Kingdom of Saudi Arabia
Ministry of Higher Education
Majmaah University
Zulfi, College of Sciences
Mathematics Department

جامعة المجمعة
Majmaah University

المملكة العربية السعودية
وزارة التعليم العالي
جامعة المجمعة
كلية العلوم بالزلفي
قسم الرياضيات

COURSE CLASSIFICATION FORM

Course Number/Name		**Math-216 Geometry**	
Prepared by		**Naveed Yaqoob**	
Program Learning Outcomes	**Levels* (0,1,2, 3,4,5)**	**Relevant Activities**	**Assessment Methods/Metrics**
a1. Apply fundamentals and concepts of mathematics.	**5**	- Lectures - assignments	• 3 Midterm and final exam • Home work
a2. Apply fundamentals and concepts General sciences and Computer skills.	**3**	- assignments on basis and dimensions	• 1 Midterm and final exam • Home work
a3. Realize Social and ethical values	**0**		•
b1. Read and construct mathematical arguments and proofs.	**5**	- Lectures - assignments	Home work
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.	**4**	- Lectures - assignments	• 3 Midterm and final exam+ Home work
c1. Work independently and within a team	**3**	Divided students into groups and using oral discussion with homework	• Home work
c2. Bear responsibility for different situations.	**1**		• Quizzes
c3. Realize codes of ethics and their importance.	**0**		
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.	**4**	- Lectures - assignments - Oral discussion	• 3 Midterm + final exam • Home work • Quizzes
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.	**4**	- Lectures - assignments	• Home work • Quizzes
d3. Critically interpret numerical and graphical data.	**3**	- assignments on determinats	• Home work • Quizzes
e1. Use computer and its applications as an office tool	**3**	- assignments on eigenvalues and eigenvectors	Home work Quizzes

*** Please mark (or type) High (5), Medium-High (4), Medium (3), Low-Medium (2), Low (1) or Not At All (0) indicating the level to which you believe, as an instructor, the students have achieved these outcomes in this course.**

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Course Objectives and Outcomes

Course Number: Math-216 **Course Name: Geometry**

Prepared by: Naveed Yaqoob

Table 1: Relationship of course objectives/outcomes with PLO and ASIIN Criteria

Course Objectives:	Course Outcomes:	ASIIN	PLO
Have the knowledge of planer analytic geometry	Fundamental concepts	a, b, e, m	
	Improve and **outline** the linear algebra.	b, c	
	Illustrate how to communicating with: Peers, Lecturers and Community.	l, n	
Have the knowledge of equations, loci and straight lines.	**Define** and **recognize** equations, loci and straight lines	a, b, c, g, m , j	
	Shown the ability of working independently and with groups.	n	
	Illustrate how take up responsibility.	l, n	
Studying the properties of circles.	**Define** and **recognize** the concepts of circles	a, b, f, h	
	ability to **write** Mathematical equations in a correct mathematical way	a, j, g	
Studying the basics of parabola and ellipse.	**Define** and **recognize** the parabola and ellipse	a, c, h	
		d, h	
	Illustrate how to Search the internet and using software programs to deal with problems	d, h	
Have the knowledge hyperbola and its construction.	**Define** and **recognize** the hyperbolas	a, e, i	
	interpret how to Know the linear operators and linear mappings using the internet	k, h, g	
Studying the problems on polar coordinates.	**Define** and **recognize** polar coordinates	a, i	
	interpret how to Know the eigenvalues, eigenvectors theory using the internet	h, k	
Studying the parametric equations	**Define** and **recognize** parametric equations	a, i	
	interpret how to Know the diagonalization using the internet	k, h, g	

Table 2: Methods of assessment of course syllabus

.

Assessment Method	Number/Type	Instructor Assessed	TA/Grader Assessed	Peer/Self Assessed
Homework	2 homework assignments	X		
Mid Terms/Final Exams	2 mid-term; 1 final exam	X		
Quizzes	One	X		
Lab Assignments				
Computer Assignments				
Computer Tools Used				
Oral Presentations				
Written Reports				
Other				

