

AP[®] Calculus AB

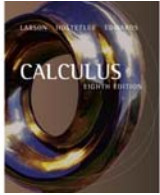
Federal Way High School Mathematics Program

Syllabus for AP Calculus AB for the 2008-2009 School Year

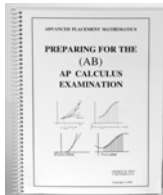
Instructor: Lindsay M. O'Neal **E-mail:** loneal@fwps.org **Phone:** 253-945-5436

Planning Period: Mon/Fri 12:13-1:06; Tues 12:50-2:05; Thurs/Fri 11:29-12:44

Primary Texts:



Larson, Ron, Robert P. Hostetler, and Bruce H. Edwards. Calculus with Analytic Geometry. 8th ed. Boston, MA: Houghton Mifflin Company, 2006. (\$163)



Best, George W., and J. Richard Lux. Preparing for the (AB) AP Calculus Examination. 1st ed. Andover, MA: Venture Publishing, 2002. (\$40)

Materials:

Graphing Calculator

Example: TI-83 Plus (about \$100)

Spiral Notebook

Please remember that students are financially responsible for the replacement of books and calculators at the end of the year if they are unable to return them.

Course Overview:

This course is designed to introduce and familiarize students with the concepts and mechanics of the major ideas behind calculus. There are two primary objectives, one of which is to prepare students for the AP Exam (\$84) on *Wednesday, May 6, 2009*. The other goal is to prepare students for future courses in mathematics by giving them a firm foundation in the concepts of calculus. Our specific goals are in line with those named in the official AP Calculus Course Description.

- Students will learn to work with functions that are represented numerically, graphically, analytically, and verbally.
- Students will understand the meaning of derivatives and their application in solving a variety of problems.
- Students will understand the meaning of definite integrals and the relationship between integration and differentiation expressed in the Fundamental Theorem of Calculus.
- Students will be able to model situations, communicate mathematically, interpret results, and determine reasonableness of solutions.
- Students will learn how to use graphing calculators to solve problems, experiment, interpret results, and support their conclusions.

Class Work and Evaluation:

Class Work: Students must come to class prepared each day. They should have their textbook, spiral notebook, and graphing calculator during every class period. Calculators will be used in class everyday to help solve and verify solutions. Students must be prepared to participate in taking notes, calculator demonstrations and experiments, practice problems, and discussion (written and oral) of calculus problems.

Assignments: Homework will be given nearly everyday and is due at the beginning of the next class period. This work, along with students' notes, must be done in their spiral notebook, which will be checked off each day.

Quizzes: Students will have anywhere from 0-2 quizzes per unit. They may also have "quizzes that don't count." These are not graded for accuracy, but for effort only. It is an opportunity for students to evaluate their own progress with the material.

Participation Quizzes: These quizzes are given the day before a unit exam and include three parts. There is an attendance piece, where students must be able to tell me what days they missed and prove that they made up the work. The assignment quiz tests to see if they did the homework and chooses certain problems to grade for accuracy. The final piece is to evaluate what they have learned during the unit. At this point, their spiral notebook is collected, and homework grades are included in the Participation Quiz grade.

Exams: At the end of each unit, students will take an exam worth 100 points. This is the final evaluation of how well they are meeting standard on a certain set of skills. These exams may contain a combination of multiple choice and free-response questions, each of which follows the format of AP Exam questions. These exams may contain portions in which calculators are required and portions in which they may not be used.

Classroom Expectations and Policies:

- **Attendance:** Attendance is critical for active learning! I will follow our school's attendance policy, but please understand that missing class means getting behind.

We know "regular attendance has a direct effect on the academic progress of the students and the development of good habits which will aid students as they move into the world beyond the district." Taking into account the Federal Way Public Schools' Attendance Policy (Policy 3120) and the Federal Way Public Schools' Attendance Procedure (Procedure 3120P), our staff members condensed the Attendance Policy and Procedure into the following important points:

1. A student is responsible for arriving on time and being prepared to learn in every class.
2. A student is responsible for clearing their excused absences with the attendance secretary within two school business days. Bring your note to Mrs. Shelby at the Attendance window located across from the main office.
3. A student whose absence is excused is responsible for making up the assignments/activities/ and the attendance/participation portion of the grade missed during the absence in the manner provided by the teacher.
4. A student whose absence is unexcused may **NOT** be given the opportunity to receive credit for a graded activity/assignment that is due during the time when the student is absent.
5. A student whose absence is unexcused will be responsible for making up the time missed in a manner determined by the school. Examples of such discipline may include, but are not limited to: after school detention, ISS, and exclusion from an activity conducted by the school other than actual class time*.

Every teacher will attempt to contact the student's parents/guardians after the 4th, 8th, and 12th absence. Every teacher will fill out a record of the phone call on the Attendance Phone Log.

Advisory teachers will be responsible for assigning initial consequences for unexcused absences and subsequent referrals to administration for continued unexcused absences in all of the student's classes.

1st and 2nd unexcused absence- Detention

3rd and 4th unexcused absence- Detention, ISS or Saturday School

5th or more unexcused absence- Progressive discipline including potential Out of School Suspension for Insubordination

Students with continued absences will be "Becca Billed" according to state law.

Students with 12 or more absences (**NOT INCLUDING SCHOOL RELATED**) will be required to meet with an "attendance appeal board" along with their parents/guardians.

*Activities students can be excluded from include, but are not limited to: assemblies, club meetings, dances, and sporting events.

- **Electronic Use Policy:** Students in the possession of telecommunications or other electronic devices shall observe the following conditions:
 - All telecommunication/electronic devices may not be in visible sight or operated during "**school hours**". Telecommunication/electronic devices may be displayed and/or operated only before and after the regular school day, unless an emergency situation exists that involves imminent physical danger or a school administrator authorizes the student to do otherwise.

"**School Hours**" are defined as 7:00 AM until 2:05 PM. Students in after school activities such as, but not limited to, Eagle Vision, Detention, Clubs, Activities, Sports, and 7th Period Classes, must adhere to their school supervisors' expectations about use—which could include not in visible sight or operated at all.

- A student may use a telecommunication/electronic device during his/her **designated breakfast and lunch period** in an area **officially designated** by the school for such purposes. Use is not permitted in common areas such as hallways or outside of the building not designated for such use. Further, use in the designated area outside of the breakfast & lunch period is not permitted.

At Federal Way High School the "**designated breakfast and lunch area**" is defined as the cafeteria and the outside areas adjacent to the cafeteria.

Consequences for violating this policy are:

First offense: Warning

Second offense: Taken until end of day

Third offense: Taken and can only be picked up by parent

Fourth offense: Progressive discipline

- **Respect:** I really only have one rule for my classroom, and that is that all students respect themselves and others. When we respect each other, we can accomplish great things!
- **Grading Criteria:**

A	92-100%	C+	78-79%
A-	90-91%	C	72-77%
B+	88-89%	C-	70-71%
B	82-87%	F	0-69%
B-	80-81%	P	Not computed in GPA

Please detach and return this portion to Ms. O'Neal. Keep the above for your records.
I have read and understood this syllabus for AP Calculus for the 2008-2009 school year.

Student Name

Parent Name

Phone Number

Parent/Guardian Signature Date

Student Signature Date