

# Economics

## Graduate and Undergraduate Review

### Year 1 (April 2017) - FAR Implementation Report

(Reviewed 2015-16)

#### Recommendation #1

Add a second math admission requirement. One option is to add Data Management at 60. Another option is to require any two of (Functions, Vectors and Calculus and Data management) at 60 and 65.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be not accepted for the reasons stated by the Department. The Committee understands this recommendation as an attempt to address the issue of attrition from first to second year. ARC expects that the Department will consider attrition in the context of a larger discussion about progression, retention and curriculum.

The Committee believes that recommendations 1 through 4 point to the need to utilize the curriculum map and consider changes to the undergraduate program to ensure that course content and delivery are addressing the course-level and program-level outcomes. The Committee encourages the Department to undertake an ongoing process of curriculum review and revision.

#### Implementation Plan

Recommendation not accepted.

#### 2017 Comments

The department takes the issues of progression, retention and curriculum seriously. See the Actions for Recommendations 2, 3, and 4. In addition, to address concerns the department has:

- implemented a new BA with Major in Economics program (starting Spring 2017)
- changed the prerequisite to a required third year theory course (ECON 3P22) (starting Spring 2017)
- started discussions about implementing a new BBE with major program

As for ongoing curriculum review and revision the micro, macro, and econometrics curriculum groups and the department UPC/Curriculum committee will continue to meet to review and revise the curriculum. The next round of meetings are scheduled for late April 2017.

#### Recommendation #2

Consult with instructors teaching marketing courses to determine which topics (e.g. mergers, vertical restraints) might be useful to cover in ECON 3P06.

### ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation. ARC expects that the Department will consider topics in ECON 3P06 in the context of a larger discussion about curriculum. Please see also recommendation #1 with respect to curriculum review.

### Implementation Plan (1<sup>st</sup> Priority)

Responsible for approving: Department  
Responsible for resources: Department  
Responsible for implementation: Department  
Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions	Respon- sibility	Year One	Year Two	Year Three
On Target (T), On Hold (H), Delayed (D), Complete (C)				
Action #1 Consult with the Chair of Marketing, International Business, and Strategy Department in the Goodman school of Business	Instructor of 3P06	H		

### 2017 Comments

The Department started its consultation with the Chair of Marketing, International Business, and Strategy Department in the Goodman school of Business in September of 2016. Emails and course outlines for MKTG 2P51, MKTG 2P52 and ECON 3P06 were exchanged. Unfortunately, the regular instructor of ECON 3P06 had to take medical leave in late September 2016, and an interim instructor took her place. The Department expects the regular 3P06 instructor to return in the fall of 2017. So implementation is on hold until then.

### Recommendation #3

Instructors of Mathematics for Economics classes consider striking a balance between emphasis on proofs of mathematical theorems in general vs the working out of illustrative numerical as well as theoretical examples from economic theory where the mathematics being taught is helpful. Content of the Mathematical Economics Courses should focus on the material that will be of direct relevance for the advanced theory and econometrics courses. If possible consider reducing the amount of material to a single 3rd year math econ course. Having said that, the objective should be to prepare the student well for theory and econometrics courses, which should include developing the ability of students to handle proofs and abstract logical reasoning that arise in economics, as well as the ability to employ such methods in their own analytical work.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be in two parts.

- a. The Committee considers the recommendation to strike a balance between the emphasis on mathematical proofs vs illustrative and theoretical examples to be accepted and in the process of implementation. The Committee expects that the Department will address this recommendation in the context of a larger discussion about curriculum. Please see also recommendation #1 with respect to curriculum review.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Review and revise the balance between proofs of mathematical theorems and illustrative examples from economics in Mathematical Economics Classes.	Instructors of Mathematical Economics	C		

**2017 Comments**

The instructors of Mathematical Economics classes reviewed their course content in the summer of 2016 and have implemented changes. For example:

- Discussion and derivation of proofs regarding the closure of sets have been eliminated (though they still appear in the notes for reference). They have been replaced with a numerical example of why the budget set is convex and why it may not be.
- Almost all discussions and formal derivations of results pertaining to matrices as linear transformations have been eliminated. Instead, a basic, general picture of what occurs with matrix multiplication is presented.

The instructors of Mathematical Economics will continue to review the curriculum in the Math Econ courses regularly (as per the ARC disposition of Recommendation #1) and ensure an appropriate balance between proofs and illustrative examples.

- b. The Committee considers the recommendation to reduce the amount of materials in Mathematical Economics Courses to a single 3<sup>rd</sup> year math econ course to be not accepted for the reasons stated by the Department.

**Implementation Plan**

Recommendation not accepted.

