FINAL ASSESSMENT REPORT

Institutional Quality Assurance Program (IQAP) Review

Economics Program (Undergraduate)

Date of Review: March 20 – 21, 2017

In accordance with the University Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external evaluation and the internal response and assessments of the **undergraduate Economics** program delivered by the Department of Economics. This report identifies the significant strengths of the programs, together with opportunities for program improvement and enhancement, and it sets out and prioritizes the recommendations that have been selected for implementation.

The report includes an Implementation Plan that identifies who will be responsible for approving the recommendations set out in the Final Assessment Report; who will be responsible for providing any resources entailed by those recommendations; any changes in organization, policy or governance that will be necessary to meet the recommendations and who will be responsible for acting on those recommendations; and timelines for acting on and monitoring the implementation of those recommendations.

Executive Summary of the Cyclical Program Review of the Undergraduate Economics Program

In accordance with the Institutional Quality Assurance Process (IQAP), the department of Economics submitted a self-study in January 2017 to the Associate Vice-President, Faculty to initiate the cyclical program review of its undergraduate programs. The approved self-study presented program descriptions, learning outcomes, and analyses of data provided by the Office of Institutional Research and Analysis. Appendices to the self-study contained all course outlines associated with the program and the CVs for each full-time member in the department.

Two arm's length external reviewers from Ontario and one internal reviewer were endorsed by the Dean, Faculty of Social Sciences, and selected by the Associate Vice-President, Faculty. The review team reviewed the self-study documentation and then conducted a site visit to McMaster University on March 20 - 21, 2017. The visit included interviews with the Provost and Vice-President (Academic); Associate Vice-President, Faculty, Chair of the Department of Economics and meetings with groups of current undergraduate students, full-time faculty and support staff.

The Chair of the department and the Dean of the Faculty of Social Sciences submitted responses to the Reviewers' Report (June 2017). Specific recommendations were discussed and clarifications and corrections were presented. Follow-up actions and timelines were included.

Strengths

In their report (April 2017), the Review Team acknowledged the program's "excellent reputation in Canada and internationally". The Review Team's report also recognized the balancing act between serving a huge number of level 1-2 students from across the University and providing a strong two-track Honours and Specialist Honours program to the majors. Several strengths of the program were highlighted in the report:

- Excellent reputation in Canada and internationally
- · Highly qualified and productive faculty and staff
- Large service teaching, good accessibility
- Wide variety of specialized courses in upper years
- Streaming in Honours to prepare students both for graduate school in economics and other options post degree (e.g. employment, other graduate programs)
- Alignment with FWI and University objectives
- Efficient and collegial department administration and staff provide a "great teaching and learning experience"

Areas of Improvement

The Review Team's report identified the following areas for improvement:

- In-program Math requirements
- Admission requirements and procedures for Honours (specifically with regard to Math)
- Expansion of Honours Econometrics requirements
- Introduction of mandatory Communications course (2nd year)
- Coordination of sections in multiple-section courses and coordination of grades in related courses

The Dean of the Faculty of Social Sciences, in consultation with the Chair of the department shall be responsible for monitoring the recommendations implementation plan. The details of the progress made will be presented in the progress report and filed in the Vice-Provost, Faculty's office.

Summary of the Reviewers' Recommendations with the Department's and Dean's Responses

