## Math 172 Course Information

Required Text Essential Calculus: Early Transcendentals (2nd Edition), by J. Stewart

Course Content Selected sections in Chapters 6-10 of the textbook.

Course Objective Continue the development of the one variable differential and integral calculus. In particular, the student who successfully completes the class will be able to:

- 1. evaluate proper and improper integrals through a variety of techniques
- 2. apply the techniques of integration to problems such as the finding arc length, the volume of revolution, and the center-of-mass
- 3. understand the convergence of infinite sequences and infinite series
- 4. use power series to represent common functions
- 5. understand the algebra and calculus of power series
- 6. understand how to approximate a function with a polynomial up to a given error criteria
- 7. express equations of curves and surfaces using various parametric forms and coordinate systems.

**Homework Policy** Problems will be assigned and graded regularly via the **WebAssign** system. The homework is due at the stated date and time, and late assignments will not be accepted. I encourage you to collaborate with each other when doing the homework problems. One of the goals in doing the homework is to not only further develop your problem-solving skills, but to improve your ability to communicate mathematics to others.

Make-up Policy There will be no make-up exams. If you miss an exam, the score on the final will be substituted for the score of the exam.

**Grading Policy** There will be four midterm exams, and a final exam. The points will be distributed as follows:

	Homework	Midterm Exams	Final Exam	Total
Points	50	400	150	600

The distribution of grades is not determined until the end of the semester. In a typical situation, the final distribution of grades will determine the cutoff point for A's, B's, etc. I can guarantee, however, that if your class average is 93 or better, then you will receive an A for the course.

Attendance Policy Your attendance is not mandatory; however, your likelihood of doing well is directly proportional to the number of lectures that you attend. If you decide not to attend, that is your business, but please do not then expect me to be sympathetic to your pleas for help the day before an exam is given.

**Electronic Gadget Policy** While you are free to use the technology of your choice while doing the homework problems, you will not be permitted to use any technology when taking in-class exams.

The classroom is a No Cell Phone Zone. You are not to use your cell phone to make phone calls, receive phone calls, or text message. Any violation of this policy will result in the deduction of three points from your final class average.