## Recommendation 4

Instructors of Econometrics classes consider reducing emphasis on pure econometric theoretical material and proofs of formulae and theorems and introduce a heavier component of applications of econometric methods to statistical studies undertaken as part of projects and applications.

### ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation. The Committee expects that the Department will review this recommendation in the context of a larger discussion about curriculum. Please see also recommendation #1 with respect to curriculum review.

### Implementation Plan (1<sup>st</sup> Priority)

Responsible for approving:	Department
Responsible for resources:	Department
Responsible for implementation:	Department
Timeline:	Dean of Social Sciences to report by the end of academic year 2016/17

Actions	Respon- sibility	Year One	Year Two	Year Three
On Target (T), On Hold (H), Delayed (D), Complete (C)				
Action #1 Review and revise the balance between theory/proofs and applications (especially through projects and applications) in the Econometrics Classes.	Instructors of Econometrics classes	C		

### 2017 Comments

The instructors of the Econometrics classes reviewed their course content and evaluation methods and have implemented changes. For example, as of the Winter of 2017:

- ECON 2P90 has no required proofs and assignments comprise 20% of the final grade
- ECON 3P90 includes only two very short formal proofs and assignments comprise 15% of the final grade
- ECON 3P95 includes formal proofs but applied projects (including presentations and participation) comprise 50% of the final grade
- ECON 4P12 includes formal proofs but the assignments and the forecasting project (including presentations and participation) comprise 55% of the final grade
- ECON 5P03 includes proofs (as is appropriate for a graduate level course), but assignments comprise 25% of the final grade.

All undergraduate econometrics courses include a large applied component, and a weekly lab section (where students can work on their assignments) that focuses on applications. The Departmental Econometrics Group will continue to review the curriculum in the econometric courses regularly (as per the ARC disposition of Recommendation #1) and

ensure that the emphasis on applications of econometric methods to statistical studies undertaken as part of projects and applications is maintained.

**Recommendation 5**

In order to improve student performance in the Statistics/ Econometrics sequence offer Math 1P98, Econ2P90 and Econ 3P90 in consecutive terms.

**ARC Disposition of the Recommendation**

ARC considers the recommendation to improve access to these courses to be accepted and in the process of implementation. The Committee acknowledges that the scheduling of MATH courses lies outside the jurisdiction of the Department of Economics, but would encourage a dialogue between the two Departments to explore possibilities.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Offer ECON 2P90 and 3P90 more often	chair	C		
Action #2 Encourage MATH to offer MATH 1P98 more often	chair	C		

**2017 Comments**

The Department has taken steps to improve access to the Statistics/Econometrics sequences of courses. ECON 2P90 and ECON 3P90 are offered in both the Fall and Winter terms of 2016-17 and that will continue in future years. ECON 2P90 is also being offered in the spring term of 2017

The Chair talked to the MATH Department about offering both MATH 1P97 and 1P98 in both the Fall and Winter terms, perhaps through the new on-line versions of those courses.

**Recommendation 6**

In order to improve student performance in the Math sequence offer Econ2P30 and Econ 3Q91 in consecutive terms.

**ARC Disposition of the Recommendation**

ARC considers the recommendation to improve access to these courses to be accepted and in the process of implementation. As with recommendation #5, the Committee would encourage a dialogue with the Mathematics Department to explore synergies.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions	Respon- sibility	Year One	Year Two	Year Three
On Target (T), On Hold (H), Delayed (D), Complete (C)				
Action #1 Offer ECON 2P30 and 3Q91 more often and especially in consecutive terms	chair	C		
Action #2 Encourage MATH to offer MATH 1P97 more often	chair	C		

**2017 Comments**

The Department has taken steps to improve access to the Mathematical Economics sequences of courses. ECON 2P30 and ECON 3Q91 are offered in both the Fall and Winter terms of 2016-17 and that will continue in future years.

The Chair talked to the MATH Department about offering both MATH 1P97 and 1P98 in both the Fall and Winter terms, perhaps through the new on-line versions of those courses.

**Recommendation 7**

In future reviews, the Department should consider incorporating some samples of exams, assignments, quizzes, answer keys, project topics etc., as part of the information package provided on course content within its self-study.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be not accepted as stated. While the Committee does not agree that such material should be included in the Self Study, the Department is encouraged to have such material available for reviewers during future site visits.

**Implementation Plan**

Recommendation not accepted.

**2017 Comments**

The Department will make such materials available in future reviews.

**Recommendation 8**

The Department consider broadening its pool of faculty members from which to draw upon when assigning teaching duties for first year classes.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be accepted and in the process of implementation.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Assign different faculty to teach first year classes	chair	T		

**2017 Comments**

Although the 2017/18 first year course instructors are not currently set, they will be different from previous years. Probationary tenure-track appointments have been made with considerations given to first year teaching abilities.

