## SELF-ASSESSMENT - SUMMARY OF ACTIVITIES
### UF MATHEMATICS

**Condition #1:** The right people apply for doctoral study.  
**Condition #2:** The right applicants are admitted as doctoral students  
**Condition #3:** Students and faculty form productive working relationships  
**Condition #4:** Students experience social support from fellow students

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Goals /Activities</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>On the one hand, we routinely receive many more applications meeting minimum requirements (3.0 GPA, 1000 GRE, satisfactory TOEFL, mathematics BA or equivalent) than we have places; on the other hand, we do not receive sufficiently many applications meeting more desirable requirements (3.5 GPA, 1250 GRE, satisfactory TOEFL, mathematics BA with plenty of good courses). Of course, there are occasional instances of students applying to pursue a course of study that our department does not offer (statistics and mathematics education come to mind); in such cases, it generally turned out that the applicants had not examined our webpage but had instead made assumptions based on experience with certain other universities. <strong>Proposed activities in this area are:</strong> Given appropriate resources, we would be in a position to prepare and provide informative brochures for prospective students and to pay for site visits.</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
| 2          | (i) Our admissions practice has been to label incoming students as doctoral students on entry if they indicated the PhD as their ultimate goal. All of our graduate students must pass through our master’s program (with some exceptions for students arriving with a master’s degree in hand) and perform at an appropriate level before they are allowed to proceed to the PhD. The number of students who actually continue to the PhD but then fail to complete is rather small.  
(ii) Experience has shown that there are often greater opportunities for funding and placement of graduate students in applied mathematics.  
(iii) Our admissions practice in the past has also been to allow some flexibility, perhaps admitting one or two
students whom the admissions committee felt (for a variety of reasons) were deserving of the opportunity and/or promised to enrich our program; in view of the present climate, we shall (somewhat reluctantly) have to be more circumspect in this regard.

**Proposed activities in this area are:** (i) In order to minimize errors of interpretation that might arise from this practice, we propose (starting fall 2007) to label all incoming students as master’s students unless they enter with a master’s degree, postponing the ‘doctoral’ label until they meet our criteria for continuing to the PhD (typically at the end of the second year).

(ii) When appropriate, we propose to place a little greater emphasis on applicants intending to pursue applied mathematics, effective fall 2007 incoming class.

---

3 By the nature of the degree, doctoral students must of course form productive relationships with faculty; the same is true for those applied mathematics students who choose to pursue a master’s degree by thesis. The precise extent of the relationship is variable to some degree, depending on a number of factors including (but not limited to) the nature of the research and the personalities involved. Our doctoral students are always encouraged to begin research under a faculty member sooner rather than later: experience shows that the factor most likely to delay graduation is progress on research towards the dissertation.

**Proposed activities for this area:** Recognizing that encouragement is not enough, we plan (starting spring 2007) to assign a provisional faculty advisor to each incoming graduate student, the choice being made in accordance with the expressed field of interest; the provisional advisor would not only offer academic guidance but also serve as a teaching mentor. In addition, we plan special colloquia aimed at beginning
students to familiarize them with areas of research pursued in the department; some of these are already taking place this semester, but they will be routine starting in fall 2007. By these means, we facilitate an earlier introduction to and appreciation of the profession.

| Proposed activities for this area: | Encourage greater social cohesion among more graduate student research groups. |

| Fall 2007 |

Our Graduate Mathematics Association (GMA) is run by students, for students. The GMA offers social support to fellow students and holds occasional social events (including fall and spring picnics) bringing together faculty and students at all levels. Some sub-disciplines tend to be more mutually supportive than others. For example, the UF student chapter of SIAM (Society for Industrial and Applied Mathematics), formed a couple of years ago, is rather closely knit; an academic conference run by the chapter drew national attention. Certain other seminar groups are run especially for graduate students, giving them opportunities to present work for encouragement, constructive criticism and general education. Beyond this, beginning students naturally form themselves into study groups, with the encouragement of faculty.

| Ongoing |
| Other | There are aspects of strategic intervention that seem not to fit under any of these headings. Here we mention only the formation (last year) of an advisory committee to identify at an earlier stage those doctoral students for whom research appears to be too great a challenge and to counsel them that graduation with the MS (rather than the PhD) is appropriate; our admissions chair is an advisory committee member, closing a feedback loop. |