

Math 1534 - Transition Calculus II

Summer 2012

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Office Hours: TBA

Websites: Important class information will be available on the class website and Carmen:
<http://www.math.osu.edu/~broaddus/1534>
<https://carmen.osu.edu>

Text: *Calculus for scientists and engineers, multivariable*, Briggs, Cochran, Gillett
ISBN-10: 0321785517
ISBN-13: 978-0321785510

Lectures: MWF 10:20AM-11:15AM and TuTh 9:35AM-10:55AM in
BE (Baker Systems Engineering) 0130

Teaching Assistant: TBA

Grading:

Final Exam (Wed. August 8, 10AM-11:45AM)	50%
Midterm (Thurs. July 12, in class)	30%
Homework	20%

As your assignments are graded your scores will be posted on *Carmen* (<https://carmen.osu.edu>)

Homework: Weekly homework will be posted on the course website. You should do the relevant homework problems after each lecture so that you can bring questions and comments to class and recitation.

Attendance: Regular attendance is essential for success in this course. You are responsible for all announcements and material covered in class. If you miss a lecture it is up to you to get lecture notes from one of your classmates.

Tutor Room: Free tutoring is available in the *MSLC Tutor Room* (Cockins Hall 014, M-Th 12:30PM-4:30PM) if you need help with any of the course material. More information is available at <http://www.mslc.ohio-state.edu>.

Course Topics: We will cover Chapters 9-13 of the textbook (see above). This will cover

1. sequences (infinite ordered lists of numbers)
2. series (sums of infinitely many numbers)
3. integral, ratio, root and comparison tests for series convergence.
4. power series (sums of infinitely many monomials)
5. Taylor Series (special power series which approximate many functions)
6. vectors, dot products, cross products
7. vector-valued functions
8. partial derivatives, chain rule, maximization/minimization in several variables

Showing Your Work: Mathematics is not just about deriving the correct numerical solution to a problem. It is also about convincing others that your method of calculation is appropriate. Solutions to problems should be written in a concise, logical manner. This may require you to rewrite solutions clearly and neatly once you have figured out how to do a problem.

Calculators: Calculators are permitted except for those with symbolic algebra or calculus capabilities. You may not use calculator memory to store notes.