Outcome of ASIIN	
a	Graduates have sound mathematical knowledge. They have a profound overview of the contents of fundamental mathematical disciplines and are able to identify their correlations.
b	Graduates are able to recognise mathematics-related problems, assess their solvability and solve them within a specified time frame.
c	Graduates have a basic ability to work in a scientific way. They are in particular able to formulate mathematical hypotheses and have an understanding of how such hypotheses can be verified or falsified using mathematical methods.
d	Graduates can flexibly apply mathematical methods of fundamental component areas of mathematics and are able to transfer the findings obtained to other component areas or applications.
e	Graduates have abstraction ability and are able to recognise analogies and basic patterns
f	Graduates are able to think in a conceptual, analytical and logical manner.
g	Graduates have an extensive comprehension of the significance of mathematical modelling. Are able to create mathematical models for mathematical problems as well as for problems in other areas of science or everyday life, and have a selection of problem solving strategies at their disposal.
h	Graduates can use basic methods of computer-aided simulation, mathematical software and programming to solve mathematical problems
i	Graduates are in a position to solve more extensive mathematical
j	Graduates can classify, recognise, formulate and solve mathematics-related problems
k	Graduates use electronic media competently
l	Graduates can implement lifelong learning strategies. A prerequisite for this is that the students are per-severing and that they have developed persistence.
m	Graduates can recognise, formulate, classify and solve problems in a mathematical context
n	Graduates can communicate, possibly also in a foreign language, and contribute their work effectively in teams

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Instructor Course Evaluation Form

The purpose of this evaluation is to collect instructor feedback for improving this course and the Mathematics program. Information will also be used for program accreditation purposes.

I. Program Learning Outcomes Evaluations

Course Number/Name	Math216 Geometry	Semester	Second1434/1435
Instructor	Naveed Yaqoob		

The course listed above is designed for students to achieve the following outcomes at a Not At All, Low, Low- Medium, Medium, Medium-High or High level.

Please mark (or type) High (5), Medium-High (4), Medium (3), Low-Medium (2), Low (1) or Not At All (0) indicating the level to which you believe, as an instructor, the students have achieved these outcomes in this course.

Program Learning Outcomes	Relevant Activities	5	4	3	2	1	0
a1. Apply fundamentals and concepts of mathematics.	- Lectures - assignments	**5**					
a2. Apply fundamentals and concepts General sciences and Computer skills.	- assignments on logic statements		**4**				
a3. Realize Social and ethical values.							**0**
b1. Read and construct mathematical arguments and proofs.	- Lectures - assignments	**5**					
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.	- Lectures - assignments - Oral discussion	**5**					
c1. Work independently and within a team						**1**	
c2. Bear responsibility for different situations.					**2**		
c3. Realize codes of ethics and their importance.							**0**
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.	- Lectures - assignments - Oral discussion		**4**				
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.	- Lectures - assignments		**4**				
d3. Critically interpret numerical and graphical data.	- assignments on information data and represented data			**3**			
e1. Use computer and its applications as an office tool							**0**

II. Catalog Description , and Course Prerequisites Evaluations:

Based on your experiences in the course, please respond by circling the most appropriate number. Circle N/A for items that are not applicable, or if you have no opinion.

Catalog Description 1434-1435	• **Fundamental concepts + Equations, Loci and straight lines** • **Second degree equations + General equations of circle** • **Parabola: Construction, properties and related problems** • **Ellipse: Construction, properties and related problems** • **Hyperabola: Construction, properties and related problems** • **Second degree curves, tangents and normals + Polar coordinates and parametric equations**						
Course Prerequisites:	PMTH 231	**Circle One (5=Strongly Agree; 1=Strongly disagree)**					
2a. Do you believe that the catalog description (above) is accurate for this course?		**(5)**	**4**	**3**	**2**	**1**	**N/A**
2b. Do you believe that the course prerequisites (above) are appropriate for this course?		**5**	**(4)**	**3**	**2**	**1**	**N/A**
2c. If not, please list any prerequisites you believe are not appropriate for this course.							

III. Textbook(s) and/or Lab Manuals (if applicable) Evaluations:

Textbook(s) and/or Lab Manuals (if applicable):	• **A Concise Geometry By: Clement V. Durell** • **Plane Geometry By: G.A. Wentworth**	**Circle One (5=Strongly Agree; 1=Strongly Disagree)**					
3a. In general, do you believe this to be an appropriate textbook for this course?		**(5)**	**4**	**3**	**2**	**1**	**N/A**
3b. Was the organization of the textbook appropriate for this course?		**(5)**	**4**	**3**	**2**	**1**	**N/A**
3c. Was the level of the textbook appropriate for this course?		**5**	**(4)**	**3**	**2**	**1**	**N/A**

