

Final Assessment Report

Biological Sciences Undergraduate Program

A. Summary

1. The Department's Self Study was considered and approved by the Academic Review Committee of Senate on September 18, 2012.
2. The Review Committee consisted of two external reviewers: Michael Crawford, University of Windsor, Clarence Swanton, University of Guelph and an internal reviewer, Ed Sternin, Department of Physics.
3. The site visit occurred on March 6-8, 2013.
4. The Reviewers' Report was received on March 25, 2013.
5. The Department's response was received on May 6, 2013.
6. The Dean of Mathematics and Science' response from Ejaz Ahmed was received on May 13, 2013.
7. The Undergraduate Program Committee response was received on April 19, 2013.

The academic programs offered by the Department of Biological Sciences which were examined as part of the review included:

BSc Biology
BSc Biochemistry
BSc Biomedical Sciences
Concurrent BSc/BEEd

This review was conducted under the terms and conditions of the IQAP approved by Senate on June 6, 2011.

The reviewers assigned the Biological Sciences programs an Outcome Category 2, "Good Quality".

B. Strengths of the Program

The reviewers state that:

The Biology programs attempt, with the resources at hand, to deliver relatively comprehensive coverage of Biology: from genes to cells to tissues and animal physiology: from microbes, fungi, plants and animals to ecosystems. The breadth of this coverage is a challenge with the faculty numbers available but, without exception, faculty members and students indicated that this breadth was a valued and defining component of their service, experience, and pedagogy. As reviewers, we regard this breadth as a critically important asset.

They also state that the “students were unanimous and vociferous in their appreciation of the passion of their instructors.” and that for many, “this enthusiasm was transformative: mid-program changes and altered career aspirations resulted.”

The reviewers noted that an “additional strength of the program was its emphasis upon experiential learning.” and that “[T]his is clearly a rigorous and immersive experience in a professional research context. It is one of the few program aspects that still differentiates the smaller from larger institutions.” They state that [T]his is a defining feature of the program that should be valued for its own sake, and it marks a significant accomplishment”.

The reviewers also state that:

Faculty in the Department of Biological Sciences are active and engaged in research. Indeed, proportionate to the size of the Department and the resources afforded by the Institution, they have done exceedingly well. We note an unusual concentration of NSERC Accelerator Grants, CRC chairs, and papers in first-tier journals. Intra-departmental collaborations appear quite common, as do partnerships with other faculty on campus. There are a number of internationally recognized “high-fliers.”

C. Opportunities for Improvement and Enhancement

The reviewers provided 34 recommendations:

Provost and Dean of FMS

1. When program discussions and new directions are in the offing, work hard to be inclusive and consultative. Restoration of trust and “buy-in” will be profitably addressed by having joint discussions with the Provost, Deans concerned (in the case of inter-faculty programs), and Department Chairs together. Formalize agreements in writing to safeguard against changes in the occupancy of administrators at either end. The transmission of institutional memory can be imperfect, even if all of the stakeholders are clear, concise, and well-intentioned.

It should be noted that while recommendations #1-5 are directed to the “Provost and Dean of FMS”, responsibility for operationalizing these recommendations would fall to the Dean of the Faculty who would then bring them to the attention of the Provost, following existing procedures at Brock.

In its response, the Program stated:

It is true that the department has been disappointed over the years with a perceived lack of institutional support associated with our taking on externally driven initiatives related to increasing enrollments and online offerings. However, we remain keen to work with the administration to deliver quality programs that both attract top students and increase the reputation of Brock University.

The Faculty Dean responded, “We agree and such discussions and documentation of agreements is now common practice in FMS.”

ARC considers the recommendation to enhance and document consultation to be accepted and in the process of implementation.

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean of Mathematics & Science
Responsible for implementation:	Department, Dean of Mathematics & Science
Timeline:	Dean to report by end of academic year 2013/14

2. Work to quickly provide administrative assistance to Biology - they need a program assistant, more student advising capacity, and somebody to take charge of the departmental web presence.

The Program stated:

This is a desperate need. Students in all of our programs need a “home” within Biology. An “in house” undergraduate program coordinator/academic advisor will lead the efforts of all faculty and staff to provide a high level of service to our students increasing student satisfaction and retention. We agree that our website needs attention and have started initiatives to develop materials to enhance our web presence for both recruitment of new students and communication with existing students. The undergraduate program coordinator would be the natural person to manage our web presence.

