Math 180
Calculus and Analytic Geometry
Spring, 2010

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Office Hours:	Th 4:00 - 4:45
	TTh 9:30 - 10:00 p.m.
	T 10:00 - 10:30 a.m.
Text:	***Thomas Calculus Early Transcendentals***, 11th edition
	Student Solutions Manual – Optional
Calculator:	Highly Recommend: TI-84 or TI-NSpire

Attendance: Regular attendance is mandatory. If you are absent during the first week (the add period), you will be dropped and someone on the waiting list will be added. If you are absent more than three times, you could be dropped, but it is your responsibility as a student to drop if you decide to quit attending the class. You are responsible for the material covered in class during your absence.

Homework: Homework will be assigned from the text on a daily basis, but will be collected and graded on exam days. I will only be checking to see that at least one problem was done from every section assigned. Other homework problems will be collected as stated on the problems. I will answer homework questions at the beginning of class. The lowest homework grade will be dropped**. No late homework accepted! No Excuses! (Yes – I missed because I was ill is an excuse!)**

Quizzes: Quizzes will be given as stated on the timetable. The lowest quiz grade will be dropped. **No make-up quizzes will be given. (Yes – I missed because I had a flat tire is an excuse!)**

Exams: Exams will be given as stated on the timetable. **No make-up exams will be given!** If the final exam percentage is higher, it will replace the lowest exam percentage.

Final Exam: The final exam is cumulative and will be given at the time given in the Schedule of Classes. Failure to take the final will result in an "F" for the course. If the final exam percentage is higher, it will replace the lowest exam percentage.

Computer Labs: We will use MAPLE for our computer labs. There will be at least two computer labs for the semester.

Grading:

3 exams @ 15% each	45%
5 quizzes @ 3% each	15%
Homework	10%
Computer Labs	5%
Final Exam	25%

90% and above	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
Below 60%	F

Cheating Policy

Acts of cheating and plagiarism are considered serious violations of the Mt. San Antonio College Student Discipline Policy, AR & P Section 609. All incidents of cheating and plagiarism will be reported to the Student Life Center. Cheating or plagiarism is the act of misrepresenting the work of someone else as your own or assisting another student by providing them with answers to exams or written work that is not their own. This includes copying from another, use of stolen exams, instructor's notes or test key, and failure to use quotation marks and citing the source when using the written work of another, including internet sources.

If a student is caught cheating on an exam, that student will receive a **"F" for that exam and your final will not replace the lowest exam percentage, if higher,** and cheating could result in disciplinary action such as suspension or expulsion. If a student is caught cheating on a quiz, the student will receive a **zero for that quiz and the lowest quiz grade will not be dropped**. Students are encouraged to review both the Academic Honesty Policy and the Student Discipline Policy which are printed in the College catalog for further clarification.

CHEATING IS A SERIOUS OFFENSE AND WILL BE TREATED AS SUCH.

Measurable Objectives for Math 180

Students will:

1. Represent functions verbally, algebraically, numerically, and graphically. Construct mathematical models of physical phenomena. Graph functions with transformations on known graphs. Use logarithmic and exponential functions in applications. Solve calculus problems using a computer algebra system.
2. Prove limits using properties of limits and solve problems involving the formal definition of the limits. Solve problems involving continuity of functions. Evaluate limits at infinity and represent these graphically. Use limits to find slopes of tangent lines, velocities, other rates of change and derivatives.
3. Compute first and higher order derivatives of polynomial, exponential, logarithmic, hyperbolic, trigonometric, and inverse trigonometric functions. Evaluate derivatives using the product, quotient, and chain rules and implicit differentiation.
4. Use derivatives to compute rates of change in applications. Apply derivatives to related rates problems, linear approximations and differentials, increasing and de3creasing functions, maximum and minimum values, inflections and concavity, graphing, optimization problems, and Newton's Method. Apply the Mean Value Theorem in example problems. Use L'Hospital's Rule to evaluate limits of indeterminate forms. Use a Computer Algebra System in applications of calculus.
5. Use anti-derivatives to evaluate indefinite integrals and the Fundamental Theorem of Calculus to evaluate definite integrals. Evaluate integrals using the substitution rule and integration by parts.

The Student Learning Outcomes (SLOs) for this course can be found at the Mathematics and Computer Science webpage at http://math.mtsac.edu/slo_math.html#math180

SLOs are used to assess the course--how well or if students are learning a particular topic.

Measurable objectives are instructional expectations for a given course that establish curricular elements and standards.