GHS Course Syllabus

General Course Information

Subject: AP Calculus 1 Year: 2012-2013

Department: Math Room #: 112 Periods Taught: 2B, 3B

Course Title: AP Calculus 1

Course Description: This course covers selected topics in differential and integral calculus from numerical, graphical, analytical and verbal perspectives. Concepts are introduced through the properties of limits.

Faculty Name: *Connie Abel (BS Mathematics, MEd.)*

Office Hours: Mrs. Abel is available before school, during first lunch and after school. An appointment is recommended.

Introduction to Course: AP Calculus 1 corresponds to Math 251 (Differential Calculus) and Math 252 (Integral Calculus) in the Oregon University System. Material and expectations are similar to any college-level introductory calculus class.

Students need strong algebra skills and should be familiar with modeling, graphing and solving in the following families of functions in verbal, numeric, graphical or symbolic expressions: Linear, quadratic, rational, radical, exponential, logarithmic, and trigonometric.

Students who take AP Calculus 1 during their junior year may take AP Calculus 2 as a senior.

Note to Parents: The AP designation indicates that the course prepares students for the AP test in the first week of May. The cost of the test is about $90. If that is a hardship for your family, talk to your child's counselor about the financial help that is available. Fees must be paid to the Glencoe bookkeeper before Christmas break.

I will give a cumulative final exam in May, during AP testing week. Taking the AP test is not a requirement for the class, but students who take the AP test will be excused from the cumulative final exam that is given during the same week as the AP Calculus test.

About two thirds of the AP test is without calculator use, so this course will also incorporate both calculator and no-calculator activities and tests

We devote a significant amount of time to solving released AP calculus exam problems from previous years (both non-calculator and calculator active within the multiple choice and free-response formats). This homework will be graded for accuracy.

In addition to course hours in the classroom, students will be expected to spend 45 to 60 minutes outside of class for homework completion for every class meeting.

AP CALCULUS ONLINE INFORMATION: **www.apcentral.collegeboard.com**

Course Objectives:	Students will become familiar with the following, all from numerical, graphical and symbolic perspectives, both in the abstract and as models of real-world situations, with applications to linear, quadratic, rational, radical, exponential, logarithmic, and trigonometric functions. Topics emphasize calculator use for numerical and/or graphical connections, explorations, solutions, or support of conclusions. Limits Differentiation Continuity Motion Analysis of functions Optimization Linearization Anti-derivatives and Integration Numerical methods for integral approximations Slope fields and differential equations

Required Text: Calculus Eighth Edition; Larson, Hostetler, Edwards isbn # 0-618-50300-5

Grading

Grading Categories & Percentages: Homework – 10% Tests 90%

Grading Scale: Grade scales reflect district Balanced Grading Policy: every grade level is associated with an equal proportion of the scale. No earned grade will be less than 50%	A 90--100% B 80--89.9% C 70--79.9% D 60--69.9% F 50--59.9% S 70 --100% U 40 --70%	Students who already have credits for three graded math classes are eligible to take AP Calculus 1 on a Satisfactory/Unsatisfactory basis (ungraded option). Non-seniors who wish to take AP Calculus 1 as an ungraded class MUST earn credits for at least three graded math class before graduation. Graded courses may be taken concurrently or during the following year(s). Students who wish to change to the ungraded option must file their S/U forms by the end of the first quarter for semester 1 grades or by the end of the third quarter for semester 2 grades. Students who change to the S/U grading option will not be allowed to return to the graded option.

No-Drop Policy — By Glencoe policy, students in AP classes will not be allowed to drop the course once they have been enrolled.

Late Work Policy: — The majority of learning takes place not in the classroom, but during homework practice. Students who do their homework promptly have better success as well as better retention of concepts. Students without completed homework do not receive much-needed feedback on their efforts. Most university instructors do not accept late work, and AP Calculus 1 is a college level course; I do not accept late work.

Make-up Work Policy See Student-Parent Handbook: — I do accept make-up work within the grace period of the number of class-days absent plus one for absences relating to illness, bereavement or religious observances. **Make-up tests must be completed within the grace period allowed by the make-up work policy**. Students who exceed this time frame will be required to complete make-up tests during the next class period.

Retake tests — Colleges do not offer retake tests. However students who have done poorly on a test or group of tests may wish to demonstrate their proficiency by taking the final exam in May. Test grades will be averaged. No other retake opportunity will be offered.

GRADE ENTRY — **Please allow 1 week or more for evaluation and entry of test and homework scores into student grades.**

Cheating/Plagiarism Policy: — Cheating will not be tolerated. Any student caught cheating will be referred to his/her administrator and counselor, and parents will be contacted. In the event of a second offense, the student may be removed from the class with loss of credit (WF).

Classroom Conduct: *All students need to come to class with textbook, calculator and supplies. If for any reason, a student comes without a calculator, (s)he may borrow one from the teacher for the period in exchange for a student identification card. All students are expected to participate in classroom investigations, discussion and practice problems.*

We follow the student-parent handbook regarding dress code, electronic devices and tardy policy

Students and Parents/Guardians – Please provide your signature below indicating you have read and understand the requirements and expectations of this course.

Student Signature & Date

Parent/Guardian Signature & Date