

## نموذج مواصفات المقرر

كلية : التربية

جامعة : الفيوم

**Relevant Program:** B.Sc. (Science & Education), Mathematics ,Basic Education

**Major or minor element of programmes :** Major

**Department offering the program:** Educational Depts. + Math Department  
Faculty of Science

Department offering the course : Mathematics

Academic year / Level: First Year ( First Term )

Date of specification approval : 20 / 10 / 2008

### A- Basic Information

Title : Introduction to computer science Code : ١٧١١٣ Mat

Credit Hours:-- Lecture: 2

Tutorial: Practical: 1 Total: 42

### B- Professional Information

#### 1- Overall Aims of Course

On completion of this course student will learn:

- 1- Brief history for computer and their generation.
- 2- Fundamental terminology associated with computer.
- 3- Numeric systems and brief introduction to data structure.
- 4- Main input and output units and how to deal with them.
- 5- Structure of central processing units and their function.
- 6- Brief introduction to operating systems.

#### 2- Intended Learning Outcomes of Course (ILOs)

A- Knowledge and understanding:

The student will be able to:

- ١- ١. Understand the design and functioning of hardware; input and output units, and the central process units.
- ١- ٢. Know Fundamental terminology associated with computer.
- ١- ٣. Know computers networks and Computer security systems.

## B- Intellectual Skills:

- ١-٢.ب Deal with the well-known operating systems; windows, word.  
١-٣.ب Increasing the students experience in computer and networks.  
٢-٣.ب Using some well- known operating systems; MS-DOS and MS-WINDOWS.

## C- Professional and Practical Skills:

- ١- ث Increase the student's ability to deal with the different computer's programs.  
١ - ٢.ث Training to use the world computer's applications.  
٤-٣.ث The ability to deal with numeric systems.

## D- General and Transferable Skills:

- ١-٢.ث Group working.  
١-٣.ث Problem solving.  
١-٤.ث Use new technological tools.

### 3- Course Content:

## 3- Contents:

Topic	No. of Hours	Lecture	Tutorial / Practical
1- Introduction to Computer terminology	2	1	1
2- Brief introduction to computer Architecture; input and output units, and central process units	2	1	1
3- Numeric systems, and brief introduction to data structure	2	1	1
4- Introduction to operating system. Using some well- known operating systems; MS-DOS and MS-WINDOWS.	2	1	1
5- Introduction to the world computers (applications, characteristic, what's computer and what does it do?)	4	2	2
6- Hardware (CPU, main memory, ports).	2	1	1
7- Input, output and storage.	4	2	2
8- Software (operating systems, function of O. S. , O. S. parts, common O. S. language translator, application).	2	1	1
9- Numbering system.	4	2	2
10- Computer network.	2	1	1
11- Virus.	2	1	1

## 4- Teaching and Learning Methods:

- 4-1: Lectures.
- 4-2: Discussion sessions.
- 4-3: Practical projects.
- 4-4: Research Assignments .

## 5- Student Assessment Methods:

- 5-1: Written exam(mid-term) to assess the level of knowledge and understanding.
- 5-2: Class work(practical exam) to assess the level of professional skills to use the new technology.
- 5-3: Class work (quizzes) to assess the level of Intellectual skills to use the world computer's applications.
- 5-4: Written exam(at the end of term)to assess the ability to pass the exam.

## Assessment Schedule:

- Assessment 1: Written exam (mid-term) Week 7
- Assessment 2: Class work (practical exam) Week 13
- Assessment 3: Class work (quizzes) Week 4 - 8 - 12
- Assessment 4: Written exam (at the end of term)Week at the end term .

## Weighting of Assessments:

Mid-Term Examination	28	%
Final-Term Examination	60	%
Oral Examination		%
Practical Examination	12	%
Semester Work		%
Other Types of Assessment		%
Total :	100%	

Any formative only assessments: Homeworks

## 6- List of References:

6-1: Course Notes:

Course notes prepared by staff of mathematics Department.

6-2: Essential Books (Text Books):

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6-3: Recommended Books:

- 1-Charles Parker, “Understanding Computer; Today and tomorrow”, 2000 Edition , the Drylen Press Series.
- 2- Peter Norton, “Introduction to Computer”. Glence Norton online, [http:// www.glenco.com](http://www.glenco.com)

6-4: Periodicals, Web Sites... etc:

Computer organization and design:  
[http:// www.inst.eecs.berkeley.edu /~cs61c](http://www.inst.eecs.berkeley.edu/~cs61c)

## 7- Facilities Required for Teaching and Learning

- 1- Updating lab.
- 2- Original modern versions of software.
- 3- Library contains new edition books for computer science with enough copies.

**Course Coordinator: Dr.Mohamad Abd El-Ahlam**

**Head of Department Prof. Kamal Ahmed El Dab**

**Date: //**

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