

AP CALCULUS AB/BC – FALL 2006

INSTRUCTOR: Mr. Brock

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Calculus is the basis for college level mathematics, as well as for engineering and all sciences. It emphasizes building mathematical understanding through problem solving and challenging application rather than rote memorization and repetitive practice. By the end of the semester you will be able to:

1. Develop and apply the concepts of limits, differentiation, and integration graphically, algebraically, and numerically.
2. Use the techniques of differentiation in a problem-solving setting.
3. Use a graphing calculator to investigate and apply mathematical concepts.
4. Determine, interpret, and communicate solutions to mathematical and real-world problems using patterns, functions, and algebra; demonstrate the ability to apply statistical methods for representing and interpreting data and communicating results.

Textbook: CALCULUS, Fifth edition, Stewart, cost: \$105.00

CALCULUS Graphical, Numerical, Algebraic, Finney, et al, cost: \$65.00

Content: Chapter 1	Functions and Models	1 week
Chapter 2	Limits and Continuity	2 week
Chapter 3/7	Derivatives of Functions	3 weeks
Chapter 4	Applications of Differentiation	5 weeks
Chapter 5/7	Integrals	3 weeks
Chapter 6/7	Applications of Integrals	4 weeks

Evaluation:	<u>First Marking Period</u>		<u>Second Marking Period</u>	
	Tests	40 pct	Tests	30 pct
	Quizzes	20 pct	Quizzes	20 pct
	Homework	20 pct	Weekly Problem Sets	20 pct
	Other graded work	20 pct	Homework	15 pct
			Other graded work	15 pct

NOTE: You will receive two AP grades for this course!

Homework: Homework assignments will be given regularly and questions will be addressed at the beginning of the next class. Homework assignments will be collected on a random basis to see if you are keeping up with assignments. It is vital to success in this class that you keep up with the material and come prepared to class each day. Late assignments will be accepted only during the current unit (chapter) and for reduced credit.

Notebook: Taking notes is expected. All work in your notebook should be dated and organized in a logical manner. A 3-ring binder is recommended so that handouts, homework, tests, and quizzes can be easily organized together with notes and other assignments.

Materials: Notebook, paper, pencils, textbook, graph paper, straight edge, graphing calculator. A TI-83 or TI-83 plus is recommended.

Extra Help: I am usually available after school for help. See me to set up an appointment. Do not wait until you are completely lost to seek help.

Procedures: Be in your seat and ready to begin when the late bell sounds. ***Running through the door as the tone sounds means you are tardy!***

All CD Players, Walkmans, Cell Phones, Pagers, and hats must be kept in your locker or in your book bag throughout the school day. If it is visible, it will be confiscated and turned in to the office.

Food (including candy and gum) are not allowed in class. Water bottles (containing water) may be used, all other drinks must be kept put away in book bag during class.

In my opinion, AP Calculus is the most useful course that a college-bound student can take in High School. If you keep up with the material, do your assignments, and stay interested you will have the opportunity to earn a full year of college credit. This would enable you to begin ahead in college and may enable you to participate in honors or other advanced courses of instruction. ***What you get out of this course will depend on what you are willing to put into it!***

This Form Should Be Signed By You and Your Parent/Guardian

I have read and understand the course syllabus for AP Calculus.

Student Name _____

Student Signature _____ Date _____

Parent or Guardian Signature _____ Date _____

e-mail address _____

daytime phone number _____