

## Information – Math 233

<b>Professor</b>	Marcello Lucia Office 1S-226, marcello.lucia@csi.cuny.edu <a href="http://www.math.csi.cuny.edu/~mlucia/">http://www.math.csi.cuny.edu/~mlucia/</a>												
<b>Time and Place</b>	Monday, Wednesday: 4:40–6:20pm, 1S-112 Office hours: Monday: 2:30–4:30pm and Wednesday: 3:30–4:30pm.												
<b>Textbook</b>	CALCULUS-EARLY TRANSCENDENTALS, by <i>Rogawski</i> W.H. Freeman & Co. (2015) ISBN-13: 978-1-4641-1488-5, ISBN-10: 1-4641-1488-9												
<b>Course Outline</b>	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.												
<b>Course Grade</b>	The final course grade is determined as follows: <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td style="padding-right: 20px;"><b>Homework</b></td> <td style="padding-right: 20px;">5%</td> <td style="padding-right: 20px;"><b>First Test</b></td> <td>10%</td> </tr> <tr> <td><b>Matlab</b></td> <td>5 %</td> <td><b>Second Test</b></td> <td>20%</td> </tr> <tr> <td><b>Quizzes</b></td> <td>20%</td> <td><b>Final</b></td> <td>40%</td> </tr> </table> <p><b>Homework:</b> 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 <a href="http://www.math.csi.cuny.edu/">http://www.math.csi.cuny.edu/</a> and follow the links.</p> <p><b>MatLab:</b> Projects can be found on the mathematical Website.</p> <p><b>Quiz:</b> <i>Every Wednesday, you must expect a quiz</i></p> <ul style="list-style-type: none"> <li>• There will be a total of 10 quizzes, each one will be graded out of 10 (a total maximal sum of 100)</li> <li>• The sum of those quizzes will be 20% of the final grade</li> <li>• A sum <math>\leq 40</math> will be an <i>F</i> for this class</li> </ul> <p><b>First test:</b> Monday, September 18th 2017 <b>Second Test:</b> Wednesday, October 11th 2017 <b>Final:</b> Refer to the official calendar of CSI <b>The material for the tests is cumulative</b> <b>Matlab Deadline:</b> The Four MatLab Projects must be submitted by Sunday December 10th, 2017.</p>	<b>Homework</b>	5%	<b>First Test</b>	10%	<b>Matlab</b>	5 %	<b>Second Test</b>	20%	<b>Quizzes</b>	20%	<b>Final</b>	40%
<b>Homework</b>	5%	<b>First Test</b>	10%										
<b>Matlab</b>	5 %	<b>Second Test</b>	20%										
<b>Quizzes</b>	20%	<b>Final</b>	40%										
<b>Integrity policy</b>	Cheating hurts everybody. Please refer to <a href="http://www.csi.cuny.edu/privacy/cuny_academic_integrity.pdf">http://www.csi.cuny.edu/privacy/cuny_academic_integrity.pdf</a>												
<b>Cell phone</b>	Let us stay focused on the class ! Thus, cell phone must be switched OFF.												
<b>Lesson Plans</b>	Below, each lesson corresponds to a 50minutes class												

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