



Course specification

University/Academy: Damanhour University

Faculty/Institute: Science

Department: Mathematics

1. course Data:

Course code: Comp202	Course title: Computer (2)	Academic year/level: 2008-2009 Second year - Second term
Specialization: جميع التخصصات لمجموعة العلوم الرياضية والفيزيائية والكيميائية	No. of instructional units: lecture <input type="text" value="2"/> tutorial <input type="text" value="2"/> practical <input type="text" value="-"/>	

2. course Aim

This course is designed to encourage in students a sense of interest for computer science, and appreciation of its application in different contexts and to involve them in an intellectually stimulating and satisfying experience of learning and studying. Provide a solid foundation in the major areas of computer science. Provide education and training of high quality in computer programming.

3. Intended learning outcome

a) Knowledge and understanding

- a1. List the importance of the usage of computer in our life.
- a2. Define the basic components of a computer and the usage of each component,
The student also will get an understanding of.



	<p>a3. Recognize the different types of computer programs.</p> <p>a4. Discuss and explain the usage of specific ready packages like: word processing, spread sheets, presentation programs.</p>
b) Intellectual skills	<p>b1. Differentiate between software and hardware of computer science.</p> <p>b2. Demonstrate knowledge and understanding of essential facts, concepts and principles relating to computer applications.</p> <p>b3. Use some familiar ready packages and apply them on real applications.</p>
c) Professional skills	<p>c1. Plan, design and execute practical activities using techniques and procedures appropriate to computer programs.</p> <p>c2. Plan, design, record, execute and communicate a piece of independent applications using computer programs media and techniques.</p>
d) General skills	<p>d1. Work in group on selected software packages</p> <p>d2. Set tasks and solve real problems using these selected software.</p> <p>d3. Use organization skills (including task</p>



	and time management) relevant to computer software both individually and in a group situation.
4. course content	1- High level programming language (C++). The notions of an algorithm and the formulation of a problem.
	2- Standard functions.
	3- Procedures and top down design.
	4- Declarations.
	5- Statements.
	6- Expressions -Input and output.
	7- Compilation and execution.
	8- Error messages
	9- Debugging techniques.
	10-Loops
	11-Arrays
	12-Functions
	13-Subroutines
	14-Applications
	15-Introduction to classes and objects.
	16-Object oriented programming
5. Teaching and learning methods	5.1 Lectures. 5.2 Lab work 5.3 Homework 5.4 Oral discussion
6. teaching and learning methods for students with special needs	Non
7. Student Assessment	
a) Procedures used:	Final exam
b) Schedule:	Assessment 2 Final exam Week 15
c) Weighing of Assessment:	Final exam 100 Marks



List of Textbooks and References:

d) Course Notes	Course notes provided by the staff member of Math department, to be handed at the beginning of the semester.
e) Required Books (Textbooks)	C++ Programming Language, The (3rd Edition) (Paperback) by Bjarne Stroustrup (Author)
f) Recommended Books	None
g) Periodicals, web sites,....,etc	None

Course Instructor: Prof. Dr. Mohamed Darwish

Head of Department: Dr. Ragab Omar Abd El-Rahman

Date: / /