Course Specification

(Postgraduate Programs)

Course Title:	**PhD Dissertation**
Course Code:	**MAT 7399**
Program:	**Doctor of Philosophy in Mathematics**
Department:	**Mathematics and Statistics**
College:	**Science**
Institution:	**Imam Mohammad Ibn Saud Islamic University**
Version:	**2024 – V1**
Last Revision Date:	**None**

Table of Contents

A. General information about the course:

1. Course Identification:

1. Credit hours:					
15					
2. Course type					
A.	☐ University	☐ College	☒ Program	☐ Track	☐ Others
B.	☒ Required		☐Elective		
3. Level/Year at which this course is offered: Level 5-8 / Year 3-4					
4. Course General Description:					
Depend on research area.					
5. Pre-requirements for this course (if any)**:**					
Passing the comprehensive exam					
6. Pre-requirements for this course (if any)**:**					
None					
7. Course Main Objective(s):					
The objective of this course is to enable students to learn skills of research including reviewing the literature, writing research, thinking critically and evaluating works. The student, as well, should master investigating previous known results and attempt seriously to invent, generalize, improve, or focus on special cases to come up eventually with original and valuable results. The course is aimed also to mastering the language of proof and uses it to practice applied and theoretical aspects of research, accessing all resources such as papers, electronic materials, and data base to comprehend the topic and avoiding redundant efforts. Finally, one important goal for the course is to elaborate scientific writing up and publishing in respected journals in the field.					

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	0	0%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%
5	Personal work and learning	240	100%

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

No	Activity	Contact Hours
1.	Lectures	0
2.	Laboratory/Studio	0
3.	Field	0
4.	Tutorial	0
5.	Others (Personal)	240
	Total	240

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

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Research subject dependent.	K1, K2	30 work hours\week Self-study	Assignments
2.0	Skills			
2.1	To develop techniques of proof in the corresponding subject.	To develop techniques of proof in the corresponding subject.	Deep problems	Presentations
2.2	To develop oral communication and technical writing skills through writing and oral presentation.	To develop oral communication and technical writing skills through writing and oral presentation.	Self-study	Participations
2.3	To use Internet in searching for scientific information	To use Internet in searching for scientific information	Self-study	Participations
2.4	To carry out deep and not short proofs.	To carry out deep and not short proofs.	Deep problems	Presentations
3.0	Values, autonomy, and responsibility			
3.1	To work individually.	V1, V3	Personal questions	• Presentations and discussions Writing a thesis
3.2	To work in groups.	V1, V2	Team work	Collaborations

C. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	First year report	Last week in the first year (year 3)	Pass or fail
2.	Second year report	Last week in the second year (year 4)	Pass or fail
3.	Defense	Upon defense committee approval	Pass or fail

*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	On the recommendation of supervisor.
Supportive References	On the recommendation of supervisor.
Electronic Materials	On the recommendation of supervisor.
Other Learning Materials	On the recommendation of supervisor.

2. Educational and Research Facilities and Equipment Required:

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	▪ Each class room should be equipped with a whiteboard and a projector. ▪ Laboratories should be equipped with computers and an internet connection.
Technology equipment (Projector, smart board, software)	The rooms are equipped with data show and Smart Board.
Other equipment (Depending on the nature of the specialty)	None.

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	**Direct:** Questionnaire.
	Course Responsible	**Direct:** Course e-Portfolio. **Indirect:** Second examiner checklist-Course report.

Assessment Areas/Issues	Assessor	Assessment Methods
	Peer Reviewer	**Direct:** Questionnaire. **Indirect:** External assessor report.
Effectiveness of students' assessment	Program Leaders	**Direct:** Course e-Portfolio. **Indirect:** Course report.
Quality of learning resources	Students	**Indirect:** Second examiner checklist-Course report.
	Faculty (Academic Advisory-GCC)	**Direct:** course Entrance/Exit. **Indirect:** Observations - Accreditation review.
	Program Leaders	**Direct:** Course e-Portfolio. **Indirect:** Course evaluation survey- Observations- Syllabus review- Accreditation review.
	Course Responsible	
The extent to which CLOs have been achieved	Course Responsible	**Direct:** Exams - Course e-Portfolio. **Indirect:** Second examiner checklist-Course report.
	Program Leaders	**Indirect:** Exams.
Other	**Students**	**During the semester and at the end of the course each student will complete two evaluation forms.**

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

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	**MATHEMATICS AND STATISTICS DEPARTMENT COUNCIL**
REFERENCE NO.	**8/1446**
DATE	**05/04/1446 (08/10/2024)**