



TO: Committee on Academic Policy and Programs

SPONSOR: Cheryl Regehr, Vice-Provost, Academic Programs

CONTACT INFO: vpademicprograms@utoronto.ca

DATE: August 26, 2011 for September 20, 2011

AGENDA ITEM: 8(b) 1

ITEM IDENTIFICATION:

Follow-up Report on the Review of the Centre for the Environment and its programs

JURISDICTIONAL INFORMATION:

The Committee is the point of entry into governance for reports, summaries and administrative responses on the results of academic reviews of programs and units commissioned by academic administrators. The role of the Committee is to ensure that the reviews are conducted according to University policy and guidelines, an appropriate process is being used, adequate documentation is provided, consultations are undertaken, and issues identified in the review are addressed by the administration. Under the new University of Toronto Quality Assurance Process, the Committee may request a one year follow-up report when concerns are raised in an external review that require a longer period of response.

This report is forwarded, together with the record of the Committee's discussion, to the Agenda Planning committee of the Academic Board, which determines whether there are any issues of general academic significance warranting discussion at the Board level. The same documentation is sent to the Executive Committee of Governing Council for information.

PREVIOUS ACTION

The Centre for the Environment in the Faculty of Arts and Science was reviewed on February 21, 2010 and the summary and administrative response presented to the Committee on Academic Policy and Programs on September 21, 2010. The report of the external reviewers spoke very positively about the University's strength in this area and the critical importance of faculty research. At the same time, however, they emphasized a number of challenges facing the unit. In response, the Committee asked for a one year follow-up report to provide the opportunity for the Faculty of Arts and Science to address concerns around the structure and administration of the unit.

HIGHLIGHTS

The follow-up report from the Faculty of Arts and Science focuses on the following areas as requested by the Committee:

- *Structure and administration of the unit*

The reviewers presented four possible models for the Centre's future. In his follow-up report the Dean of the Faculty describes in detail the progress that has been made in conducting a principled discussion of the programs that should be offered in the area of the environment and resources from which larger discussions of structures will follow.

FINANCIAL AND/OR PLANNING IMPLICATIONS: n/a

RECOMMENDATION: For Information.



9 September 2011

Professor Cheryl Regehr
Vice-Provost Academic Programs
Simcoe Hall, Room 225
University of Toronto

Re: Review of Centre for Environment, one-year follow up report

Dear Cheryl,

Thank you for your letter of 17 June 2011, requesting a one-year follow-up report to the February 2010 external review of the Faculty of Arts and Science Centre for Environment. Your letter requests information on the structure and administration of the Centre. In general, I can report that progress has been made in fostering and formalizing discussions within the Faculty with respect to how best to offer high-quality undergraduate and graduate programs and support for internationally significant research related to the environment and resources.

As you know, recent reviews of the Faculty of Arts & Science, the Faculty of Forestry, and the Centre for Environment, coupled with recent academic planning within several Arts & Science units, led to much discussion of the most appropriate academic structure for teaching and research programs related to the environment and natural resources over much of the 2010-11 academic year. These informal discussions helped identify a number of important issues related to the most effective way to offer high quality undergraduate and graduate programs in these areas of critical importance.

Given the number of groups involved in the informal discussions it became difficult to ensure that all units strongly affiliated with programs in the environment and resources had been fully consulted and informed of ongoing discussions. In order to focus the discussion and consider how best to offer high-quality undergraduate and graduate programs related to the environment and resources, in May 2011, I struck a broadly-based working group to review our activities in these areas and to make recommendations for the Faculty of Arts & Science. [The membership of the committee, terms of reference, and related memos and reports are available at <http://www.artsci.utoronto.ca/faculty-staff/committees-reports/envres>]. The committee is representative of the units involved in main programs and research in the area of environment and resources and included faculty and students. The Faculty of Forestry was invited to participate due to their existing FAS undergraduate programs related to the environment and conservation.

The specific charge of the Working Group is:

1. To summarize and review the existing Arts & Science undergraduate and graduate programs in the general area of environment and resources.
2. To identify strengths and weaknesses of the current Faculty unit structures, considering the academic plans of the units and cognate disciplines.
3. To make recommendations (either organizational or otherwise) that would strengthen environment and natural resources programs overall, identifying specific outcomes and measures of progress toward academic goals and ensure that the resources we place into

initiatives on the environment and resources achieve the greatest scholarly and educational impact.

