Calculus Committee Final Report for the year 2003-2004

Members: Ray Collings, Jessica Craig, Ming Her, Gloria Hitchcock, Kouok Law, Margie Lewkowicz, Alice Pierce, Larry Powell, Barrett Walls, and Robby Williams

1. **Teaching Guide for Calculus III (Math 2633):** Suggested homework problems for the Calculus III course were compiled and added to the Calculus III Teaching Guide. Kouok Law, Barrett Walls, and Jessica Craig selected these problems.

2. **Textbook Search:** It was decided by the committee that the textbook search should be put off for one year and therefore conducted during the 2004 – 2005 academic year. This will mean that we can examine the new edition of the Stewart, “Calculus: Concepts and Context” before making our final selection. This decision was voted on and passed by the discipline.

3. **Assessment of Calculus Sequence:** The committee finalized and administered the assessment instruments for all three Calculus classes.

   **Calculus I:** The Calculus I assessment instrument was designed last year by Margie Lewkowicz, Larry Powell, Said Bagherieh, and Alice Pierce. This year, Gloria Hitchcock also assisted with its writing. It consisted of 8 multiple-choice questions that, in the fall semester, were added to all Calculus I finals. Students were required to buy their own scantron forms.

   **Calculus II:** The Calculus II assessment instrument was designed last year by Ray Collings, David Nazari, and Jessica Craig. This year, Barrett Walls also assisted with the design of this assessment instrument. It was given in the spring semester. The Calculus II assessment instrument consisted of 9 multiple-choice questions, which were added to each Calculus II final. This assessment was split into two parts - a non-technology portion and a technology-permitted portion. Patricia Gregg of Institutional Research and Planning provided bubble sheet answer forms for the Calculus II assessment test. This will allow her to quickly analyze the results of this assessment.

   **Calculus III:** The assessment instrument for Calculus III, designed Kouok Law, Barrett Walls, and Robby Williams, contained four free response questions which were added to each Calculus III final. Each Calculus III instructor will be given a grading rubric along with the packet of assessment tests. In analyzing the results of this assessment, the committee will use the results obtained by each Calculus III instructor using this grading rubric.

   The **directions for administering these assessment instruments** were finalized via much email discussion by all of the committee members. The results of all three assessment instruments will be analyzed during the 2004 – 2005 academic year.