External Review of the Department of Geography and Environmental Studies, University of Regina

Reviewers:

- Dr. K. Wayne Forsythe, Professor, Department of Geography and Environmental Studies, Ryerson University
- Dr. Dirk de Boer, Professor and Head, Department of Geography and Planning, University of Saskatchewan
- Dr. Theresa D. Garvin, Professor, Human Geography, Department of Earth and Atmospheric Sciences, University of Alberta

Site Visit Date: March 23-24, 2017

Report Date: June 27, 2017

1. Preamble

The Review Committee (RC) for the University of Regina's (UR's) Department of Geography and Environmental Studies consisted of three external reviewers: Dr. K. Wayne Forsythe (Ryerson University), Dr. Dirk de Boer (University of Saskatchewan) and Dr. Theresa Garvin (University of Alberta). The internal reviewer was Dr. Stephen Bend from the Department of Geology. The RC was provided with a Self-Study Report from the department that provided details of the unit's research profile, of undergraduate and graduate programs, as well as the academic CVs of the professors. The committee conducted a site visit on March 23 and 24, 2017. This included meetings with academic administrators of the University, the Faculty of Arts, and the Faculty of Science. In the Department of Geography and Environmental Studies, the RC met with professors, staff, and undergraduate and graduate students. In addition, we had the opportunity to meet with alumni from both the undergraduate and graduate programs. The reviewers also had opportunity during the site visit to tour the laboratory facilities, as well some of the research lab areas. We thank Dr. Stephen Bend for guiding us to various locations during our visit and for answering some of the committee's questions during our meetings. The agenda for the Review Committee's site visit is found in Appendix A.

2. Summary

The Department of Geography and Environmental Studies at the University of Regina last underwent a review in 2002. This report is the result of a two-day visit to the department and university by the review team that occurred on March 23-24, 2017. Much has changed at the University of Regina and in the department in the intervening years. In 2013, the department changed its name through the addition of Environmental Studies. The reasons for this change are in keeping with other Geography Departments in Canada, including Carleton University, Concordia University,

the University of Manitoba, Ryerson University and Wilfrid Laurier University. Perhaps the most pertinent is that "Environment" is an often-used term and is something that is known to potential students through their high school experience. This change and other recommendations that are contained within this report should lead to a productive future for the department. Despite a modest number of professors, there is a way forward for both undergraduate and graduate programs, for research, and for service to the university as a whole.

This report starts with observations common to all three reviewers, followed by recommendations and conclusions. Both the observations and recommendations are divided into sections on undergraduate and graduate teaching and learning, research, staffing, service, and financial resources. Together, these recommendations build on one another to provide concrete directions for the long-term development of a sustainable and thriving department.

3. Undergraduate Teaching and Learning

Overall, undergraduate students reported a high satisfaction with content in Geography courses, with access to course instructors, and with overall experiences in the department. They expressed concerns with unpredictable course scheduling, courses cancelled by the registrar's office at the last minute, and with required courses not being offered when needed. The following presents an explanation of some of these overlapping concerns and some recommendations for moving forward.

Number of Undergraduate Programs

The Department of Geography and Environmental Studies offers a diverse set of undergraduate programs, including joint programs, and both majors and minors. There are 11 undergraduate programs in total, covering the areas of geography, environmental studies, environmental geoscience, and geographic information science, plus combined majors with biology and economics. Relative to the number of permanent faculty in the department (nine tenured and tenure track, one half time instructor), this number of programs is high. The numbers of students in each of the programs varies widely, ranging from none in a few programs, to one (1) each in the joint Economics & Geography, and the joint Biology and Geography programs, to five (5) in the BSc Geography (2016 numbers taken from the self-study document). Historically, numbers in programs have fluctuated with the strongest registrations occurring in the BA Geography, the BA Environmental Studies, and the BSc Geography. The Review Committee noted that, at present, there are perhaps too many program options which has led to dilution and some programs being undersubscribed. The committee also noted that number of undergraduates enrolled in any of the majors/minors could increase without jeopardizing the quality of the various degree offerings.

