

EXECUTIVE SUMMARY
Academic Program Review
Mathematics

1. How did the external review committee rate the quality of the program- excellent, very good, good, adequate, or poor? How does the program compare with benchmark top-tier programs nationally? Please provide a brief rationale for the external review committee's rating.

The external reviewers, in sum, gave the department a VERY GOOD rating. It would be difficult to compare the Mathematics Department to top-tier programs because of the severe impediments they see for this department. These will be delineated below, with other details.

2. What are the most important general issues that emerged from the external review process?

- a. *Facilities*

There is currently inadequate space for faculty and for faculty-student meetings. The reviewers believed that the faculty offices in Mathematics were so small as to be factually inadequate; in many cases, the spaces are too small to accommodate even one student visitor.

- b. *Service courses*

The reviewers were astounded by the service teaching load of Mathematics (approximately 85% of their total offerings, according to the review). They believe the department is underappreciated on this front.

- c. *Full-time Faculty*

The reviewers repeatedly state that the Department should hire two new tenure track positions to replace the part-time staffing that the department habitually employs. They believe this would bolster the department's curricular offerings and be just compensation for the service courses delivered.

3. What specific recommendations for improving the program's quality has the external review committee made to the Dean? (Please number each recommendation and ensure that the scope of each recommendation is clear when multiple curricula are covered in the report).

- a. *Enrollments*

The reviewers believe that enhancing both faculty and space in Mathematics would improve the enrollments. Overall, the reviewers believe there are a reasonable number of majors in the Dept., but they would like to see more.

- b. *Facilities*

- Must augment faculty closets/offices.
- Should provide adequate space for the department's successful weekly socials (teas).
- Should provide adequate space

c. *Curriculum*

- The reviewers believe that, overall, the department provides a good curriculum, considering their various external constraints.
- Reviewers are led to believe that instructor-to-instructor variation is so great as to be a problem.
- They also recommend additional upper-division electives, but only if the hiring recommendations are followed.

d. *Faculty*

- The reviewers strongly recommend two new tenure-track positions for the department. This would acknowledge their service course load, improve the curriculum, and decrease dependence on part-time instructors.

e. *Teaching workload*

- As noted earlier, the principle point in this area is that 85% of the courses delivered are in service of other programs. They believe this is too high.

4. In the opinion of the external review committee is the program following the University's strategic initiatives in that it is:

- a. Recruiting and retaining a diverse faculty of outstanding teachers and scholars.
 - The reviewers specifically mention (on multiple occasions) the incredibly impressive caliber of the most recent hires.
 - The department has "many excellent teachers," and the reviewers note some instances of faculty research of software development.
 - The reviewers note that "the students consider themselves lucky" to have "such dedicated and accessible faculty" in the department.
 - The department would benefit from hiring more women faculty.
- b. Enrolling, supporting and graduating a diverse student body that demonstrates high academic achievement, strong leadership capabilities, a concern for others, and a sense of responsibility for the weak and vulnerable.
 - The reviewers cite the incredibly positive sense of community created within the department's group of majors.
 - Given the enormous load of service courses delivered by the department, the reviewers felt that a concern for others was implicit.
 - The department encourages leadership and concern for others by having their majors participate in the Bay Area Mathematics competition.
- c. Providing the environment necessary to promote student learning in the program.
 - The department has done an exemplary job of creating a positive learning environment for students. The reviewers were perhaps most impressed with the enthusiasm of the majors for the department and the outstanding faculty efforts that have achieved such an atmosphere.

5. **In what way is the program contributing to the goal of making the University of San Francisco a premier Jesuit Catholic urban university with a global perspective that educates leaders who will fashion a more humane and just world?**
 - a. Service dedication as a department, to nearly the entire university, is astounding to the external reviewers.
 - b. Dedicated teaching and student interaction, despite substandard facilities.
 - c. Outreach and Community Impact: The department routinely hosts a Bay Area mathematics competition (BAMM) for area high-school students.

6. **What is the timetable for the response to the external review committee's recommendations for program improvement? What can the AVP's office do to appropriately respond to the review?**
 - a. Faculty: The reviewers strongly recommend hiring two new tenure-track faculty in the department.
 - b. Space: could be resolved, at least partially, in Summer '05, but a new science center will be needed to fully comply.
 - c. Retreat

7. **What general comments or issues, if any, are crucial to understanding the reviewers' report?**
 - a. It would be unfair to evaluate this department separate from their currently inadequate facilities and their large burden of service courses.