The Working Group met during the summer to review the various environment and resource programs offered by the Faculty as well as the aspirations of the units offering the programs. The Working Group decided to concentrate first on undergraduate programs with consideration of graduate programs to follow. Three themes emerged in the group's discussion that related to undergraduate programs in Environmental Sciences, Environmental Studies, and Earth Systems Science. Before proceeding any further in discussion, the Working Group decided that subcommittees should be established to review these three themes and consider associated undergraduate programs and pedagogy.

The composition of the subcommittees included representation from the Working Group and additional members were also invited to participate, especially undergraduate and graduate students related to each theme. Guests from the broader FAS community in programs related to environment and resources were invited to meet with the subcommittees. Each subcommittee reviewed and discussed the Faculty's strengths in environment, resources and related programs inviting guests to speak or write to the committee from additional disciplinary areas. Each subcommittee developed a program outline in order to conceptualize what could be considered as an ideal program that the Faculty could offer in the areas of Environmental Science, Environmental Studies and Earth Systems Science. Based on the input from further consultation in A&S, if there is general agreement to proceed with such programs or modifications to existing programs, a detailed program description would need to be developed by the participating teaching staff and units.

The progress of the Working Group has been shared with the broader Arts & Science community along with an invitation for input and discussion. (The update report is available at <http://www.artsci.utoronto.ca/faculty-staff/committees-reports/envres>). Although there will likely be suggestions for additional programs and program modifications that emerge over the course of consultations and discussions, the Working Group considered that it is important to begin the process by presenting programs that had emerged in their initial discussions. A first phase of consultation will occur over the course of September in order to solicit input on the program proposal outlines, rationales and possible alternatives, as well as comments on how to best administer and support the programs and possible implications for existing programs and units.

The co-chairs of the Working Group are meeting with faculty, undergraduate and graduate students and staff in units that offer programs in the environment and resources in order to listen directly to their comments and suggestions. The Working Group will meet in October to review the input received through this consultation phase and consider the next steps in preparing their report for the Faculty and seeking additional input on the program proposal outlines through further broad-based consultation.

Yours sincerely,



Meric Gertler
Dean, Faculty of Arts and Science



TO: Committee on Academic Policy and Programs

SPONSOR: Cheryl Regehr, Vice-Provost, Academic Programs

CONTACT INFO: vpacademicprograms@utoronto.ca

DATE: August 26, 2011 for September 20, 2011

AGENDA ITEM: **8(b) 2**

ITEM IDENTIFICATION:

Follow-up Report on the Review of the Undergraduate Program in Forensic Science at the University of Toronto Mississauga

JURISDICTIONAL INFORMATION:

The Committee is the point of entry into governance for reports, summaries and administrative responses on the results of academic reviews of programs and units commissioned by academic administrators. The role of the Committee is to ensure that the reviews are conducted according to University policy and guidelines, an appropriate process is being used, adequate documentation is provided, consultations are undertaken, and issues identified in the review are addressed by the administration. Under the new University of Toronto Quality Assurance Process, the Committee may request a one year follow-up report when concerns are raised in an external review that require a longer period of response.

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PREVIOUS ACTION

The Forensic Science program at the University of Toronto Mississauga was reviewed on December 2-3, 2009. In his report the external reviewer described his findings as troubling and suggested that the program be restructured or closed. In response, the Committee on Academic Policy and Programs asked for a one year follow-up report to provide the opportunity for the University of Toronto Mississauga to provide information on a number of identified issues: structure and administration of the unit, curriculum, faculty resources, and space and facilities.

HIGHLIGHTS

The follow-up report from the University of Toronto Mississauga focuses on the following areas identified in the initial review report:

- *Structure and the administration of the unit*

The reviewer expressed concern that location of the program within the Department of Anthropology meant it did not receive the attention it deserves. In her response, the Dean and Vice-Principal (Academic) has indicated that the program will not be moved but that the new director, an Anthropologist, is enthusiastic and has a good working relationship with the Department.