Recommendation

• The current number of programs available should be reduced by at least 40%. Despite the argument that reducing the number of different programs may not result in a reduction of

the number of courses taught in a department, a multitude of closely-related, relatively similar programs creates confusion for students, complicates student advising, and represents an administrative burden to the department, faculty, and university. Program rationalization will allow the unit to focus on its flagship programs, and may provide an opportunity to align the faculty in the department with common goals and providing cohesiveness to the diverse body of departmental faculty.

Undergraduate Program Requirements

Relative to undergraduate programs in similar regions of the country, the University of Regina's Department of Geography and Environmental Studies requires a high number of Geography credit hours in its majors and minors, as well as providing little flexibility for students to create programs based on their own interests. At present, UR's BSc Major in Geography requires 51 credits of core geography (17 courses) and a number of prescribed cognate courses. UR's BA Major in Geography requires 39 credits (13 courses) in Geography (including seven Geog courses at the 100 & 200 level, and six Geog courses at the 300 & 400 level.). By comparison, the University of Alberta's BA Major in Human Geography requires only five geography courses in first and second year, and four specialized Geography courses in years three and four. In fact, many programs and universities are experiencing a move away from highly prescribed course requirements towards requirements that allow students to use approved cross-listed courses in other departments to fulfill skills and knowledge requirements. Such flexibility is attractive to a new cohort of millennial learners and allows for more students in the program without increasing teaching workload. At present, the BA in Environmental Studies program is the reverse of Geography and relies heavily on courses delivered by other departments. This situation represents both an advantage, in that not all of the courses have to be delivered by the department, and a disadvantage, in that the department loses some control over timetabling and course content. Some students reported that there was duplication of material when taking lower-level courses in different departments as part of their Environmental Studies degree.

Recommendations

• For each retained program, the number of required Geography courses should be reduced to no more than five (5) in first and second year, and 3-6 in third and fourth year. In addition, the department should allow students the opportunity to explore their own specialized interests through using cross-listed course options from other departments towards credits in their Geography or Environment program. For the BA Environmental Studies program, requirements should be standardized similar to the Geography program.

¹ There is a tradition in Geography to design programs around a high number of required Geography courses that cover the broad range of geography; this seems to be the model currently operating at University of Regina. The model we propose here focusses the course requirements on a few cognate courses (generally taught in first and second year and

- The department should explore the opportunity to move from very specialized courses in third and fourth year to more generalized course titles that sit within the expertise of current faculty and allow for flexible topic coverage over time. Such courses could also be offered in alternating years, based on available teaching resources.
- The department and faculty should provide minimal funding to allow members of the department to visit other universities to explore how other Geography departments have faced similar challenges. Short one-day or two-day trips to other universities (University of Alberta, University of Calgary, University of Manitoba, University of Saskatchewan, University of Winnipeg) will foster the adoption of program innovations.

Coordinating Joint Major/Minor Programs

At the time of the review, the department had two joint major programs with very low registrations. While joint majors are one way to capture students and increase enrollments, the committee recommends that they be adopted cautiously to ensure that growth in these programs does not detract from the regular BA and BSc programs that form the core of the department's undergraduate offerings.

Recommendations

- The department should review the existing joint majors based on decisions made in the program review.
- The department should carefully and judiciously explore the options for future joint majors and minors.

Courses Listed in the Calendar

There are many courses listed in the calendar that are highly specialized and/or have not been offered recently. When they have been offered, registrations have been low. In the meantime, expertise within the department has changed with new hires and new faculty interests. The redesign of Majors and Minors provides an opportunity to build a set of courses 'from the ground up' and to reflect on similar changes that have taken place in Geography departments across Canada. Most departments now require two introductory courses for all students (one human/social and one physical), then second year courses (perhaps 2 from a selection of 2-4), and then flexibility in the upper levels. At present,

taken by both BSc and BA students), followed by a few upper-level specialized courses and the ability of students to take cross-listed courses for program credit. This approach is being used in Geography departments more recently as a way to increase program registration, allow for students to customize their learning environments, and to have departmental teaching focussed on a set of key, core courses (thus reducing the number of courses overall that must be taught each year). The added benefit is that it allows the department to focus limited teaching resources on the key geographic concepts and techniques.

there are 11 first and second year courses in the calendar, and 30 courses at third and fourth year. This is far too many for the teaching resources available in the department.

