

The Georgia Institute of Technology
Fall 2014

Math 2401 - Calculus III

Lecture: Robinson Molecular Science and Engineering Building, G011 - TR 9:35 - 10:55AM.

Recitation (D1): Skiles 170 - MW 9:05 - 9:55AM

Recitation (D2): Skiles 246 - MW 9:05 - 9:55AM

Recitation (D3): Skiles 202 - MW 9:05 - 9:55AM

Instructor: Irina Holmes

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Office Hours: TR 11:30AM - 1PM

Email: irina.holmes@math.gatech.edu

or by appointment

Course Webpage: <http://people.math.gatech.edu/iholmes6/F14MATH2401.html>

Teaching Assistants:

Section (D1): Chen Xu

Office: Skiles 153

Office Phone: 404-385-7497

Office Hours: Tuesday 1 - 2PM

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Section (D2): Yichen Wang

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Office Phone: 404-385-7525

Office Hours: Monday 3 - 4PM

Email: ywang737@math.gatech.edu

Section (D3): Sergio Mayorga

Office: Skiles 149

Office Phone: 404-385-3939

Office Hours: Monday 4 - 5PM

Email: smayorga3@math.gatech.edu

Text: The following text is required for the course:

Title: "Thomas' Calculus: Early Transcendentals"

Publisher: Addison-Wesley (Pearson)

Edition: 12th

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:

<u>Topic</u>	<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, September 10 <u>during recitation</u>
Exam 2	Wednesday, October 1 <u>during recitation</u>
Exam 3	Wednesday, October 29 <u>during recitation</u>
Exam 4	Wednesday, November 19 <u>during recitation</u>
Final Exam	Tuesday, December 9 8am - 10:50am In our regular <u>lecture room</u> (Molecular Science G011)

Exam/Quiz Rules:

- **Calculators:** There are no calculators 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.

Piazza: This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates, the TAs, and myself. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the developers, email team@piazza.com. Find our class page at: <https://piazza.com/gatech/fall2014/math2401d1d2d3/home>.

Important Dates for Fall 2014:

8/18	First day of classes
8/22	Last day to register
9/1	Labor Day - No Class
9/26	Progress Report Deadline
10/10	Last day to drop or withdraw with a grade of "W"
10/11-10/14	Fall Student Recess - No Class
10/26	Last day to withdraw from school with a grade of "W"
11/27, 28	Thanksgiving Break - No Class
12/5	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!**