The Faculty Dean responded:

Over the last two months 80% of students who received advising from the FMS Academic Advisor were students from Biology programs so that we feel that adequate advising is already available to Biology students. To enhance the Graduate Studies side of the departmental web pages the department must take advantage of web design and development which is becoming available through the Faculty of Graduate Studies. The Department can also hire part-time help for other web material and should submit a proposal, including a budget, to the Dean before moving forward

ARC deems the recommendation to provide these resources to the program to be worthy of consideration and acknowledges that there are existing processes and policies for negotiation of these arrangements. ARC expects that the Department will proceed through normal channels of advocacy for these resources.

Implementation Plan (First Priority)

Responsible for approving:	Department, Dean
Responsible for resources:	Dean
Responsible for implementation:	Department, Dean
Timeline:	Dean to report by end of academic year 2013/14

3. If faculty or staff depart or go on sabbatical or leave, be cognizant that the program has no capacity for absorption left - deficits will have to be addressed in a pro-active and seamless manner, especially if student numbers continue to grow.

The Program stated:

Our department has been very satisfied with the support we have been given by the Dean of FMS for covering faculty absences due to sabbatical leaves, research time releases or other initiatives.

The Faculty Dean stated, “The Deans’ office has provided replacement teaching as needed by the department.”

ARC considers this recommendation to be consistent with existing practice and no further action is required.

Implementation Plan

No further action required.

4. There is a need to replace the retiring Geneticist. This is a critical competence required in both teaching and research.

The Program stated, “The Dean of FMS and the Provost have already given their approval for the replacement of [the retiring Geneticist].”

The Faculty Dean stated, “Implementation of this recommendation has been approved.”

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

Implementation Plan (Second Priority)

Responsible for approving:	Department, Dean
Responsible for resources:	Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2014/15

5. If student numbers continue to increase, and especially if the Department contributes leadership to the Applied Health Sciences or Environmental Sustainability initiatives, there will be a need for new faculty (one for each initiative, assuming present numbers as a baseline).

In its response, the Program stated:

We agree that our ability to handle significantly increased enrollments and/or new program developments will require additional faculty members.

The Faculty Dean stated:

Our ability to appoint new faculty members will depend on a combination of factors including numbers of majors and non-majors, number of courses and the availability of funds from the Central Budget Committee.

ARC considers this recommendation to be outside of the Committee’s jurisdiction. ARC expects that the Department will proceed through normal channels of advocacy for these resources.

Implementation Plan (Second Priority)	
Responsible for approving:	Department, Dean
Responsible for resources:	Dean
Responsible for implementation:	Department, Dean
Timeline:	Dean to report by end of academic year 2014/15

Dean of FMS and Department Chair

6. Coordinate better to link student course evaluations with the message relayed to faculty during the annual faculty course assignments. If necessary for political reasons, the Dean should play a role, even if only at a distance (email to Chair requesting this be redressed).

The Program stated, “The Chair will meet with individual faculty members regarding course evaluations.”

The Faculty Dean stated, “Changes to how course evaluations are used will require changes to the Brock-BUFA Collective Agreement.”

Although ARC understands that the Department has a plan in place to address the issue, this recommendation is outside of ARC’s jurisdiction. As per the Brock/BUFA collective agreement Article 12.07 d) student course evaluations are the property of the instructor. Although evaluations are made available to each instructor's faculty dean during the annual report process, evaluations may not be used for the administrative purposes of the department without an instructor's consent.

Implementation Plan

Recommendation outside of ARC’s jurisdiction.

7. Coordinate with Senior Lab Demonstrators to monitor the good versus unsatisfactory performance of TA contracts at the end of a semester.

The Program stated, “The Chair will work with the senior demonstrators to maintain a record of performance associated with TA contracts.”

The Faculty Dean stated, “We are working with HR and CUPE towards developing acceptable means of performance evaluation for CUPE members.”

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

Implementation Plan (First Priority)	
Responsible for approving:	Department, Dean
Responsible for resources:	Department, Dean
Responsible for implementation:	Department, Dean
Timeline:	Dean to report by end of academic year 2013/14

8. Find means to show students how their feedback is being acted upon whether they refer to course content, design, professorial accessibility, or TA excellence. Both good and bad reports need to be seen to be acted upon and an update relayed to the assessors (your students).