Recommendations

- As part of the program restructuring, revise course offerings to present a cohesive set of flexible courses that meet the needs of students, while offering a straightforward, stepwise introduction of content through the four years of the degree(s).
- An elective course in programming (in r or python) was identified as desirable by current students and alumni.

First Year/Introductory Courses

The committee was made aware that, in the past, some first-year courses were offered in multiple sections in the same term. Given the strain on teaching resources, this appears to be duplication. For example, Geog 100 (World Regional Geography) is often offered by both the Department of Geography and Environmental Studies and by Luther College in the same term. Likewise, Geog 121 in Winter 2016 was taught by two faculty members in two different sections. With the latest revision in courses, the two courses that were previously second year (220 and 221) were moved to first year (120 and 121). This means that, at present, there are three first-year courses (100, 120 and 121) and some of them are taught in multiple sections in the same term. In addition, some of those courses are also taught during spring and summer sessions. This suggests an inefficient use of the scarce teaching resources at the introductory level. Finally, the committee noted that there has been a decline in the number of students taking all first year Geography courses. The reasons for this appear to be complex. However, the committee agrees that instructors who are enthusiastic and inspiring should be assigned to teach these courses. Faculty research should also be presented in first year courses to show students what Geographers do. First-year courses are the major recruitment tool for students should they decide to major in any of the degrees offered by the department.

- Retain 120 and 121 as required first-year courses.
- Ensure enthusiastic, seasoned faculty members teach first year courses and incorporate research into teaching.
- Move 100 (World Geography) to a second-year course.
- Reduce the number of second-year course offerings to 2-4 key courses that will provide students with core geographic skills.
- Embrace the recent Environmental Studies name change and increase course offerings with the "environmental" designation (especially for first year courses). Incoming first year students are familiar with environment but likely not so familiar with geography since it is not offered at the high school level in Saskatchewan.

Laboratory & Field-based Learning

Current students and alumni clearly emphasized the importance of experiential learning, both in the laboratory and in the field. Indeed, fieldwork is a key identifying feature of geographic learning and can be emphasized as a way to reach out to the new generation of experience-based and group learners. Increasing such opportunities would not only appeal to students coming into the university, but could also enhance student involvement in research, thus enriching students' overall learning experience. Laboratory access is currently available for students, although size constraints of these facilities limits enrollment and 'hands-on' time, especially at the introductory level. A second limiting factor for experiential learning is the additional cost. This includes the teaching time required to develop and deliver field and lab courses, as well as the financial cost. Despite the fact that field trips to off-campus sites, and longer-term, field-based learning (such as trips to other cities or countries) provide exceptional learning opportunities and are well-liked by students, in the recent past they have been taken on a 'overload teaching' by dedicated faculty members. Finally, the added cost of field equipment, supplies, transport, and (potentially) housing can be a constraint.

Learning how to think is very important according to program graduates and was a strength highlighted in many of the current courses that are offered. Increased opportunities should be provided for learning how to write: in reports, through an undergrad thesis, and in lab write-ups, as this is a very important skill that is required in the workplace.

Geographic Information Systems (GIS) was cited by students as a program area that should be required. Elective techniques courses such as remote sensing and geospatial/spatial analysis should be offered to all students. GIS and geostatistics must be made available as options for students in the environmental studies programs. Program graduates cited the need for this in job applications.

- For on-campus courses, move to a model of classroom lectures (faculty member) & lab (graduate TA) as used by other universities for lab-based learning. Increasing the number of small lab sections per course will enable higher course registrations without impacting the workload of teaching faculty. In the short term, this may require additional work for instructors to develop new methods of course delivery; however, in the long term it will reduce instructor workload and foster increased enrollments for those courses that are currently full.
- Reintroduce a consistently and predictably offered field-based course taught as part of
 faculty members' regular teaching load. A substantial field course (Geog 411) to national
 and international destinations used to be part of the regular course offerings in the
 department. This needs to be reinstated as not only does it provide the field experience
 students have requested, it is also an effective recruitment tool. The Department might
 consider focusing field courses in regional locations that provide opportunities for both

BSc and BA students to conduct work at the same time in order to lower transportation costs and take advantage of economies of scale. They might also consider offering the field course in alternate years, depending on teaching loads of faculty members.

