



## Course Specifications

<b>Course Title:</b>	History of Mathematics
<b>Course Code:</b>	Math 481
<b>Program:</b>	Bachelor of Science in Mathematics
<b>Department:</b>	Mathematics
<b>College:</b>	Science
<b>Institution:</b>	University of Tabuk

## Table of Contents

<b>A. Course Identification.....</b>	<b>3</b>
6. Mode of Instruction (mark all that apply) .....	3
<b>B. Course Objectives and Learning Outcomes.....</b>	<b>3</b>
1. Course Description .....	3
2. Course Main Objective.....	3
3. Course Learning Outcomes .....	3
<b>C. Course Content .....</b>	<b>4</b>
<b>D. Teaching and Assessment .....</b>	<b>4</b>
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods .....	4
2. Assessment Tasks for Students .....	5
<b>E. Student Academic Counseling and Support .....</b>	<b>5</b>
<b>F. Learning Resources and Facilities.....</b>	<b>5</b>
1. Learning Resources .....	5
2. Facilities Required.....	خطأ! الإشارة المرجعية غير معروفة.
<b>G. Course Quality Evaluation .....</b>	<b>6</b>
<b>H. Specification Approval Data .....</b>	<b>6</b>

## A. Course Identification

<b>1. Credit hours:</b>	<b>03 Hours/Week</b>
<b>2. Course type: Theory</b>	
a.	University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b.	Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
<b>3. Level/year at which this course is offered:</b> L8/Y4	
<b>4. Pre-requisites for this course (if any):</b> Math-200	
<b>5. Co-requisites for this course (if any):</b> None	

### 6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100%
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

### 7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	45
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	<b>Total</b>	<b>45</b>

## B. Course Objectives and Learning Outcomes

### 1. Course Description

This course is designed to improve the students' understanding of the historical development of mathematics. To emphasize the role of Arabs and Muslims in the development of mathematics.

### 2. Course Main Objective

- Students will be able to recall the historical development of mathematics.
- Students will recognize the role of Arabs and Muslims in development of mathematics.
- Students will be able to do some calculations using Babylonian and ancient Egyptian, Greek and Hindi numerals.

### 3. Course Learning Outcomes

CLOs		Aligned PLOs
1	<b>Knowledge and Understanding</b>	
1.1	Students will be able to recall the history and evolution of Mathematics.	K1
1.2	Students will be able demonstrate knowledge of techniques used in the ancient times.	K2

CLOs		Aligned PLOs
<b>2</b>	<b>Skills :</b>	
2.1	Students will be able to solve problems using operations and techniques learned.	S1
2.2	Students will be able apply various numerical systems to perform mathematical operations.	S3
2.3	Students will be able to demonstrate proficiency in presenting mathematical concepts.	S4
<b>3</b>	<b>Values:</b>	
3.1	Students will be able to work in groups and observe ethics.	V1
3.2	Students will be able to manage duties and time.	V2

### C. Course Content

No	List of Topics	Contact Hours
1	Ancient Egyptian Mathematics	3 Hrs
2	The number symbols	3 Hrs
3	The summation operation	3 Hrs
4	The difference operation, the multiplication and division operations	3 Hrs
5	Indian Mathematics	3 Hrs
6	The number symbols	3 Hrs
6	<b>Mid-Exam 1</b>	
7	The summation operation	3 Hrs
8	The difference operation	3 Hrs
9	The multiplication and division operations	3 Hrs
10	The fraction	3 Hrs
11	The mathematics in Europe	3 Hrs
11	<b>Mid-Exam 1</b>	
12	The functions, The limit,	3 Hrs
13	The derivative of functions	3 Hrs
14	The integrals of functions, Some scientific names with related their works	3 Hrs
15	<b>Revision and final Exam</b>	3 Hrs
	<b>Total</b>	<b>45 Hrs</b>

### D. Teaching and Assessment

#### 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and Understanding</b>		
1.1	Students will be able to recall the history and evolution of Mathematics.	Introducing new ideas through case study Lectures Class Discussions	Quizzes I II Midterm Exams Final Exams homework assignments.
1.2	Students will be able demonstrate knowledge of techniques used in the ancient times.		
<b>2.0</b>	<b>Skills</b>		
2.1	Students will be able to solve	- Lectures	- Quizzes

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	problems using operations and techniques learned.	Group work - Case Study - Brainstorming	-Assignments -Midterm exams - Final exam
2.2	Students will be able apply various numerical systems to perform mathematical operations.		
2.3	Students will be able to demonstrate proficiency in presenting mathematical concepts.		
3.0	Values		
3.1	Students will be able to work in groups and observe ethics.	Cooperative learning and teamwork project	- Quizzes -Assignments -Class participation
3.2	Students will be able to manage duties and time.		

## 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Activities	Weekly basis	5%
2	Homework	Weekly basis	5%
3	Quizzes	Weekly basis	10%
4	Mid Exam1	6 <sup>th</sup> week	20%
5	Mid Exam2	11 <sup>th</sup> week	20%
6	Final Exam	At end of the Semester	40%

\*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## E. Student Academic Counseling and Support

**Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :**

Six office hours per week in the lecturer schedule.

## F. Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	Howard Eves. An Introduction to the History of Mathematics, 4th Edition. Holt, Rinehart, and Winston, New York 1998.
<b>Essential References Materials</b>	Carl B. Boyer. A History of Mathematics. Oxford University Press, 1993.
<b>Electronic Materials</b>	None
<b>Other Learning Materials</b>	None

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	1. Lecture Room with max capacity of 30 students and equipped with White Board, Overhead projector and internet connection.

Item	Resources
	2. Library
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Projectors
<b>Other Resources</b> (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	None

## G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Direct and Indirect
Extent of achievement of course learning outcomes	Teachers	Direct
Quality of learning resources	Students	Indirect

**Evaluation areas** (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

**Evaluators** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## H. Specification Approval Data

<b>Council / Committee</b>	The Curriculum committee
<b>Reference No.</b>	
<b>Date</b>	25/08/2021