

# Math 142, Section 03: Calculus I

## Fall 2010 Syllabus

### 1 Course Information

- Location and Time: MW 12–12:50pm, TTh 12:30–1:50pm, 401 Lee Drain Building
- Professor: Dr. Martin Malandro
- Department: Mathematics and Statistics
- Office: 409 Lee Drain Building
- E-mail (preferred method of contact): malandro@shsu.edu
- Phone number: (936) 294–1580
- Office Hours: Mon 1–2pm and 4:30–5pm, Tues 3:30–4:30pm, Wed 1–2pm and 4:30–5pm, and by appointment
- Required Materials:
  - Textbook: Calculus: Early Transcendentals (1st edition) by Soo T. Tan, published by Brooks/Cole
  - Calculator: TI-83 or better recommended. Calculators with computer algebra systems will not be allowed on exams. If you have questions about the legality of your calculator, please see me.

**Course Description:** Topics include limits and continuity, the derivative, techniques for differentiation of algebraic, logarithmic, exponential and trigonometric functions, applications of the derivative and anti-differentiation, definite integral, Fundamental Theorem of Calculus. Prerequisite: C or better in MTH 163 or high school equivalent. Credit 4.

**Course Objectives/Learning Outcomes:** A successful student will attain mastery of the following topics. Other topics will also be covered.

- Limits and continuity
- Rates of change and the definition of the derivative
- Methods of differentiation
- Related rates
- Optimization problems
- Curve-sketching
- Anti-differentiation
- Area problems and the Fundamental Theorem of Calculus

### 2 Grading Policy

Your grade in the course will be calculated using the following weights:

Homework	20%
Exam 1	20%
Exam 2	20%
Exam 3	20%
Final Exam	20%

Grading Scale:

A	90% or better final average
B	80–89% final average
C	70–79% final average
D	60–69% final average
F	59% or lower final average

**Homework:** I will assign homework on a regular basis. After you've had some time to do your homework, we will have "homework sessions" in class. Here is how they will go. I will choose problems from the homework and call on students randomly to put solutions to those problems on the board. A proper solution is an unbroken chain of logic leading to the answer, not just the answer itself. Show your work! Your homework score will be determined entirely by your participation when I call on you in these sessions. Obviously, you can only participate in and learn from these sessions if you are present. Attendance is important! I will grade all presentations on a 4-point scale.

Homework sessions won't necessarily be announced ahead of time, so bring your completed homework with you to class every day. You will probably find it helpful to bring your book as well. Unless I announce otherwise, when I assign homework I will expect you to have it completed and ready to present after two evenings have passed. For example, if I assign homework on Monday, it's fair game for me to call on you any time starting Wednesday.

**Homework make-up policy:** No make-ups for missed homework presentations will be available. Therefore, in calculating your homework average, I will drop your (1) lowest homework score.

**Exams:** Many exam problems will be similar to homework problems or examples worked in class. The final exam will be cumulative.

If you arrive late to an exam, you may still take the exam in the remaining time as long as nobody has finished the exam yet.

**Exam make-up policy:** If you miss an exam, you will be expected to show appropriate cause in writing. If you must miss an exam, I expect you to contact me beforehand. If that is impossible, then you must contact me no later than 24 hours after the exam. If you miss an exam and have not contacted me by this time, you forfeit your right to a make-up.

**Academic Honesty Policy:** You may work together on homework assignments and you may consult whatever sources you deem necessary while doing so. The purpose of the homework is to LEARN—specifically, to better your understanding of the underlying concepts and to gain proficiency in using them to solve problems.

Exams, on the other hand, exist for you to DEMONSTRATE what you have learned. They are individual endeavors, where no help is to be given or received. Cheating on an exam includes, but is not limited to, sharing answers or using any form of cheat sheet (note: notes programmed into a calculator count as a cheat sheet). If I catch you cheating on an exam, I will forbid you from attending any further class meetings and assign you a grade of F in the course.

**Extra Credit Policy:** There may be occasional opportunities for extra credit over the course of the semester. All extra credit opportunities will be announced in class. Under no circumstances will individual extra credit opportunities be available.

**Grade Dispute Policy:** All grade issues need to be brought to my attention within one week of having your grade returned/posted.

**Final Exam Schedule:** Mon Dec 13, 2pm–4pm

### 3 Classroom Policies

**Attendance Policy:** I expect you to attend every class. If you miss a class, then I expect you to get notes from a classmate. I expect you to arrive to class on time.

**Classroom Rules of Conduct:** Students must refrain from behavior in class that disrupts the learning process. Students are prohibited from using tobacco products in class, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times or about inappropriate things, wearing inappropriate clothing, using cellphones, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

Math-related questions and math-related discussion in the classroom are encouraged. However, chatter is disruptive to the learning process and will not be tolerated under any circumstances. Furthermore, any variation of the question “do we need to know this for the test?” is banned.

### 4 Tentative Schedule

Algebra (brief review), limits, intro to derivatives	Aug 25–Sep 22
Exam 1	Sep 23
Methods of differentiation	Sep 27–Oct 20
Exam 2	Oct 21
Applications of differentiation	Oct 25–Nov 15
Exam 3	Nov 16
Area, antiderivatives, and the Fundamental Theorem	Nov 17–Dec 10
Final Exam	Mon Dec 13, 2pm–4pm

The date/time of the final exam is set by official SHSU policy. All other dates in this list are tentative and subject to change.

### 5 Additional Information

All information on this syllabus is subject to change. All changes will be announced in class. Further university policies regarding academic dishonesty, student absences on religious holy days, disabilities, and visitors in the classroom which apply to this course may be found at <http://www.shsu.edu/syllabus/>. If there is a conflict between information on this syllabus and official university policy, university policy takes precedence.