- *Curriculum and academic programs*

The reviewer suggested that the curriculum lacks depth and consistency. The Dean and Vice-Principal (Academic) has explained in some detail the rigorous assessment and reworking of the program's content and structure that has occurred.

- *Faculty resources*

The reviewer expressed concern that the reliance on cross-appointed faculty and sessional instructors did not support a strong or coherent program. In response, the Dean and Vice Principal (Academic) has described the new director's success in securing teaching commitments from participating departments that will improve instructional quality and provide greater stability.

- *Space and Facilities*

The reviewer expressed concern about the deficiency of basic instrumentation and the Dean and Vice Principal (Academic) reports that the program has moved into newly constructed and outfitted space which offers top quality science labs.

FINANCIAL AND/OR PLANNING IMPLICATIONS: n/a

RECOMMENDATION: For Information.



August 8, 2011

Professor Cheryl Regehr
Vice-Provost, Academic Programs
Simcoe Hall
University of Toronto

Dear Cheryl:

Re: Forensic Science Review

I am writing in response to the request by the Committee on Academic Policy and Programs in regards to the external review of the undergraduate Forensic Science program conducted in December 2009. The Committee had requested a one-year follow-up report to focus on a number of specific issues:

Structure and Administration of the Unit

The positioning of the program 'within' Anthropology has not been changed but the program is now led by an enthusiastic director who is herself an anthropologist and has a good working relationship with departmental colleagues and the Chair. The current director has engaged in vigorous outreach among the participating departments to stimulate their commitment to the program and is working closely with the chair of anthropology to address issues that raised concerns in the review.

Curriculum and Academic Programs

The new director has undertaken a rigorous assessment and reworking of the program's content and structure. She revamped the Forensic science survey course (FSC 239Y), obtained commitments from faculty in other departments to ongoing teaching in the program, and has updated and streamlined the requirements for all four streams of the program. In the past, the heavy emphasis on math, physics, chemistry and biology for students in all four streams had come at the expense of Psychology and Anthropology stream students' ability to meet the requirements for the specialist program in their cognate field (and hence to be admitted to graduate programs that would allow them to pursue careers as forensic psychologists or forensic anthropologists). Program requirements in these streams have been revised to ensure that these students may also meet the requirements for the specialist program in their field, and to reflect the appropriate level of math, physics, chemistry and biology courses to allow them to do advanced work in forensic anthropology or psychology. The changes introduced to the Chemistry and Biology streams will allow us to pursue accreditation for them.

Following the review, we had closed admission to the program for September 2010. In February 2011, we made the decision to re-open admission to the program and are promoting the program to high school students during recruitment season.

On a side note, I would like to add that the students enrolled in the program are very enthusiastic about Forensic Science. Though a small program, they have one of the most robust and dedicated student academic societies within UTM. In addition, we have investigated and can confirm that the quality of admitted students and their rates of employment or admission to graduate programs upon completion of the program remain very high.

Faculty Resources

We recently hired a term-limited appointee who will bring valuable expertise to the program and who will help prepare it for the accreditation process. As noted earlier, the new director met with each of the participating departments and secured some valuable teaching commitments that will help to stabilize and improve the instructional quality of the program, including the instructor of first year Psychology and a former recipient of UTM's Teaching Award. Until we see how enrolment progresses and the accreditation process unfolds, there are no current plans to hire continuing faculty.

Space and Facilities

In the North Building (its former home), Forensic Science had to create lab space in a building that was built to house humanities subjects. The program was in fact using office- and seminar-sized and outfitted rooms for their labs. In early July, the program moved into the newly constructed Terence Donnelly Health Sciences Complex where the program has top-quality science labs. These are first-rate web lab spaces with benches, fume hoods, and modern equipment and space.

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Mullin', with a long horizontal flourish extending to the right.

Amy Mullin
Vice-Principal, Academic and Dean



TO: Committee on Academic Policy and Programs

SPONSOR: Cheryl Regehr, Vice-Provost, Academic Programs

CONTACT INFO: vpacademicprograms@utoronto.ca

DATE: August 26, 2011 for September 20, 2011

AGENDA ITEM: **8(b) 3**

ITEM IDENTIFICATION:

Follow-up Report on the Review of the Department of Physical and Environmental Sciences at the University of Toronto Scarborough and its programs

JURISDICTIONAL INFORMATION:

The Committee is the point of entry into governance for reports, summaries and administrative responses on the results of academic reviews of programs and units commissioned by academic administrators. The role of the Committee is to ensure that the reviews are conducted according to University policy and guidelines, an appropriate process is being used, adequate documentation is provided, consultations are undertaken, and issues identified in the review are addressed by the administration. Under the new University of Toronto Quality Assurance Process, the Committee may request a one year follow-up report when concerns are raised in an external review that require a longer period of response.

This report is forwarded, together with the record of the Committee's discussion, to the Agenda Planning committee of the Academic Board, which determines whether there are any issues of general academic significance warranting discussion at the Board level. The same documentation is sent to the Executive Committee of Governing Council for information.

PREVIOUS ACTION

The Department of Physical and Environmental Sciences at the University of Toronto Scarborough was reviewed on March 29-30, 2010. The report of the external reviewers suggested a number of areas for immediate attention. In response, the Committee on Academic Policy and Programs asked for a one year follow-up report to provide the opportunity for the University of Toronto Scarborough to provide information in respect to a number of areas of concern including: programs, faculty, administrative structure, and facilities.

HIGHLIGHTS

The follow-up report from the University of Toronto Scarborough focuses on the following areas identified in the initial review report:

- *Programs*

The reviewers expressed concern about gaps in curricula affecting the ability of graduates to proceed to graduate programs. In response, the Dean and Vice-Principal (Academic) has indicated that physics and astrophysics curricula have been completely revised; the programs in chemistry are being changed to meet the accreditation requirements of the Canadian Society of Chemistry; and the environmental science programs are similarly being modified to meet accreditation requirements and support student progression to the Masters in Environmental Science.

- *Faculty resources*

The reviewer expressed concern about the ability of the Department to adequately support its existing programmatic obligations. In response, the Dean and Vice Principal (Academic) has explained that the Department has made complement development a priority in order to reduce long-term dependence on stipendiary faculty.

- *Structure and Administration of the unit*

The reviewers identified a series of concerns to do with the administration of the Department, emphasizing the challenge of coordinating such a diverse unit. They recommended in particular that the Physics area might benefit from being a unit in its own right. In response, the Dean and Vice-Principal (Academic) has noted a number of initiatives taken by the chair to improve communications and provide opportunities for collegial discussion. In particular, he has underlined the decision to appoint four Associate Chairs of whom one has a specific responsibility for Physics supporting a degree of autonomy for the area.

- *Facilities*

The reviewer underlined the lack of lab space and technical support for the programs and the negative impact of this on the ability of programs to support learning objectives. The Dean and Vice Principal (Academic) reports that UTSC will begin construction on a new lab facility in the fall 2011 and will be renovating others.

FINANCIAL AND/OR PLANNING IMPLICATIONS: n/a

RECOMMENDATION: For Information.

19 July 2011

Professor Cheryl Regehr
Vice-Provost, Academic Programs
Office of the Vice-President and Provost
Simcoe Hall
University of Toronto

Follow-up Report, External Review of the Department of Physical & Environmental Sciences

Dear Cheryl,

Thank you for your letter of 17 June 2011 requesting a follow-up report to the external review of the Department of Physical & Environmental Sciences. The Department of Physical and Environmental Sciences is our leading department in several important ways, including the excellent reputation of the research faculty, the strength and innovation of its graduate programs, and the commitment of its faculty to the Department and to the larger UTSC project. I am very grateful to the reviewers for their careful consideration of the Department and their recognition of its strengths. We are also grateful for their candid assessment of the challenges facing the Department. We have taken their recommendations seriously. We have been working hard over the year and have made substantial progress in implementing their recommendations.

