Tentative Schedule for MATH 2163, Calculus III

Textbook: Calculus, 5e, by James Stewart

	Sections	Suggested homework
1	13.2: Vectors	3,11,13,17,19,23,25
2	13.3:The Dot Product	1,3,5,7,9,11,15,17,19,23,27,29,33,35,37,39
3	13.4: The Cross product	1,3,5,7,9,12,13,15,25,29
4,5	13.5: Equations of Lines and Planes	1,3,5,7,9,10,11,12,13,17,19,23,25,27,31,35
6,7	15.1: Functions of several variables	1,5,7,9,11,13,15,17,19,23,25,33,
8	15.2: Limits and Continuity	5,7,9,11,13,19,35
9	15.3: Partial Derivatives	1,5,7,13-37 odd, 41,43,47,49,57,59,61
10,11	15.4: Tangent Planes and Linear Approximations	1,3,5,19,29
12	15.5: The Chain Rule	1,3,5,7,9,11,21,23,27,31,35,45
13,14	Review for Exam 1 & Exam 1	
15,16	15.6: Directional Derivatives and Gradient Vector	1,5,7,9,11,15,19,23,25,29,33
17,18	15.7: Maximum and Minimum Values	1,3,5,7,9,13,27,29,31,39
19	15.8: Lagrange Multipliers	1,3,5,9,11,13,23
20	16.1: Double Integrals over Rectangles	1,13
21	16.2: Iterated Integrals	1,3,5,9,15,17,19,21,25
22,23	13.6: Cylinders and Quadric Surfaces	3,5,7,8,11,13,19,21-28
24,25	16.3: Double Integrals over General Regions	1-25 odd, 37,39,41,43
26,27	Review for Exam 2 & Exam 2	
28	13.7: Cylindrical and Spherical Coordinates	3,9,13,19,35,41,55
29,30	16.4: Double Integrals in Polar Coordinates	1-25 odd
31	16.5: Applications of Double Integrals	1,3,5,7,9,13
32,33	16.6: Surface Area	1,3,5,7,9,11,12
34	16.7: Triple Integrals	3,5,7,9,11,13,29,35,41,45
35,36	16.8: Triple Integrals in Cylindrical and Spherical Coordinates	1-23 odd
37	16.9: Change of Variables in Multiple Integrals	1-15 odd
38, 39	Review for Exam 3 & Exam 3	
40	17.1: Vector Fields	1,3,5,11,21,23
41	17.2: Line Integrals	3,7,9,11,13,15
42,43	17.3: The Fundamental Theorem for Line Integrals	1,3,5,9,11,13,15,19,23,33
44	17.4: Green's Theorem	1,3,7,9,11,13,17,19,21

MATH 2163, Calculus III, Fall 2007
MATH 2163.001, MWF 7:30-8:20am, Classroom Building 201
MATH 2163.002, MWF 8:30-9:20am, Classroom Building 201

- **Course description:** Prerequisite: 2153. A continuation of 2153 including differential and integral calculus of functions of several variables and an introduction to vector analysis.

- **Instructor:** Yanqiu Wang
  - Office: 441 MATH (405-744-5698).
  - Office Hours: TTH 4-6pm or by appointment.
  - Email: yqwang (AT) math.okstate.edu

- **Webpage:** http://www.math.okstate.edu/~yqwang/math2163_fall07/index.html

- **Textbook:** Calculus, 5e, by James Stewart.

- **Grading policy:** Your final grade will be based on the following;
  - Three Midterm Exams (3*50pts).
  - Ten in-class quizzes (10*5pts).
  - Final Exam (100pts): comprehensive.
  - The Total is 300 pts: A (>=90%), B (>=80%), C (>=70%), D (>=60%).

- **Make-up policy:**
  - Make-ups for exams will only be allowed for an authorized absence under the University Regulations.
  - Normally a written note is required.
  - Student should contact the instructor to schedule a make-up by the end of the next working day after the missed exam.

- **Homework:** Homework will not be collected. However, you are strongly recommended to attempt all problems listed as "Suggested homework". You are welcome to work in teams.