AP Calculus AB

Fall 2017

Description

Differential Calculus is the mathematical study of change. It uses the concept of "limits" to take a sequence of approximations called average rates of change, over smaller and smaller intervals, and analyzes if this sequence is approaching a specific definite value; if so, this value is defined to be the "instantaneous rates of change". This process is known as differentiation, and is critical in the study of Physics, Engineering, Economics, Finance, and many other fields.

Integral Calculus is the mathematical study of accumulation; it formalizes the process of adding together infinitely many infinitesimally small values. We will discover the Fundamental Theorem of Calculus, which implies that integration is the inverse process of differentiation.

Teacher: Dr. Paul L. Bailey

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Book: *Saxon Calculus*, 2nd edition, Saxon and Wang, ISBN: 1-56577-146-X

Ref: *Thomas' Calculus*, 11th edition, Weir, Hass, Giordano, ISBN: 978-0321185587

Grade Components

Classwork:	5%
Homework:	5%
Checks:	5%
Exams:	85%

Classwork consists of participation in discussion, and activities such as team quizzes, worksheets, and other group work. Classwork activities are normally be graded on a scale of zero to ten.

Homework exercises from the textbook will be assigned daily to be completed before the next class. These will be graded on a scale of zero to ten based on the attached rubric. Students may be asked to work out their completed homework on the board during class.

Checks are ten to twenty minute comprehension assessments, covering the previous few days material, given at least once per week. These will be graded on a scale of zero to ten.

Exams are an hour long and occur every Wednesday. These will be graded on a scale of zero to one hundred points.

All students are expected to take the AP Calculus AB examination, which is scheduled for Tues, May 15, 2018.