

Attachment 2 (e)
Course Specifications

4

Kingdom of Saudi Arabia
The National Commission for Academic Accreditation & Assessment

T6. Course Specifications



Course Specifications

Institution: Hail University

Date: 08/12/2016

College/Department: Preparatory Year, Basic Science Department, Mathematics

A. Course Identification and General Information

1. Course title and code: Preparatory Mathematics-Level 4 PMAT 004

2. Credit hours: 2 hours

3. Program(s) in which the course is offered: Preparatory Year, Basic Science Department, Mathematics.
(If it is a general elective that is available in many programs, indicate this rather than listing the programs.)

4. Name of faculty member responsible for the course: Mr. Shah Hussein, Mr. Abdul Moiz Mohammed,
Dr. Lachene Bachiwa , Dr. Lilian Akasha

5. Level/year at which this course is offered: Second semester of the academic year 2015-2016

6. Pre-requisites for this course (if any): Completed PMAT - 003 (Level-3)

7. Co-requisites for this course (if any):

8. Location if not on main campus: Male: Baqa Campus, Building-6, Female: Aja Campus.

9. Mode of Instruction (tick (✓) the appropriate box):

a. Traditional classroom

What percentage?

100%

b. Blended (traditional and online)

What percentage?

c. E-learning

What percentage?

d. Correspondence

What percentage?

f. Other

What percentage?

Comments:



B. Objectives

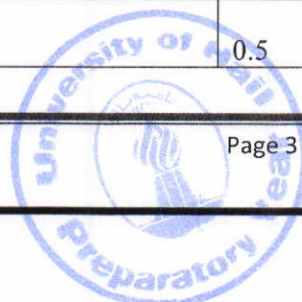
1. What is the main purpose for this course?
 1. Reformulate basic concepts of trigonometry and trigonometric functions in the different scientific and engineering specialties
 2. Define basic trigonometric functions and right triangles.
 3. Solve right triangles.
 4. Define trigonometric functions in the Cartesian plane
 5. Calculate trigonometric functions of any real number.
 6. Analyze graphs of the basic trigonometric functions
 7. Solve some problems using the fundamental identities
 8. Define the inverse trigonometric functions of sine , cosine and tangent
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)
 - A. Teachers' development seminars
 - B. Good planned Class room visits and discussions with teachers;
 - C. Using Black board system;
 - D. Self development

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

1. Topics to be Covered:

List of Topics	No. of Weeks	Contact hours
1. Angle Measure, Special Triangles and Special Angles	1.5	4
2. The Trigonometry of Right Triangles	1.5	2
3. Trigonometry and the coordinate plane		2
4. Unit Circles and the Trigonometry of Real Numbers	1	4
5. Graphs of the Sine, Cosine; Cosecant, Secant functions	0.5	2
6. Graphs of the Tangent and Cotangent functions		2



7. Fundamental Identities and Families of Identities	1	2
8. Constructing and Verifying Identities	1	4
9. The Sum and Difference Identities	1	4
10. The Inverse trigonometric functions	0.5	2
Total	7 weeks	28

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory or Studio	Practical	Other	Total
Contact Hours	4 x8	0	0	0	0	32
Credit	2	0	0	0	0	2

3. Additional private study/learning hours expected for students per week:

4 hours

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

In the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcome, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)