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: 5:30–6:20pm and 8:20–9:00pm

Wednesday: 5:30-6:20pm.

Textbook Calculus-Early Transcendentals, by Rogawski

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:

 $\begin{array}{lll} \textbf{Homework} & 5\% \\ \textbf{Matlab} & 5\% \\ \textbf{Quizzes} & 20\% \\ \textbf{First Test} & 10\% \\ \textbf{Second Test} & 20\% \\ \textbf{Final} & 40\% \\ \end{array}$

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)
- $\bullet\,$ The sum of those quizzes will be 20% of the final grade
- A sum ≤ 40 will be an F for this class

First test: February 18th Second Test: March 25th

Final: Refer to the official calendar of CSI

Matlab Deadline: The Four Projects must be submitted by Sunday May 3rd.

Integrity policy Cheating hurts everybody. Please refer to

http://www.csi.cuny.edu/privacy/cuny_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 ,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	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, 12		Exam 1 (February 18)	
13	13.4	Curvature	Webwork 13.4
14	13.5	Motion in three space	Webwork 13.5
15	14.1	Functions of several variables	Webwork 14.1
16	14.2	Limits and continuity	Webwork 14.2
17	14.3	Partial derivatives	Webwork 14.3
18	14.4	Tangent planes	Webwork 14.4
19, 20		problems session	
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		Exam 2 (March 25th)	
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