Recommendation	Proposed Follow-Up	Responsibility for Leading Follow-Up	Timeline for Addressing Recommendation
The Department and Faculty should consider options for softening the GPA requirements	The department currently has in place a mechanism for informal assessment of students who lie marginally below the Faculty of Social Sciences (FSS) cut-off for admission to Honours. The UG Chair reviews their grades and based on performance in six key	Undergraduate Chair	Next 3 years for tracking follow-up
for transfer students who have difficulty getting into the Honours program due to low first-year grades	Economics courses, determines whether they are a good prospect despite an overall GPA that is below the usual cut-off. We will review whether this process is working well by follow-up on the subsequent performance of the students who have been affected by the policy.		
Grade 12 Calculus should be made an admission requirement for each undergraduate Economics program. Students who do not have that credit should be allowed to satisfy the requirement by taking the university's high school equivalent Math course in the first term of their second year	The department is considering three responses to this recommendation. First, it could require that Grade 12 Calculus be completed by the end of second year, probably by students taking a McMaster Math course (1F03) that is equivalent. Second, there are close relationships between calculus and marginal analysis in economics. With fairly modest resources, the department could offer an "Introduction to Calculus Applications in Economics" course that could introduce the basics of calculus with examples tailored to the specific learning objectives of our students. Third, it is also investigating the option of Direct Admission into Economics, rather than through first year admission to the FSS. With Direct Admission, the requirement could be implemented at the high school level.	Undergraduate Chair	Next year for the first change and then ongoing for resource intensive second change. Next 3 years for Direct Admission discussion and possible implementation
The in-program Math requirement in the two Honours streams should be strengthened to require at least 3 further units of Math at	The department is considering adding Econ 3G03 to the requirements for the Specialist stream of Honours. It is also investigating other potential Math courses that could be added to requirements. The first best option would be to expand our in-house offerings in introductory mathematical economics and require something like 3G03 for all Honours, given sufficient	Undergraduate Chair	Next 2 years

university level	resources. We could do this and also add 3G03 to the Specialist		
	requirements.		
Econometrics I (3U03)	The department is first exploring the option of making Econ 4G03	Departmental Chair	Next 2 years, although
and Applied	(Econometrics II) a requirement for all these students. Second,	and Undergraduate	possibly longer if new
Econometrics (3WW3)	to offer 6 units of Econometrics for all Honours students, the	Chair	resources are available
should both be required	department would require additional resources to teach more		and the
courses in the two	sections of 3U03. Third, a related issue of heterogeneitity of		recommendation to
Honours streams.	student preparation in 3WW3 could be addressed by offering		expand to 6 units is
Econometrics I should	2B03 in both terms (i.e., an additional section) and requiring that		implemented for all
be a pre-requisite for	all Honours take 2B03 (and not SocSci 2J03). This would require		Honours
Applied Econometrics	a modest amount of teaching resources. In an ideal world, we		
	would undertake all three responses.		
The department should	The challenge of offering a required Communications course is	Undergraduate Chair	Next 3 years, depending
consider mounting a	one the department is keen to undertake. It fits with current		on resource availability
required	University initiatives (e.g., the Programming in the Arts & Science		and hiring priorities
Communications course	Faculties (PASF) Report) and has considerable support within the		within FSS.
in second year of all	Department. There is strong sentiment for Economics-related		
Economics programs.	writing, rather than a general Faculty (or Faculties) wide offering.		
Students should be	This would require 4 or 5 additional classes (class size 20 – 25) for		
taught both oral	intensive writing and communication training and could possibly		
communication and	be framed within the department as part of the 2D03 Economic		
writing skills in this	Issues offering. Since existing resources are already stretched to		
course	the limit and since such a major new initiative would not be		
	appropriate for Sessionals and/or PhD Students, an adequate		
	response would need new teaching resources over the long-		
	term.		
The Department should	As implied by the report, there is already some informal	Undergraduate Chair	Immediate, effective
devise formal methods	coordination in a number of multi-sectioned courses. As the	and Chair	Fall 2017
to ensure that a	report proposes, the department will move to more formal		
common set of core	coordination. As an immediate first step, the Chair, in		
topics are taught at an	collaboration with the UG Chair, will ask the most senior		
appropriate level in all	instructor (or the closest full-time faculty member) to serve as		
sections of multi-	coordinator for each such course. The main tasks will be to		