Curriculum and academic programs

1. The physics and astrophysics undergraduate programs have been completely revised and students are now able to meet all program requirements with course offerings at UTSC. The programs contain the standard elements of an undergraduate physics degree with a planetary flavor. This is consistent with the objectives outlined in the departmental plan. Program changes were taken through all levels of governance last year and will commence in September 2011.
2. The physics and astrophysics group has developed an aggressive hiring campaign that will see their ranks grow within the next three years. In the interim they will remain dependent on stipendiary and contractually limited hires to meet their teaching obligations.
3. The chemistry group plans to seek accreditation from the Canadian Society of Chemistry for its specialist programs. In order to be accredited, the programs must increase the lecture and laboratory contact hours. In addition, more comprehensive coverage of the five main areas of chemistry is required. Over the past year the department made excellent progress toward achieving this goal:

- a. It has hired three new faculty, one in the teaching stream and two in the tenure-stream. With this increase in complement, the chemistry program no longer will be dependent on stipendiary hiring except for research leaves and personal leaves.
 - b. The lecturer is tasked with the development of needed laboratories in second year inorganic and physical chemistry.
 - c. A course in biochemistry is being added to the curriculum.
 - d. The curricular revisions required to achieve the goal of accreditation will be taken through the 2011-12 UTSC curriculum cycle, which begins this summer.
4. The environmental science faculty group also has reconsidered its programs in light of the external review. The Environmental Careers Organization (ECO) recently has agreed to review these programs for accreditation. In addition, changes in the Geosciences Specialist program are being contemplated to enable graduates of this program to achieve all academic requirements of the Professional Geoscientist designation (PGeo).
- a. Modifications to the Geoscience Specialist program will be taken through the 2011-12 UTSC curriculum cycle.
 - b. Changes to the Major program in Environmental Science, which will enable graduates of this program to be eligible for the Department's Masters of Environmental Science, were implemented in September 2010.
 - c. The environmental science programs are becoming less dependent on stipendiary hires as recent permanent hires reach their full teaching potential.
5. Co-op working groups were struck for both chemistry and environmental science. Physics and Astrophysics have opted out of co-op and will focus on the Concurrent Teacher Education Program. The chemistry working group has developed a coherent plan to enable students to move more smoothly through the chemistry co-op program. Approval of the new plan will be sought in the coming year. The environmental science working group is redesigning the program delivery and will report to the department sometime in the fall of 2011.

Structure and administration of the unit

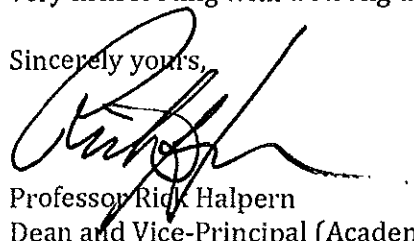
1. The Chair has appointed four Associate Chairs, one for undergraduate affairs, one for research and one for the graduate programs. The fourth Associate Chair has been appointed with specific responsibility for Physics and Astrophysics. This was done to provide this disciplinary group with a degree of autonomy within the department and as a potential first step towards becoming an independent department. This structure has worked very well.
2. The Chair initiated the drafting of a departmental constitution, which was ratified in the fall and took effect 1 January 2011. Regular meetings, presided over by a "Chair of Council" (someone other than the department chair), now take place to review curricular matters, department trajectory, and space.
3. Internal communication has also been enhanced through regular emails and more formal memoranda from the Chair. The memos are posted on the departmental web page for reference. Over 50 memos on a wide variety of departmental issues have circulated to date.
4. Overall, morale is now extremely high. Faculty are engaged and actively involved in the departmental matters. There is a marked increase in optimism about the future of the department and a renewed confidence in the excellent work being done within it.

Departmental Facilities

1. The TRACES laboratory has received final approval and construction of the facility will be complete by fall 2011. This facility will provide state of the art chemical analysis equipment for both instruction and research. This exposure to cutting edge techniques will be a key component for accreditation of the chemistry programs.
2. Following the completion of the new Instructional Centre and resulting secondary space re-allocation, the department has gained over 400 nasms of space for much needed offices for faculty, staff and students, and instructional and research space. Renovations to this space have already begun. Two new faculty research laboratories will be completed by the end of the summer and expanded and renovated space in a new portable will be available for the Masters of Environmental Science students within the current year. Three of the chemistry teaching laboratories, which are badly out of date, also will undergo major renovations during the summer of 2012.

The Department of Physical and Environmental Sciences has made remarkable progress over the past year; I am very grateful to the Chair for his excellent leadership. The Department is now on a very firm footing with a strong upward trajectory.

Sincerely yours,



Professor Rick Halpern
Dean and Vice-Principal (Academic)