

Progress Report  
Cover memo

Department of Biology Year of appraisal 2012

To: Vice-Provost, Teaching and Learning

Date: Feb 24, 2017

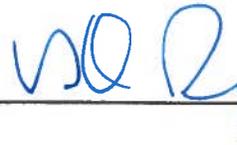
In accordance with the Concordia University Academic Program Appraisals Manual, 5th edition revised, the Department of Biology and the Faculty of Arts and Science enclose the finalized Progress Report detailing the activities originating as a result of the Faculty Dean's Implementation Plan, dated October 14, 2014.

The Department Chair also confirms that this Progress Report has been presented to the Departmental Assembly (or its equivalent) prior to its submission for signature to the Faculty Dean and the Office of the Provost and VP, Academic Affairs.

Signed,



**Patrick Gulick**  
Department Chair



**André Roy**  
Faculty Dean

# Progress Report

## Update on the recommendations

Note: the recommendations from the original Implementation Plan are presented first, along with the implementation schedule and responsibility. The Department is invited to respond to each recommendation by:

- Indicating the status of the recommendation (completed, delayed, ongoing, or cancelled)
- Providing a short update and rationale (if the recommendation has been delayed or cancelled)
- Including a new timeline for completion if relevant

### 1) Courses

#### **Recommendation 1: Standardized grading**

- 1a. The Chair has provided instructors with a standardized grading scheme and historical grade distributions for 200, 300 and 400-level courses.
- 1b. All instructors have been made aware of the need for maintaining standardized grading across course sections and throughout the department.
- 1c. **This process will be continued and should address variations in grading standards.**

*Implementation schedule: Immediate implementation with ongoing assessment*

*Responsibility: Chair of Department*

#### Progress on this recommendation (please underline one)

Completed

Delayed

Ongoing

Cancelled

#### Update or rationale on the status of this recommendation

The Department compiles records of grade distribution for all courses from 2011 and updates the record on a yearly basis. The records are distributed to all instructors along with guidelines for maintaining standardized grading. Instructors can readily see the % of each grade category for their courses, as well as all other courses, for the last 6 years. Instructors are advised to give timely feedback to students on their performance in classes, maintain similar grade distributions between different sections of the same course and between the same courses in successive years.

#### New timeline for completion of this recommendation

- 1d. Graduate supervisors have been encouraged to have regularly scheduled advisory committee meetings with graduate students.

*Implementation schedule: Immediate implementation with ongoing assessment*

*Responsibility: Graduate Program Director*

#### Progress on this recommendation (please underline one)

Completed

Delayed

Ongoing

Cancelled

#### Update or rationale on the status of this recommendation

In general, graduate supervisors in Biology meet on daily basis and many advisory committees hold regularly scheduled committee meetings. Based on annual progress reports of the School of Graduate Studies, the Graduate Program Director and Graduate Program Assistant will track graduate students with unfavourable reports to ensure regular supervisory committee meetings. Additionally, as committee report forms are filed

with the GPA, we are able to track the frequency of meetings and send out reminders to supervisors and students.

#### **New timeline for completion of this recommendation**

A full tracking protocol should be implemented by summer, 2017

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#### **Recommendation 1: Course offerings**

- 1e. The Biology Department will implement a course rotation system for some of its 300 and 400-level courses. This will increase the available courses for students over the course of their degree.**
- 1f. In addition, the department is cross-listing upper level and graduate (e.g., Diploma) courses to increase the course options for advanced undergraduate students.
- 1g. The department has offered courses in conjunction with other departments/ faculties and will continue to explore these possibilities although these courses have proven difficult to maintain.
- 1h. The department will monitor class sizes at the 400-level to see the effect that these changes make and further assess which courses may require defined lower enrolments.**

*Implementation schedule: Immediate implementation with ongoing assessment*

*Responsibility: Undergraduate Program Director*

#### **Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

#### **Update or rationale on the status of this recommendation**

Our ability to reduce the enrollment size of courses is severely restricted by the course section allotment given by the Faculty of Arts and Science. The problem is further exacerbated by the student enrollment increase in recent years.

Since 2010 we increased the number of 400-level courses (19 course sections for 2010; 22 course sections for 2016) by introducing new courses (e.g. BIOL498 – Internships in Tropical Biology and Biology 498 Advanced Statistics) and cross listing more courses to 400 level from the 500 and 600 level courses. We also reduced the enrollment gaps between high and low enrollment courses by applying the same enrollment caps to all lecture-based courses and by offering low enrollment courses in alternating years. In 2010, the class size for 400-level lecture courses ranged from 6 to 61. But in 2016, this class size ranged from 15 to 45.

However, despite of our effort to reduce class size, the average class size for 400 level courses has increased from 30 in 2010 to 34 in 2016. The median class size for 400 level course was 39 for 2016-2017. This number is far from the target size recommended by the UAC committee (25). Increase in class size is due to the increase in the number of students enrolled in the Biology programs. Compared to 2010, 30-40 % more students graduated with a degree program offered by the Biology department. This means that the demand for 400-level courses is much stronger than 2010. However, without additional class section allotments to the department, we are unable to meet the class size guideline.