**Recommendation 9**

The Department try to improve its communication with the library via its liaison to resolve issues which are of importance to the faculty.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be accepted and in the process of implementation. The Committee would encourage the Department Library Representative to annually review library needs and communicate with the Liaison Librarian.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 meet regularly with the Economics librarian.	Department library liaison	C		

**2017 Comments**

The Department Library representative met with librarians in September and December of 2016.

**Recommendation 10**

The Department encourage faculty members to actively bring to the attention of students, in each of their classes, the services offered by library staff which can be useful when conducting research and writing term papers and encourage them to take advantage of these.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be accepted and in the process of implementation. The Committee expects that the Department Library Representative would be involved in encouraging faculty members to bring library services to the attention of students in each of their classes, as part of the annual review of library needs suggested in recommendation #9.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Communicate to faculty the services offered by the librarians	Department library liaison	C		



## 2017 Comments

The Department Library representative communicated with faculty regarding his meetings with librarians and reminded faculty about the library services available to students.

### Recommendation 11

The Department develop a set of tenure guidelines which provide a journal ranking and an expectation of the level of teaching performance and research output required for tenure.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be not accepted as it lies outside the jurisdiction of the Committee and has implications with respect to the Brock University/Faculty Association collective agreement.

#### Implementation Plan

Recommendation not accepted.

### Recommendation 12

Replace both ILTAs when they retire.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be not accepted as it lies outside the jurisdiction of the Committee. ARC expects that the Department will proceed through normal channels of advocacy for ILTA positions.

#### Implementation Plan

Recommendation not accepted.

### Recommendation 13

Continue to be aggressive in pursuing co-op student registrations and in encouraging students to consider switching into co-op in second year.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted. The Department is encouraged to work with the Co-op, Career and Experiential Learning Office with regard to co-op registrations.

#### Implementation Plan (1<sup>st</sup> Priority)

Responsible for approving:	Department
Responsible for resources:	Department
Responsible for implementation:	Department
Timeline:	Dean of Social Sciences to report by the end of academic year 2016/17

Actions On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Promote the Co-op programs and encourage students to enroll into the Co-op programs.	Chair and all instructors	C		

### 2017 Comments

The first year instructors regularly promote the Co-op programs in their classes. The department also co-ordinates with external relations to promote the programs, including attending the job fairs.

### Recommendation 14

Add a BA with Major Non-Honours Economics Program (20 credits, 60% minimum major average) which does not require advanced theory and math econ courses.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted and in the process of implementation. The Committee encourages the Department to submit a request for major modification to introduce this new pathway.

#### Implementation Plan (1<sup>st</sup> Priority)

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Propose a BA with Major Economics Program	Department	C		

### 2017 Comments

The program was proposed and approved in the Fall of 2016 and will commence in the spring of 2017.

### Recommendation 15

Offer more sections of required courses in the undergraduate program. If budget constraints do not allow for more sections to be offered then reduce the number of third year electives (especially ones with enrolments below 50).

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be accepted. The Committee expects that the Department will work with the Dean to determine the underlying data and develop strategies to move forward on this issue.

#### Implementation Plan (2<sup>nd</sup> Priority)

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2017/18

Actions On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Offer more sections of required courses in the undergraduate program	Chair	C		

#### 2017 Comments

For 2016/2017, ECON 4P13, 4P14 3Q91 and 3P95 were offered in both Fall and Winter terms and Econ 3P02 was cancelled. More required courses were offered in Spring (Econ 3P21, 3P22, 2P90 and 2P91). The department will continue to discuss annually with the Dean which sections of required courses will be offered given budget constraints.

### Recommendation 16

Cross list 4th year electives and MBE courses. If cross-listing is not allowed then simply offer the undergraduate and graduate course at the same time taught by the same instructor. This is a costless way of increasing the number of MBE electives.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be not accepted as stated, for the reasons given by the Department. However, the Committee would like to clarify that under existing rules, graduate and undergraduate courses can be taught in conjunction but cannot be cross-listed in the two calendars. A graduate program can allow for this type of course to be accepted towards degree completion. The Department is invited to explore this option as one way to increase the number of MBE electives.

#### Implementation Plan

Recommendation not accepted.

### Recommendation 17

Keep GretL as an introductory software and introduce a second software (e.g. R, Eviews, MatLab, STATA) in upper year courses.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be already accepted and implemented.

#### Implementation Plan

No further action required.

### Recommendation 18

Upgrade the Academic Advisor to an Undergraduate Director who is responsible for advising students, communicating with students about policies and events via a designated web- site, leading curriculum development, taking over the INPE and BBE coordinator roles and making recommendations to the Chair regarding course offerings.

