**Form No. (12)**

**Course Specification**

**University/Academy: Benha**

**Faculty/Institute : Computers and Informatics**

**Department : Computer Science**

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| **1- Course Data** | | |
| **Course Code:**  CHW160 | **Course Title:**  Introduction to Computers | **Academic Year/Level:**  1stYear / B.Sc. |
| **Specialization:**  Computer Science | **No. of Instructional Units: Lecture** 4 **Practical** 4  ...... | |

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| **2- Course Aim** | One of the objectives of this course is to be computer literate: knowing the history of computers, categories of Computer systems, components of computer systems (Hardware [input, processing, storage, output, and communications devices], Software [Systems as well as applications SW]), terminology of the IT domain,…., etc.). The course also aims to acquire the knowledge necessary for being a computer professional: An introduction to Programming languages, Algorithms and flow charts, Main elements in Programming languages, Mathematical expressions, I/O statements, Loops, Logical expressions and Branching. |
| **3- Intended Learning Outcome** | |
| **a- Knowledge and Understanding** | * + 1. Enumerate the terminology and concepts of the IT field.     2. Understand the theories of Number Systems and binary coding schemes.     3. Summarize computer system components and their functions.     4. Illustrating the Concepts of Programming languages. |

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| **b-** | **Intellectual Skills** | * + 1. Interpret how data is represented, stored and displayed.     2. Criticize the different theories of how processing occurs.     3. Interpret the classifications of Networking and resource sharing and management. |
| **c-** | **Professional Skills** | * + 1. Use instruments that help in mastering DOS and WINDOWS.     2. Master MSOFFICE (WORD, EXCEL, AND POWER POINT).     3. Design very simple and primitive programs using C++. |
| **d-** | **General Skills** | * + 1. Manipulate MSOFFICE to write a report, create a spread sheet, and prepare a presentation.     2. Manipulate HTML to create a Homepage; and to effectively use the Internet.     3. Discuss the concept of programming. |

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| **4- Course Content** | An Overview  Computer Systems  Input Hardware  Processing Hardware (I)  Processing Hardware (II)  Storage Hardware (III)  Output Hardware  Communications Hardware  Systems Software  Applications Software  Programming Fundamentals (I)  Programming Fundamentals (II)  Programming Fundamentals (III)  Programming Fundamentals (IV) |
| **5- Teaching and Learning Methods** | Lectures: 4 hours/lecture  Labs : 4 hours/lab  Assignments: 4 /semester  Summer Training |
| **6- Teaching and Learning Methods for Students with Special Needs** | ...... |
| **7- Student Assessment:** |  |
| **a- Procedures used:** | 1-Midterm **to assess** the knowledge acquired  2-Practical Exam **to assess** the skills of using computers  3-Oral Exam  **to assess** the understanding of presented concepts  4-Final Written Exam **to assess** the overall understanding of the subject |

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| **b- Schedule:** | Assessment 1 Week 3  Assessment 2 Week 5  Assessment 3 Mid-Term exam Week 7  Assessment 4 Week 10  Assessment 5 Oral and Practical exam Week15  Assessment 6 End of Term final Exam Week 16 |
| **c- Weighing of Assessment:** | Semester Work 10 %  Final-term Examination 70 %  Oral Examination 7 %  Practical Examination 13 % |
| **8- List of Textbooks and References:** | ...... |
| **a- Course Notes** | Course Lectures Slides |
| **b- Required Books (Textbooks)** | 1. Understanding Computers: Today and Tomorrow, Introductory by Deborah Morley and Charles S. Parker (Feb 13, 2012) 2. C++ From Control Structures through Objects 6th Edition, 2008. |
| **c- Recommended Books** | 1-H.L.Caproon, “Computer Tools and Information Age”, 8th edition, Prentice Hall, 2007.  2-Problem solving with C++, 6th ,by Walter Savitch, Addison Wesley, 2006.  H.L.Caproon, “Computer Brief”, 8th edition, Prentice Hall, 2009. |
| **d- Periodicals, Web Sites, ..., etc.** | ...... <http://computer.howstuffworks.com>, [www.pcguide.com](http://www.pcguide.com) , [www.learncpp.com](http://www.learncpp.com), [www.cplusplus.com](http://www.cplusplus.com), [www.cprogramming.com](http://www.cprogramming.com) , <http://courses.cs.vt.edu/~csonline> |

**Date: ….. / …… / 2013**

Course Coordinator: ………Dr.Walid Osamy……… Department Head: …Dr. Mazen Saliem

**Signature: Signature:**