Timetabling

Both students and faculty expressed dissatisfaction with the current timetabling system, noting that courses changed timeslots from year to year, were scheduled at less convenient times during the day, and conflicted with other courses required for the program. Indeed, the committee considered that some of the loss in course registrations in Geography and related programs could be due to the uncertainty of timetabling and the inability to take courses required for program completion.

Recommendation

• Timetabling of courses should be returned to the unit level. Unit control of course scheduling is the norm at most other post-secondary institutions in Canada and ensures an understandable and predictable program schedule for students. It also allows teaching faculty to effectively plan allocation of time for both teaching and research.

Alternate Teaching Methods

A rationalization of programs and required courses may provide the opportunity to engage in new and innovative teaching methods. Other Canadian universities are taking advantage of online content, and both synchronous and asynchronous learning environments. The Review Committee emphasizes that any such change in teaching methods must be accompanied by considerable support from Administration (both at the Faculty of Arts and University administration levels) in order to make such a change effective. Faculty members that utilize these alternative methods must have easy access to instructional designers, learning support experts, and IT/infrastructure personnel. Past experiences in other universities have shown that the adoption of alternate methods takes considerable time and effort for individual instructors. Given the current teaching demands made on faculty, this approach should only be adopted with careful consideration and financial and resource support from administration.

Recommendations

- One faculty member should be tasked with exploring opportunities for future alternate teaching methods and report back to the department.
- Alternate teaching methods should not be adopted until sufficient support resources are provided by university administration.

Honours Program

The current honours program should be retained and promoted for exceptional students. Not only does it provide options for students, it also develops a talent pool from which faculty members can recruit graduate students. The committee supports the honours program model that has an individual

honours student working directly with a supervisor on an appropriate project. Given scarce resources, it is not appropriate for the department to allocate an honours course as part of regular teaching assignments.

Recommendations

- The honours program should be retained using the model of individual supervisor oversight (no common course required)
- The honours program should require a written thesis

4. Graduate Teaching and Learning

The Committee met with both current graduate students and alumni, all of whom reported high satisfaction with the program and regret that the status of the program has recently changed. The committee found that the graduate program is currently the most pressing challenge in the department because it affects both undergraduate teaching and faculty research programs.

The Department offers M.A., M.Sc. and Ph.D. programs in Geography and Environmental Studies, and all programs are currently "Special Case". There is no fixed graduate curriculum; the program is uniquely tailored to each student and their thesis/research needs. The "Special Case" status of the graduate programs complicates the application process as it requires applicants to develop elements such as a problem statement, objectives, and a literature review as part of the application prior to the start of the program. In a regular graduate program, this work would be done once the student is in the program, in many cases as part of a course, so applying to a "Special Case" graduate program presents a barrier to graduate student admission. The current enrollment is six graduate students whereas based on other programs of similar size and scope, a guideline might be about 15-20 graduate students for 5-6 research-active faculty.

Many Canadian university Geography programs have faced similar issues in the past years. In response, other departments have moved to a highly flexible format for graduate programming, similar to the undergraduate program. Rather than requiring a core set of courses, graduate students are sometimes required to take at least one course within the department (often a directed reading with the supervisor) and one or two other courses elsewhere in the university. It is now common practice to require only three (3) courses at the graduate level, and some universities only require two (2) if the student has graduated from the same institution. In addition, some departments use a process called 'piggybacking' or 'layering' to allow graduate students to take a 400-level (senior) course for graduate credit by doing additional work at a higher academic level. This permits a rational use of scarce teaching resources. It also places research at the forefront of the graduate experience, rather than coursework. In comparison, UR's Graduate Program in Geography and Environmental Studies currently requires five (5) courses.

Some faculty did comment that the structure of the graduate program required students to take too many courses, and as a result some faculty were teaching graduate courses on overload to enable students to graduate. The committee sees this as detrimental to both faculty members and to the future of the program and firmly believes that faculty members should get acknowledgement and recognition for their graduate teaching as well as supervision of graduate students. To increase recruitment opportunities, we recommend that linkages be developed with both Brandon University and Medicine Hat College, neither of which have graduate programs in Geography.