#### ARC Disposition of the Recommendation

ARC considers this recommendation to be not accepted as it would require budgetary resources and therefore lies outside the Committee's jurisdiction. The Committee expects that the Department will proceed through normal channels of advocacy for these resources.

#### Implementation Plan

Recommendation not accepted.

### Recommendation 19

Students be allowed to elect at least one representative, from the student body in each of the programs within the Department, who will be allowed to attend regular Department meetings as voting members, perhaps with the exception of a few select categories of agenda items from which they would be excluded. They should also be considered for membership in some of the standing committees of the Department, especially those which pertain directly to student interests such as program and curriculum matters.

#### ARC Disposition of the Recommendation

ARC considers the recommendation to have student representation in the Department to be accepted. The Committee expects that the Department will consult with the Dean about models in the Faculty of Social Sciences which might be appropriate or modified to meet the needs of Economics.

#### Implementation Plan (2<sup>nd</sup> Priority)

Responsible for approving:	Department
Responsible for resources:	Department
Responsible for implementation:	Department
Timeline:	Dean of Social Sciences to report by the end of academic year 2017/18

Actions  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Ask the Brock Economics Student Association (BESA) to elect representatives from the Economics, Business Economics, and MBE programs to attend department meetings	Chair	T		

### 2017 Comments

The Department is working to develop the procedures that would implement the selection of the student representatives. The Chair met with students in the Brock Economics Student Association (BESA) in the fall and again this term. Under the supervision of the chair, the BESA students are working to write procedures/bylaws for the election of the representatives. The expectation is that the procedures/bylaws would be completed this year and that representatives would be elected in 2017/18.

### Recommendation 20

In future, Departmental Reviews should explicitly solicit student participation in the review process and keep student bodies informed, in a timely manner, of key events pertaining to reviews.

#### ARC Disposition of the Recommendation

ARC considers the recommendation to be accepted. The Committee notes that the IQAP Section 2.7 states that the Self Study shall be prepared "Under the leadership of a Lead Author a committee comprised of faculty, staff and students, in consultation with all faculty, staff and students associated with the program".

#### Implementation Plan (3rd Priority)

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2018/19

Actions  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Continue to follow the IQAP regulations by soliciting student input and keeping students informed of the process.	Department	T		

**2017 Comments**

No actions at this time, as the recommendation pertains to future reviews.

**Recommendation 21**

The Department should consider having a set number of meetings every term with the proviso that if there are not enough agenda items a meeting may be cancelled. Input should be sought from faculty regarding possible agenda items.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be accepted and in the process of implementation.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

<b>Actions</b>  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 After experimenting with a schedule of one meeting per month in the Fall term of 2016, the department and chair have set a schedule of two meetings per term	Chair	C		
Action #2 Solicit members of the department for agenda Items	Chair	C		

**2017 Comments**

After experimenting with a target schedule of one meeting per month in the Fall term of 2016, the department proposed and the chair agreed that two scheduled meetings per term is appropriate. More meetings are held if they are required as has occurred, for example, in the Winter term of 2017 to deal with recruiting.

The chair has asked members of the department for agenda items to be included.

**Recommendation 22**

The Department should consider organizing retreats to have free flowing exchange of ideas in an informal setting about priorities, issues and direction of the Department.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be accepted and in the process of implementation. The Committee believes that the Department is best-positioned to determine strategies to move forward with this recommendation.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Organize a department retreat in 2016/17, and plan for more retreats in future years	Chair	T		

**2017 Comments**

The Chair (and his designates) are planning to organize a retreat in late April.

**Recommendation 23**

In future unit reviews, the Department should consider striking a small committee to spear head its effort to produce a self-study and involve the entire department when assimilating input for the draft self-study and bring the draft for further consideration by the department as a whole prior to the adoption of the final version.

**ARC Disposition of the Recommendation**

ARC considers this recommendation to be accepted. Please see also the ARC response to recommendation #20.

**Implementation Plan (1<sup>st</sup> Priority)**

Responsible for approving: Department  
 Responsible for resources: Department  
 Responsible for implementation: Department  
 Timeline: Dean of Social Sciences to report by the end of academic year 2016/17

Actions  On Target (T), On Hold (H), Delayed (D), Complete (C)	Respon- sibility	Year One	Year Two	Year Three
Action #1 Continue to follow the IQAP regulations by involving the whole department and submitting the draft self study for further consideration prior to adopting the final version.	Department	T		

**2017 Comments**

No actions at this time, as the recommendation pertains to future reviews.

We submit that the Timeline should be changed to

“Dean of Social Sciences to report by the end of academic year 2018/19”  
as is the case in Recommendation #20, since it (like Rec#20) also refers to the preparations for future reviews.