MATH 241 Calculus IV – Spring 2022

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

Class web page: https://www.egcharalampidis.com/teaching/241_S22/math_241_S22/

Tentative Schedule

Date	Lectures	Events
3/28 M	12.6 Cylinders and Quadric Surfaces	
3/29 T	14.1 Functions of Several Variables (Part I)	
3/31 R	**No class**	**César Chavez's Birthday**
4/1 F	14.1 Functions of Several Variables (Part II)	
4/4 M	14.2 Limits and Continuity	
4/5 T	14.3 Partial Derivatives	
4/7 R	14.4 Tangent Planes and Linear Approximations	
4/8 F	14.5 The Chain Rule	**Quiz #1: 12.6; 14.1-14.4**
4/11 M	14.6 Directional Derivatives and the Gradient Vector (Part I)	
4/12 T	14.6 Directional Derivatives and the Gradient Vector (Part II)	
4/14 R	14.7 Maximum and Minimum Values	
4/15 F	14.8 Lagrange Multipliers (Part I)	**Study 12.6; 14.1-14.8 for Midterm #1**
4/18 M	14.8 Lagrange Multipliers (Part II)	
4/19 T	15.1 Double Integrals over Rectangles (Part I)	**Review Session***
4/20 W	**No class**	**Quiz #2: 14.5-14.8**
4/21 R	15.1 Double Integrals over Rectangles (Part II)	
4/22 F	**Midterm #1** (12.6; 14.1-14.8)	
4/25 M	15.2 Double Integrals over General Regions (Part I)	
4/26 T	15.2 Double Integrals over General Regions (Part II)	
4/28 R	15.3 Double Integrals in Polar Coordinates (Part I)	
4/29 F	15.3 Double Integrals in Polar Coordinates (Part II)	
5/2 M	15.4 Applications of Double Integrals (Part I)	
5/3 T	15.4 Applications of Double Integrals (Part II)	
5/5 R	15.6 Triple Integrals (Part I)	
5/6 F	15.6 Triple Integrals (Part II)	**Quiz #3: 15.1-15.4**
5/9 M	15.6 Triple Integrals (Part III)	
5/10 T	15.7 Triple Integrals in Cylindrical Coordinates (Part I)	
5/12 R	15.7 Triple Integrals in Cylindrical Coordinates (Part II)	
5/13 F	15.8 Triple Integrals in Spherical Coordinates (Part I)	**Study 15.1-15.4; 15.6-15.8 for Midterm #2**
5/16 M	15.8 Triple Integrals in Spherical Coordinates (Part II)	
5/17 T	16.1 Vector Fields (Part I)	**Review Session***
5/18 W	**No class**	**Quiz #4: 15.6-15.8**
5/19 R	16.1 Vector Fields (Part II)	
5/20 F	**Midterm #2** (15.1-15.4; 15.6-15.8)	

*Please, see the Syllabus for the time and location.

Date	Lectures	Events
5/23 M	16.2 Line Integrals (Part I)	
5/24 T	16.2 Line Integrals (Part II)	
5/26 R	16.2 Line Integrals (Part III)	
5/27 F	16.3 The Fundamental Theorem for Line Integrals (Part I)	
5/30 M	16.3 The Fundamental Theorem for Line Integrals (Part II)	
5/31 T	16.4 Green's Theorem	
6/2 R	16.5 Curl and Divergence (Part I)	
6/3 F	16.5 Curl and Divergence (Part II)	**Review Session*** and **Quiz #5: 16.1-16.5**