Recommendations

- The graduate program must be reinstated as soon as possible.
- The department needs to support, enable, and encourage graduate applications to external sources of funding (Tri-council scholarships as well independent sources such as the Royal Canadian Geographical Society, and city and provincial sources).
- The graduate course requirements should be revised to permit maximum flexibility for students and fewer course requirements to complete the program (3 courses maximum).
- Faculty members must receive acknowledgement on annual reviews for the number of graduate students that they supervise and for overload graduate teaching.
- Where faculty members have external funding for graduate students, the department must support recruitment and retention.
- Current graduate funding should be used to support graduate students in Teaching Assistantship positions situated within labs and classrooms.
- Graduate students with TA/RA support should be encouraged to present guest lectures and give class presentations (participation should not be limited to marking only).
- Once reinstated, the program should be widely advertised through Departmental, Faculty, and University websites and listserves, as well through national academic organizations and social media.

5. RESEARCH

The Department of Geography and Environmental Studies' research productivity and impact fall within the norms of similarly sized departments in Canada. The Committee's consideration included number of publications, quality of research journals, and success in peer-reviewed funding exercises. As is common in Geography, many types of research take place, and presentation of research results has occurred in diverse venues. The Google Scholar and Web of Science statistics show the department is within the range of departments where a combination of teaching, research and service are required.

There have been great successes in the department, such as the awarding of a Canada Research Chair. In addition, the department hosted the very successful Prairie Summit annual meeting that brought together four diverse organizations in one conference. Departmental members have also been

successful at garnering Tri-Council and other external research grants. These examples, coupled with ongoing productivity and research impact, suggest that research is a considerable strength of the unit.

Two of the members of the Department of Geography and Environmental Studies who are highly active in research (Sauchyn and Widdis) are slated for retirement in the next two years. These retirements will likely have a significant impact on the research profile of the department unless changes are made to support faculty research programs through increased access to graduate students and standardized and predictable teaching assignments. While new faculty members have entered the department in the past few years, the committee found that they seem to have received little formal mentoring or guidance.

Recommendations

- The graduate program be reinstated as soon as possible to support recruitment of high-quality personnel in support of faculty research programs.
- Administration implement a mentoring program for new faculty that matches incoming assistant professors with experienced researchers outside of the department.
- Faculty should be encouraged to utilize existing University of Regina support structures
 for peer review grant and proposal development. Internal funding opportunities provided
 by the office of the VP Research should be utilized by faculty for developing larger grant
 proposals.

6. SERVICE

Given the size of the department, its contribution to service internally and externally is admirable. Fewer faculty members has meant that service loads are distributed amongst a small group and it is likely that members of this department are taking on higher service loads as compared to colleagues in larger units. The committee was disappointed to hear that when faculty are seconded to administrative roles or to research centres, the university has not always provided additional teaching/research capacity to cover such losses.

Recommendations

- Service roles for all faculty members should be carefully managed to ensure that service takes no more than 20% of their time. This is especially important for Assistant Professors.
- Administration must provide additional teaching/research capacity for secondments and university-level administrative appointments.

7. FACILITIES

The department currently houses teaching space, research space, and a map library. Teaching space – especially lab space for physical geography – is extremely limited as compared to other Geography departments of this size. The dry lab only has capacity for six, while the wet lab can seat 20 students.

As a result, multiple sections of a course need to be taught and this is a waste of valuable teaching resources. Alternately, course registrations need to be capped. Lack of appropriate teaching space, and especially lab space, is clearly influencing the program's success.

Research space consists of a set of externally-funded labs (PARC, PEPL) a geomatics lab (TERRA) and a map library. Both PARC and PEPL are located in buildings that are a 10 minute walk from the Department. TERRA is a fully-equipped digital geomatics lab and supports both student coursework and faculty research.

