



# Computer Applications I





## SUR 224



Benha University

Surveying Engineering Department

Faculty of Engineering  
(at Shoubra)

- Course Title:** Computer Applications I
- Course Code:** SUR 224
- Instructor:** Dr. Islam ElShaarawy
- Main Textbook:** “C++ How to Program” by Deitel and Deitel<sup>1</sup>  
[C++ How to Program, 3/e \(Slides\)](#)  
[C++ How to Program, 3/e \(Examples\)](#)
- Other References:** <http://www.cplusplus.com/doc/tutorial/>   
<http://en.cppreference.com/w/> 
- Other Resources:** <http://scratch.mit.edu/>   
<http://flowgorithm.org/> 

**Course Contents:**

1. Introduction to Computers
  - Hardware/Software
  - Operating Systems
2. Introduction to Computer Programming
  - Machine Language and Assembly Language
  - High Level Languages
3. Problem Solving Concepts
4. Control Structures
5. Functions
6. Arrays
7. Numerical Analysis
8. Applications

**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 walking<sup>2</sup> are not allowed.



**Grading System:**

<b>Attendance<sup>3</sup>:</b>	00
<b>Assignments:</b>	05
<b>Quizzes:</b>	05
<b>Midterm Exam:</b>	10
<b>Oral Exam<sup>4</sup>:</b>	20
<b>Final Exam:</b>	60

1 I am using the *third edition* but you can use any.  
2 If you are late for the lecture, 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