DePaul University Academic Program Review

Cycle 5: Spring 2002—Spring 2003

Memorandum of Agreement -- September 2003

Mathematics Department

As a result of the fifth cycle of DePaul University's Academic Program Review Process (Cycle 5), the participants in the process enter into the following agreements. The participants understand that this document will be available to be made public once all the signatures are in place.

University Commitments to Cycle Five Units:

1. Academic and Career Advising:
   a. The University will look into providing institutional assistance for graduate/professional school preparation in terms of publicizing and making certain that standardized test preparation programs are available.
   b. The University will look into implementing advising alerts through Campus Connect that encourage students to contact their advisors prior to enrolling in courses.

2. Diversity:
   Consistent with the University’s mission, DePaul University remains strongly committed to promoting the diversity of faculty, students, and staff. Academic Affairs will support a variety of strategies developed by departments and programs to enhance such diversity.

University Commitments to the Mathematics Department:

1. Faculty Evaluation Guidelines
   The Dean of the College of Liberal Arts and Sciences will provide models of best practices in faculty evaluation of new and existing faculty to the Mathematics Department.

2. PeopleSoft
   The University will continue to respond to PeopleSoft concerns and the Subject Matter Expert (SME) in the College of Liberal Arts and Sciences will continue to be available to assist departments with PeopleSoft issues.

Actions agreed upon for the coming academic year:

1. Curriculum, Assessment, and Related Issues
   a. Service Courses
      The department chair has initiated a dialogue between the Mathematics Department and science departments regarding service courses, primarily the calculus sequences MAT 150-152 and MAT 160-162. The department’s undergraduate committee has followed up by holding several informal meetings with members of the science departments, at which a variety of opinions and requests have been presented. The department will continue this process and with the collaboration of the
sciences systematically identify the specific goals that should be achieved in the introductory calculus sequence. The Mathematics Department will then make appropriate revisions to the calculus sequences with the concrete goals of the sciences in mind, considering special sections for science students if enrollments justify that, and considering the possible benefits of alternative pedagogies as well. The department will also work to develop inter-departmental assessment procedures.

b. Assessment

In accordance with the practices of the University and the Office of Teaching, Learning, and Assessment, the Mathematics Department will develop a systemic assessment plan to assess undergraduate programs and the student learning outcomes in those programs. Currently, the department’s assessment committee is assessing general program effectiveness by working with graduating seniors. The department will also start assessing the first year calculus sequence by using the inter-departmental assessment procedures proposed in the previous item as a starting point.

c. Math/Science Initiatives

The Mathematics Department will continue to work with the science departments on the three initiatives proposed by the National Science and Math steering committee on “advising,” “marketing and retention,” and “program coordination.” The department has representatives in the workgroups and will continue to contribute.

2. Students

a. Benchmarking

The Mathematics Department will examine retention and graduation data and trends against national norms and with special attention to be paid to success rates for minority students. The department will contact OIPR regarding locating data sources and identifying institutions suitable for benchmarking.

b. Outcomes

The department will examine students’ aspirations and outcomes with regard to post-baccalaureate decisions about careers and graduate school. The adequacy of preparation for these career choices will also be examined. Alumni Relations will be contacted in order to obtain contact information for graduates.

3. Enhancing Course Offerings

a. Undergraduate Program

i. To increase enrollments and meet students’ needs, existing undergraduate/graduate programs will be strengthened by making them more flexible. In particular, the Mathematics Department and the Dean of the College of Liberal Arts and Sciences will be open to discussions of introducing special topics classes, if it can be demonstrated that a sufficient number of students are interested in pure math.

ii. The Mathematics Department will make an effort to communicate with the science departments, College of Commerce, and CTI to advertise upper level math classes and hence to increase the enrollments and frequency of such courses.
b. Graduate Program

i. Applied Statistics Program

1. The program will work toward the incorporation of technology into the curriculum to train students on computational software used in industry.

