

MATH 2220: Multivariable Calculus

Updated Schedule, Spring 2021

Week	Day	Topic	Sections	Assignments Due
1	M 2/8	Welcome! Vectors, lines, and planes in \mathbb{R}^3	1.1-1.3	
	W 2/10	Functions of several variables and graphs	2.1	
	F 2/12	Limits and continuity	2.2	
2	M 2/15	Differentiation	2.3	HW 1 (1.1-1.3, 2.1)
	W 2/17	Differentiation	2.3	
	F 2/19	Paths and curves	2.4	
3	M 2/22	Properties of derivatives	2.5	HW 2 (2.1-2.4)
	W 2/24	Directional derivatives	2.6	
	F 2/26	Higher partial derivatives	3.1	
4	M 3/1	In-Class Quiz: functions and derivatives		HW 3 (2.4-2.6)
	W 3/3	Implicit function theorem	3.5	
	F 3/5	Implicit function theorem	3.5	
5	M 3/8	Extrema - 1 st derivative test	3.3	No HW due
	W 3/10	Wellness day – no class, no discussion		
	F 3/12	Extrema - 2 nd derivative test	3.3	
6	M 3/15	Extrema - 2 nd derivative test	3.3	HW 4 (3.1, 3.3, 3.5)
	W 3/17	Constrained extrema	3.4	
	F 3/19	Double integrals	5.1, 5.2	
7	M 3/22	Double integrals	5.3	HW due by Wed. 9am. HW 5 (5.1-5.2)
	W 3/24	Double integrals / review	5.4	
	T 3/25	Evening prelim online 6:30-8:00 p.m.		
	F 3/26	No class today! Relax!		
8	M 3/29	Triple integrals	5.5	No HW due
	W 3/31	Triple integrals	5.5	
	F 4/2	Cylindrical and spherical coordinates	1.4	
9	M 4/5	Parameterized surfaces	7.3	HW 6 (5.4, 5.5)
	W 4/7	Geometry of maps and change of variables	6.1, 6.2	
	F 4/9	Change of variables theorem	6.2	
10	M 4/12	Arc length	4.2	HW 7 (7.3, 6.1-6.2)
	W 4/14	Path integrals and vector fields	4.3, 7.1	
	F 4/16	Line integrals	7.2	
11	M 4/19	Line integrals	7.2	HW 8 (7.1-7.2)
	T 4/20	Evening prelim online 8:30-10pm		
	W 4/21	No class or discussion today. Relax!		
	F 4/23	Wellness day		
12	M 4/26	Wellness day		No HW due

	W 4/28	Surface area and surface integrals	7.4, 7.5	
	F 4/30	Surface integrals of vector fields	7.5, 7.6	
13	M 5/3	Green's theorem, Divergence and curl	8.1, 4.4	HW 9 (7.2-7.5)
	W 5/5	Green's theorem, Divergence and curl	8.1, 4.4	
	F 5/7	Stokes' theorem,	8.2	
14	M 5/10	Stokes' theorem	8.3	HW 10 (7.6, 8.1-8.2)
	W 5/12	Gauss' theorem	8.4	
	F 5/14	Review / Catch up	8.4	
M 5/18	1:30pm	“Prelim 3” = Exam. On gradescope.		