



weekly lesson schedule

Course Lecturer		: Alla Naseer Krabat			
e-mail					
Title		Laser Detection Systems			
Course Coordinator					
Course Objectives		This course introduces the student to the fundamentals of static electric and magnetic fields. Topics covered include:			
Course Description		1- .electric force field due to elementary stationary charge, 2- 2. the magnetic force field due to electric charge moving at uniform velocity, 3- 3. electric and magnetic forces, 4. stored electric and magnetic energy			
Textbooks		CALCULUS, Thomas, twelfth edition			
final exam 50	project	Assignment	daily exams	lab	Midterm Exam
	10	10	10	10	10
General Notes					



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Week	Date	Topics Covered	Number of Hours	Notes
١	1٠-11-2024	Vector algebra, position and distance vector, unit vector, fields, scalar and vectors.		
٢	١٧-11-2024	Addition, subtraction, and products of vectors		
٣	2٤-11-2024	Coordinate systems Cartesian, cylindrical, and spherical.		
٤	١-12-2024	Vector transformation,		
٥	٨-12-2024	Vector calculus, differential lengths, surfaces, and volumes. Integral of contours, surfaces, and volumes, flux and circulation.		
٧-٦	15-12-2024 22-12-2024	Del operator, gradient, divergence, and curl. Laplacian, stockes and divergence theories. Open and closed surfaces.		
٩-٨	29-12-2025 5-1-2025	Reviewing the materials and Med-term Exam		
١٢-١١-١٠	12-1-2025 19-1-2025 26-1-2025	Electrostatic, charges at rest, columbo's force, electrical field intensity, and charge density distribution types		
١٤-١٣	2-2-2025 9-2-2025	Electrical flux and flus density, gauss's law, first maxwell equations		
١٥	16-2-2025	Electrical potential, second Maxwell equation, dipoles, monopoles, and power and energy		

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Head of Department signature: