August 4, 2006

MEMO

TO: Mark Gromko
    Vice Provost for Academic Programs

FROM: Neal Carothers, Chair
       Department of Mathematics and Statistics

RE: Unit response to Program Review Committee recommendations

The Program Review Committee’s recommendations are listed below, in italics, together with the department’s responses. As a response of a global nature, we would like to point out here that all of the PRC’s recommendations carry a timetable of Fall 2006 or AY 2006–2007. While the department will do its best to continue its history of progress on recommendations stemming from program review, we feel that it is unrealistic to expect substantial progress along all fronts simultaneously.

1. Tenure-Track Staffing
   The Department and the Dean of Arts and Sciences should discuss the appropriate tenured/tenure-track and non-tenure track staffing levels for the Department in order to assure its continued success in teaching (both graduate and undergraduate), research, and service missions. The Department should prepare a hiring plan with clear priorities for additions in the various research areas. The plan should be created with input from the Dean, and approved by him by the end of the 2006-07 academic year.

Response: The department concurs with this recommendation.

2. Non-Tenure-Track Staffing
   In consultation with the Dean, the Department should consider various options for changing the types of positions included among the non-tenure-track faculty (postdocs, visiting faculty, lecturers, and instructors), along with teaching loads and class sizes. Based on this consultation, the Department should present a specific proposal to the Dean, by the end of the 2006-07 academic year.

Response: The department concurs with this recommendation. As of Fall 2006, our full-time faculty will consist of 49% temporary, non-tenure track faculty. Moreover, only 3 of these 21 temporary faculty holds the PhD and only one will be involved in research or graduate teaching. This dramatic imbalance is seriously hampering the department’s ability to fulfill its mission with regard to its majors and its graduate programs.

3. Integration of Instructors
   The Department should complete the revision of its governance documents to address such issues as workload, evaluation, and merit for instructors. The governance documents should be revised
by the end of fall semester, 2006. The Department should also complete the development of mechanisms to provide training, formative evaluation, and professional development opportunities for instructors. To some extent, this effort should be on going, but an initial plan should be in place by the end of the 2006-07 academic year.

Response: The department concurs with this recommendation, but it may not be possible to complete all of these tasks during the coming academic year. We do have a start on revising our governance documents and hope to have new versions in place by the end of fall. However, we will be even more shorthanded than usual during AY 2006–2007 and it may be unrealistic to expect our already overextended faculty to devise training and professional development programs for instructors in this short time frame. An initial, skeletal plan is very likely the best we can hope for during the coming year.

We are breaking new ground here. We are not aware of any training or professional development programs of this sort in any of our sister institutions in the State. Indeed, the modest beginnings of a program created in our department are likely the first of their kind in any mathematics department in the country. The fact that we have found it necessary to develop such training programs only serves as further testament to our staffing difficulties.

4. Assessment of Majors and Graduate Students

We recommend that the Department continue to institute new/additional methods of student outcomes assessment that focus on both undergraduate and graduate major programs. During the 2006-07 academic year, the Department should set a goal of implementing an assessment procedure for majors. The following year, the Department should add an assessment program for graduate programs. Progress on these efforts should be reported annually in the Department’s report to the Student Achievement Assessment Committee. Future revisions to the curriculum should be informed by the results of assessment of student outcomes.

Response: The department concurs with this recommendation. However, as pointed out in our self study (and unavoidably reiterated here), the department is desperately shorthanded. While we do have a large teaching staff, nearly half of our full-time faculty are temporary and hold only a master’s degree. These faculty are used almost exclusively to teach in our 100-level service courses. None are involved in any substantive way with our majors or our graduate programs. Furthermore, we will have fewer (and younger) tenure track faculty in residence in Fall 2006 than at the time of our last program review. Clearly, assessment of majors and graduate programs — arguably assessment of any stripe — is best handled by experienced tenure track faculty and not by inexperienced temporary faculty.

While the department is committed to assessment at all levels, it is unrealistic to hope for substantial improvement along these lines given the current nature of our faculty. This issue was addressed in our self study, where we described the nature and variety of the assessment mechanisms we are currently able to manage.

Please do not interpret this as a reluctance or unwillingness to improve. However, please do bear in mind that the department has been called on to devote substantial time and energy to assessment of a more global nature in its service courses (not to mention the
development of training programs, as described in item 3, above). While this in no way detracts from our obligation nor our desire to improve assessment methods for majors or for graduate programs, it does mean that we have stretched our tenure track resources to their limit. It is our sincere hope that as the many improvements we have implemented in our service courses settle into place, we will be able to turn more of our energies to other issues, including the assessment of majors and graduate programs.

5. Service Courses
In ongoing consultation with the other units it serves, the Department should continue its strong efforts to assess and revise as needed its service courses in order to better meet the needs of the students.

Response: The department concurs with this recommendation. Indeed, we have been in discussions with Dean Nieman and Associate Dean Thibault about these issues already and have arrived at a number of plans (several of which will go into effect in Fall 2006) that should further improve the delivery and assessment of our service courses.

We would, however, draw the PRC’s attention to the response to item 4, above, as concerns about the limitations of our tenure track faculty apply equally well here.

6. Statistical Consulting Center
The Department should solicit the involvement of the Graduate Dean, the deans of Arts & Sciences and Business Administration, the Department of Applied Statistics and Operations Research, and other relevant stakeholders to put together a plan for the future of the Statistical Consulting Center. This plan should reconsider the mission of the Center, consider consulting and engagement opportunities for students and faculty, and address the need for help in developing relations with the external community. A similar recommendation has been made in the Committee’s report to the Department of Applied Statistics and Operations Research, which has historically taken the lead in running the Center.

Response: The department concurs with this recommendation. We have already discussed the situation with Dean Bulmahn, who fully supports such changes and, in fact, has offered to instigate discussions with the parties named above.

While this is not the appropriate place for factual corrections, we would be remiss if we did not point out that while the director of the Center has come from the faculty of the Department of Applied Statistics and Operations Research during several of the most recent terms, this should not be interpreted as a history of leadership in any broader sense. Indeed, the Center began as and continues to be a joint endeavor between the two departments. It would be more accurate to say that the Department of Applied Statistics and Operations Research has been granted the director’s position more often than the Department of Mathematics and Statistics during the Center’s history.

7. Graduate Student Stipend Levels
As a university community, it will be essential to address the competitiveness of stipend levels. However, the solution cannot be solely to rely on internal funding of graduate stipends. Neither can individual departments take on the whole burden. Therefore, any efforts to increase stipend levels must involve collaboration among the faculty, the departments, the colleges, and the
Graduate College. The Committee urges the Department and the Graduate Dean to develop a plan, by the end of the fall semester of 2006, to address the fifth year of funding for highly-qualified doctoral students.

Response: The department concurs with this recommendation. We have already held a number of discussions with Deans Bulmahn and Nieman concerning this issue and we feel confident that further progress can be made.

8. Doctoral Program Report
The Department should rewrite the Doctoral Program section of the self study in the form specified and submit it to the Graduate Dean by June 15, 2006.

Response: This has been completed.