2023
TPG-153

Course Specification

(Postgraduate)

Course Title:	Math 699
Course Code:	Thesis
Program:	M Sc Mathematics
Department:	Mathematics
College:	College of Science and Humanities
Institution:	Prince Sattam Bin Abdulaziz University
Version:	2
Last Revision Date:	Oct 2024

Table of Contents

A. General information about the course:

1. Course Identification:

1. Credit hours: 6(0,0,6)				
2. Course type				
A.	☐University	☐College	☒ Department	☐Track
B.	☒ Required		☐Elective	
3. Level/year at which this course is offered: (Level 4 onwards)				
4. Course general Description:				
The student performs mentored research independently under the supervison of Academic Supervisor				
5. Pre-requirements for this course (if any)**:**				
Should have completed all the course work of the Program and acquired atleast 30 credits				
6. Co-requirements for this course (if any)**:**				
Nil				
7. Course Main Objective(s):				
To prepare the students to pursue research oriented career in the field of Mathematics.				

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom		
2	E-learning		
3	Hybrid • Traditional classroom • E-learning	At least one hour per week on mutual agreement with the Supervisor	100%
4	Distance learning		

3. Contact Hours: (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)…… It is independent research so the student meets the Supervisor at a mutually agreed time for discussion**	24
	Total	24

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods:

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Demonstrate understanding of advanced Mathematical concepts, Principles and theories and their applications	K1	Discussion Brainstorming session	Evaluation of Thesis by committee constituted by the Department council Oral Defense of Thesis by the student
1.2	Describe various definitions and theorems and identify the underlying mathematical concepts.	K2		
1.3	Identifying relevant research problems in the field of mathematics and describe suitable algorithms.	K3		
2.0	**Skills**			
2.1	Apply appropriate theories, principles and concepts to solve mathematical problems using various techniques.	S1	Discussion Brainstorming session	Evaluation of Thesis by committee constituted by the Department council Oral Defense of Thesis by the student
2.2	Carryout research in the field of mathematics.	S2		
2.3	Exhibit oral and written scientific or technical communication skills.	S3		
3.0	Values, autonomy, and responsibility			
3.1	Work effectively exhibiting integrity and professional value to the assigned task.	**V1**	Discussion Brainstorming session	Level of compliance to Thesis Regulations.
3.2	Conducting scholarly or professional activities in an ethical manner	**V2**		
…				

C. Course Content:

No	List of Topics	Contact Hours
1.	This is a Research course, so the student choose the topic of research which was not done before as per the advice of the Supervisor	At least 2 hours a week or based on need
Total		24

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Writing of Research Proposal and its approval	3	
2.	Approval of title by the King Fahad National Library	5	
3.	Submission of Thesis	Within three semesters after completing the course work	
4	Defense of Thesis	After approval of the thesis by the committee	

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities:

1. References and Learning Resources:

Essential References	Based on the needs of the research topic and as advised by the Supervisor
Supportive References	--
Electronic Materials	--
Other Learning Materials	--

2. Educational and Research Facilities and Equipment Required:

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	**Computer with Mathematical Software as required**
Technology equipment (Projector, smart board, software)	**Mathematical software based on the research topic**
Other equipment (Depending on the nature of the specialty)	**Logistic and financial support for helping the student to participate in scientific conferences**

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Student	Indirect
Effectiveness of students assessment	Student	Indirect
Quality of learning resources	Student / Faculty	Indirect
The extent to which CLOs have been achieved	Faculty / QAAC	Direct and Indirect
Other		

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	**--**
REFERENCE NO.	**--**
DATE	**JAN 2025**