

Internal Academic Review 2008-2009

Department of Mathematics and Statistics Internal Academic Review Committee Report to Senate

The Internal Academic Review (IAR) of the Department of Mathematics and Statistics is now complete. The Internal Academic Review Committee (IARC) has taken into consideration all of the submissions related to the IAR of the Department of Mathematics and Statistics and respectfully submits the following report. The IARC Report to Senate is intended to supplement the findings of the attached Review Team Report and to provide a mechanism for the Head of the Department of Mathematics and Statistics and the Associate Dean of the Faculty of Arts and Science to jointly report on the progress in addressing the Review Team recommendations (please see the “Outcomes” section of this report).

Summary of the Internal Academic Review of the Department of Mathematics and Statistics

The IARC acknowledges the Department of Mathematics and Statistics for its high quality undergraduate teaching, strong research activity, exemplary commitment to service teaching and success in hiring high quality new faculty members. The IARC also recognizes the Department for its exemplary leadership in revamping its undergraduate curriculum so that larger classes can be taught efficiently and effectively.

The IARC recognizes that the Department of Mathematics and Statistics has made a number of exceptional hires recently but these have not kept pace with retirements and other resignations. This situation is further complicated by the potential of an additional eight faculty members who will reach normal retirement age within the next three years. The IARC encourages the Department to create a succession plan to address this immediate challenge. In this financial environment it is unlikely that succession planning will involve full replacement.

The IARC joins the External Consultants in their concerns about the appropriateness and sustainability of postdoctoral fellows teaching classes as large as 300 students. This heavy load may not be in the best interest of the fellows, whose main focus should be on their research during their time at Queen’s University.

The IARC agrees with the reviewers’ comments that the foundation of the Department of Mathematics and Statistics is strong in the areas of teaching and research. The IARC fully supports the Department in its efforts to remain competitive and successful while addressing the recommendations of the IAR Reports including the urgent need to find a balance between departmental activities and optimizing its faculty complement and contributions.

Outcomes of the Internal Academic Review of the Department of Mathematics and Statistics

*Joint response submitted by the
Dean of Arts & Science and
the Head of the Department of Mathematics and Statistics*

The Department of Mathematics and Statistics and the Faculty of Arts and Science are pleased to see the Department complimented for its many successes. Both the Department and the Faculty are committed to exploring mechanisms that will allow for continued excellence in teaching, research and service under the current constrained budget conditions.

The Faculty of Arts and Science recognizes the importance of working with the Department to ensure it can fulfill its obligations to provide teaching for its honours undergraduate program and its graduate program while simultaneously providing service teaching to students in the Faculty of Applied Science and Engineering in addition to students in the Faculty of Arts and Science. The Department is moving towards a sustainable teaching plan on multiple fronts.

In terms of capacity, the Department has made several research appointments and several primarily teaching appointments over the last few years. We acknowledge the vulnerability of the Department in terms of its upcoming retirement profile. We are pleased that a number of key faculty members who carry heavy teaching loads have developed transition plans that improve short term predictability around teaching. The Department will carefully examine externally funded hiring opportunities that might provide additional teaching capacity. The Faculty commits to supporting the Department in its efforts to increase its core faculty complement by facilitating applications for external salary support or, when the university budget situation eventually becomes more favourable, by considering additional hiring.

In the meantime, the Department of Mathematics and Statistics is actively exploring creative ways of managing the overall teaching load for its professors. Curriculum is being reviewed to determine whether its undergraduate and graduate programs and courses can be amalgamated, streamlined or otherwise optimized. At the undergraduate level, the Department is actively engaged in experimenting with the virtualization of certain large courses and with replacing traditional lecture time with student centered educational experiences that can be managed by graduate students and post-doctoral fellows. The Department is mindful of the importance of ensuring that less experienced instructors, including post-doctoral fellows, are mentored and assigned to teaching duties appropriate to their experience.

Part of the Department of Mathematics and Statistics' effort to manage the teaching plan is in direct support of continued excellence in research. The Department wishes to protect the research time for its research intensive faculty. The Faculty of Arts and Science supports the Department's commitment to maintaining a balance between the twin pillars of teaching and research.