#### **New timeline for completion of this recommendation**

Not possible to determine at the departmental level.

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- 1i. The minimum CRC score for undergraduate admission to Biology has been increased and the department is monitoring the effect of this change on enrolments in 200 and 300-level courses. Thus far, enrolments have been increasing.**

*Responsibility: UGDP*

#### **Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

The minimum CRC score for admittance into Biology programs was raised to 23 in 2013. Although this increase was followed by a small reduction in the acceptance rate, the number of new student registrations for 2013 & 2014 remained about the same as the 2012 level. As far as we can tell, the increase in the minimum CRC score has not caused any negative impact on the student enrollment numbers.

**New timeline for completion of this recommendation**

*Enter timeline here*

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1j. The department also is exploring the possibility of online course delivery for its non-program courses.

**Responsibility:** *Undergraduate Program Director*

**Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

Online section of BIOL 203 Fundamental Nutrition (a non-program course) has been introduced Winter 2017. We received strong support for this course from eConcordia/Knowledge one team and the term is proceeding smoothly. We are currently working to create an online section of BIOL 202 General Biology (a non-program course), which will be offered in Winter 2018.

**New timeline for completion of this recommendation**

*Enter timeline here*

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1k. The department continues to evaluate how many and what type of graduate courses to deliver.

**Implementation schedule:** *Immediate implementation with ongoing assessment*

**Responsibility:** *Unspecified*

**Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

We increased course offering to M.Sc. students by cross listing of 500-level Graduate diploma courses and also by introducing a new course (BIOL 680 Advanced Statistics for Biological Sciences). As a result, fewer graduate students rely on reading courses to fulfil their course requirement. We will continue to increase the graduate course offerings.

**New timeline for completion of this recommendation**

*Enter timeline here*

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1l. The department still is interested in a Co-op program and in the coming years will explore this option.

**Implementation schedule:** *Proposed for 2016-17 addition*

**Responsibility:** Co-op coordinator – Dr. Madoka Gray Mitsumune

Progress on this recommendation (please underline one)

Completed

Delayed

Ongoing

Cancelled

Update or rationale on the status of this recommendation

The co-op program was initiated in Fall 2016. Ten coop students completed their first study terms successfully. They will go on their first work term soon.

New timeline for completion of this recommendation

*Enter timeline here*

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## 2) Courses

### Recommendation 2: Student writing skills

- 2a. The Chair of the Department has impressed upon all instructors the need to integrate writing skills into all courses.
- 2b. The graduate writing course BIOL 670 Scientific Communication has been opened to some advanced undergraduate students by being cross-listed at the 400-level.
- 2c. **In the current environment, discussions are continuing as to how best to provide writing opportunities to students (e.g., through Student Academic Services or other University services, further modifications to existing courses, adding new courses, working with other departments, etc.)**

**Implementation schedule:** Immediate implementation with ongoing assessment

**Responsibility:** Unspecified

Progress on this recommendation (please underline one)

Completed

Delayed

Ongoing

Cancelled

Update or rationale on the status of this recommendation

*The graduate writing course BIOL 670 Scientific Communication is now being offered once per year, whereas it was offered once every two years prior to the departmental appraisal. It has been opened to a small number of advanced undergraduate students by being cross-listed at the 400-level. In addition, BIOL 466, Advanced Laboratory in Molecular Biology, a required course in the Cell & Molecular programs and taken by 48 students per year, now devotes 2 weeks of the course to instruction in writing research reports. Several 400 level courses include paper writing and oral presentation training (E.g. BIOL452: Population and Conservation Genetics; Biol 467 Advanced Cell Biology, BIOL498: Internships in Tropical Biology.)*

The introduction of major writing assignments, e.g. term papers, into courses, while desired by faculty and students, is currently hampered by the large class sizes to do increasing enrollments and the cap on the number of our course sections.

New timeline for completion of this recommendation

*Enter timeline here*

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## 3) Departmental governance

### Recommendation 3: Departmental governance

- 3a. The Department Administrator position has been filled leading to more efficient running of the department.
- 3b. **A system of meetings including regularly-scheduled Departmental Meetings involving faculty, part-time**

faculty, staff, undergraduate and graduate students has been instituted.

3c. Faculty meetings also will continue to be held as needed.

3d. Staff and student representation will be included on committees as appropriate.

3e. The Chair has initiated meetings with the teaching laboratory technical staff and instructors for laboratory courses on a biannual basis to facilitate communication on the management of these courses.

*Implementation schedule: Immediate implementation with ongoing assessment*

*Responsibility: Chair of Department*

**Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

3b. To facilitate scheduling and attendance the Departmental Faculty Meetings and Departmental Meetings are set at the beginning of the academic year, based on a time when there will be the least conflict with the faculty members' teaching schedule. Faculty meetings are scheduled on the first Tuesday of the month and are occasionally re-scheduled. Departmental meetings scheduled once or twice a year and are attended by FT faculty members and representatives of staff, graduate students and undergraduate students.

