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, Wednesday: 2:30–4:25pm, 1S-102
Office hours	Monday: 8:10–8:50pm, Monday, Wednesday: 5:30–6:30pm.
Textbook	CALCULUS (FOURTH EDITION) by *Rogawski, Adams & Franzosa*, W.H. Freeman & Co. (2019) ISBN: 9781319055844 e-book ISBN: 9781319411657 **(The book is mandatory)**
Course Outline	This course expends what has been done in Calculus 1 to tackle functions of several variables. Such a generalization is motivated by the facts that in the field of applications, problems depend on several variables.

Course Grade The final course grade is determined as follows:

Homework	5%		**Test 3**	25%
Test 1	10%		**Final**	45%
Test 2	15%			

Test 1: Monday, February 23rd
Test 2: Wednesday, March 25th
Test 3: Monday, May 4th

The material on each exam is cumulative and based on the lectures given in class together with the HW. Depending on how you have answered a question on an exam, I will ask you to provide additional oral explanations during my office hours.

Homework	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.
Integrity policy	In every university, College of Staten Island included, there is an integrity policy. You can find it on brightspace and you should read it.
Cell phone	Let us stay focused on the class ! Thus, cell phone must be switched off. No phone during my lectures.

Lesson Plan

Below, each lesson corresponds to a 100 minutes class.

The lesson may start with a 10-15 minutes student presentation on a topic that I will assign.

Lesson	Sections	Topics	Homework (Webwork)
1	12.1, 12.2	Vectors	12.1 & 12.2
2	12.3	Dot Product	12.3
3	12.4	Cross Product	12.4
4	12.5	Planes in three-space	12.5
5	12.6	Quadratic surface	12.6
6	13.1, 13.2	calculus of Vector-valued functions	13.1& 13.2
7	13.3	Arc-length and speed	13.3
8		**Exam 1 (February 23rd)**	
9	14.1	Functions of several variables	14.1
10	14.2	Limits and continuity	14.2
11	14.3	Partial derivatives	14.3
12	14.4	Tangent planes	14.4
13	14.5	Gradient, Directional derivatives	14.5
14	14.6	Chain rule	14.6
15	14.7	Optimization	14.7
16	14.7	Optimization	14.7
17		**Exam 2 (March 25th)**	
18	14.8	Lagrange multipliers	14.8
19	15.2	Double integrals	15.2
20	15.3	Triple integrals	15.3
21	15.4	Integration in other coordinates	15.4
22	15.5	Change of variables	15.5
23	16.1	Vector fields	16.1
24	16.2	Line integrals	16.2
25		**Exam 3 (May 4th)**	
26	16.3	Conservative vector fields	16.3
27	16.4	Parametrized surfaces, Surface integral	16.4
28	16.5, 17.1	Surface integral of vector fields, Green's Theorem	16.5, 17.1