The Map Library is a medium-sized space located in and maintained by the department. Established in 1968, it houses a comprehensive collection of maps, atlases, and other reference materials used by students and researchers from across the university, and is staffed by graduate students (TA/RA) funded through the Department. Traditionally, Geography departments in Canada housed map libraries in order to provide easy access to printed maps and reference materials. However, these map libraries require special environmental controls, are generally quite expensive to maintain and are not part of the university's openly-available library holdings. Over the last two decades, most Geography departments have reassessed their map libraries and moved documents to university libraries, local libraries, and provincial and national archives. Such a transition recognizes the historical nature of printed maps and atlases and ensures their proper maintenance. It also ensures that documents are properly catalogued and publicly available. The committee acknowledges that the map library is a source of well-founded pride; however, it does require a large amount of space and the TA support used to staff it can very likely be better utilized elsewhere, in particular for supporting graduate student instructional development through increased opportunities for field and laboratory teaching experiences. Student input indicates that the map library is a great place to study but is only utilized for course assignments in some first year courses.

- The Faculty of Arts should liaise with the Faculty of Science to gain access to increased wet lab and dry lab teaching space for the physical geography courses.
- The University of Regina Library should assign a librarian to the task of reviewing the current Map Library holdings and searching alternative homes for important and historical documents.
- Current Map Library holdings should be rationalized to focus only on those needed to support current research and teaching foci.
- The size of the Map Library should be reduced by at least 50% and space reallocated to meet greater needs (perhaps as a larger dry lab teaching space).
- If the Map Library is reallocated, the space must remain assigned to the Department.

8. STAFFING & ADMINISTRATION

Currently the Department has 10.5 full-time academic staff members: two full professors, six associate professors, one assistant professor, one lecturer, and one instructor (half-time). The Department has one administrative assistant. While small by some university standards, there are departments of similar size throughout Canada and they all successfully provide undergraduate and graduate programs. The Committee did note, however, that the Department of Geography and Environmental Studies cannot be reduced in size without jeopardizing its mission of teaching, research, and service to the community. Undergraduate/graduate students and alumni who met with the committee were generally happy, stating that professors are approachable and well-liked, and care about their students. The administrative assistant was also identified as extremely helpful. Staff from outside the department indicated that there are opportunities for the physical geographers to develop stronger linkages with faculty members in the Faculty of Science.

Experienced faculty members both inside and outside the department indicated that the lack of departmental representation on Faculty of Science councils makes administering the BSc program difficult. Whenever a change needs to be made to the BSc program, revisions must be brought forward by someone from outside the department. This inconvenience slows the ability of Geography to make required program changes in a timely manner.

Some members of departments within the Faculty of Science introduced the option of having the physical geographers move to other departments. The review committee would consider this option, only if the human/social geographers also move to the Faculty of Science and become members of that Faculty. There are a number of examples of where such a move has occurred in Geography departments in Canada, including the University of Alberta, McGill University, and McMaster University. The committee categorically rejects the dividing Geography between two different faculties.

- Priority should be given by the Faculty of Arts to replace the two faculty members retiring in the near future.
- Physical geographers should be encouraged to develop closer ties with colleagues in the Faculty of Science.
- The Faculty of Science must permit the Faculty of Arts to appoint a physical geographer as a special representative to Faculty Council with the rights to propose changes to the BSc program.
- The addition of a lab technician would greatly enhance the ability of the department to offer laboratory and field work learning opportunities that were emphasized by all of the current students and alumni with whom we met.
- The inclusion of additional adjunct professors to may help to diversify course offerings.

• Geography, as a department, should not move to Faculty of Science unless Faculty of Science supports the inclusion of the Human/social geographers in the move.

9. FINANCIAL RESOURCES

The discretionary budget allocation of approximately \$13,000.00/year means that resources are spread very thin. Given that computer equipment has a limited lifespan, where possible the university should provide funding for computer upgrades in existing labs. The department also incurs ongoing expenses for the Map Library, from which the entire university benefits. The drop in the Student Academic Support Budget (TA/RA wages) of approximately \$10,000.00 from 2005-2006 to 2015-2016 most certainly impacts the ability of faculty members to offer more laboratory and field work experience in their courses.

The committee heard many ideas from administration, faculty, and students about how to generate additional revenue. For example, one suggestion was to offer a new GIS certificate through the Continuing Education (CE) department. Some of the revenue from courses offered through CE (~25%) would flow back to the department via the Faculty of Arts (revenue refers to the monies left after expenses are covered). Note: An introductory course in Geography and Environmental Studies either in-classroom or online could be developed. The CE department also believes there is pent-up demand for introductory Geography and Environmental Studies courses online, especially during the summer semester. There are calls for new course submissions twice a year. If approved, instructors receive an \$8000 grant to develop the course.

Recommendations

- The use of TA/RA funding to staff the Map Library should cease immediately. All TA funding should be allocated to hands-on teaching such as field assignments, labs, and tutorials.
- One faculty member (as mentioned earlier) should be assigned to exploring options for teaching online courses. As previously stated, this should be approached with caution and any move to online teaching must be accompanied by appropriate and adequate support from university administration.

10. KEY RECOMMENDATIONS

The Department of Geography and Environmental Studies has undergone substantial change over the past decade and now faces stressors that were not in place at the time of the last review. Overall, the committee recommends that the department completely re-think its programs, course offerings, and facilities. Universities in Canada and around the world are undergoing fundamental changes in how higher-education functions. The following five key recommendations will begin a transformative process that will ensure the success of the department in the decades to come.

1. The department must develop a strategic plan

A five-year strategic plan will provide direction and clarify the department's goals so all faculty members understand them. There is currently not enough emphasis on moving the department forward and some quite divergent interests that inhibit the implementation of changes. The department should therefore develop a plan to address the goals of the University's 2015-2020 Strategic Plan and use its principles when making requests for resources. The traditional approach of Geography as being a broad swath of course offerings is no longer relevant or feasible in today's university environment. A highly structured program format is not preferred by today's students, who want to be able to follow their own interests. The department needs to be proactive and embrace new ideas and take advantage of opportunities as they arise.

The department performs very well in some aspects of what it does; however, a common streamlined program platform needs to be developed with all faculty members contributing equally to its design. In particular, Assistant and Associate Professors should have considerable input into program design as they will be the ones implementing the changes over the next 2-5 years. This can begin with reassessing all of the programs that are offered.

2. Undergraduate Program Rationalization

The department currently offers far too many programs. Considerable thought should be given to reducing the offerings to three to four key programs. Creating a small set of undergraduate programs is an important element of rationalizing the undergraduate program. The department should be looking at how programs are offered in other, comparably sized university geography departments for models of course and program delivery. Programs with low registrations or requiring specialized courses being taught to only a few students should be abandoned. The number of 'required' courses in each program should be reduced to allow students greater flexibility in designing a program based around their individual interests. Fewer geography courses should be required for the Geography programs, and required courses for the Environmental Studies degrees should be re-examined and reduced (in particular, to account for overlapping content in courses taught outside of Geography).

3. Reduce and Standardize Undergraduate Courses

There is considerable overlap and multiple sections being taught of lower level (first- and second-year) courses, which represents an inefficient use of scarce teaching resources. Consideration should be given to not offering undergraduate courses (especially first and second year courses) in the Spring and Summer sessions (unless they are taught by additional sessional instructors). Courses that have not been taught recently should be removed from the calendar. A core set of mandatory courses should be developed that can be taught to larger groups of third and fourth year students.

4. Reinstate the Graduate Program

The loss of the graduate program has a domino effect throughout the department. Instructors lose access to critical TA/RA resources, the Special Case requirements increase workloads for students

and their supervisors, and lack of access to graduate students can influence recently hired faculty members' viability for promotion in the future. For these reasons, the committee recommends reinstating the graduate program as quickly as possible and recommends a concurrent re-design of the program requirements, reducing the number of geography courses students need, as well as the number of courses overall to get a degree. The committee strongly recommends that the department review graduate program requirements for similar sized departments for inspiration.

5. Transition the Map Library

The Map Library, though a valued part of the department, is a drain on resources. At some point, the Map Library will have to be moved and become part of the university and/or provincial archive and library holdings. The committee recommends that discussion on how this will occur should begin as soon as possible. Past experiences of other universities show that this will be a long and detailed process. The sooner the discussions start, the better.

11. Conclusion

Despite facing some challenges over the past five years, the Department of Geography and Environmental Studies has retained a strong research record and students report high satisfaction with instructors, faculty, and most programs. Nonetheless there is work to be done. Given the current situation in post-secondary education in Saskatchewan (and in Canada as a whole) we highly recommend that the department begin the process of rethinking the structure and delivery of its programs and courses to make the most effective use of faculty time and resources. The University of Regina is not alone in this situation; therefore we strongly recommend that the department reach out to learn how other Geography departments have survived and thrived in similar conditions. With such changes, there is a bright future for the Department of Geography and Environmental Studies at University of Regina.



Geography & Environmental Studies

Itinerary: Thursday 23 March 2017

Draft date: 2017-03-23 2:38 PM

Time	Who / What	Participants	Where
7:30 am	Opening Breakfast at London Belle	VPR, Provost, Dean of Arts, FGSR Dean and Unit Review Team	Fairfield Hotel, 3915 Albert St
9:00	Faculty of Arts	Unit Review Team, Dean Rick Kleer	CL 427
9:40	Faculty of Graduate Studies & Research	Unit Review Team, Dean Thomas Bredohl	PT 110.4
10:00	Break	`	CL 427
10:30	Provost and Vice-President (Academic)	Unit Review Team, Dr Thomas Chase	CL 427
11:00	Department	Unit Review Team, Department Members	CL 427
11:30	Department (continued)	Unit Review Team, Department Members	CL 427
12:00 - 1:30 pm	Lunch 'Reservation under Geography'	Unit Review Team only	University Club
1:30	Student Society and current undergraduates	Unit Review Team, Current students	CL 427
2:00	Faculty of Arts Administrator	Unit Review Team, Rose-Marie Bouvier	CL 427
2:30	Break		CL 427
3:00	Tour of Research Labs	Unit Review Team Dr Kyle Hodder, Dr David Sauchyn	RI408.1, RI435, PARC
3:30	Tour of Teaching Labs, and Department, and Map Library	Unit Review Team, Dr Ulrike Hardenbicker	CL340+
4:00	Undergraduate Alumni – Leanne Melton, Jonathan Richards, Laura Richard (in-person) & Geoff Gunn (videocon)	Unit Review Team And Undergraduate Alum	CL 427
4:30	Luther College	Unit Review Team, Dean Volker Greifenhagen	CL 427
5:00 – 6:00 pm	Meet and Greet Social		University Club



Geography & Environmental Studies

Itinerary: Friday 24 March 2017

Time	Who / What	Participants	Where
8:30	John Archer Library	Unit Review Team, Marilyn Andrews, Bill Sgrazzutti	Alexandria Room
9:10	Vice-President (Research)	Unit Review Team, Dr David Malloy	AH 510.1
9:40	Faculty of Science	Unit ReviewTeam, Dean Douglas Farenick	LB 225
10:15	Break		CL 427
10:30	Individual Faculty and Staff upon request	Dr Joe Piwowar, Unit Review Team	CL 427
10:40	Coordinator, BGISc Program	Dr Julia Siemer Unit Review Team	CL 427
10:50	Coordinator, Environmental Studies Program	Dr Ulrike Hardenbicker Unit Review Team	CL 427
11:00	Individual Faculty and Staff upon request	Dr Randy Widdis, Unit Review Team	CL 427
11:10	'Teaching-focused' Faculty	Mark Coté, Unit Review Team	CL 427
11:20	Centre for Continuing Education	Terri Allard, Willadell Garrick Unit Review Team	CL 427
11:30	Department of Geology	Unit Review Team Dr Kathryn Bethune, Dr Janis Dale	CL 427
12:00 - 1:30 pm	Lunch "Reservation under Geography"	Unit Review Team Only	University Club
1:30	Samantha Kerr, Jessica Vanstone (in-person); also (videocon) David Barrett, Evan Kraemer	Unit Review Team & MSc Graduate Alum	CL 427
2:00	Department Head	Unit Review Team, Dr Kyle Hodder	CL 427
2:30	Break		CL 427
3:00	Wrap up	Unit Review Team	
3:30 – 4:00 pm	Post-Review Meeting	VP (Research), Provost, Dean of Arts, FGSR Dean & Unit Review team	CL 427