ASSESSMENT PLAN
Master of Science in Mathematics

Department of Mathematics
College of Science and Mathematics
University of South Carolina
March, 2000

I. PROGRAM PURPOSES
The M.S. in mathematics is designed primarily for students who seek broad and intensive preparation for teaching in a junior college or working in industry.

II. INTENDED LEARNING OBJECTIVES/OUTCOMES
The M.S. degree recipient should be able to...

1. Understand theory: understand advanced mathematical research appearing in reputable journals in the field.
2. Understand application: understand applications of mathematics in business, government, or industry.
3. Written Communication: explain on paper mathematical results to a mathematically educated audience not expert in the particular specialization.
4. Oral Communication: orally present mathematical results to a mathematically educated audience not expert in the particular specialization.
5. Instruction: act as an independent instructor for lower level courses in mathematics.

III. PROCEDURES, MEASURES, AND CRITERIA
1. Theory: candidates are required to pass the theoretical courses Math 700 and 703 which form the foundation for most of the other advanced graduate courses in mathematics. In addition, the content of the thesis is drawn from several research papers in an area of interest to the student.
2. Understand application: candidates interested in applications will take courses labeled from Math 720 to Math 728 to get exposed to high level applications of mathematics in business, government, or industry.
4. Oral Communication: candidates take the required seminar course Math 790 and orally present the thesis during an examination to which faculty and graduate students are invited.
5. Instruction: candidates teach as instructor of record during 2 regular semesters and 2 summer semesters a lower level mathematics course. Candidates will have full responsibility as instructor of record in these courses.

IV. IMPLEMENTATION
The Department of Mathematics will conduct an Exit Survey with each graduating M.S. student, in which each student will be asked how well he/she is prepared for his/her prospective job, as well as comment on the USC graduate program's strengths and weaknesses. The results are used to
help make improvements in the program. First positions of graduates are kept on file. Each year the Graduate Director will prepare a summary report of assessment data.

V. IMPLEMENTATION
Evaluation results from the Implementation Phase of this Assessment Plan will be featured in the Department's Annual report, the Strategic Plan (including any updates), and at other times deemed appropriate by the Department Chair or other University officials.

VI. FEEDBACK CHANNELS
Assessment results and summaries will be circulated to program faculty at a faculty meeting and at other times as deemed necessary by the Department Chair.

VII. USE OF RESULTS
Use of results for program modification and the subsequent impact of any changes made will be reviewed yearly by the relevant faculty, and included in the Department's annual Report and Strategic Plan (including any updates).