# Course Specification of Computer Science

**University:** Al Azhar  
**Faculty:** Medicine  
**Department:** Computer Science

## 1- Data of the course:

<table>
<thead>
<tr>
<th>Code of the course:</th>
<th>Title of the course:</th>
<th>Year:</th>
<th>Specialty:</th>
</tr>
</thead>
<tbody>
<tr>
<td>109 -computer</td>
<td>Computer for the 1st year students.</td>
<td>1st year of MBBCh program</td>
<td>Computer science</td>
</tr>
</tbody>
</table>

**Duration:** 28 weeks  
**Number of teaching units:** 2 units  
**Lectures:** 1 hour/week  
**Practical:** 1 hour/week

## 2- Objectives of the course:

- To instill an awareness of the various types of information sources available.  
- Provide a technical introduction for computer science and medical information Science.

## 3- ILOs

### A- Knowledge and understanding:

1. Define each part of computer hardware and its function.  
2. The basics of how computers operate, with an emphasis on knowledge of practical issues:  
   - Storage devices, RAM, types of printers etc.).  
   - Define the use of each office program.  
   - Have a basic understanding of various computer applications in medicine - for instruction, information managing, computer based medical record, etc.

### B- Intellectual Skills:

1- Integrate Knowledge with practical lessons  
2- Apply all learned information to the practical in computer lab.

### C- Practical/Professional Skills:

**PRACTICAL SKILLS:**

*By the end of the course, students should be able to:*

1. Tolerate working in MS Office
D- General Skills:

GENERAL SKILLS:
By the end of the course, students should be able to:

1. Be familiar with computer and its updates.

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>% total hrs</th>
<th>No. of hrs</th>
<th>Lectures</th>
<th>Practical/small groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-General Principles</td>
<td>40%</td>
<td>66%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>2-MS Office</td>
<td>30%</td>
<td>42%</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>3-Practical</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4- Course Content:

I- Introduction to computers

- Historical background: The student will learn briefly the historical development of computers and the evolution of digital world.
- Why should I bother learning?
- What can a computer do?
  a. In general: A computer is a machine, which knows nothing. Yet it is extremely fast in calculations, it has an enormously strong and capacious memory and it doesn’t get bored repeating things.
  b. For me:
     - _Student
       - Textbooks in digital form
       - Demonstrations: digital videos, simulators
       - Internet search
     - _Physician
       - Keeping records
       - References on CD’s
       - Continuous medical education
     - _Researcher
       - Searching the literature
       - Statistical analysis
       - Presentations
     - _Lecturer
- Presentations
- Keeping up to date
- What are the various computer components and accessories?
  - CPU, BIOS, RAM
  - Input devices: Keyboard, Mouse, Pen, scanner etc…
  - Output devices: Printer, Sound, Monitor, Datashow etc…
  - Storage devices: Hard disk, Floppy, CD, Flash etc…

Role of Software:
  - System
    - Various operating systems
    - What is the system responsibility
  - Applications
    - Word processing
    - Database
    - Statistics
    - Presentations
    - Internet and communication
    - Other

- Protecting my computer from virus threats
  - What is a virus anyway
  - Why are there viruses
  - How to defend myself
  - Keeping updated

II-Introduction to MS Office:
- Advantages of using computers.
- Basic terminology
- Using the keyboard

5- Methods of teaching:
1. Lectures
2. Practical and small group sessions:
   Practical training
3. Online material:
   A hint for further self-learning

6- Methods of teaching of handicaps
Not present
7- Students evaluation and assessment:

| End year written exam |
| B- Time of assessment   | At the end of the year in June |
| C- Allocated marks/Distribution | Total marks: 50 marks for written and practical exams |

8- Teaching books, notebooks, and references:

| Books/Notebooks: | BASIC MATERIALS:  
| References: | o Computer presentations used during teaching. |

Course Coordinator: