## Mathematics 132-4: Calculus I Fall 2005 MWF 9:10-10 am c315 Wells Hall

#### **Instructor Information:**

Lawrence Roberts A345 Wells Hall lawrence@math.msu.edu

### Office Hours:

M 10-11 am T 1-2 pm Th 2-3 pm

Appointments made be made; if necessary, please send me an e-mail. Please drop by during my office hours sometime during the first two weeks to introduce yourself.

**Textbook:** Thomas' Calculus. 11th Ed by George Thomas. We will cover most of chapters 2,3,4, and 5. Occasionally, supplemental material will be used. It will be available on the website.

Course Website: https://mathdata.msu.edu/CP/RW/S132\_004.html or go to www.math.msu.edu/ lawrence/math132.html

**General Comments and Prerequisites:** This course shall cover the basics of calculus; specifically we will cover chapters 2,3,4, and 5 of the book and any supplemental material at the instructor's discretion. It is assumed that you have solid knowledge of algebra and trigonometry; chapter 1 provides a summary of the necessary material and will be skipped (but you should glance through it to make sure you know what is in it). If you require special accomodations please tell me in the first few weeks of class.

**Grading Policy:** There will be 600 points total for the semester. The final will count for 200 pts. Not taking the final will automatically result in a failing grade. Each exam will count for 80 pts. The final 80 points will be divided according to: 60 pts for homework and 20 points for Gateway exams (see below). Course grades will be normalized by comparing the final exam grades of this section with the other Math 132 sections. There will be *no* make-up exams. In cases of documented and extraordinary absence (e.g. illness *with* a doctor's note), the final will count for more. You may also miss one or two homeworks without affecting your grade. There are *no* alternatives to the final. If the dates of the exams below will prove to be a problem, please see me as soon as possible.

**Exams:** Midterms will be given during regular class hours in the regular room unless otherwise announced. The final will be given on December 12 in a room that will be announced closer to the time. The first exam will concentrate on chapter 2, the second on chapter 3, the third on chapter 4, and the last on chapter 5. Although the problems will stem from these chapters you will need to remember the preceding material and any material assumed as a pre-requisite. The final will cover the entire course (a sample final can be found at www.math.msu.edu).

**Homework:** Homework will be assigned daily, and should be completed by the next class. The assignments will also be listed on the website. Expect to spend 2-3 hours on homework for each hour in class. There will be many, many problems, so if you fall behind it may be difficult to catch up. I will collect the homework on Wednesday of each week. Two or three problems will be graded on each assignment. You are encouraged to help each other with homework.

**Gateway Exams:** These are designed to test basic skills. They are taken in certain rooms in the C wing of Wells Hall during posted hours beginning Wed. Sept. 7. The rooms and hours may be found by going to

# http://www.math.msu.edu/Cstudent/Gateway/index.html

and choosing the link for math 132. These exams are graded pass/fail. Each problem on the exam is graded right or wrong, with no partial credit. The number of correct answers required for passing (around 80 %) is stated on each exam. You can take each exam repeatedly until you pass, but you can only take it once per day. Note the requirements on the website *below* the schedule.

Gateway Exam 1 (algebra and trig skills) **must be taken at least once between September 7 and Friday, Sept. 30**. This exam covers the high school math skills needed for calculus. A good way to prepare is by reviewing and doing problems in Chapter 1 in the textbook. If you pass the exam before September 20, you will receive 10 pts; if you pass before September 30, you will receive 5 pts. Otherwise you will receive no points

Gateway Exam 2 (differentiation skills) **must be taken at least once between Monday, Oct. 3 and Friday, Oct. 28**. This exam is basically a compilation of homework problems from Chapter 3. To pass it you will need to master the basic rules of differentiation. Passing by October 14 earns 10 pts, passing by October 28 earns 5 pts, otherwise you will get no points.

**Learning Center:** ("Helproom") You are encouraged to make use of the *free* help run by the Mathematics Department. It is located on the first floor of the A-wing of Wells Hall. The hours will be posted at www.math.msu.edu under the link Mathematics Learning Center.

**Calculators:** Calculators are **not** required for this class, and will not be permitted during the exams. The exam questions will not involve any complicated arithmetic calulations and you may always leave your answers in a form like  $11\sqrt{2}$  or  $\pi/5$ .

**Useful Comments:** Start working on the homework problems the day that they are assigned. As many of the exam questions will be similar to homework problems, you should make sure you understand every problem. If you get stuck, look back through the section in the textbook or your class notes and find a worked-out example similar to the one you're stuck on. After that, try (i) asking a friend, (ii) going to the Helproom, or (iii) coming to office hours.

**Remember!!!** The University's policy on academic integrity, covered in the Spartan Life Handbook, includes the requirement that

"no student shall claim or submit the work of another as one's own"

#### **IMPORTANT DATES:**

August 29 (Monday) Course begins! September 2 (Friday) Last day change to or from credit/no credit or visitor status September 5 (Monday) Labor Day – No Class! September 9 (Friday) Last day to change to a lower level math course or change sections September 19 (Monday) Exam #1: Chapter 2 September 22 (Thursday) Last day to drop with full refund September 30 (Friday) Last day to take Gateway Exam # 1 October 14 (Friday) Exam #2: Chapter 3 October 18 (Tuesday) Last day to drop with no grade reported October 28 (Friday) Last day to take Gateway Exam # 2 November 11 (Friday) Exam #3: Chapter 4 November 25 (Friday) Thanksgiving Break – No Class!! December 7 (Wednesday) Exam #4: Chapter 5 December 12 (Monday) Final Exam 10 am - 12 noon