Ministry of Higher Education
Majmaah University
College of Applied Medical Sciences
Medical Equipment Technology Department

Course Syllabus

First Semester – 2013/2014

General Information

Course name	Course code	Credits	Contact hours
Applied Mathematics 1	BMTS243	2 lecture	2 lecture

Instructors/ Coordinators

	Instructor	Coordinator
Name	Dr. Mohammad Al-Hawari	Dr. Mohammad Al-Hawari
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Text Book

Title	Mathematics for Engineering
Author/Year	Antony Croft & Robert Davision / 2003

Supplemental materials

Recommended Textbooks and Reference Material		
Title	Engineering Mathematics	
Author/Year	M.K. Venkatraman / 2001	
Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)		
Web sites	http://findpdf.net/documents/engineering-maths-by-m-k-venkataraman-text-pdf-download.html	http://tutorial.math.lamar.edu/Classes/CalcI/CalcI.aspx
	http://findpdf.net/documents/engineering-maths-by-m-k-venkataraman-text-pdf-download.html	http://tutorial.math.lamar.edu/Classes/CalcI/CalcI.aspx

Specific Course Information

a. Brief description of the content of the course (Catalog Description)
In this course student will study a review of some fundamental concepts in math used for biomedical technology. It includes fundamental operations on polynomials, linear equations, ratio and proportion variation and functions, system of linear equations, trigonometric functions and identities. It includes also, the exponential functions and their graphical representation, Logarithms, Logarithmic functions and their graphical representation, derivatives and application, integrals and application. It contains geometry limits and linear algebra.
b. Prerequisites (P) or Co-requisites (C)
(P) Mathematics for Health Sciences - CAMS232
c. Course type (Mandatory or Elective)
Mandatory

Specific Goals

a. Specific outcomes of instruction

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

- Recognize the features of Polynomials. (a)
- Identify exponential functions and logarithmic functions. (b)
- Analyze and solve problems using matrices and vectors. (f)

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
Operation on Polynomials	1	2
linear equations and Partial fractional	2	4
System of linear equations	1	2
Trigonometric functions and identities	1	2
Ratio and proportion variation and functions	1	2
Derivatives and application	1	2
Integrals and application	2	4
Geometry limits and linear algebra	1	2
Exponential functions and Logarithmic functions	1	2
Graphical representations of the Exponential functions and Logarithmic functions	1	2
Vectors and Complex Numbers	2	4