Math 2850 Syllabus Spring 2006

Space-Time: RH1561 MW7:30pm-9:10pm

Instructor: Mao-Pei Tsui

Office Hours: UH2080B MW 1:00-3:00pm, Tu 2-3:00 pm

Phone: 419-530-2998

Email: Mao-Pei.Tsui@Utoledo.edu

Homepage: http://www.math.utoledo.edu/∼mtsui/

Class Homepage: http://www.math.utoledo.edu/∼mtsui/calc06sp/calc06.html

Text: *James Stewart, Calculus*: Fifth Edition, 2003. ISBN 053439339X

Prerequisites: Passing grade in 1860 or 1840. Students who enroll in Math 2850 but have not passed either 1860 or 1840 may be administratively dropped from the class.

Homework: I will post homework assignments on the web. There are two kinds of homework. The first one is the online homework. You need to goto $http://www.ilrn.com$. After you login, you will find your assignment. The other type of homework is the homework that you have to turn in. It can be found at http://www.math.utoledo.edu/∼mtsui/calc06sp/homework/hw.html

Your solutions must be neat and show all work. If you do not show your work then you will not receive credit for your solution. When you turn in your assignment fold your papers lengthwise, and write your name, the course number, and due date on the outside. I will drop your two lowest homework scores.

Quizzes: There will be eleven 10 minute quizzes given at the end of class on Wednesday. The first quiz will given on January 18 and the last on April 26. The material on the quiz will be drawn from the online homework assignments during the week of the quiz. The time of the quizzes can be found on the web. I will drop your two lowest quiz scores.

Exams: There will be three one hour in class exams in the fourth, eighth and thirteenth weeks of the semester. There will be a comprehensive final exam given during scheduled final exam period for this section. The final exam will place slightly more emphasis on the material covered after the last in class exam. No calculators with symbolic or graphing capabilities are allowed on quizzes and exams.

Missed Quizzes and Exams: Absences for quizzes and exams can only be excused if covered by the University's missed class policy. The policy specifically mentions absences from class may be excused for personal emergencies, religious observances, participation in certain UT sponsored activities, and government required activities. For more information see http://www.utoledo.edu/index.asp?id=529. Arrangements for make up quizzes and exams will only be made if you inform me of the absence without delay by phone or email and present a documented excuse.

Grading: The following percentages are assigned to the components of the student's grade.

Quizzes	7%
Online homework	8%
Hand in homework	10%
Exam I	15%
Exam II	15%
Exam III	15 %
Final Exam	30%

In computing the quiz grade the lowest quiz score will be dropped.

Your final grade will be determined from the distribution of total points earned, on the following scale: 90-100% earns an A; 80-89% earns a B; 70-79% earns a C; 60-69% earns a D. The IW grade will be given to only those students who have stopped attending class before or on March 24. If you have any question about your grade at any time please speak with me.

Resources: There are resources available for students who need extra help outside of my office hours. For this courses the most reliable source of tutorial help can be found at the Mathematics Learning and Resource Center located in the basement of Carlson Library(adjacent computer lab).

Goals:

At the end of the course, students should be able to
- make calculations with agility, accuracy, intelligence and flexibility
- explain the basic concepts clearly and reason logically with them.

Expectations :

To achieve these goals, students are expected to
- read each section of the textbook before the material is presented in class
- attend the lectures
- complete all homework assignments
- discuss mathematics with other students and the instructor

Calendar:

Last date to drop	January 8
Exam I	Feb. 1
Exam II	Mar. 1
Last date to withdraw	Mar. 3
IW grade deadline	Mar. 24
Exam III	Apr. 5
Final exam	May 3(Wednesday), 7:30-9:30 p.m.

Syllabus:

Week	Subject	Sections
1	Coordinate systems, Vectors, Dot product	13.1, 13.2, 13.3
2	Cross product	13.4
3	Lines and Planes, Surfaces, Spherical and cylindrical coordinates	13.5, 13.6, 13.7
4	Vector function and space curves, Exam	14.1
5	Arc-length, Velocity , Function of several variables,	14.3, 14.4, 15.1, 15.2
6	Partial derivatives, Tangent planes, Chain rule, Directional derivatives	15.3, 15.4, 15.6, 15.6
7	Maximum and Minimum values, Lagrange multipliers	15.7, 15.8
8	Lagrange multipliers, Exam	15.8
9	Spring break	
10	Double integrals , Iterated integra	16.1, 16.2, 16.3
11	Double integrals in Polar coordinates, Application of Double integrals	16.4, 16.5
12	Surface area, Triple integrals	16.6, 16.7, 16.8
13	Vector fields, Exam	17.1
14	Line integrals, Fundamental Theorem of Line integrals	17.2, 17.3
15	Green's Theorem, Curl and Divergence, Parametric surfaces and their areas	17.4, 17.5, 17.6
16	Surface integrals, The divergence Theorem	17.8, 17.9