AP CALCULUS SYLLABUS

TEACHER:

Mr. Halvorson	Classroom A102	Office A110
Available for help:	6:15-7:20am and 2:25-3:30pm	
Home:	612-385-9615	
Email:	jim.halvorson@district196.org	

COURSE OVERVIEW:

This is a course in differential and integral calculus. Calculus is a "**Gateway**" course that prepares you for advanced work in engineering, mathematics, business, and science. The goal of any AP course is to prepare students for success on the AP Exam. A score of 3,4, or 5 on the AP exam will earn college credit at most institutions of higher learning.

TEXT: **Calculus-Graphical, Numerical, Algerbaic**: Finney, Ross, Demana, Waits, and Kennedy – SFAW-1999

TEACHING STRATEGIES:

Students will be exposed to all 4 levels of calculus: analytical, graphical, numerical, and verbal, and will be given opportunity to demonstrate their skill (verbal & written) in class (small & large group) as well as on tests. Classroom discussion will include follow-up comments such as "why?" or "justify your conclusion." If possible, follow-up questions will also include: "can this be solved by one of the other methods?" Tests will include questions requiring an explanation/justification of steps and solutions. Tests are broken into calculator and non-calculator.

STUDENT EXPECTATIONS:

All students are expected to take the AP exam. Students will: come to class prepared, keep a notebook, keep current with all assignments, and follow classroom rules. A graphing calculator is required. I will be using a TI-83 for demonstration purposes. Calculators allowed on the AP Calculus Exam include the TI-83,84,85,86 and 89. Communication skills will include proper use of complete sentences, nouns, pronouns, subject, and verbs. Students falling BELOW a **B-** will be expected to come in for extra help until the grade improves! A 3-ring binder is strongly encouraged. The EVHS policy on tardies and absences will be adhered to. It is expected that students will follow the **Honor Code** concerning cheating and plagiarizing.

OBJECTIVES:

1. Pass the AP Calculus Exam (May 5, 2010).
2. Develop the mathematical skills necessary for future success.
3. Elevate critical thinking and problem solving skills.

HOMEWORK/AP QUESTIONS/PROJECTS:

Assignments will be collected daily-**show all work**! 9 point practice AP free response questions will be given weekly. Students will have 1 week to return them for credit. In addition, AP free response questions will be given and completed during class time with a partner. Selected groups will be responsible for solutions at the board. Group AP free response questions will be scored like the others. There may be an opportunity to demonstrate additional learning through a project of some type.

TESTS/QUIZZES:

All tests and quizzes will be announced. There will be no retakes. Take home and/or group exams may also be used. If you miss the day of the test/quiz, you will be expected to take the test/quiz the following day.

GRADING:

10% AP PROBLEMS (given weekly)
10% HOMEWORK
10% FINAL EXAM (semester)
70% TESTS/QUIZZES

GRADING SCALE:

93-100	A	90-92	A-	87-89	B+	83-86	B
80-82	B-	77-79	C+	73-76	C	70-72	C-
67-69	D+	63-66	D	60-62	D-	Failure is not an option	

You must maintain above a "C" average to stay in the class.

A few things to remember:

- If you are willing to work you WILL pass the AP Exam(over 95% of EVHS kids DO pass the AP Calculus Exam versus 60% Nationally)
- Getting college credit while in high school is a terrific benefit. It saves time and money, plus moves you up on the registration schedule.
- How you do your work is a refection of yourself !
- Be prompt, prepared, polite, and productive!

The AP CALCULUS EXAM-AB

SECTION I-part A	28 MC	55 minute	No calculator	
-part B	17 MC	50 minutes	Calculator	av. score MC: 22.3 [EVHS: 34.5]
SECTION II	2 Free Response	30 minutes	Calculator	
	4 Free Response	60 minutes	No calculator	av. score FR: 23.5 [EVHS: 37.2]

You must assume TOTAL RESPONSIBILITY for studying and learning the material presented in the course. The exams are intended to produce average scores of about 50%. 45 multiple-choice questions are worth 1.2 points each, 6 free response questions are worth 9 points each: TOTAL 108 points. You don't have to score a perfect paper to earn a 5.

Distribution of grades for 2009 AP Calculus Candidates:			**Score**		
5-	15.9%	[EVHS: 31%]	Extremely well qualified	75-108 points	(70% = 5)
4-	23.3%	[EVHS: 29%]	Well qualified	58-74 points	(54% = 4)
3-	26.9%	[EVHS: 23%]	Qualified	40-57 points	(37% = 3)
2-	17.8%	[EVHS: 7%]	Possibly qualified	25-39 points	
1-	16.1%	[EVHS: 10%]	No recommendation	0-19 points	