
Final Assessment Report: External Program Review – Mathematics
Academic Planning and Priorities Committee of Senate – June 2014
Algoma University

Algoma University's Institutional Quality Assurance Process [IQAP] on Program Reviews requires an objective, comprehensive, and constructive evaluation of all academic programs. The central objective of program review is to assess how current offerings could better serve students (within the available resources), and provide specific recommendations for improving program quality.

The Department of Mathematics and Computer Science delivers three mathematics programs: (i) Bachelor of Arts (General)- Mathematics, (ii) Bachelor of Science (General) - Mathematics, and (iii) Minor in Mathematics.

The strengths of the program include: course offerings consistent with accepted peer-standards, small class sizes that allow extensive interaction between students and faculty, an engaging student classroom experience, and suitably-qualified faculty.

Within the context of the external review of these programs, the Academic Planning and Priorities Committee (AppCom) of Senate has reviewed the program self-study, the External Review Committee (ERC) Report, the Program Response to the ERC Report and the Decanal Response to all the materials above. In its synthesis, review and response to these materials, AppCom is called upon to identify opportunities for program improvement and enhancement. As such, the Committee recommends the following actions for implementation:

Recommendation #1 – Program and Course Revisions

- a. the addition of 4000-level calculus course;
- b. the addition of 4000-level Special Topics II course;
- c. the addition of 3000-level (Partial) Differential Equations course;
- d. the substitution of the CHMI requirement, with a general science elective;
- e. the reduction of the grade weighting on attendance and assignments and the enhancement of weighting on assessment of subject-mastery;
- f. the enhancement of 1000- and 2000-level grading standards to align with normative grading standards in MATH programs.

Recommendation #2 – Program Development Advisory Committee

In consideration of the department commitment to *“create synergies with other departments to help strengthen their offerings, improve their enrollments, and grow their program so that, ultimately, they can offer a 4-year degree”* – it is recommended that the department initiate a

MATH Program Development Advisory Committee (PDAC). This Committee would be comprised of faculty members internal to the University, with the objective of (a) identifying the skills and knowledge that students require to meet the needs of those programs, (b) advising on the currency & relevance of curriculum and course materials, and (c) ensuring that course-level outcomes meet standards of cognate programs. These objectives would enhance course- and program- appeal, as well as provide the basis for program development of a four-year (Honours) MATH program [B.Sc. or B.A.].

Recommendation #3 – Resourcing

That the Academic Administration adequately resource and support the mathematics programs to ensure academic integrity, quality and opportunity – all of which will enhance program appeal and growth – by

- a. considering a joint-appointment with cognate programs to strengthen MATH course delivery,
- b. ensuring the appropriate scheduling and staffing of all 1000-level MATH courses that are nominally slated for tutorial offerings;
- c. allocating academic-support space for the MATH Lab, a support that services the numeracy needs across a number of academic programmes;
- d. engaging the MATH faculty in community outreach (high school and indigenous student recruitment)

The Committee recommends that, within one month, the Department prepare a work plan based on the aforementioned recommended actions for implementation. This work plan will be assessed by the Committee, and approved. The Department shall prepare a report of the status of the agreed implementation plan eighteen months following completion of the review. This report shall be submitted to the Committee for follow-up.

Respectfully submitted:

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