Other Resources:

<http://www.cburch.com/logisim/> 
<http://bbrown.spsu.edu/digitalworks/> 
<http://bleyer.org/icarus/>  Icarus Verilog
<http://vol.verilog.com/>  Verilog

Course Contents:

1. Digital Systems and Binary Numbers
2. Boolean Algebra and Logic Gates
3. Gate-Level Minimization
4. Combinational Logic
5. Synchronous Sequential Logic
6. Registers and Counters

Attendance Policy:

1. Attendance is expected.
2. Whether you attend or not, you are responsible for keeping track of whatever happens during the lectures and the tutorials.
3. Side talking, cellphones, laptops, food/drinks, and walking² are not allowed.



Grading System:

Attendance³:	00
Assignments:	10
Quizzes:	10
Midterm Exam:	10
Oral Exam⁴:	30
Final Exam:	90

1 You can use an earlier edition if you already have one.
2 If you are late for the lecture, then you are allowed to walk into the lecture hall but quietly.
3 Attendance will be taken anyway.
4 There will be a semester project that will be discussed during the oral exam