



Jordan University of Science and Technology
Faculty of Science & Arts
Physics Department

PHY200 Introduction To Mathematical Physics

First Semester 2017-2018

Course Catalog

3 Credit Hours. Determinants , matrices , Complex numbers, double integrals and applications, triple integrals, Green theorem, Divergence theorem, stocks theorem.

Text Book

Title	1- MATHEMATICAL PHYSICS
Author(s)	Nabil. Laham and Nabil. Ayoub
Edition	2nd Edition
Short Name	Math Physics 1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
2- Calculus	2- Calculus	Howard Anton	5th Edition	
Math Physics 1	Mathematical methods in the physical science	Mary Boas	2nd Edition	

Instructor

Name	Prof. Mohammed Al-Qadi
Office Location	NA
Office Hours	Sun : 09:30 - 11:30 Mon : 09:30 - 10:00 Tue : 09:30 - 10:30 Wed : 09:30 - 10:00 Thu : 09:30 - 11:30
Email	malqadi@just.edu.jo

Class Schedule & Room

Section 1:
 Lecture Time: Sun, Tue, Thu : 08:30 - 09:30
 Room: M1304

Prerequisites

Line Number	Course Name	Prerequisite Type
901020	MATH102 Calculus (2)	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Complex number	From Math Physics 1
Weeks 3, 4	Determinant	From Math Physics 1
Weeks 5, 6, 7	Matrices	From Math Physics 1
Week 8	Double Integrals	From Math Physics 1
Week 9	Surface Area	From Math Physics 1
Week 10	Triple Integrals in Cylindrical and Spherical Coordinate	From Math Physics 1
Week 11	Vector Fields	From Math Physics 1
Week 12	Line Integrals	From Math Physics 1
Week 13	Independence of Path; Conservative Vector Fields	From Math Physics 1
Week 14	Green's Theorem	From Math Physics 1
Week 15	The Divergence Theorem	From Math Physics 1

Mapping of Course Objectives to Program Student Outcomes ¹	Assessment method
Determinants and matrices [1(a)]	First exam
Complex numbers [1(a)]	First exam
Multiple integrals [1(a)]	
Vector calculus [1(a)]	

Relationship to Program Student Outcomes (Out of 100%)

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
100										

Evaluation

Assessment Tool	Weight
First exam	30%

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