

# Math 2644 Calculus II Spring 2017

Mon/Wed 9:30-10:45 Pafford 112  
Friday 10:10-11:00 Pafford 302

**Instructor:** Dr. David Leach  
**Office:** 317 Boyd  
**email:** cleach@westga.edu (Don't use CourseDen email to contact me—I don't check it.)  
**Phone:** 678-839-4127  
**Textbook:** *Calculus, Early Transcendentals Single Variable*, Vol 2, 7<sup>th</sup> Edition, by Stewart.

**Learning Outcomes:** Upon completing the course, you will be able to

- Use integration methods including parts, partial fractions, trigonometric substitution (L1, L9)
- Use washers and shells to compute volume and surface areas of solids of revolution (L1, L9)
- Use Simpson's rule to approximate definite integrals (L8)
- Evaluate improper integrals (L1)
- Use integrals to solve nonuniform work and hydrostatic force problems (L8, L9)
- Convert and sketch parametric and polar curves. (L1)
- Determine areas and arc lengths determined by parametric and polar curves.(L1)
- Classify sequences and determine their limits. (L1, L2)
- Determine the convergence or divergence of series (L1, L7)
- Construct the power series representation of a function (L7)
- Use the Maple Computer Algebra System to visualize and solve problems

## Grading and Evaluation:

There will be four in-class tests worth 100 points each. Test 4 will be given in two parts. There will be several assignments, most of which will involve the use of Maple. Your assignments will be averaged into a score out of 100 points. The final exam will be comprehensive and will be worth 150 points. Your average in the course will be computed by adding your three best tests, your assignment average, and your final exam score; dividing by 5.5; and rounding to the nearest whole number. Letter grades are assigned as follows:

90-100: A      80-89: B      70-79: C      60-69: D      0-59: F

Tentative dates and topics for the tests are given here. These may change depending on the pace at which we cover the material.

Test 1	Chapter 6	Feb 1
Test 2	Chapter 7	Feb 22
Test 3	Chapters 8 & 10	Mar 15
Test 4	Chapter 11	Apr 10 & 24

**Attendance:** You are expected to attend all classes. If you miss a class, you are responsible for getting all information and materials that you missed.

**Make-ups:** In order to take a make-up test you must have a valid, documented reason for missing it, and (except in extreme situations) take the make-up within two weekdays of returning to class.

**Academic Dishonesty:** Any student caught cheating will receive a failing grade and may be reported to the Office of Student Affairs. Cheating includes using unauthorized materials during a test, giving or receiving information during a test (including copying), giving information about a test to a student who will take it at a later time, and receiving information about a test before you take it.

**Calculators:** You'll need a scientific or graphing calculator for the homework and tests. Calculators with a built-in computer algebra system (including TI-89s, TI-92s, and the n-Spire CAS) won't be allowed on tests. We may also use spreadsheets occasionally in class and on assignments.

**Maple:** In this course we will make extensive use of the Maple Computer Algebra System. If you want your own copy of Maple, you can purchase a student edition for \$99 from <https://webstore.maplesoft.com/>. Maple is available on campus in the following computer labs:

Math Tutoring Center	205 Boyd	12 computers
TLC Computer Lab	1105 TLC	43 computers
RCOB Lab	228 Adamson	24 computers

**Bonus & Extra Credit:** Throughout the semester, I might assign a few bonus problems to the entire class. No individual extra credit will be assigned for any reason.

**Office Hours:** I will post my schedule, including my office hours on CourseDen. I also plan to hold Lab hours in which I'll be available in a computer lab to help you with Maple. I'll probably use surveys on CourseDen to help me decide when and where to schedule my lab hours.

**Other Course Policies:** Other course policies, including information regarding students with disabilities and the UWG Honor Code can be found at <http://tinyurl.com/UWGSyllabusPolicies>. You should read this at the beginning of each semester.

**Important Dates:**

- MLK Holiday:** January 16
- Spring Break:** March 20-24
- Final Exam:** Wed May 3 8:00-10:30