MATH 143 Calculus III – Winter 2022

MTRF 7:10-8:00am (38-218)

Class web page: `https://web.calpoly.edu/~echarala/teaching/143_W22/math_143_W22/`

Tentative Schedule

Date	Lectures	Events
1/3 M	10.1 Curves Defined by Parametric Equations	
1/4 T	10.2 Calculus with Parametric Curves (Part 1)	
1/6 R	10.2 Calculus with Parametric Curves (Part 2)	
1/7 F	10.3 Polar Coordinates (Part 1)	
1/10 M	10.3 Polar Coordinates (Part 2)	
1/11 T	10.4 Areas and Lengths in Polar Coordinates	
1/13 R	11.1 Sequences (Part 1)	
1/14 F	11.1 Sequences (Part 2)	**Quiz #1: 10.1-10.4**
1/17 M	**No class**	**Martin Luther King Jr. Day on Monday, 1/17**
1/18 T	11.1 Sequences (Part 3)	**Classes follow Monday schedule**
1/20 R	11.2 Series (Part 1)	
1/21 F	11.2 Series (Part 2)	**Study 10.1-10.4; 11.1-11.2 for Midterm #1**
1/24 M	11.3 The Integral Test and Estimates of Sums (Part 1)	
1/25 T	11.3 The Integral Test and Estimates of Sums (Part 2)	**Quiz #2: 11.1-11.2** & **Review Session**[*]
1/27 R	11.4 Comparison Tests	
1/28 F	**Midterm #1** (10.1-10.4; 11.1-11.2)	
1/31 M	11.5 Alternating Series & 11.6 Absolute Convergence	
2/1 T	11.7 Ratio and Root Tests/Strategy for Series	
2/3 R	11.8 Power Series	
2/4 F	11.9 Representation of Functions as Power Series	
2/7 M	11.10 Taylor and McLaurin Series (Part 1)	
2/8 T	11.10 Taylor and McLaurin Series (Part 2)	
2/10 R	12.1 Three-Dimensional Coordinate Systems	
2/11 F	12.2 Vectors (Part 1)	**Quiz #3: 11.3-11.10**
2/14 M	12.2 Vectors (Part 2)	
2/15 T	12.3 The Dot Product (Part 1)	
2/17 R	12.3 The Dot Product (Part 2)	
2/18 F	12.4 The Cross Product (Part 1)	**Study 11.3-11.10; 12.1-12.3 for Midterm #2**
2/21 M	**No class**	**Washington's Birthday on Monday, 2/21**
2/22 T	12.4 The Cross Product (Part 2)	**Quiz #4: 12.1-12.3** & **Review Session**[*]
2/24 R	12.5 Equations of Lines and Planes (Part 1)	
2/25 F	**Midterm #2** (11.3-11.10; 12.1-12.3)	
2/28 M	12.5 Equations of Lines and Planes (Part 2)	
3/1 T	12.5 Equations of Lines and Planes (Part 3)	
3/3 R	13.1 Vector Functions and Space Curves	
3/4 F	13.2 Derivatives and Integrals of Vector Functions	

Date	Lectures	Events
3/7 M	13.3 Arc Length and Curvature (Part 1)	**Quiz #5: 12.4-12.5; 13.1-13.2**
3/8 T	13.3 Arc Length and Curvature (Part 2)	
3/10 R	13.4 Motion in Space: Velocity and Acceleration (Part 1)	
3/11 F	13.4 Motion in Space: Velocity and Acceleration (Part 2)	**Review Session**∗
3/12 S	**Quiz #6: 13.3-13.4**	

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