The Program stated:

Currently students who contact the Chair with issues regarding courses and/or instructors are told at the time what the next steps in any process of exploring and/or dealing with their particular issue will be. If the issue affects them personally it will be followed up with them in person by the course instructor/senior demonstrator and/or chair. We feel that issues that are of a more general nature and fall into the category of individual dissatisfaction with particular teaching styles and practices do not demand the same kind of followup. For example, this year the Chair dealt with a number of complaints regarding one course instructor. When going over the course evaluations it was clear that there were two distinct populations of students in the class, one larger component who were very content with the instructor and one smaller group who were not. The chair initiated weekly meetings with the course instructor to address the issues brought up by the smaller group and some changes in teaching and communication style were made by the course instructor and the issues were effectively resolved. The chair did not feel the need to “report back” to individuals as changes were implemented for all to see.

The Faculty Dean stated, “We agree with the Chair and will provide assistance as the Chair requests.”

ARC considers this recommendation to be outside the Committee’s jurisdiction. As per the Brock/BUFA collective agreement Article 12.07 d) student course evaluations are the property of the instructor. There are a number of processes in place for students who wish to provide “feedback” and ultimately the Senate Student Appeals Board would deal with issues that could not be resolved.

Implementation Plan

Recommendation NOT accepted.

9. If future expansion is planned for Distance Education, augment personnel to implement delivery. Some faculty justifiably articulate concerns regarding the appropriateness of Distance Models for delivering university-level courses; nevertheless, it is the reality that the Province is going to force this issue. [One of our senior demonstrators] appears to have managed a huge cohort of students well, and to have delivered sensibly designed and taught courses. She impressed us with her knowledge and acumen and is deserving of the respect of her faculty peers. One caveat: Distance Education does not come cheap. Current estimates indicate that once teaching faculty, TAs, software costs, development and infrastructure are calculated, a distance course costs \$39 to every \$19 of a conventional course (Palloff and Pratt, *The Realities of Online Teaching*, 2002).

The Program stated:

Our Department was on the forefront of distance education and committed to it with the conversion of [a department member] from senior demonstrator to Online Course Coordinator. [The Department member]’s job has grown in leaps and bounds and has been made challenging with limitations in implementation software. We agree with the reviewers’ assessment that online courses are no cheaper to run than lecture courses. However, online courses are in demand and Brock will lose students if we do not offer them. Given appropriate resources we will continue to expand our collection of online offerings and are currently proposing an online version of BIOL 2P97.

The Faculty Dean stated, “We encourage the department to develop online courses where such courses are appropriate and demand is sufficient to justify the cost.”

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

Implementation Plan (First Priority)	
Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

Dean of FMS, Dean of Graduate Studies, Department Chair

10. Little consideration has been given to how changes in graduate student numbers might impact Departmental ability to deliver courses and labs. Stochastic changes in recruitment could present serious challenges for the availability of graduate students available to TA, say ecology or genetics, as very different competencies are required.

The Program stated:

We have maintained a relatively large and stable graduate student population over the years. We are fortunate that the numbers have been large enough to handle many of the required TA positions in our diverse range of courses. Hopefully our graduate student numbers will not decrease significantly in the future although without further increases in faculty numbers we are not in a position to greatly increase them. However, we do not and could not depend solely upon graduate students for our TA needs. Over the years we have “collected” a strong group of non-graduate student TA’s who offer a wealth of diverse experience and maturity to our courses.

The Faculty Dean stated, “This is currently not a problem but if such a problem arises in future we will work with the Chair to find solutions.”

ARC considers this recommendation to be an observation rather than a recommendation. The Committee believes the Department is best positioned to determine appropriate strategies to deliver their courses and labs despite changes in graduate student numbers.

Implementation Plan

No further action required.

11. Little consideration has been given to how gross expansions in the size of Biology service courses will be met using present numbers of graduate students to fulfil TA duties

The Program stated, “Yes this has been a challenge, see #[10] above.”

The Faculty Dean stated, “We will work with the department as needed if this becomes a problem in future.”

ARC considers this recommendation to be an observation rather than a recommendation. The Committee believes the Department is best positioned to determine appropriate strategies to deliver their Biology service courses despite changes in graduate student numbers.

