MATH 214: Linear Algebra

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Official Office Hours: MWF 11:20–12:10, MW 1:20–2:20
Effective Office Hours: MTWRF 9:00–4:30, except when I am teaching (MWF 9:20, 10:20 and 12:20) or in a meeting.

Introduction: In this course, we will discuss the basic properties of linear operations, i.e., multiplying by constants and adding the results. With that restriction on the operations, we can extend from single-number variables to variables that are lists and tables of numbers. We will study the concepts used to manipulate such arrays algebraically and geometrically, and we will see some of the applications of such arrays.

Textbook: *Introduction to Linear Algebra,* G. Strang, Wellesley-Cambridge Press, 2009, ISBN 978-9-980232-71-4. This book has a lot of material online associated with it including the MIT Open Courseware (OCW) video lectures (http://math.mit.edu/linearalgebra). Links to the textbook website and other videos are on our course home page and Moodle page.

Course home page: http://math.colgate.edu/math214/dlantz/

Weekly Assignments: Problem sets including exercises from the book will be due approximately weekly. The report for each assignment should include your solutions of each problem assigned, or your attempt to solve it and comments about where you are stuck. It should also include an *Executive Summary* of the report. In the summary you will answer three questions using complete sentences:

1. What idea did you believe was the most important in each part's assignment?
2. Why do you believe that is the most important idea?
3. What troubles did you have with the assignment, if any?

The summary should be separated from your work on the problems — on a separate cover sheet, say. Credit for each assignment is based on this summary and reasonable attempts at all assigned problems. Satisfactory completion of these assignments will be crucial to success in this course. You may work together on the problem sets, but the executive summary should be yours alone.

Exams: There will be two exams held at 7:30 p.m. on Tuesdays, 8 Oct and 19 Nov, in McGregory 217. If one of these times is impossible for you, please see me to schedule an *earlier* time to take that exam. The final exam may be taken with either section of MATH 214, on Tue Dec 17 at 9 a.m. or on Thu 19 Dec at 3 p.m.

Grades: Your grade will be determined by your work on weekly assignments (10%), midterm exams (30% each), and the final exam (30%).

Advice: 1. While attendance is not part of your grade, missing classes almost always decreases grades. Come to class.
2. If you don't understand something, *stop me and ask,* even if everyone else seems to

understand.
3. If you feel you may need an accommodation based on the impact of a disability, please contact me privately to discuss your specific needs. Please contact Lynn Waldman, Director of Academic Support and Disability Services at 315-228-7375 in the Center for Learning, Teaching, and Research. Lynn reviews documentation to determine and help coordinate reasonable and appropriate accommodations for students with disabilities.