MATH 241 Calculus IV – Fall 2021

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

Class web page: https://www.egcharalampidis.com/teaching/241_F21/math_241_F21/

Tentative Schedule

Date	Lectures	Events
0/00 14	10.6 G 1: 1	
9/20 M	12.6 Cylinders and Quadric Surfaces	
9/21 T	14.1 Functions of Several Variables (Part I) 14.1 Functions of Several Variables (Part II)	
9/23 R 9/24 F	14.1 Functions of Several variables (Fart II) 14.2 Limits and Continuity	
9/24 Г	14.2 Limits and Continuity	
$9/27 \; { m M}$	14.3 Partial Derivatives	
9/28 T	14.4 Tangent Planes and Linear Approximations	
$9/30 \; R$	14.5 The Chain Rule	
$10/1 \mathrm{F}$	14.6 Directional Derivatives and the Gradient Vector (Part I)	Quiz #1: 12.6; 14.1-14.4
$10/4~\mathrm{M}$	14.6 Directional Derivatives and the Gradient Vector (Part II)	
10/5 T	14.7 Maximum and Minimum Values	
10/7 R	14.8 Lagrange Multipliers (Part I)	
$10/8 \; { m F}$	14.8 Lagrange Multipliers (Part II)	Study 12.6; 14.1-14.8 for Midterm #1
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$10/11 \; M$	15.1 Double Integrals over Rectangles (Part I)	
10/12 T	15.1 Double Integrals over Rectangles (Part II)	Review Session*
$10/13 \mathrm{~W}$	No class	Quiz #2: 14.5-14.8
$10/14~\mathrm{R}$	15.2 Double Integrals over General Regions (Part I)	
$10/15 \; { m F}$	Midterm #1 (12.6; 14.1-14.8)	
10/18 M	15.2 Double Integrals over General Regions (Part II)	
10/19 T	15.3 Double Integrals in Polar Coordinates (Part I)	
10/21 R	15.3 Double Integrals in Polar Coordinates (Part II)	
10/22 F	15.4 Applications of Double Integrals (Part I)	
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$10/25~\mathrm{M}$	15.4 Applications of Double Integrals (Part II)	
10/26 T	15.6 Triple Integrals (Part I)	
$10/28 \; { m R}$	15.6 Triple Integrals (Part II)	
$10/29 \; { m F}$	15.6 Triple Integrals (Part III)	Quiz #3: 15.1-15.4
11/1 M	15.7 Triple Integrals in Cylindrical Coordinates (Part I)	
11/2 T	15.7 Triple Integrals in Cylindrical Coordinates (Part II)	
$11/4~\mathrm{R}$	15.8 Triple Integrals in Spherical Coordinates (Part I)	
$11/5 \; { m F}$	15.8 Triple Integrals in Spherical Coordinates (Part II)	Study 15.1-15.4; 15.6-15.8 for Midterm #2
11/8 M	16.1 Vector Fields (Part I)	B
11/9 T	16.1 Vector Fields (Part II)	Review Session* and Quiz #4: 15.6-15.8
11/11 R	No class	Veterans' Day on Thursday, 11/11
$11/12 \; \mathrm{F}$	Midterm #2 (15.1-15.4; 15.6-15.8)	

^{*}Please, see the Syllabus for the time and location.

Date	Lectures	Events
11/15 M 11/16 T 11/18 R 11/19 F		
11/22 M 11/23 T 11/25 R 11/26 F	No class No class No class	Thanksgiving Break Thanksgiving Break Thanksgiving Break Thanksgiving Break
11/29 M 11/30 T 12/2 R 12/3 F	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