Implementation Plan

No further action required.

12. It was unclear whether or not institutional consideration has been given to the adverse effects that recent NSERC policy changes will have upon investigators' capacity to recruit graduate students at present numbers. These changes will likely impact the pool of talent available to TA.

The Program stated:

We have been remarkably successful with research support even with the changes at NSERC and it is our main priority to stay a research-intensive department with a full population of graduate students. That being said, as described in #1 above, we have a population of non graduate student TA's that we must encourage and maintain as well.

The Faculty Dean stated, "We will work with the department as needed if this becomes a problem in future."

ARC considers this recommendation to be an observation rather than a recommendation. The Committee believes the Department is best positioned to determine appropriate strategies to recruit graduate students and fulfill requirements for TAs.

Implementation Plan

No further action required.

Provost, Dean of FMS, Dean of Applied Health Sciences, Department Chair

13. Rationalize and consolidate course offerings to make most efficient use of existing courses. If there is already a Biomedical stream, capitalize upon it. There is no room for course duplication.

The Program stated:

The department has been working to consolidate course offerings for some time. This has of course been primarily within the department, but also within the faculty. We have worked in the past with other departments and faculties to develop programs put together with existing course offerings, i.e. Neuroscience, Biochemistry, Biotechnology, Biomedical sciences, Biophysics. We agree with the reviewers' opinion that course and or program duplication makes no sense.

The Faculty Dean stated, "We agree with the Reviewers and the Chair but if there is an opportunity for improving our offerings we will explore that opportunity with those concerns in mind."

ARC considers the recommendation to examine course offerings to be accepted. The Committee suggests that a complete map of the curriculum showing the various programs to which the courses contribute would provide key information for strategic planning as the Department moves forward.

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

14. Ensure that course offerings are available in reciprocal fashion. Anatomy should be easily accessible to Biology etc., and the reverse should also be true.

The Program stated:

We would like to work towards reciprocity in course offerings, and we shall initiate discussions with our colleagues in other departments to achieve this outcome. Nevertheless, we understand that there are limitations based on available resources that may make reciprocity unfeasible.

The Faculty Dean stated, “We encourage discussions between units to facilitate improved course access between programs and will work to help improve such access.”

ARC considers this recommendation to be worthy of consideration but outside the Committee’s jurisdiction. While reciprocity is to be encouraged, Departments have autonomy with regards to their curriculum.

Implementation Plan

Recommendation NOT accepted.

15. Ensure that the expansion of Biology courses to accommodate students in the Applied Health Sciences results in a commensurate growth in Biology resources. There is a poor record of budgetary allocations and revenue sharing.

The Program stated:

We agree completely, we will not be able to handle significantly larger enrolments in our courses without additional resources. We do not want to compromise the integrity of our core courses any further by continued cutting of course material/labs/resources to accommodate more students.

The Faculty Dean stated, “We rely on the Central Budget Committee for funding additional costs so this recommendation is beyond our control.”

ARC considers this recommendation to be worthy of consideration but outside the Committee’s jurisdiction. The Committee encourages discussion around revenue-sharing and budget-allocation and expects that the Department will proceed through normal channels to achieve this.

Implementation Plan

Recommendation NOT accepted.

16. Ensure that Applied Health Sciences is not being marketed to attract pre-professional students unless it provides and requires the courses deemed requisite for medical, dental, physiotherapy, chiropractic, and pharmacy schools (Biology, Math, Chemistry, Physics, etc.). Failure in this regard will see an initial expansion followed by disgruntled collapse and reputational damage.

The Program stated:

We are working closely with Applied Health Sciences to ensure that any joint program is fully acceptable to both faculties, is of high quality, and will enhance the reputation of Brock University.

The Faculty Dean stated, “FMS has no control over the marketing plans of other Faculties: the Senior Administration and ARC (at the program level) will determine the outcome of any such initiatives.”

ARC considers this recommendation to be outside the scope of the review of the programs offered by the Department of Biological Sciences. ARC understands that Senior Administration is aware of this issue and will monitor the situation.

Implementation Plan

Recommendation is NOT accepted.

Student Development Centre

17. While it is clear that services are advertised and available to students, nevertheless visibility remains low. According to SDC staff, pre-semester workshops (Smart Start) appear to attract only slightly more than 50% of students and only “some” science majors. Consider inserting a SDC module into the introductory lab session in 1st year (alongside the present Librarian’s module). Reward attention with a SAKAI-mediated quiz and a modest contribution to the total grade.

