University: Benha   **Faculty of Science**

Course Specifications

Programme(s) on which the course is given: **Biology & Geology**

Major or Minor element of programmes: Major

Department offering the programme: Biology & Geology

Department offering the course: Mathematics

Academic year / Level: First year (Biology and Geology) **/** First Semester

Date of Department approval: 2008

A- Basic Information
Title: Computer science   **Code:** 101 M
Credit Hours: **Lecture:** 1hr/week
Tutorial: **Practical:** 1h/w   **Total:** 2 hrs/week

B- Professional Information
1.   **Overall Aims of Course:** at the end of this course, the students will acquire:
i) Brief history for computer and the generation, fundamental terminology associated with computer
ii) Numeric systems and brief introduction to data structure and main input and output units and how to deal with them
iii) Structure of central process units and their function, brief introduction to operating system

2.   **Intended Learning Outcomes of Course (ILOs)**:

a-   **Knowledge and Understanding:**
At the end of the course the student will be able to:
a1-Understand the design and output units and the central process units.
a2- Know fundamental terminology associated with computer.
a3- Deal with the well- known operating system , windows , word and be able to know computers networks.
b-   **Intellectual Skills:**
At the end of the course the student will be able to:
b1- Use basic principles of computer science.
b2- Make discussion concerning to problems.
b3- Create of mental ability for the student.

c-   **Professional and Practical Skills:**
At the end of the course the student will be able to:
c1- Develop the ability of the student to bind between topics.
c2- Solve problem
c3- Develop the capability of the student for thinking.

d-   **General and Transferable Skills:**
At the end of the course the student will be able to:
d1- Use Computer

d2- Work in groups.
d3- Analyze results.

3.   **Contents**

Topics	No. of hours	Lecture	Practical
Introduction to computer terminology, Numeric systems and brief introduction to data structure	4	2	2
Brief introduction to computer Architecture , input and output units ,and central process units	4	2	2
Input ,Output and storage , Software	4	2	2
Introduction to operating system	4	2	2
Introduction to the world computers and hardware	4	2	2
Numerical system and computer network	4	2	2
Total	24	12	12

4.   **Teaching and Learning Methods**

4.1- Lecturing
4.2- Discussions
4.3- Exercises
4.4- Homework

5.   **Student Assessment Methods**

    5.1 Discussions to assess applying and evaluating the information
    5.2 Practical to assess the acquired profession skills
   5..3 Mid term exam to assess understanding **intellectual** skills
    5.4 End of term exam to assess understanding **intellectual** skills

2-Assessment Schedule

    Assessment : Discussions   Week 1-12
    Assessment : Essay   Week 3
    Assessment : Mid term   Week 7
    Assessment   Final exam   Week 14

Weighting of Assessments

Mid-Term Examination   10%
Final-term Examination   80%
 Oral Examination.   5%
 Practical Examination   %
 Semester Work   5%
 Other types of assessment   %
               Total   100%

Any formative only assessments

6-List of References

6.1- **Course Notes**
6.2- **Essential Books**
   Mathematical Programming, V. G. Karmanov, Mir Publishers Moscow, 1984

6.3- **Recommended Books**
   Mathematical Programming, V. G. Karmanov, Mir Publishers Moscow, 1984

6.4**- Periodicals, Web Sites, … etc**
Google.com; Sciencedirect.com

7-Facilities Required for Teaching and Learning
Over head projector

Course Coordinator: Prof. Dr. Maher Zayed
Head of Department: Prof. Dr. Effat Abbas
 Date: