

SENATE COMMITTEE ON UNIVERSITY PLANNING

Academic Unit Review – Summary

Department: Geography and Environment

Site Visit	March 28-29, 2011
Date of Report	May 3, 2011
Informal Response to Planning	June 16, 2011
Formal Response to Planning	September 30, 2011
Implementation Update	Expected Winter 2013
Midterm Review	Expected Fall 2016

Summary of Departmental Self-Study

The Department of Geography and Environment has eight full-time faculty members. They cover Human Geography, Economic Geography, Urban Geography, Planning, Development Studies, Environmental Studies, Physical Environment, Weather and Climate, Coastal Geomorphology, Biogeography, Oceans Pollution, Earth Systems Science, Research Methods, Data Analysis, and Geographic Information Systems. The Department offers Honours, Major, and Minor programs in three degree streams: a Bachelor of Arts in Geography, a Bachelor of Arts in Environmental Studies, and a Bachelor of Science in Environmental Science.

Geography and Environment has one full-time technician and instructor in Environmental Science, and shares support staff (including a G.I.S. technician) and administrative resources and infrastructure with other units in the Social Sciences. Geography and Environment offices and facilities are located on the top and bottom floors of the Avard-Dixon Building, and involve some dedicated and some shared classroom and laboratory space elsewhere in the building. Two laboratories (the Ollerhead and Finkel ones) are located in other buildings.

The faculty complement in Geography increased from 1.5 to 4.0 over the first 30 years of its existence, and from 4.0 to 8.0 over the next five years, at the end of which it became the Department of Geography and Environment. Recent growth in the faculty complement in Geography and Environment was associated with a determination to move decisively beyond a focus on human and cultural geography to include physical geography and, in recent years, with burgeoning student interest, increasing professional preoccupation, and wider societal concern relating to environmental issues. The Department significantly revised and reoriented its course offerings and program options in the watershed year of 2007, and reconstituted itself as Geography and Environment, at the same time as the University had adopted a new Strategic Statement which led, ultimately, to an

Academic Renewal Plan, the principles underlying which the Department has embraced and pursued. Geography and Environment has in recent years established a strong reputation for strategic planning; pedagogical innovation, including increased emphasis on field-based, experiential learning and on the intensive, “block” offering of courses; opportunities for student collaboration with faculty in both research and teaching; faculty and staff engagement with students; diligent academic advising; and extraordinary efforts to meet student needs and desires. The Department is highly regarded within and beyond the Mount Allison community for its excellence in research and scholarship, teaching and learning, and service, including significant outreach activities involving the local high school, the Town of Sackville, the Province of New Brunswick, and regionally, nationally, even internationally.

The Department has acknowledged that, in several ways, its very strengths are the source of certain of its weaknesses. All three program streams have experienced growth in the past three years. Not only are there many more students seeking to take Geography and Environment courses, but there are more declaring a Minor, a Major, or Honours. Enrolment pressures have involved long wait lists and engender considerable anxiety and frustration on the part of students and faculty alike. Administrative response to these issues has not always been timely or entirely satisfactory from the Department’s perspective, in terms of additional stipendiary appointments, technical support, and laboratory supplies provided, particularly for the Environmental Science courses, several of which are core courses in the Minor, Major, and Honours programs in all three streams. The Department also expressed concern in its self-study about the awkwardness of their being required to operate solely within the Faculty of Social Sciences administratively, and there not being enough budgetary recognition of the significance and resource implications of their teaching Environmental Science and conducting Environmental Science research. Finally, the Department has identified the size of its faculty and staff complements as problematic. The continued student demand for Geography and Environment courses, the Department’s focus on experiential, small-group, and field-based learning, and its interest in providing even more depth and breadth in their course offerings, mark this as a significant issue.

The Department concluded its self-study by indicating some of the areas into which it is moving, or its members would like to move, resources permitting. These include the arrival of the new Canada Research Chair and his Human Dimensions of Environmental Change Laboratory; enhancements in Environmental Science course offerings; the development of environmental activism and student leadership programs; expansion of the Marine Macroecology and Biogeochemistry Lab with the appointment from within the current faculty complement of a second Canada Research Chair; the extension of data analysis, GIS, and spatial modeling; adding a community planning and environmental assessment emphasis, and including in it a more fully developed “block teaching” of related courses; and a more realized relationship with the Rural and Small Towns program at Mount Allison, as well as

partnerships with other academic departments and with various community groups and agencies.

Summary of External Reviewers' Report

By and large, the External Review Committee concurred with the views expressed in the Department's self-study as to strengths, challenges, and future trajectories. They emphasized that course registration increases since 2007 have not been matched by comparable growth in faculty and support staff, equipment, or laboratory resources, thus leading to significant strains and difficulties for both students and faculty. They also suggested that the Department members' extensive involvements and extraordinary strengths in research, publication, and public outreach might prove to be unsustainable, unless teaching-related pressures were somehow eased. This could be accomplished through enrolment caps or through additional teaching positions, and the Department struck the reviewers as "an excellent candidate for growth, for both strategic and enrollment reasons". The reviewers also observed that the Department has teaching labs and research space fairly close to faculty offices, but there is some concern within the Department over the control of space shared during the teaching-intensive part of the year with other academic units.

The reviewers offered some fifteen recommendations, designed to suggest ways in which the Department might increase its focus and enhance its efficiency, and also ways in which the University might increase the resources provided to the Department, so as to lessen the difficulties that it was facing. Some recommendations, they suggested, could readily be implemented, and at no or little cost, while others "imply serious inputs of time or money". They identified the following as their key suggestions.

- The University should conduct an internal review of the RSTP, focusing on how it relates to Geography and Environment and fits the University's academic mission.
- The Department itself should conduct a significant review of its curriculum, considering additional courses that might be offered, reconsidering the courses currently offered, and revisiting degree requirements and the prerequisite structure.
- The Department should be provided with additional teaching power, either through full-time or stipendiary appointments.
- There should be consideration of providing additional secretarial support and instituting a Faculty-wide student advising system.
- The University should not proceed with a proposal for an M.Sc. in Environmental Science, unless and until there were "real and material university support for it".
- The University should provide adequate space for faculty and student research.

Some additional points made in the report are worth noting.

- Maintaining an appropriate balance between the biophysical and human aspects of their subject is a difficulty often faced in geography and environmental studies programs. A particular concern expressed within the Department in that respect is the dearth of upper-level GENS electives in their course offerings.
- There is room for creatively reconfiguring existing GENV offerings so as to add specializations such as environmental activism and community planning.
- Teaching loads seem high and faculty burnout possible, especially because of the many block, special topics, and independent studies courses offered. Some of those courses might be made a regular part of the course offerings, once it becomes clearer why there are so many.
- Improvements to room allocation and control of specialized teaching space would seem to be necessary. So too is improvement in registration processes, including pre-registration, and the provision of additional teaching assistance when laboratory sections need to be expanded considerably.
- Every effort should be made to maintain the praiseworthy emphasis on field and hands-on experience in Geography and Environment courses.
- The Library resources seem generally strong, although there is a need for a specifically geography/environment index/abstract/full-text service such as GEOBASE.
- Geography and Environment faculty and student Environmental Science research funding applications should be vetted by a science subcommittee, appropriate course and program requirement changes should go to a science faculty forum for discussion, and there should be departmental representation at meetings of Science Heads.

Summary of Departmental Response

The response from the Department of Geography and Environment evinces general support for all fifteen recommendations contained in the External Review, characterizing those recommendations as fundamentally requiring additional administrative support in the form of resources, personnel, and commitment to enhancing the quality of the department's programs. In the meantime, the response has indicated, the department is content to continue to offer graduate studies in a limited way rather than pursue their original ambitions to prepare a formal proposal to the MPHEC for the creation of an M.Sc. in Environmental Science.

Most significantly, and consistent with the reviewers' recommendations, the Department advances a case for additional faculty, more stipends, a second laboratory instructor, and better recognition of the resource needs associated with the Environmental Science part of its program.

Planning Committee and Provost Response

From the University Planning Committee's perspective, the Geography Department's considerable growth in faculty complement and the curricular and program differentiation it has experienced since the early 1970s have been in response to developments within the profession and the world, and of course to student demand. The growth in size and increase in curricular areas and programs have also contributed to student demand: they built it, and the students came, to the point where the Department continues to experience significant enrolment pressures, despite the increase in faculty complement. These pressures are felt particularly, but not exclusively, in the Environmental Science courses that are part of the core requirements for all three streams.

In addition, the Department is currently seeking to move into new curricular and program areas, areas in which the occasional course has already been offered, sometimes based on soft, external money and sometimes under the "special topics" rubric. Such offerings of course also have the potential of increasing demand.

As well, the Department's admirable effort to meet student needs and desires through open-ness to suggestion and flexibility has entailed a major investment of time and care in academic advising; the offering of a large number of independent studies courses, done on an overload basis by certain faculty members; and the facilitation of a significant number of specially approved Majors and Minors.

We note that several of the report's recommendations contain within them suggestions that choices need to be made not only by the administration but also within the Department, when considering how best to ameliorate the difficult situation it is facing. For example, the reviewers recommend that "[t]he Department conduct an in-depth internal curriculum review, including consideration of course offerings, required courses on the degree offerings, and pre-requisites. This review should also consider new curriculum directions." For its part, the Department has indicated in its response that it will "... initiate an in-depth review of ... [its] courses and programs and ... develop proposals for refining our core program pre-requisites and requirements." We anticipate then that, as it considers its curriculum, prerequisite structure, and program requirements in the coming months, the Department will, as has already been suggested by the Provost, reconsider its deployment of the teaching power of the faculty members that it already has, in light of the particular enrolment pressures that it is experiencing. The committee also suggests that the Department reflect on the high number of independent studies courses that it offers, and what that costs its academic staff; continue to put caps on courses when necessary; and consider whether and how to manage or refocus student and faculty expectations in light of existing realities and newly emerging opportunities.

At the same time, we would expect that the senior administration, with the advice of the University Planning Committee and Senate, would itself find ways to expand the

resources provided to the Department. A critical role will necessarily be played by the Dean of Social Sciences in confirming that such discussions occur at various levels and in facilitating communication between and among those levels.

From the Provost's perspective, the Department's tone in pressing its case for additional staffing, more resources, better procedures, and greater control over laboratory space; its failure to acknowledge the several improvements in those respects that have been put into effect in recent years; and its leaving uncorrected certain errors in the external reviewers' understanding of the situation in the Department, is somewhat disappointing.

To start with two small examples, the Department's formal response to the external review indicates that stipendiary allocation commitments provided as a result of the pre-registration process that had been conducted at the suggestion of the former Dean/current Provost were inadequate. Yet, the latter had come away from the post-registration discussion of stipends with the Head with the understanding that three stipends would suffice from the Department's point of view, unless after the re-opening of registration later there were significant new enrolment pressures evident. That is precisely why the Department was provided three stipends by the incoming Dean during the summer. Also, in commenting on the matter of controlling bookings for currently shared laboratory space, the Department indicates that it remains unaware of any plans that the administration might have in that respect, while at the same time acknowledging that there had been discussions between the Head and the current Dean of Social Sciences on precisely that matter. Those discussions were intended as the first step towards the administration's developing a plan.

Although it is somewhat inevitable that there will be small misunderstandings by external reviewers, given the relative brevity of their visits to campus, we note that certain of the Geography and Environment reviewers' recommendations betray a misunderstanding on their part of some of the details of the Department's situation. For example, precisely because of the unique circumstances of Environmental Science courses and Environmental Science research, the Department of Geography and Environment has in fact sent a representative to participate in meetings of the Council of Heads of Science for the past several years, and steps have been taken to ensure that Environmental Science student summer research and graduate student award applications are routinely considered by the science sub-committee of the Research and Creative Activity Committee. On the other hand, the external reviewers did recognize that there was an emerging consensus in Mount Allison budget discussions that Environmental Science enrolments should be treated separately from other Geography and Environment course enrolments, and would then be subject to a higher, science-department-akin multiplier when determining the budgetary allocations that are based on enrolments. This has already served to increase considerably the Department's budgetary allocation for 2011-12.

Although in general communication between the Department Head and the outgoing Dean/incoming Provost had been regular, substantial, and productive in the 2011-12 academic year, there would seem to have been some inadvertent “talking past one another” between the Provost and the Head on a number of matters. For example, while the Head of Geography and Environment was preparing the formal departmental response to the external review, the Provost was seeking to identify funds that might have been used to support the preparation of an MPHEC proposal for an M.Sc. in Environmental Science, as the Department had originally envisioned and as its members had indicated that they wished to continue pursuing, assuming that sufficient resources could in fact be identified. Following the meeting during which the initial departmental reaction to that effect was communicated, the University Planning Committee and Provost indicated in writing that they were sympathetic to the Department’s wish to move into graduate studies in a more formal way, and that “[m]embers of the committee are optimistic that creative ways can be found to realize the Department’s ambitions in this respect, with judicious provision and effective use of some additional resources.” In its formal response a little over a month later, the Department indicated that it had “no hope that funding will be forthcoming from the administration” and were prepared therefore to maintain the status quo of having individual graduate students occasionally pursue a specially-approved M.Sc. in an environmental science area, as the external reviewers had recommended be done pending a commitment of additional resources.

The Provost and University Planning Committee now suggest that the prospect of preparing an MPHEC proposal be explored further by the Dean and the Head.

Another example of talking past one another concerns the relationship between Geography and Environment and the Rural and Small Towns Program at Mount Allison. Although the external reviewers recommended an internal review of the RSTP and its relationship to the Department, by June, 2011 this recommendation seemed moot to the incoming Provost, given his deepening understanding of the serious fiscal problems associated with the operation of the RSTP. The Provost’s reading of the minimal reference to the relationship between the Department and the RSTP in the self-study, and his conversations with the outgoing Provost, the Head of Geography and Environment, and the Director of the RSTP concerning the fiscal difficulties of the latter, had not alerted the incoming Provost that considerable work and energy had been going into discussions with the Director of the RSTP and with officials in the New Brunswick government in connection with several initiatives. As the Head has explained, these included the prospect of introducing a planning program and a research directorate for municipal governance, where presumably the RSTP might have played a key role.

It is not clear that the incoming Provost’s decision to close the RSTP has necessarily obviated those latter plans, but it is truly unfortunate that no consultation with the Department took place concerning the proposed closing of the RSTP, and for that the Provost apologizes.

The University Planning Committee and the Provost would like to comment specifically on the dearth of upper-level GENS courses, which both the reviewers and the Department had flagged as a significant issue. We would observe that, although the faculty complement has four GENS and four GENV faculty members, the GENS faculty normally teach four courses per year, as compared to the GENV faculty who teach five, and, in addition, until recently two of the four GENS faculty members had been on reduced teaching loads, both having been NSERC University Faculty Award recipients at the time. Although one of those individuals continues to have a reduced teaching assignment, as the second Canada Research Chair within the Department's faculty complement, it might still be possible to recast program requirements and the curriculum slightly, and re-organize teaching responsibilities and assign stipendiary appointments accordingly, so as to alleviate this difficulty.

We would also observe that recent improvements in the Unit 1 collective agreement, providing for example earlier sabbatical eligibility or periodic course release to Department Heads, should serve better to compensate for the heavy advisory and administrative demands associated with being Head of the Department of Geography and Environment.

To conclude, the committee recommends that the Department engage in regular consultation with the Dean while it considers its various options, and that the Dean keep both the Department and the Provost apprised of developments as they emerge. We look forward to seeing what the Department proposes as to curriculum modification, program changes, prerequisite adjustments, graduate studies, teaching assignments, staffing, resources, and so forth, once the Department has completed its own internal reflection on all of these matters. As we indicated in our earlier written communication in late August, we view Geography and Environment as a growing and vibrant program, and one that warrants serious consideration for additional resources. Given the realities that exist in this relatively small university and in current economic and political circumstances, we know that the Department and the Dean of Social Sciences will consider assiduously how the Department's objectives might best be achieved, once they are clarified and perhaps modified. We know too that they will do so with an eye to serving the needs of their students and their own interests, as teachers, learners, scholars, researchers, and providers of service within the University and beyond.