Jordan University of Science and Technology
Faculty of Engineering
Biomedical Engineering Department

BME204 Introduction To Linear Systems
Second Semester 2022-2023

Course Catalog
3 Credit Hours. Matrices, determinants, systems of linear equations, vector spaces, linear transformations, eigenvalues, eigenvectors, and related topics.

Text Book	
Title	Linear Algebra
Author(s)	Friedberg, Insel, and Spence
Edition	4th Edition
Short Name	Ref#1
Other Information	...

Instructor	
Name	**Prof. TAIMOUR ALDALGAMOUNI**
Office Location	E2L3
Office Hours	Sun : 11:30 - 12:30 Sun : 13:30 - 14:30 Mon : 10:00 - 12:00 Tue : 11:30 - 12:30 Thu : 11:30 - 12:30
Email	tfaldalgamouni@just.edu.jo

Class Schedule & Room

Section 1:
  Lecture Time: Sun, Tue, Thu : 12:30 - 13:30
  Room: M5125

Prerequisites		
Line Number	**Course Name**	**Prerequisite Type**
902010	MATH201 Intermediate Analysis	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Weeks 1, 2, 3, 4	Systems of Linear Equations and Matrices.	
Weeks 5, 6	Determinants	
Weeks 7, 8	Vectors and Vector Space	
Week 9	Eigenvalues and Eigenvectors	
Weeks 10, 11	Inner Product Spaces	
Week 12	Linear Transformations	
Weeks 13, 14, 15	Diagonalization and Quadratic forms, Numerical methods, and Matlab applications	

Mapping of Course Outcomes to Program Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Ability to understand ideas of vectors and matrices and dot products. [1SLO1, 1SLO2, 1SLO7]	25%	
Understand and apply linear algebra theorems. [1SLO1, 1SLO2, 1SLO7]	25%	
Ability to solve linear system of equations. [1SLO1, 1SLO2, 1SLO7]	25%	
Ability to solve eigenvalue problem. [1SLO1, 1SLO2, 1SLO7]	25%	

Relationship to Program Student Outcomes (Out of 100%)																			
A	B	C	D	E	F	G	H	I	J	K	L	M	SLO1	SLO2	SLO3	SLO4	SLO5	SLO6	SLO7
													33.33	33.33					33.33

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