The Program stated, “We will consider insertion of an SDC module into Biol 1F90.”

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

18. Provide course instructors with links to the SDC so that information can be posted on individual course websites, as well as the Departmental pages that are directed to the undergraduate experience and pedagogy.

The Program stated, “We can provide additional links to the SDC.”

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

19. Investigate the possibility of [the SDC] collaborating with Biology to provide tutoring specific to Biology, perhaps even at the Department. The Chemistry tutor (at the SDC) was regarded as very effective. Given the size of the program, similar competence should be developed for Biology.

The Program stated, “There currently is a Biology tutor at the SDC, we would be happy to collaborate further with the SDC.”

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

Office of the Registrar

20. Rapid expansion of 1st-year intake has outstripped departmental capacity: students admitted to allied programs routinely find themselves wait-listed for Biology. The wait-lists numbering in the hundreds fall to the Department to manage by hand. This is a poor use of non-existent administrative resources. It also introduces an uneasy tenor to student experience right from the outset. This needs to be automated, and communication from the Registrar's Office regarding acceptances and implications for course demand must be immediate so that the required resources are allocated immediately?

The Program stated:

We definitely need to work on the wait list issue for many of our courses. We would be happy to do this in conjunction with the office of the registrar. This would require significant consultation between the department and the office as the maintenance of waitlists is complicated by the variety of students interested in taking our courses. These include majors in our programs, students in outside programs that require specific Biology courses, education students seeking Biology teachables and student who are just interested in Biology.

The Faculty Dean stated:

We agree with the Chair's response. The Registrar's Office should consider dealing with wait-lists more centrally, but close collaboration with departments will likely be necessary, as the Chair points out.

UPC noted that " 'electronic' wait lists are in the process of being developed."

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

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

21. The list of courses in the Calendar does not mesh well with the courses actually deliverable in any given year. Students plan their program only to discover shortly before the opening of the registration that the course they desire, and have pre-requisites for, is not available. Better long-term planning and better communication needs to occur between the Department Chair and the Registrar, who in turn should make it accessible to the students. This discrepancy has been a source of serious frustration and in some cases has led to students unnecessarily taking longer than four years to complete their degrees?

The Program stated:

We will work to make sure our calendar more accurately represents our actual course offerings, potentially including multiyear rotations. We shall also post course offerings on the departmental website as early as possible to allow students the opportunity of planning progress through their program.

The Faculty Dean stated, “We agree with the Chair’s response.”

UPC noted that:

it is up to the department to offer courses and submit them for scheduling. The Office of the Registrar does not make decisions on the list of courses to be offered by departments in any given year. Those decisions are made by members of the departments. The recommendation in item 2 should, from our perspective, be to enhance communication between members of the department (including Department Chair and Academic Advisor) and students to assist them in their program planning and course selection.

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

The Committee noted that this recommendation should be addressed as part of the curriculum review and mapping exercise.

Implementation Plan (First Priority)	
Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

22. Degree audits should, for the most part, be automated and not consume the attention of Department Chair or Program Administrator. An automated, batch-mode mechanism should be sufficient to highlight the few exceptional circumstances where a student is missing courses or requires an exemption. All others should not require individual monitoring and approval. The present online degree audit system is much too slow and only allows the examination of a single student against a single program/Calendar year, while the students may in fact benefit from the use of any of the Calendars valid during their years of study.

The Program stated:

As the number of students graduating in all of our programs increases the job of manually going over statement of standings makes it more and more apparent how much time is wasted on what should, for the most part, be an automated procedure. Surely we can get this sorted out.

The Faculty Dean stated, “We agree with the Chair’s response.”

ARC considers this recommendation to be outside the Committee’s jurisdiction. ARC agrees that this issue requires timely action, and encourages the Dean and Department to advocate for changes to the system.

Implementation Plan

Recommendation NOT accepted.

Department Chair

23. The Department needs to formulate a long-term vision and strategic plan, including a ranked order of faculty and staff hiring preferences. Even in the absence of firm commitments to resources, the “rainy-day list” should be ready and a plan in place.

The Program stated, “We agree and are in the process of working on our strategic plan including a plan for long term replacement of faculty and areas of new growth.”

