Final Assessment Report Geography (MA, MES, MSc, PhD) (joint with Wilfrid Laurier) June 2015

The Department of Geography and Environmental Management (GEM) at the University of Waterloo (UW) and the Department of Geography and Environmental Studies (GES) at Wilfrid Laurier University (WLU) jointly deliver the Waterloo Laurier Graduate Program in Geography (W-LGPIG). The W-LGPIG was approved in 1992 and became fully operational in September 1993. The W-LGPIG offers four graduate programs: the Master of Arts (MA), Master of Environmental Studies (MES), Master of Science (MSc), and PhD degrees. Specialization fields across these programs include: Environmental and Resource Management, Environmental Science, Geomatics, and Human Geography. The joint W-LGPIG was appraised in 2007 and classified as Good Quality.

The directorship of the program alternates between the two universities every three years; the current Director, Dr. Johanna Wandel, is at the University of Waterloo. The Vice-President Academic & Provost of the two universities, on the recommendation of the Graduate Deans and the Faculty Deans and Department Chairs of the participating department of the two universities, appoint the Director.

Summary of Review Process

Submission of Self-Study by Program: July 2014

Site visit: March 19-20, 2015

External Examiner's Report: March 29, 2015 Departmental Response: May 26, 2015

Review Team:

External Reviewers: Dr. Peter Keller, Department of Geography, University of Victoria

Dr. James Buttle, Department of Geography, Trent University

Internal Reviewers: Dr. Mustafa Yavuz, Department of Mechanical & Mechatronics

Engineering, University of Waterloo

Dr. Jane Rutherford, Department of Biology, Wilfrid Laurier

University

The Associate Provost, Graduate Studies, at the University of Waterloo selected the external reviewers from a list provided by the W-LGPIG program director. Each of the partner universities appointed an internal reviewer who accompanied the external reviewers during the visit to their home university. The Review Team conducted a site review of the joint Geography graduate programs over two days on March 19th to 20th; the self-study report was provided prior to the visit. Their agenda included meetings with representatives of each institution (Waterloo, and Wilfrid Laurier), including: Vice President Academic & Provosts, Associate Provost/Dean of Graduate Studies & Postdoctoral Studies, Associate Deans (Graduate Studies) and Deans of Faculties; Department Chairs; W-LGPIG Director & committee members; faculty members, graduate students, and staff of the respective Departments, and Library staff. They were given a tour of the research facilities at each of the partner universities.

Summary of Review.

The External Reviewers, Dr. Peter Keller and Dr. James Buttle, submitted a very positive report on the Joint Graduate Program in Geography (MA, MES, MSc and PhD) programs. The Reviewers were "impressed by the overall structure and quality of this joint graduate program, its faculty and students". They concluded that W-LGPIG program "overall is a very strong and highly reputable graduate program competitive with the best in Canada and internationally".

Strengths:

- The joint delivery of the program by UW and WLU "gives students access to a very significant pool of research faculty and research infrastructure not available in most other Geography graduate programs in Canada".
- The joint program is "amongst the strongest graduate programs in the country" in "water-related research, particularly in wetland and northern environments as well as geomatics. The program also could have other strengths recognized to be amongst the top nationally if the research programs of faculty in the various subdisciplines were aligned and promoted under strategic umbrella themes. As an example, Human Geography could seek to identify strength under "Climate Change" as well as "Governance". Geomatics could identify similar overarching common themes."
- The "technical Library and data support accessible to graduate students both at UW and WLU".
- "Strong-to-excellent research and scholarly records" and external funding of faculty in all fields of study.
- A "very good track record of completion rates at both the Masters and PhD levels".
- Student reports of the high quality of graduate supervision.

Weaknesses:

- "The number of courses required for completion of the research-based Masters program is greater than for comparable programs."
- Concerns raised by some students for "delivery of graduate courses using undergraduate style course evaluations focusing on examinations".
- Many of the 60 courses listed in the calendar are not offered on a regular basis.
- Potential loss of critical mass of faculty to offer graduate supervisory capacity in Human Geography.
- Limited enrolment of Master's students from other universities.

Reviewer Recommendations & Department Responses:

The Reviewers offered 12 recommendations under three themes: a) Raising the Profile, b) Program and Courses and c) Resourcing. These recommendations and the program responses appear below.

- a) Raising the Profile.
- 1. The quality and positioning of this program relative to others in Canada and internationally is poorly advertised and marketed, and therefore it operates in relative obscurity. The websites of both Departments and the joint program would benefit from investments to get the story out. It is unlikely that the expertise or resources to achieve this can be found within the units. We suggest that responsibility for program marketing and promotion be assigned elsewhere at UW and WLU, and that the unit then receive training in how to capitalise on social media and other methods to keep redesigned web-presences up-to-date and dynamic.

