

Mathematics/Mathématiques, BA and IBA, Glendon

Cyclical Program Review – 2006 - 2014

Final Assessment Report and Implementation Plan

Reported to Joint-Committee on Quality Assurance: October 2015

Program description:

The Mathematics BA and IBA options at Glendon include Specialized Honours, Honours, Bachelor (BA only) and an Honours minor option. Mathematics may also form part of a double major. The first year core courses are offered in French and in English each year. The mathematics program offers courses that are an important support for Glendon’s other programs and is one of the teachable subject options for students pursuing the BEd.

Program	Accepts 2014	Enrolment FTEs 2014	Degrees awarded 2014
BA Hons	2	20	

Reviewers appointed by Vice Provost Academic:

Yvan Saint-Aubin, Professor, Département de mathématiques et de statistique, Université de Montréal
 Peter Taylor, Professor, Department of Mathematics and Statistics, Queen’s University
 Paula Wilson, Undergraduate Program Director & Senior Lecturer, Department of Biology, York University

Site Visit: March 19, 20, 2015

The reviewers spent two days at York University where they met with key administrative personnel, including the Vice-Provost Academic. On the Keele campus the reviewers met with Associate Deans from the Faculty of Science, the Chair of the Department, the Undergraduate Program Director and coordinators for Mathematics for Education, Pure Mathematics and for Statistics. In addition they met with the Faculty of Education Coordinator for Mathematics as a teachable subject and the Science Librarian. There were opportunities to meet with faculty members and groups of students. At the Glendon campus on March 20th, the reviewers met with the Vice-Principal Academic the Chair of the Department. Lunch was held with students from the Glendon Mathematics program.

Outcome: The Joint-Committee on Quality Assurance concluded that the Decanal response adequately addressed the review recommendations. Progress on the recommendations will be included in the Follow-up Report due February 2017.

Program Strengths:

- The program level expectations are clearly laid out and include some “emerging competencies” that focus on the ability to apply mathematics to real world problems
- Students clearly appreciate the small class size at Glendon and the ability for interactive discussions with faculty members.
 - The program has developed courses at upper levels to support Economics program requirements as well as a course that supports both majors and students in the Concurrent B. Ed (French Immersion) program.



Opportunities for Program improvement (selected from self-study and reviewers' report):

- While classical teaching methods are effective, Glendon seems to be ideal for project based learning which will readily support the “real world problem” approach and build practical collaboration and team work skills.
- The 3000 and 4000 level courses are well chosen but do not prepare students for further studies in mathematics.
- Although the department has been creative in ensuring necessary courses are offered at Glendon and facilitates students taking courses at the Keele campus, the current program is not sustainable with the current faculty complement.
- Several options for realignment of the program could be considered but each presents its own challenges for the depth and breadth of offerings and for the capacity of the unit to advance professors' scholarly careers in mathematics.

Principal's Implementation Plan (selected)

The program response to the review report provided detailed discussion of various options that demonstrates a solid understanding of the context and the implications of the various options. Principal's Implementation Plan focusses primarily on the sustainability of the Mathematics program at Glendon. Because of the complementarity with other programs at Glendon, such as the new BSc in Biology, closure of the program is not being contemplated. The administrative merging of the Mathematics Department with the Economics Department at Glendon is anticipated in 2016. The Principal's Implementation Plan also notes that there is an option for some introductory mathematics to be taught by new hires in other programs. Glendon will work with the Keele Mathematics program to ensure clarity around courses at Keele that can count towards the Glendon degree. A Mathematics preparatory “camp” offering foundation tutorials for new students is being explored for 2016/2017.

An update on the action items of the Mathematics program implementation plan will be provided in the March 2017 follow-up report.

Alice J Pitt, Vice-Provost Academic
November 2015

