The Georgia Institute of Technology Spring 2015

Math 2401 - Calculus III

Lecture: D. M. Smith 105 - TR 1:35PM - 2:55PM.

<u>Recitation</u> (K1): Architecture (East) 207 - MW 1:05PM - 1:55PM. Recitation (K2): MRDC 3403 - MW 1:05PM - 1:55PM.

Recitation (K3): Howey (Physics) L5 - MW 1:05PM - 1:55PM.

Instructor: Irina Holmes Office: Skiles 017

Office Phone: 404-894-9431 Office Hours: TR 11:30AM - 1PM Email: irina.holmes@math.gatech.edu or by appointment Course Webpage: http://people.math.gatech.edu/iholmes6/S15MATH2401.html

Teaching Assistants:

Section (K1): Jonatan Johnson Office: Skiles 230.

Email: jjohnson304@gatech.edu Office Hours: Mondays 3 – 4 PM.

Section (K2): Mark Bolding Office: Skiles 163.

Email: mbolding3@math.gatech.edu Office Hours: Mondays 10 – 11 AM.

Section (K3): Marcel Celaya Office: Skiles 146A.

Email: mcelaya6@math.gatech.edu Office Hours: Wednesdays, 9:30 – 10:30 AM.

Text: The following text is required for the course:

Title: "Thomas' Calculus: Early Transcendentals"

Publisher: Addison-Wesley (Pearson)

Edition: 13th

Prerequisite and Description: Prerequisites for the course are MATH 1502 with a *minimum grade* of D. Math 2401 is an introduction to multivariable calculus. Topics include: Linear approximation and Taylor's theorems, Lagrange multiples and constrained optimization, multiple integration and vector analysis including the theorems of Green, Gauss, and Stokes.

Topics Covered During the Semester:

Topic	<u>Lectures</u>
Vector Calculus, parametric curves and motion	2
Functions of several variables, visualization and partial differentiation	5
Functions of several variables, gradients, optimization, differentials	6
Double and triple integrals	7
Vector analysis	8

Attendance: Attendance is required for all lectures. The student who misses a class meeting is responsible for any assignments and/or announcements made. Office hours will not be utilized to re-teach material presented in class. However, questions to better understand the course are always welcome.

Homework: This course will have daily homework assignments which will be administered through MyMathLab (MML). Please see the information about MML provided below.

Quizzes: There will be weekly quizzes (a total of 9) throughout the semester.

Exams: This course will have four mid-term exams and a comprehensive final exam. All mid-term exams will be given during recitation, in the room where your recitation regularly meets. The exams for the course will take place on:

(Tentative) Exam Dates:

Exam 1	Wednesday, January 28 during recitation
Exam 2	Wednesday, February 18 during recitation
Exam 3	Wednesday, March 11 during recitation
Exam 4	Wednesday, April 15 during recitation
Final Exam	Thursday, April 30
	2:50 - 5:40 PM
	In our regular lecture room (D. M. Smith 105)

Exam/Quiz Rules:

- Calculators: There are <u>no calculators</u> allowed during tests and quizzes.
- Notes or "cheat sheets" will not be allowed on exams or quizzes.
- No credit will be given on tests for a correct answer without the intermediate steps.
- Make-up Policy: There will be no opportunities for make-up tests after the fact. In the event of an absence due to travel representing Georgia Tech, such as an intercollegiate sports competition, you must notify the professor at least two weeks in advance to arrange an early test or other alternative. Otherwise, such absences will be treated as personal.
- Regrade Policy: The mid-term exams will be returned to you by your TA during recitation. There will then be a 20-30 minute period during recitation when the class will be able to discuss the solutions of the exam with the TA. If, after viewing the solutions and the grading scheme, you believe a problem or more should be regraded, you must leave your exam with the TA, along with the numbers of the problems you want regraded. Your TA will return your exam and request to the professor. The moment you leave the recitation room with your exam, you can no longer ask for regrading of any part of that exam.

Learning Disabilities: It is the right of any student with a certified learning disability to request necessary accommodation. Such requests must be made well in advance of the time that the accommodation is required and a letter of documentation from the ADAPTS office must be presented at the time of any request.

Academic Honesty: It is expected that all students are aware of their individual responsibilities under the Georgia Tech Academic Honor Code, which will be strictly adhered to in

this class. Any violations must be reported directly to the Dean of Students.

Grades: Grades will be based upon quizzes, mid-term exams, the final exam, and homework. Course grades will be assigned from the *maximum* of the following formulas:

	Method 1	Method 2	Method 3
Homework	10%	10%	10%
Quizzes	20%	15%	10%
Midterm Exams	40%	35%	35%
Final Exam	30%	40%	45%

The usual ten-point scale will be used (A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: 0-59), however, if necessary, adjustments will be made to arrive at a standard grade distribution for the course. On an individual basis, significant improvement over the semester will be taken into account. One mid-term exam grade, two quiz grades and five homework grades will be dropped when computing your grade, and this is the only mechanism for coping with personal events such as illness and family emergencies.

Additional Resources: In addition to the textbook, lectures, and office hours there are other resources available that might be of use for you during the course. All Georgia Tech students are eligible for 1-on-1 tutoring, see the website associated with the Office of Success Programs. There is also the Math Lab in the School of Mathematics where tutoring services are provided.

Important Dates for Spring 2015:

01/05	First day of classes
01/09	Last day to register
01/19	M. L. K, Jr. National Holiday - No Class
02/13	Progress Report Deadline
02/27	Last day to drop or withdraw with a grade of "W"
03/12	Last day to withdraw from school with a grade of "W"
03/16 - 03/22	Spring Break
04/24	Last day of classes

For more important dates for this course, make sure to regularly review the course website. Make sure you refresh this website every time you visit, as it will be regularly updated!