

Information

Math 233

Professor	Marcello Lucia Office 1S-226, marcello.lucia@csi.cuny.edu http://www.math.csi.cuny.edu/~mlucia/	
Time and Place	Monday: 6:30–8:10pm, 1S-217 Wednesday: 6:30–8:10pm, 1S-217 Office hours: Monday: 4:30–5:20 pm and 8:10–9:00pm Wednesday: 4:30–5:20 pm.	
Textbook	CALCULUS-EARLY TRANSCENDENTALS, by <i>Rogawski</i> W.H. Freeman & Co. (2008) ISBN-13: 978-1-4292-1073-7 ISBN-10: 1 -4292-1073-7	
Course Outline	This course aims to study functions in two and three variables. The notion of continuity, differentiability, integral of several variable functions will be covered by this class.	
Course Grade	The final course grade is determined as follows:	
	Homework & MathLab	10%
	First Test	25%
	Midterms	25%
	Final	40%
	<i>First test:</i> October 6th <i>Second Test:</i> November 17th <i>Final:</i> December 17th (to be confirmed) <i>Homework:</i> must be submitted using “Webwork” that can be found on the mathematics Website of CSI. Go to http://www.math.csi.cuny.edu/ and follow the links.	
MATLAB	MatLab Projects can be downloaded from: http://www.math.csi.cuny.edu/Computing/matlab/Projects/MTH233/cal3.pdf Deadline: MATLAB Project 1 and 2: November 10th MATLAB Project 3 and 4: December 10th	
Integrity policy	Please refer to http://www.cuny.edu/about/info/policies/academic-integrity.pdf	
Cell phone	Let us stay focused on the class ! Thus, cell phone should be switched off.	
Lesson Plans	Below, each lesson corresponds to a 50minutes class	

Lesson	Sections	Topics	Homework
1, 2	12.1	Review: Vectors	Webwork 12.1
3	12.2	Review: Vectors	Webwork 12.2
4	12.3, 12.4	Dot Product, Cross Product	Webwork 12.3 & 12.4
5	12.5	Planes in three-space	Webwork 12.5
6	12.6	Quadratic surface	Webwork 12.6
7	13.1	Vector-valued functions	Webwork 13.1
8	13.2	Calculus of vector valued functions	Webwork 13.2
9, 10	13.3	Arc-length and speed	Webwork 13.3
11	13.5	Curvature	Webwork 13.4
12	13.6	Curvature and Motion in three space	Webwork 13.5
13	14.1	Functions of several variables	Webwork 14.1
14	14.2	Limits and continuity	Webwork 14.2
15	14.3	Partial derivatives	Webwork 14.3
16	14.4	Tangent planes	Webwork 14.4
17, 18		Exam 1 (October 6th)	
19, 20			
21	14.5	Gradient, Directional derivatives	Webwork 14.5
22	14.6	Chain rule	Webwork 14.6
23	14.6	Chain rule	
24	14.7	Optimization	Webwork 14.7
25, 26	14.8	Lagrange multipliers	Webwork 14.8
27, 28	15.1	Integration in several variables	Webwork 15.1
29, 30	15.2	Double integrals	Webwork 15.2
31, 32	15.3	Triple integrals	Webwork 15.3
33, 34	15.4	Integration in other coordinates	Webwork 15.4
35, 36	15.5	Change of variables	Webwork 15.5
37, 38	16.1	Vector fields	Webwork 16.1
37, 38	16.2	Line integrals	Webwork 16.2
39, 40		Exam 2 (November 17th)	
39, 40	16.3	Conservative vector fields	Webwork 16.3
41, 42	16.4	Parametrized surfaces	
43, 44	16.4	Surface integral	Webwork 16.4
45, 46	16.5	Surface integral of vector fields	Webwork 16.5
47, 48	17.1	Green's Theorem	Webwork 17.1
49, 50	17.2	Stokes' Theorem	Webwork 17.2
51, 52	17.3	Divergence Theorem	Webwork 17.3
53, 54		Review	
55, 56		Exam preparation	