Date: June 10, 2005

To: President Jolene Koester

From: Margaret Fieweger, Associate Vice President
       Undergraduate Studies

Subject: Final Memorandum of Understanding – Mathematics Dept. Program Review

On April 6, 2005 a meeting was held to discuss the commendations and recommendations made by the external reviewers for the Mathematics Department.

Attached please find the final Memorandum of Understanding from the 2004-05 Mathematics Department Program Review.

Please contact me if you have any questions.

MAF:pf
Attachment

cc: Harry Hellenbrand, Provost and V.P., Academic Affairs
    Fred Dorer, Dean, College of Science and Mathematics
    Vicki Pedone, Associate Dean, College of Science and Mathematics
Date:       June 10, 2005

To:         Dr. Fred Dorer, Dean, College of Science and Mathematics

From:       Margaret Fieweger, Associate Vice President, Undergraduate Studies

Subject:    Final Memorandum of Understanding – Mathematics Department Program Review

On April 6, 2005 a meeting was held to discuss the commendations and recommendations made by the external reviewers of the Mathematics Department. Present at the meeting were: Margaret Fieweger, Associate V.P., Undergraduate Studies; Mack Johnson, Associate V.P., Graduate Studies, Research & International Programs; Fred Dorer, Dean, College of Science & Mathematics; Vicki Pedone, Associate Dean, College of Science & Mathematics; Magnhild Lien, Chair, Mathematics Department; department faculty members Werner Horn and Katherine Stevenson; and Shannon Harp representing the Educational Policies Committee.

Dr. Fieweger congratulated the program on its many strengths and for the commendations in the external reviewers' report. A discussion of the reviewers' commendations and recommendations followed.

The recommendations were reviewed and the understandings on the following pages were reached.

MAF: pf
Attachment

cc:       Harry Hellenbrand, Provost and V.P., Academic Affairs
         Spero Bowman, Associate V.P., Academic Resources
         Penelope Jennings, Associate V.P., Faculty Affairs
         Mack Johnson, Associate V.P., Graduate Studies, Research, and International Programs
         Vicki Pedone, Associate Dean, College of Science and Mathematics
         Magnhild Lien, Chair, Mathematics Department
         Shannon Harp, Psychology Dept., Educational Policies Committee Rep.
         Paula Schiffman, Biology Dept., Graduate Studies Committee
Summary of Reviewers' Commendations

1. CSU Northridge has a strong mathematics department, with a vibrant undergraduate program and a viable graduate program. It is one of the strongest mathematics departments in the CSU system.

2. The department is well administered. The department chair is doing an outstanding job, which is much appreciated by department faculty. Other department administrators and department committees are functioning smoothly.

3. Ongoing improvements are under way, as the department continually updates course content and fine-tunes undergraduate and graduate degree programs.

4. A number of department faculty are extensively involved in encouraging undergraduate mathematics majors and mentoring students through various activities and programs. The effort put into the undergraduate mathematics major program by faculty members is impressive.

5. CSUN's Mathematics faculty has a reputation among students for being accessible and friendly.

6. Department faculty have obtained significant funding from NASA, NSF and various other sources for undergraduate and graduate projects and research.

7. The department works actively to update the curriculum for students interested in teaching. The department is developing various programs in connection with the Teachers for a New Era grant from the Carnegie Foundation. The department has sought advice and materials from excellent sources concerning mathematics education.

8. Department faculty are active in research, scholarship, K-14 outreach, and professional development which informs their classroom teaching.
Summary of Reviewers' Recommendations

1. Develop a five-year plan for hiring, which can be updated and possibly amended on an annual basis. To maintain the status quo in terms of department size, there should be at least one or two tenure-track hires per year.

   Understanding: The department is committed to developing a five-year hiring plan based on the department's goals, curriculum, enrollments, budget, full-time/part-time faculty ratio, retirements, and other relevant factors.

2. The department has established mathematics education and statistics as priority areas for hiring. Strengthen the department’s profiles in these areas.

   a. The mathematics education appointment would be expected to perform certain programmatic functions that differ from a typical faculty appointment in Mathematics (participate in curriculum development for mathematics teachers, teach courses in the program, advise students in the program, contribute to the smooth administration of the program, publish research in mathematics education, develop a successful record of external grant support.) Develop a memorandum of understanding approved by the candidate, the department, and the administration, laying out the expectations for the candidate and the criteria for promotion and tenure.

   b. Hire a statistician so that the department can mount a more extensive offering of statistics courses. This is another area where there is a shortage of candidates. The department should be flexible in terms of conditions of employment and precise field of research.

   Understanding: In order to attract, hire, and retain strong candidates for permanent faculty positions the department and dean will develop strategies within the parameters of the CSU CFA MOU.

3. Make use of the battery of exams of the Mathematics Diagnostic Testing Program (MDTP) for placing and advising students. The MDTP is supported jointly by CSU and UC. Its exams cover the spectrum from seventh grade pre-algebra readiness to calculus readiness. The packaging of the exam results provides high-quality diagnostic information for students and for mathematics advisors.

   Understanding: The department uses the MDTP for placement in Calculus courses and for MATH 105.

4. Expand effort into increasing the number of mathematics majors.

   Understanding: The department chair is committed to work with the faculty to develop strategies to attract more majors.
5. Make some program adjustments to the Subject Matter Preparation Program proposal recently submitted to the California Commission on Teacher Credentialing (CTC) in order to satisfy the conditions of the CTC review.

Understanding: The completed Subject Matter Preparation program was submitted to CTC in November 2004. If further adjustments are suggested by CTC the department will make adjustments as required.

6. Eliminate the MS Mathematics for Educational Careers track. It is not successful and is unlikely to attract students in the future. Generally speaking, students who receive a master’s degree in mathematics are not interested in teaching in high school but rather in teaching at the community college level or in following other career goals in education.

Understanding: The department plans to modify the program, not eliminate it. The department has submitted a substantial program modification that will make it more attractive to the target population of secondary school teachers.

7. Require letters of recommendation for entering graduate students. GRE scores may also be either suggested or required of applicants to the graduate program.

Understanding: The department agrees and will require letters of recommendation for admission to the graduate program. The department’s graduate committee will continue to discuss the use of GRE scores and other appropriate criteria for admission.

8. Formulate a document that would make department policies and functioning more accessible and more transparent to faculty and administrators. It could also be used for recruiting purposes, and to introduce the department to new faculty members. The department chair has already given some thought to such a document.

Understanding: The department chair has spoken to the faculty about creating a document detailing the department’s policies and function, and they have agreed to do it.

9. Continue steps that are being taken to improve the level of advising, namely, the appointment of an Associate Chair whose portfolio would include undergraduate advising, the standardizing of advising procedures, and the scheduling of occasional meetings of advisors to discuss advising problems and to share information.

Understanding: The department has begun the process of improving advisement and appointing an associate chair to coordinate advisement functions.
10. Allocate appropriate space in a new or existing building for the Mathematics department. Participate actively in the design of any new classrooms and office complexes intended for department use.

**Understanding:** The department chair and faculty are actively involved with space planning projects for the new building.

11. Assessment of the programs is required. The department should have objectives, and student learning outcomes for each option and regularly discuss how their students are achieving the student learning outcomes.

**Understanding:** The department agrees and has taken steps to develop an assessment plan which will include all options and follow the college assessment policy.