

Course Syllabus

First Semester – 2013/2014

General Information

Course name	Course code	Credits	Contact hours
Computer Programming	BMTS366	1 lecture+1 lab	1 lecture+2 lab

Instructors/ Coordinators

	Instructor	Coordinator
Name	Mr. Vinoth Kumar	Mr. Vinoth Kumar
Email	v.subramanian@mu.edu.sa	v.subramanian@mu.edu.sa
Ext	2894	2894

Text Book

Title	C: How to Program
Author/Year	Harvey M. Deitel, Paul Deitel / 2011

Supplemental materials

Recommended Textbooks and Reference Material	
Title	Object Oriented Programming with C++: 6e
Author/Year	E. Balagurusamy / 2013
Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)	
Web sites	www.cprogramming.com
	tutorial5.net/p/picture-archiving-communication-system-(pacs)
	plsql-tutorial.com

Specific Course Information

a. Brief description of the content of the course (Catalog Description)
This course focuses on C and C++ programming and application to biomedical systems. It includes also, data base programming SQL, database utilization for medical systems and patients information archiving with some application using PACS database software and others.
b. Prerequisites (P) or Co-requisites (C)
None
c. Course type (Mandatory or Elective)
Mandatory

Specific Goals

a. Specific outcomes of instruction

By the end of this course, the student should be able to:

- Comprehend the basic concept of computer programming. (a)
- Classify the syntax and semantics of C, C++. (b)
- Examine the importance of program logic. (c)
- Analyze the usages of various program languages construct. (c)
- Participate in creating applications using C, C++. (e)

b. Student outcomes addressed by the course

a	b	c	d	e	f	g	h	i	j	k
✓	✓	✓		✓						

Brief list of topics to be covered

Topics	No of Weeks	Contact hours
Introduction to Programming Languages, Data types, Variables and Operators	1	1
Structure of C Program and its Input and Output functions	1	1
Conditional and Looping Statement	2	2
Sample C Programs, Pointers	3	3
Structure of C++ and its Input and Output functions	1	1
Conditional statement , Looping statement	2	2
Sample Programs in C++	1	1
Database Programming	1	1
Database Utilization for Patient information	1	1
Introduction to Oracle	1	1
PACS Database Software	1	1