SUBJECT: AP Calculus AB for Experienced Teachers

TARGET AUDIENCE: This course is designed to meet the needs of experienced teachers of AP Calculus AB who are interested in pursuing the topics of Calculus AB beyond the level of study in the Introductory Calculus AB Institute.

COURSE OBJECTIVES:
1. To present the major topics of an AP Calculus course from a numerical, graphical and analytical point of view.
2. To integrate graphing calculator technology in calculus instruction.
3. To review the 2015-2016 AP Calculus AB curriculum and preview newly proposed curriculum changes to be implemented within two years.
4. To review AP exam questions, student performance data and AP grading rubrics.
5. To share and discuss the problems and promises of conducting an AP course.
6. To preview reference materials and texts appropriate for use in AP Calculus.
7. To outline lesson plans, develop teaching strategies and formulate alternative forms of evaluation for use in the classroom.
8. To provide strategies for enhancing student writing skills in problem solutions.

FORMAT: Curriculum topics will be introduced via lecture and demonstration, problem solving activities, calculator lab activities and cooperative learning projects. Group discussions will focus on the issues of teaching an AP Calculus course—such issues to be determined from the needs and interests of the participants at the institute. Some issues identified for discussion in the past include: student selection, prerequisite coursework, homework, grading, AP exam preparation…

REQUIREMENTS, ASSIGNMENTS, ETC.: Participants are encouraged to bring their course textbook and any support materials they plan to use and/or have used and would like to share with the group.

Each participant should bring the graphing calculator they will use in their classroom. The Texas Instruments TI-84 and the TI-89 will be used by the instructor for demonstrations.

Each participant will receive a notebook of curriculum topical developments cross referenced with technology support and AP examination questions. Sample questions that highlight daily topics will be given for overnight review. Teachers are encouraged to customize the materials for use in their own settings.