Course Specification

(Postgraduate Programs)

Course Title:	Selected Topics in Pure Mathematics (2)
Course Code:	MAT 6287
Program:	Master of Science in Mathematics
Department:	Mathematics and Statistics
College:	Science
Institution:	Imam Mohammad Ibn Saud Islamic University
Version:	2024 – V1
Last Revision Date:	1446/04/05 (08/10/2024)

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A. General information about the course:

1. Course Identification:

1. Credit hours:				
3((2 Lectures, 0 Lab, 2 Tutorial))				
2. Course type				
A.	☐University	☐ College	☒ Program	☐Track
B.	☐Required		☒ Elective	
3. Level/year at which this course is offered: (Level 3-4 / Year 2)				
4. Course General Description:				
Course dependent.				
5. Pre-requirements for this course (if any):				
None.				
6. Pre-requirements for this course (if any):				
None.				
7. Course Main Objective(s):				
This course This course is designed to enable students to study different special topics of interest, which are carefully selected from Pure Mathematics topics. The course covers selected topics in mathematics suggested by the student's supervisor and approved by the chairman and the department council each time this course is offered. Additioally, to learn topics those are not formally offered by the program and receive appropriate academic credit.				

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	100%
2	E-learning	0	0%
3	Hybrid • Traditional classroom • E-learning	0	0%
4	Distance learning	0	0%

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

No	Activity	Contact Hours
1.	**Lectures**	30
2.	**Laboratory/Studio**	0

3.	**Field**	**0**
4.	**Tutorial**	**30**
5.	**Others (specify)……**	**0**
	Total	**60**

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	Specific to each course of study.	K1, K2	4 lecture hours\week	Direct: Regular Exams
2.0	**Skills**			
2.1	Use techniques of proof in the corresponding subject.	S1, S2	Self-study	Direct: • Participations Short Quizzes
2.2	Develop oral communication and technical writing skills through writing and oral presentation.	S4	Real-life problems	Direct: Homework and Mini projects
2.3	Analyze Internet in searching for scientific information.	S3	Real-life problems	Direct: Short Quizzes
2.4	Choose out deep and not short proofs.	S1, S2	Self-study	Direct: Participations
3.0	**Values, autonomy, and responsibility**			
3.1	Work with independence and responsibility.	V1, V2	Personal questions	Direct: Participation
3.2	Lead team works.	V1, V3	Teamwork and class discussions.	Direct: Homework and Mini projects

C. Course Content:

No	List of Topics	Contact Hours
1.	Specific to each course of study	60
	Total	60

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	HomeWorks, Quizzes, Mini projects	During the semester	30%
2.	Midterm	Week 9-10	30%
3.	Final Exam	Week 16-17	40%

*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	**Specified according to the course syllabus.**
Supportive References	**Specified according to the course syllabus.**
Electronic Materials	**None**
Other Learning Materials	**None**

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 should be 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.
	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	**Course Responsible**	**Direct:** Exams - Course e-Portfolio. **Indirect:** Second examiner checklist-Course report.
	Program Leaders	**Indirect:** Exams.
	Students	**Indirect:** Second examiner checklist-Course report.

Assessment Areas/Issues	Assessor	Assessment Methods
The extent to which CLOs have been achieved	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	
Other	None	

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	1446/04/05 (08/10/2024)