Academic Program Change Items for the Ph.D. in Applied Mathematics in the Department of Mathematical Sciences to be Effective in the 09-10 AY

December 2, 2008

This document summarizes the changes in the Ph.D. degree in Applied Mathematics. All of the items in the following list were passed by votes of the faculty in the Mathematical Sciences Department.

1. A subject GRE test is required in the application process (p. 7). Previous the Math GRE was only recommended.

2. There is a minimum level of the pass required to test out of a course: one Outstanding and no mark of Unacceptable. (p. 7)

3. Math 611 can be passed with a sufficiently good pass on the Numerical Linear Algebra preliminary exam (p. 7).

4. The 4 credit seminar requirement in the PhD has been deleted (p. 9, bottom, and p. 10 in summary table).

5. Math 694 moved from fall offering to spring. (p. 10) This is ok with Electrical and Computer Engineering (apparently our biggest customer for this course) as well as our pure math and optimization faculty.

6. The rotation of courses has been modified according to the results of a 07S departmental vote. The changes for the course rotation are in red in the table on p. 11. This change reflects what the department is already doing. No adverse affect on other departments has been observed.

7. The number of times the student can take each prelimimary exams has been reduced to two (p. 13).

8. The name of the Analysis preliminary examination was changed to "Real and Complex Analysis" to more accurately reflect the syllabus for this exam (p. 13, Section 4.1).

9. The integration of the preliminary examination on Real and Complex Analysis has been changed to have Lebesgue integration rather than Riemann integration (p. 14).

10. A functional analysis candidacy exam has been added, with subjects coming from Math 806 and 836 (p. 17). The analysis exam has been deleted following deletion of Math 805 and 807 (which provided the subject matter for this course).