## MAT 203 Calculus III with Applications - Summer I

May 28, 2014

Lecture Dyi-Shing Ou (e-mail: dsou@math.sunysb.edu)

MLC Hour Monday 2pm to 3pm, Wednesday 1pm to 2pm, Thursday 1pm to 2pm

Textbook Multivariable Calculus 10ed, by Larson & Edwards

Having a copy of this textbook is recommended but NOT required.

Blackboard https://blackboard.stonybrook.edu/

All announcements, homework assignments, supplementary materials, and grades will be posted on the black-board.

**Grade** The final grade will be computed by the following components

Component	Grade Percentage
Homework	20%
Quiz	20%
Midterm 1	30%
Midterm 2	30%

The letter grade will be based on this total weighted score.

**Homework** The assigned problems can be found on the blackboard. Homework will be collected twice a week. Each homework will consist of 5 problems. The grader will grade 2 of the problems. Late homework will NOT be accepted with very few exception discussed case by case.

Computer Algebra Systems (CAS) CAS are useful tools for learning calculus. Some homeworks may ask you to use CAS to draw graphs. Students can obtain a free copy of some CAS from the school.

Mathematica http://it.stonybrook.edu/software/title/mathematica

Maple http://it.stonybrook.edu/software/title/maple

**Quiz** There will be a 10-minutes quiz at the beginning of each class. No calculators, notes, or books will be allowed in any of the exams. Makeup exams will only be given for medical reason with document proof.

**Midterm** There will be two in-class midterms for this course. No calculators, notes, or books will be allowed in any of the exams.

Midterm 1 June 16 (Mon) 9:30am to 12:00pm. Chapters 11, 12, and 13 (subject to change).

Midterm 2 July 3 (Thur) 9:30am to 12:00pm. Chapters 14 and 15 (subject to change).

Math Learning Center (MLC) The location of the MLC is S-240 in the math tower. The MLC is open from Monday to Thursday. A schedule is posted on the door.

**Disability Support Services (DSS) Statement** If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services at 631-632-6748 or at <a href="http://studentaffairs.stonybrook.edu/dss/">http://studentaffairs.stonybrook.edu/dss/</a>. They will determine with you what accomadations are necessary and appropriate. All information and documentation is confidential.

Academic Integrity Statement Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another per- son's work as your own is always wrong. Faculty are required to report any suspected instance of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary/.

Critical Incident Management Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the saftey of the learning environment, and/or inhibits students' ability to learn.

## Lecture Schedule (subject to change)

Date	Sections	Topics	Quiz
5/28	11.1, 11.2, 11.3, 11.4	Vectors in Euclidean spaces	
5/29	11.5, 11.7	Lines & Planes. Change of Coordinates	
6/2	12.1, 12.2, 12.3	Vector-Valued Functions	Chapter 11
6/4	12.4, 12.5	Tangent & Normal Vectors. Arc Length & Curvature	12.1, 12.2, 12.3
6/5	13.1, 13.2, 13.3	Functions of Several Variables	12.4, 12.5
6/9	13.5, 13.6, 13.7	Derivatives	13.1, 13.2, 13.3
6/11	13.8, 13.10	Extrema & Lagrange Multiplier	13.5, 13.6, 13.7
6/12	14.1, 14,2, 14.3	Review. Integration of One & Two Variable Functions	13.8, 13.10
6/16	Midterm I	Chapters 11, 12, 13	
6/18	14.3, 14.4*, 14.5	Integration of Two Variable Functions (cont)	14.1, 14.2
6/19	14.6, 14.7	Integration of Three Variable Functions	14.3, 14.5
6/23	14.7, 14.8	Integration of Three Variable Functions (cont)	14.6, 14.7
6/25	15.1, 15.2, 15.3	Vector fields and Line Integral.	14.7, 14.8
6/26	15.4, 15.5, 15.6	Green's Theorem. Surface Integrals	15.1, 15.2, 15.3
6/30	15.7, 15.4	Divergence Theorem, Stokes' Theorem	15.4, 15.5, 15.6
7/2		Catch up / Review	15.7, 15.4
7/3	Midterm II	Chapters 14, 15	