

Silver State Advanced Placement Summer Institute
AP Calculus AB
Course Content

Each day will be a blend of the following activities:

1. Detailed coverage of the 2011/2012 AP Calculus AB syllabus. Problems illustrating the concepts will be discussed and solved both in and out of class. Various textbooks will be available to review.
2. Presentations on significant topics, including some chosen by the participants. These could include the definition of the derivative, the chain rule, the fine points of locating maxima and minima, integration by substitution, the Fundamental Theorem of Calculus. The ability of technology to quickly compute an approximation to a definite integral has opened up easy solutions and new approaches to old problems, and this is reflected in some of the questions on recent tests.
3. Application of the four AP approved calculator functionalities using a variety of calculators. Participants are expected to bring the calculator they normally use.
4. Explanation of the scoring standards of AP Calculus in relation to the tests and their sections. The rubric for scoring the 2012 free response section will be presented and participants will experience how it was scored using actual student samples.

There should be plenty of discussion time, both during the sessions and in the free time, to share strategies, plans and experiences with content presentation and the technologies that are available. Participants are encouraged to bring an AP Calculus-approved graphing calculator and copies of successful laboratory exercises for sharing. In addition to hard copies of many items, I will provide a CD that will include a multitude of activities, worksheets, notes, and "MR CALCULUS" solutions to many released multiple-choice exams.

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