Calculus III, Spring 2012

Class Time: T,R:12:30-1:45, Engineering South 214A

Instructor : Dr. JaEun Ku

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Office hours: T,R : 2:00-3:00pm, F : 1:00-2:00pm.

Class webpage : http://www.math.okstate.edu/~jku/2163.html

TEXT: Calculus(Early Transcendentals) , 6th edition)customized), by Stewart

PREREQUISITES: Math 2153

Quizzes : Be prepared for occasional 5-10 minute quizzes in class.

Help :

- I am available during office hours, or at other times by appointment.
- Use the Math Learning Resource Center.
- Discuss the problems with your friends, but write up the solutions on your own.

Homework webpage(I will provide the class key in the class) :
https://www.webassign.net/login.html

WebAssign guide : http://www.math.okstate.edu/webassign

Other useful WebAssign help :

WebAssign Introduction

Self-Enrollment

WebAssign Tips

Help request page : https://www.webassign.net/info/help.html

CALCULATORS: Electronic calculators may be required for some of the homework problems. They will NOT be permitted in exams. Answers should be given in an exact form unless a numerical approximation is specifically requested.

Attendance: Attendance of lectures is mandatory. You are responsible for knowing the material, assignment, etc. presented in the class and the date of the exams announced in the class. The class schedule including the exam date is subject to change. Please do not late for the class.

Talking among the students(using cell phone, reading newspaper etc) is not allowed in the class. All questions must be addressed to the instructor.

Exams : We will have 3 in class midterms and 1 final. (time and date will be announced in class)

- MIDTERM 1:
- MIDTERM 2:
- MIDTERM 3:

FINAL(comprehensive): 10:00-11:50AM, May-1(Tuesday)

Conflicts: If you will miss an exam, let me know as soon as you know(and in advance unless absolutely impossible). Depending on the reason, I **may** be able to give you an exam early or late, though I won't guarantee it. I require proof of the reason for your absence(e.g., a doctor's note, proof of involvement in an OSU-sponsored activity, etc).

The OSU Syllabus Attachment (**http://academicaffairs.okstate.edu/faculty-a-staff/47-syllabus-fall**) contains useful information concerning important dates, academic integrity and students with disabilities, and much else.

Grading - There will be no makeup exams. Course grade will be maximum of the grade obtained from:

Method 1: 30% (HW, quizzes, classwork, attendance), 3 x 15% midterm exams, 25% final exam.
Method 2: 30% (HW, quizzes, classwork, attendance), 3 x 10% midterm exams, 40% final exam.

Students who achieve at least 90% are guaranteed to receive an A. A score of at least 80% will receive at least a grade of B. A score of at least 70% will receive at least a C, and students with scores at 60% or above will be assured of passing. Depending on the score distribution, these cutoffs may be lowered. Some discretion may be used in deciding borderline cases, based on my subjective judgment of students' effort and performance.

Office of Student Disability Services (315 Student Union) - According to the Americans with Disabilities Act, each student with a disability is responsible for notifying the University of his/her disability and requesting accommodations. If you think you have a qualified disability and need special accommodations, you should notify the instructor and request verification of eligibility for accommodations from the Office of Student

Disability Services. Please advise the instructor of your disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified. Call 405-744-7116 or go to www.okstate.edu/ucs/stdis/

ACADEMIC INTEGRITY POLICY - Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, c heating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge. For a brief overview of the policy you can watch the video or contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627, academicintegrity.okstate.edu.

Study Hint - Go to every class meeting and get help when you need it! Don't be afraid of asking questions, in class or out of class. DO **READ** THE TEXTBOOK. The MLRC is available for tutoring and I am anxious to help you. But only you will know when you need it. I will likely not know you need help until after an examination, which is often too late. Do the homework! As soon as possible after class, review your notes and make an outline of the class notes paying particular attention to the definitions and theorems discussed that day. Redo the examples from class in light of your outline. Then do the homework problems. Work out homework problems on scratch paper before looking at the answers in the book. Concentrate on what you are doing rather than being distracted by the radio, TV, or conversation with friends. On average you should expect to spend a minimum of three hours on homework for every class period. However you should not be discouraged if it takes you longer to complete the homework assignments. In addition, extra time will be needed to study and review for examinations.

Any changes to this syllabus will be announced in class.

Syllabus for Math 2163, Calculus III, 3 Credits

Textbook: *Calculus* (Early Transcendentals) by Stewart, 6th edition (customized)

Class	Topic	Class	Topic
1	12.2: Vectors	24	Continued
2	12.3: Dot Product	25	15.3: Double Integrals over General Regions
3	12.4: Cross Product	26	Continued
4	12.5: Equations of Lines and Planes	27	Review for Exam 2
5	Continued	28	Exam 2 (14.6-14.8, 12.6, 15.1-15.3)
6	13.1/13.2: Vector Functions and Space Curves & Derivatives and Integrals of Vector Functions	29	15.4: Double Integrals in Polar Coordinates
7	14.1: Functions of Several Variables	30	Continued
8	Continued	31	15.5: Applications of Double Integrals
9	14.2: Limits and Continuity	32	15.6: Triple Integrals
10	14.3: Partial Derivatives	33	Continued
11	14.4: Tangent Planes and Linear Approximations	34	15.7: Triple Integrals in Cylindrical Coordinates
12	Continued	35	15.7/15.8: Triple Integrals in Cylindrical Coordinates & in Spherical Coordinates
13	14.5: The Chain Rule	36	15.8: Triple Integrals in Spherical Coordinates
14	Review for Exam 1	37	15.9: Change of Variables in Multiple Integrals
15	Exam 1 (12.2-12.5, 13.1-13.2, 14.1-14.5)	38	Review for Exam 3
16	14.6: Directional Derivatives and the Gradient Vector	39	Exam 3 (15.4-15.9)
17	Continued	40	16.1: Vector Fields
18	14.7: Maximum and Minimum Values	41	16.2: Line Integrals
19	Continued	42	16.3: The Fundamental Theorem for Line Integrals
20	14.8: Lagrange Multipliers	43	16.3/16.4: The Fundamental Theorem for Line Integrals & Green's Theorem
21	15.1: Double Integrals over Rectangles	44	16.4: Green's Theorem
22	15.2: Iterated Integrals	45	Review for Final Exam
23	12.6: Cylinders and Quadric Surfaces		

Revised May 2008