## 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-219 Wednesday: 6:30–8:10pm, 1S-219 Office hours: Monday: 4:30–6:10pm Wednesday: 5:30–6:20pm.					
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 dete	rmined as follows	:			
	Homework Matlab Quizzes	$5\% \\ 5\% \\ 20\%$	First Test Second Test Final	$10\% \\ 20\% \\ 40\%$		
	Homework: You must do the HW related to the sections that have been covered during the week. There is a deadline every Sunday. The HW 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: Projects can be found on the mathematical Website.					
	Quizz: Every Monday, you should expect to have a quizz					
	• There will be a total of 10 quizzes, each one will be graded out of 10 (a total maximal sum of 100)					
	• The sum of those quizzes will be $20\%$ of the final grade					
	• A sum $\leq 40$ will be an F for this class					
	<ul> <li>First test: Monday, February 29th 2016</li> <li>Second Test: Monday, April 4th 2016</li> <li>Final: Refer to the official calendar of CSI</li> <li>the material for the tests is cumulative</li> <li>Matlab Deadline: The Four MatLab Projects must be submitted by Sunday May 15th, 2016.</li> </ul>					

Integrity policy	Cheating hurts everybody. Please refer to http://www.csi.cuny.edu/privacy/cuny_academic_integrity.pd	
Cell phone	Let us stay focused on the class ! Thus, cell phone must be switched OFF.	
Lesson Plans	Below, each lesson corresponds to a 50minutes class	

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