2. The Applied Statistics Program will build a closer relationship with the insurance industry. Proposed activities include:
   i. Invite industry speakers to enhance course content. In particular, as a resource for teaching industry practices not currently in textbooks.
   ii. Establish a cooperative relationship with one or several insurance companies that will enable students to earn academic credit (subject to certain ground rules) from DePaul while working (and receiving compensation) for one or two quarters. Then determine if this project could integrate scholarship programs with built in minority applicant components.
   iii. Finally, if the actuarial program is modified in the ways suggested above, the department will consider a "visiting committee" composed of private sector actuaries to advise on curriculum and market practice.

ii. M.A.M.Ed. Program

1. The Mathematics Department will continue to offer 14 courses per year as it is currently doing, on an experimental basis, during the 2002-2003 academic year. (For Rationale, see department’s Self-Study)

2. The Mathematics Department will prepare a proposal for the AVP for Academic Affairs to present to the Associate Deans regarding the manner in which GPAs are calculated when a graduate student repeats a course. The proposal will suggest that only the last grade from a repeated course be used in calculating graduate GPAs. Within the proposal the department will document the degree to which a problem exists with students being unable to obtain a cumulative GPA of 2.5 due to repeated poor grades in courses that are eventually completed at satisfactory levels. The department will also examine the course(s) in which this occurs and determine if there are undergraduate courses that can be taken as prerequisites to prepare students for the graduate level courses without affecting their graduate GPAs.

4. Faculty

   a. Teaching Credit/Contact Hour Issues

   At present, the Mathematics Department finds that instructors of sequences MAT 147-149 do not obtain credit for all contact hours, which creates staffing difficulties. The department, through its chair, and the Dean of the College of Liberal Arts and Sciences will have conversations intended to resolve this issue in a manner consistent with resolutions arrived at for other departments.
b. Formalize Guidelines for Faculty Evaluations

The draft of guidelines for annual faculty evaluation created by the department’s Faculty Standards Committee will be discussed within the department and put into place when the guidelines are settled upon.

5. PeopleSoft Concerns

a. The department will continue to work with PeopleSoft administrators and the SME for the College of Liberal Arts and Sciences to improve faculty knowledge of and also the process of tracking students. Better tracking of students will facilitate the advising of majors, recruitment, and potentially some aspects of assessment. Specific Issues are:
   i. Accessing rosters of majors.
   ii. Tracking minors.
   iii. Faculty access to students’ course history and information about their majors and minors.
   iv. Prerequisite checking.

6. Issues Noted for Further Attention

a. Part-Time to Full-Time Faculty Ratio

The Mathematics Department and the Dean of the College of Liberal Arts and Sciences will discuss a DePaul specific ratio of part-time to full-time faculty and benchmark department information against other schools’ mathematics departments, controlling for the assignment of faculty to different level courses.

b. Associate Chair

The department and the Dean of the College of Liberal Arts and Sciences will continue discussions about how to address certain administrative demands now resting largely on the chair, an issue the department has suggested solving by the creation of an associate chair position, combining the duties of the BMS coordinator and undergraduate program coordinator plus some additional duties now carried by the department chair. A two-course load reduction for this position has been suggested by the department.

c. Development of a Departmental Strategic Plan

The department will discuss the possible need for a strategic plan and, if needed, will begin devising such a plan.

d. Pure Math Graduate Program Proposal

The Mathematics Department will make a proposal to the Dean of the College of Liberal Arts and Sciences for the creation of a pure math graduate program. The department feels that with increasing enrollments in its undergraduate program, it is possible that demand is sufficiently high to support such a program. Additionally, the existence of a pure math graduate program may attract students to the departments’ undergraduate program.
Signed:

_____________________________  _____________________________  
Chair of Unit Review Committee    Department Chair/Program Director

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APRC Subcommittee    Chair of APRC

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Dean of the College

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Associate V.P. for Academic Affairs    Executive V.P. for Academic Affairs