MATH 241 Calculus IV – Fall 2021

MTRF 7:10-8:00am (Section 1) and 8:10-9:00am (Section 2)

 $Class\ web\ page:\ \texttt{https://www.egcharalampidis.com/teaching/241_F21/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_241/math_$

Tentative Schedule

Date	Lectures	Events
9/20 M 9/21 T 9/23 R 9/24 F	12.6 Cylinders and Quadric Surfaces14.1 Functions of Several Variables (Part I)14.1 Functions of Several Variables (Part II)14.2 Limits and Continuity	
9/27 M 9/28 T 9/30 R 10/1 F	 14.3 Partial Derivatives 14.4 Tangent Planes and Linear Approximations 14.5 The Chain Rule 14.6 Directional Derivatives and the Gradient Vector (Part I) 	Quiz #1: 12.6; 14.1-14.4
10/4 M 10/5 T 10/7 R 10/8 F	 14.6 Directional Derivatives and the Gradient Vector (Part II) 14.7 Maximum and Minimum Values 14.8 Lagrange Multipliers (Part I) 14.8 Lagrange Multipliers (Part II) 	Study 12.6; 14.1-14.8 for Midterm #1
10/11 M 10/12 T 10/13 W 10/14 R 10/15 F	15.1 Double Integrals over Rectangles (Part I) 15.1 Double Integrals over Rectangles (Part II) No class 15.2 Double Integrals over General Regions (Part I) Midterm #1 (12.6; 14.1-14.8)	Review Session Quiz #2: 14.5-14.8
10/18 M 10/19 T 10/21 R 10/22 F	 15.2 Double Integrals over General Regions (Part II) 15.3 Double Integrals in Polar Coordinates (Part I) 15.3 Double Integrals in Polar Coordinates (Part II) 15.4 Applications of Double Integrals (Part I) 	
10/25 M 10/26 T 10/28 R 10/29 F	 15.4 Applications of Double Integrals (Part II) 15.6 Triple Integrals (Part II) 15.6 Triple Integrals (Part III) 15.6 Triple Integrals (Part III) 	Quiz #3: 15.1-15.4
11/1 M 11/2 T 11/4 R 11/5 F	 15.7 Triple Integrals in Cylindrical Coordinates (Part I) 15.7 Triple Integrals in Cylindrical Coordinates (Part II) 15.8 Triple Integrals in Spherical Coordinates (Part I) 15.8 Triple Integrals in Spherical Coordinates (Part II) 	Study 15.1-15.4; 15.6-15.8 for Midterm #2
11/8 M 11/9 T 11/11 R 11/12 F	16.1 Vector Fields (Part I) 16.1 Vector Fields (Part II) No class Midterm #2 (15.1-15.4; 15.6-15.8)	Review Session and Quiz #4: 15.6-15.8 Veterans' Day on Thursday, 11/11

Lectures	Events
16.2 Line Integrals (Part I)	
16.2 Line Integrals (Part II)	
16.2 Line Integrals (Part III)	
16.3 The Fundamental Theorem for Line Integrals (Part I)	
No class	Thanksgiving Break
16.3 The Fundamental Theorem for Line Integrals (Part II)	
16.4 Green's Theorem	
16.5 Curl and Divergence (Part I)	
16.5 Curl and Divergence (Part II)	Review Session and Quiz #4: 16.1-16.5
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	16.2 Line Integrals (Part I) 16.2 Line Integrals (Part II) 16.2 Line Integrals (Part III) 16.3 The Fundamental Theorem for Line Integrals (Part I) No class No class No class No class No class 16.3 The Fundamental Theorem for Line Integrals (Part II) 16.4 Green's Theorem 16.5 Curl and Divergence (Part I)