IV. Computer usage (if applicable) Evaluations:

Computer usage (if applicable):		**Circle One (5=Strongly Agree; 1=Strongly Disagree)**					
5a. Was the use of computer well integrated with the course?		**5**	**4**	**3**	**2**	**1**	**(N/A)**
5b. Was the computer lab adequately equipped with well-maintained and updated computers?		**5**	**4**	**3**	**2**	**1**	**(N/A)**
5c. Was the computer lab equipped with sufficient number of computers?		**5**	**5**	**5**	**2**	**1**	**(N/A)**
5d. Were the special software packages (MATLAB, SPSS, C+, FORTRAN, etc) available and accessible?		**5**	**4**	**3**	**2**	**1**	**(N/A)**
5e. Was adequate technical support available when needed?		**5**	**4**	**3**	**2**	**1**	**(N/A)**

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Student Course Evaluation Form

The purpose of this evaluation is to collect instructor feedback for improving this course and the Mathematics program. Information will also be used for program accreditation purposes.

I. Program Learning Outcomes Evaluations

Course Number/Name	Math 216 Geometry	Semester	Second 1434/1435
Instructor	**Naveed Yaqoob**		
Student Name		**Student ID**	

The course listed above is designed for students to achieve the following outcomes at a Not At All, Low, Low- Medium, Medium, Medium-High or High level.

Please mark (or type) High (5), Medium-High (4), Medium (3), Low-Medium (2), Low (1) or Not At All (0) indicating the level to which you believe, as an instructor, the students have achieved these outcomes in this course.

Program Learning Outcomes	5	4	3	2	1	0
a1. Apply fundamentals and concepts of mathematics.						
a2. Apply fundamentals and concepts General sciences and Computer skills.						
a3. Realize Social and ethical values.						
b1. Read and construct mathematical arguments and proofs.						
b2. Apply critical thinking skills to solve problems that can be modeled mathematically.						
c1. Work independently and within a team						
c2. Bear responsibility for different situations.						
c3. Realize codes of ethics and their importance.						
d1. Communicate a depth and breadth of mathematical knowledge, both orally and in writing.						
d2. Ability to Organize, connect and communicate mathematical and algorithmic ideas.						
d3. Critically interpret numerical and graphical data.						
e1. Use computer and its applications as an office tool						

II. Catalog Description, and Course Prerequisites Evaluations:

Based on your experiences in the course, please respond by circling the most appropriate number. Circle N/A for items that are not applicable, or if you have no opinion.

Catalog Description 1434-1435	• **Fundamental concepts + Equations, Loci and straight lines** • **Second degree equations + General equations of circle** • **Parabola: Construction, properties and related problems** • **Ellipse: Construction, properties and related problems** • **Hyperabola: Construction, properties and related problems** • **Second degree curves, tangents and normals + Polar coordinates and parametric equations**						
Course Prerequisites:		**Circle One (5=Strongly Agree; 1=Strongly disagree)**					
2a. Do you believe that the catalog description (above) is accurate for this course?		**5**	**4**	**3**	**2**	**1**	**N/A**
2b. Do you believe that the course prerequisites (above) are appropriate for this course?		**5**	**4**	**3**	**2**	**1**	**N/A**
2c. If not, please list any prerequisites you believe are not appropriate for this course.							

III. Textbook(s) and/or Lab Manuals (if applicable) Evaluations:

Textbook(s) and/or Lab Manuals (if applicable):	• **A Concise Geometry By: Clement V. Durell** • **Plane Geometry By: G.A. Wentworth**	**Circle One (5=Strongly Agree; 1=Strongly Disagree)**					
3a. In general, do you believe this to be an appropriate textbook for this course?		**5**	**4**	**3**	**2**	**1**	**N/A**
3b. Was the organization of the textbook appropriate for this course?		**5**	**4**	**3**	**2**	**1**	**N/A**
3c. Was the level of the textbook appropriate for this course?		**5**	**4**	**3**	**2**	**1**	**N/A**

IV. Computer usage (if applicable) Evaluations:

Computer usage (if applicable):		**Circle One (5=Strongly Agree; 1=Strongly Disagree)**					
4a. Was the use of computer well integrated with the course?		**5**	**4**	**3**	**2**	**1**	**N/A**
4b. Was the computer lab adequately equipped with well-maintained and updated computers?		**5**	**4**	**3**	**2**	**1**	**N/A**
4c. Was the computer lab equipped with sufficient number of computers?		**5**	**5**	**5**	**2**	**1**	**N/A**
4d. Were the special software packages (MATLAB, SPSS, C+, FORTRAN, etc) available and accessible?		**5**	**4**	**3**	**2**	**1**	**N/A**
4e. Was adequate technical support available when needed?		**5**	**4**	**3**	**2**	**1**	**N/A**