3d. Discussion during the preparation of this report highlighted the wish of staff members to be better consulted on issues related to the scheduling of teaching laboratories, space allocation and equipment and suggested that this could be done through committee meetings. Many of these issues are not managed through committee work but by email communication from the individuals responsible for the domain. The Department Chair will insure that pertinent information is circulated to the staff and will call for meetings with people responsible as needed or as requested by Department members.

3e. Meetings with the Chair and the technical staff have been called when particular issues arise, but they have not been held regularly. The Chair will implement regularly scheduled meetings at the end of each Fall and Winter semester when the teaching labs have finished and therefore, are a convenient time for the staff involved.

**New timeline for completion of this recommendation**

A meeting with the Chair, the Technical Officer and technical staff will be scheduled for late April 2017 and will be held thereafter at the end of the Fall and Winter semesters.

## 4) Student awareness and involvement

### Recommendation 4: Student awareness and involvement

4a. Faculty members have been encouraged to informally mentor students and to create an inviting environment for students in the department.

4b. The departmental website is being updated to provide more information to students and potential students at both the undergraduate and graduate level.

4c. The department will make an effort to contact students directly and regularly (for example, via email) to make them aware of departmental events and to encourage to take advantage of the assistance that is available to them.

*Implementation schedule: Immediate implementation with ongoing assessment*

*Responsibility: Unspecified*

**Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

Biology faculty members have initiated informal mentorship activities with graduate and undergraduate students.

This resulted in several student led initiatives including 1) organization of Beyond Books Panel Discussion event linking undergraduate and graduate students and Alumni 2) Undergraduate and Graduate student mentorship initiative pairing up undergraduate and graduate students, 3) incorporating student run Concordia Galapagos Project into a formal course offering and 4) formation of the "Concordia Journal of Biology" where students publish research findings.

**New timeline for completion of this recommendation**

Enter timeline here

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- 4d. The department will advertise its departmental undergraduate research day more widely and explore the possibility of expanding this within the Faculty and in the context of any University Undergraduate Research events.

*Implementation schedule: Immediate implementation with ongoing assessment*

*Responsibility: Undergraduate Program Director*

**Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

Undergraduate Research is now featured on the Biology Department Web site and students are encouraged to participate in research projects with individual faculty members through our Biology 490 research project course. The student presentations from undergraduate, graduate diploma and graduate students taking our communications course (BIOL490, BIOL516, and BIOL670 respectively) are widely announced throughout the department by email and are attended by faculty and students.

Students are benefiting from undergraduate/graduate student mentorship initiative and clearly are more aware of undergraduate research opportunities. The number of undergraduate students who take BIOL 490 Independent study has increased annually from around 24 (2007-2011 average) to 35 (2012-2016 average). In addition, every summer since 2012, a small number of undergraduate students engage in a synthetic biology project through iGEM. Announcements of undergraduate student's participation in the NSERC-USRA and Concordia's CUSRA programs are made by faculty members in their courses and via email announcements; students participate in these programs to the maximum capacities of the programs.

**New timeline for completion of this recommendation**

Enter timeline here

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- 4e. The department will explore the possibility of a Biology Student Career Day either on its own or with other Science or University departments.

*Implementation schedule: Immediate implementation with ongoing assessment*

*Responsibility: Unspecified*

**Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

Students have initiated an annual career oriented "Beyond Books Panel Discussion" event in which graduates from the department participate in an evening panel discussion to exchange their experiences and to give advice on pursuing careers with Biology degrees. The inaugural event, which took place in 2016, was a tremendous success. and this year's event is currently being organized.

**New timeline for completion of this recommendation**

Enter timeline here

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- 4f. The department will publicize more strongly its research expertise to increase its visibility, student recruitment and community outreach.

**Implementation schedule:** Immediate implementation with ongoing assessment

**Responsibility:** Unspecified

**Progress on this recommendation (please underline one)**

Completed

Delayed

Ongoing

Cancelled

**Update or rationale on the status of this recommendation**

*Publicising the research profile of the department's is ongoing and multifaceted. These include following:*

1. *Members of the department organize international conferences, and workshops.*
2. *Members of the department present research results at scientific conferences and as invited lecturers and seminar speakers at university and research institutions. They participate in public outreach talks with local non-governmental agencies, government agencies and First Nations communities. They participate in interviews with press and broadcast media, meetings with delegations visiting the university, Concordia delegations to other institutions or governmental agencies, and policy panels for funding research in Canada.*
3. *The Department hosts a Life Sciences Seminar series which is advertised the scientific community via our Web pages and emailing's and announcements directed to undergraduate and graduate classes.*
4. *The Department holds an annual Research Conference offsite over a weekend which is attended by department faculty, graduate students and undergraduates that are working in researcher labs and a few invited external researchers.*
5. *Undergraduate students participating in the BIOL 490 undergraduate research projects have the opportunity to be co-authors on peer reviewed publications.*

*For student recruitment, faculty members make contact with students through participation in scientific conferences and all faculty members are encouraged to maintain an active web site for their research programs. Some faculty are also actively involved in student recruitment through social media (e.g. Facebook, Twitter).*

**New timeline for completion of this recommendation**

Enter timeline here

**Further comments on the appraisal process**

*The Department is invited to share any additional comments on the appraisal process or this Progress Report.*