section courses. There should be more coordination amongst instructors of different sections of core courses. One approach is to assign one of them to be a course coordinator. Where possible, the coordinator should be a permanent (tenured/tenure-track or teaching stream) faculty member	ensure common core topics, investigate the possibility of some overlap of testing materials and usually to coordinate standardization of textbook choices. While particularly important for multiple sections offered in the same term, we propose to extend this approach to all sections of the same course offered during the academic year, including Spring/Summer offerings. Even year on year, there should be at most a slow evolution in most course offerings so that completion of a particular course has the same meaning for most students in the program at any given time.		
An effort should be made to keep grade distributions of related sections of courses from becoming excessively different from one another. While for small courses, this may be possible, for large courses with similar students there is no reason to expect them to diverge significantly	The department agrees that grade distributions should not be excessively different within courses at the same level $(1-4)$. It will strengthen existing measures to improve outcomes in such cases. There is currently a policy in place that publishes (to all instructors) grade distributions for the preceding academic year by level. The Chair and UG Chair will further monitor submitted grade distributions prior to approval and, when necessary, meet with individual instructors to discuss reasons for any grade distributions that depart significantly from the norms	Undergraduate Chair	Immediate, effective Fall 2017
All Honours students should have tutorials in one level 3	The department already offers tutorials in all level 3 Econometrics courses		

Dean's Response:

The reviewers emphasized that the program has an excellent reputation nationally and internationally and that it provides students with an excellent teaching and learning experience. The report also emphasized that the program faces challenges teaching large numbers of first and second year students from outside its program while simultaneously meeting the needs of program students majoring in economics. It endorsed the department's recently adopted two-stream approach within the Honours program that allows greater customization to address the distinct needs of those students planning to pursue graduate study in economics or a related field and those seeking employment directly after completion of their degree. The reviewers provided a number of concrete recommendations to further improve the program, most of which are consistent with changes already underway within the program.

The ideas embodied in some of the recommendations are already in place in some form (e.g., softening GPA requirements for promising transfer students with low first-year grades outside economics, tutorials in third-year econometrics), though perhaps they are not as explicitly developed as they can be. A number of the recommendations have no meaningful resource requirements (e.g. common set of core topics in multi-section courses, more coordination among instructors in core courses, ensuring greater consistency in grade distributions among multi-section and/or related courses), and the department indicates in its response that it is moving quickly to implement these recommendations for the coming academic year.

Implementation of a number of recommendations; however, require resources and/or working with the Faculty to change policies/regulations within its undergraduate program. The department's undergraduate program resource requirements are distinct within the FSS given the large amount of out-of-faculty teaching performed by the department. Resource challenges are particularly acute at the moment because of an unusually large number of recent retirements and resignations, some planned but others unexpected. The FSS has worked with the department to address these challenges through new hires in each of the last two years and further hires planned for the coming year (2017-18). These efforts, however, do not fully address the resource challenges and the FSS will continue to work with the department on these issues within the context of the FSS's own resource constraints.

For each of the recommendations that would create resource demands or require changes to program policies (e.g. Grade 12 calculus program requirement; requirement of 3 additional units of math for honours students; additional econometrics requirement for honours students; a new required communications course), the departmental response offers multiple options to address the underlying issue raised by the reviewers, options that have graduated requirements for resources or policy changes (in each case, the first best option is most resource intensive but it is possible to make some progress without large resource investments). The

Dean's office will work with the department to assess how best to use existing and available new resources to achieve the underlying program improvement prompting the recommendations.

Quite apart from any resource requirements, this set of recommendations raises a few issues for the program and other changes to undergraduate programs. First, full implementation would create 9 new units of required courses within the honours program. This is a non-trivial change to the undergraduate program requirements whose implications have to be carefully assessed. Second, the overall direction of the recommendations is to increase prerequisites, which is in tension with the overall thrust of the Warner and PASF reports, which strive to create greater flexibility. The recommendations, however, do reflect the evolution of the discipline and the expectations certainly at least for students continuing on to graduate school. The department will want to continue to assess the differing needs and goals of the students in the two streams of its honours' program. Finally, the recommendation for a required communications course is consistent with the recommendations of the PASF report, though the IQAP reviewers stress the need for a course specifically about writing economics. This reflects a broader theme of ensuring that students gain greater writing abilities in the context of their specific areas of study.

Quality Assurance Committee Recommendation

McMaster's Quality Assurance Committee (QAC) reviewed the above documentation and the committee recommends that the program should follow the regular course of action with an 18-month progress report and a subsequent full external cyclical review to be conducted no later than 8 years after the start of the last review.