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

24. Since Senior Demonstrators already have access to transcripts *etc.*, it is unlikely that involving them in observing and mentoring BOOST registrants would violate FIPPA. This coordination could only be advantageous for student success and institutional retention rates.

The Program stated, “Our senior demonstrators have already established contact with BOOST who are very happy to have their support.”

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)	
Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

25. The Biology Librarian has installed a useful and innovative teaching module into the introductory 1st-year lab. A similar graded module should be introduced regarding a generic template and expectations for lab reports (with examples of good and bad reports). The availability, location, and competence of academic advisors and SDC should also be outlined within this module.

The Program stated, “This is a good idea and we will work with the senior demonstrators to establish an exercise related to understanding expectations regarding laboratory reports.”

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)	
Responsible for approving:	Department
Responsible for resources:	Department, Dean, Library
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

26. Grade Sheets are stapled to the Microbiology lab reports - this regiments TA marking, and clarifies for students where grades were awarded/lost. This practice should be expanded to all lab courses involving multiple graders.

The Program stated, “We will investigate the feasibility of expanding the grade sheet approach used in Microbiology to other laboratory courses.”

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)	
Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

27. TA performance issues: there must be consequences for poor performance, and the equation can be drawn in a straight-forward manner

- a) During their first departmental orientation, new graduate students need a talk from a figure of authority, perhaps the Department Chair, to indicate that although some supervisors may want their graduate students to do as little teaching as possible, it is the responsibility of the graduate students to take ownership of their own pedagogical development. Teaching competence is important in the marketplace. They need to capitalize on the opportunity their being a TA affords them and to impress their superiors, in order to garner competitive letters of reference. Absence of teaching excellence in an application dossier is tantamount to a death knell, and this needs to be articulated to the TA's.
- b) Graduate Committee members have the duty of evaluating and ranking students on the basis of several factors, and this includes leadership skills and potential. They need to perform well in all arenas to rank high in competition with their peers.
- c) There is a box that can be selected on the contract at the end of the session that indicates whether or not the employee has performed successfully, but while this is mandated by the current CUPE agreement, performance evaluation is not limited to only this format. Letters of feedback to TA's can and should be generated upon the completion of each contract; even when the overall performance was satisfactory, reinforcement of positive aspects and pointing out areas of potential improvement will prove useful. They will certainly put the TA's on alert that their performance matters and is being monitored. The completion of contracts needs to be coordinated among offices, and Senior Demonstrators should be consulted.
- d) Although documentary warnings are time consuming and tedious, this avenue should be used even if there is little hope for improvement before the end of the semester.
- e) In order to provide incentive to TA's who underperform consistently in class, there is always the threat of reduced access to desirable TA slots and consignment to less teaching but more work-intensive classes and labs manner.

The Program stated, "We will investigate all of the suggested ways of analysing and documenting TA performance in more detail."

The Faculty Dean stated, "We agree with the Chair's response."

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

Implementation Plan (First Priority)

Responsible for approving: Department

Responsible for resources: Department, Dean

Responsible for implementation: Department

Timeline: Dean to report by end of academic year 2013/14

28. One of the duties of a new administrative assistant should be the departmental website. 83% of recruitment is mediated through this site. It needs careful thought and continuous curation and updating.

The Program stated:

We have initiated the development of new materials for the departmental website and agree that a stronger web presence (including Facebook and Twitter) are essential for reaching our students and potential students.

The Faculty Dean stated, “We agree with the Chair’s response.”

ARC considers the recommendation to update and monitor recruitment material on the website to be accepted and in the process of implementation.

Implementation Plan (First Priority)	
Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

29. While acknowledging the historical importance of the research thesis projects to departmental productivity, the assignment of faculty as committee members for undergraduate theses is an extravagance. Students themselves are querying the utility and necessity (reportedly, there is often little to no engagement with/by the second reader). Consider abolishing the requirement for a committee structure for each thesis and rely on sole faculty supervision.

The Program stated:

Although we sometimes lament the loss of a “committee” for the fourth year thesis (we used to have three faculty members on each!) we are already moving quickly towards a single supervisor system.

The Faculty Dean stated, “We agree with the Chair’s response.”

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

Implementation Plan (First Priority)	
Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

30. Assignment of multiple instructors with different teaching styles and expectations to a single course can create frustrations for students. We recognize fully that this type of class assignment may be inevitable; however, one instructor should be assigned as the “lead instructor” who will be ultimately responsible for the course in order to reduce potential student frustrations. Whenever possible, teaching duties should be assigned in units of a single continuous semester. Workload equity for courses with vastly different enrolments can be provided through alternating course assignments over several years.

The Program stated:

We disagree that a single instructor per term is always the “best” way to mount courses. We have a long tradition of joint teaching and have been exploring more joint teaching in a number of courses. However, having a lead instructor who facilitates multi-instructor courses, especially at first and second year, is a good idea to alleviate some student frustration.

The Faculty Dean stated, “We agree with the Chair’s response.”

ARC considers this recommendation to be accepted and in the process of implementation. The Committee believes the Department is best positioned to determine appropriate delivery models for the courses in the programs.

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

31. The Department is now geographically distributed and risks losing cohesion.

- a) Form and foster an undergraduate Biology club.
- b) Formalize the graduate student-led journal clubs - request the funding for coffee - faculty no longer appear to congregate to chat, and this is dangerous for long term viability, collaboration, and departmental health.
- c) If the lounge/espresso bar in the new building is intended solely for lab use, it needs to have formal signage indicating this. Undergraduates resent being given the boot. Similarly, graduate students who tape signs to tables indicating exclusive use for their labs alone have dramatically missed the point of a lounge, and need to read some social history concerning the Watson/Franklin/Crick context (a context architects are trying to recapture in buildings like the Salk for example).

The Program stated:

We agree with the suggestions to enhance departmental cohesion. We are developing the “inner triangle” in F block to be a centrally located student, faculty and staff friendly environment to facilitate informal interactions and discussions.

The Faculty Dean stated, “We agree with the Chair’s response.”

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

The Committee believes the Department is best positioned to determine appropriate strategies for developing cohesion within the student body.

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

32. A previous report suggested the inclusion of a course on methods and techniques. We do not see how this is possible given current resources, but empathize with the impulse. Consideration should be given to development of courses cross-listed with Earth Sciences (GIS, geographical distribution modeling and statistics), and with Chemistry/Biochemistry where comparative genomics, transcriptomes, and epigenetics, could be taught along with the current and nascent technologies for analysis.

The Program stated:

We have talked about a laboratory methods course and would like to explore the possibility although we truly understand the difficulty of introducing such a course. We are currently working with a new faculty member in [Geography] who is interested in cross-listing courses in both Earth Sciences and Biology. We agree that coordinating Biochemistry courses with the Chemistry department is a very good idea.

The Faculty Dean stated, “We agree with the Chair’s response.”

ARC considers this recommendation to be accepted and in the process of implementation. The Committee believes the Department is best positioned to determine appropriate agreements with other Departments.

Implementation Plan (First Priority)

Responsible for approving:	Department
Responsible for resources:	Department, Dean
Responsible for implementation:	Department
Timeline:	Dean to report by end of academic year 2013/14

33. Petition for increased financial support for undergraduate thesis projects. Tuition rates have increased on a per/course basis, but the reagents cost allowances have remained static.

The Program stated, “We have initiated a request for increased funding for undergraduate thesis projects.”

The Faculty Dean stated, “We look forward to receiving a budget proposal from the department.”

ARC considers this recommendation to be outside the Committee’s jurisdiction. ARC expects that the Department will proceed through normal channels of advocacy for these resources.

Implementation Plan

Recommendation NOT accepted.

34. Finally, remember that the Department provides leadership to multidisciplinary programs, not service!

The Program stated, “Thank you for adjusting our perspective, we have and will continue to provide leadership to the very best programs at Brock University.”

The Faculty Dean stated, “We agree with the Chair’s response.”

ARC considers this recommendation to be an observation rather than a recommendation.

Implementation Plan

Recommendation NOT accepted.

D. Recommendations to be Implemented

The IQAP requires that ARC “set out and prioritize the recommendations that are selected for implementation.” Using the specific ARC proposals enunciated above, the following priorities are proposed:

First Priority:

Recommendations 1,2,7,9,13,14,15,17-33.

Second Priority

Recommendations 4,5.

No further action required

Recommendation 34.

E. Recommendations that Will Not be Implemented

Recommendations 3,6,8,10,11,12,16.