We agree with this recommendation. The program committee for the W-LGPIG will undertake to develop a better marketing strategy for this program, with the goal of raising the program's overall profile in Canada. This graduate marketing strategy will be coordinated with current and future undergraduate marketing activities. In particular, we will endeavour to enhance our program website. We will be seeking assistance and resources from both UW and WLU to develop, implement, and maintain this enhanced marketing and promotion program.

2. Both Departments are encouraged to develop ways to identify and stay engaged with their graduate student alumni to track their careers and successes. This information can then become part of a revised web presence.

We agree with this recommendation. The program committee will work with the alumni affairs offices at both UW and WLU to review the current status of our alumni tracking and outreach activities. Information gained from these outreach activities will be used

to both enhance our marketing efforts and to address issues in the delivery of the program.

3. All graduating graduate students should receive an exit interview with a neutral party so that the program can receive ongoing feedback on the student's experience with the overall program, their supervisor, and supervisory committee.

We agree with this recommendation. The program committee will develop a list of questions to guide these semi-structured exit interviews. Exit interviews will be administered by the graduate officers at UW and WLU, through a confidential process. Feedback from these exit interviews will be reviewed annually.

- b) Program and Courses.
- 4. The numbers and specificity of graduate courses currently offered in the program's curriculum could be simplified and generalised to accommodate flexibility and realism. Courses that have not been offered for several years should be removed, particularly in instances where the faculty member who initiated the course has left the university. The program should explore more generalized "umbrella" course titles within cognate areas that can then be "customized" with sub titles to reflect any one specific offering. Courses offered in any one year should be advertised and, if at all possible, courses offered for the following year should also be agreed upon and advertised so that there is an honest contract between entering students and the program.

We agree with this recommendation. The program committee will undertake a curriculum review with a view to streamlining graduate course offerings and eliminating older courses that can no longer be offered. This curriculum review will be undertaken in coordination with our responses to recommendations 5 and 6.

5. The number of required courses (five) is high for typical equivalent Masters programs of this type across Canada and we suggest that the possibility of reducing this by one course be considered. Courses that are cross-listed and/or offered by academic units other than the two Departments participating in the joint program should be clearly identified as such, with an explicit pointer that students must check the availability of these courses during their degree.

We are taking this recommendation under advisement. We are currently (at WLU) undertaking a detailed review of the course requirements for research masters programs across Canada. This information will inform a broader discussion regarding the appropriateness of the current course requirements and the possible revision of these requirements.

6. The learning outcomes, design and delivery of GEOG 691 should be revisited. We encourage that this process be externally facilitated through one of the two universities "Learning and Teaching Centres", and that the process include input from past students

who have taken this course. Given relatively high enrolment numbers for this type of course (often over 50), the option to divide the course into two - one specific to Masters students, the other specific to doctoral students - should be considered. Separation of the two groups would also serve to establish a sense of community amongst the PhD student cohort across the program that appears to be missing at present. As starting discussion points for redesign of GEOG 691 we offer exploration of what may be simply "busy work assignments" vs. assignments that will help the students "advance in their program of study", what aspects of professional development the course may wish to cover (e.g. writing proposals and grants, strategies for publishing, producing conference posters and presentations, preparation of teaching dossiers, project management, ethics, ...), what the most effective ways are to teach these professional development skills, and how the course may facilitate community building across the graduate body, and between graduate students and faculty. The question of whether the course should remain Pass/Fail or be graded could also be revisited. Finally, thought could be given to how the course could be adjusted on an annual basis to reflect the research interests of that year's cohort.

We agree with this recommendation. As part of the broader curriculum review undertaken in response to recommendation 4, we will undertake a review of the delivery of GEOG 691.

7. We would like to encourage the establishment of a weekly or bi-weekly seminar series across the entire program. We understand that such series exist within individual fields within the program but feel that a pan-program series would assist in promoting a greater sense of community amongst students in the program as well as raising awareness of the diversity, breadth and excitement of the discipline.

We agree with this recommendation. The department chairs at WLU and UW will coordinate to organize a pilot seminar series for the 2015-16 academic year. The initial response to this series will inform the continued development of a regular seminar series.

8. The stated timeline and deadline for the comprehensive examination should be aligned with the current reality (completion within the second year and by the end of the sixth term in the program). The evaluative pieces of the comprehensive examination should match clearly stated purposes and learning objectives and as much as possible facilitate delivering components of the doctoral theses (i.e. literature review, theoretical context, relevance to the discipline, statement of research problem to be advanced).

We do not agree that adjustments should be made to the comprehensive exam schedule. Normally, PhD students are required to complete the comprehensive exam in the 4^{th} term of study (usually the fall term of the second year in the program). Most students successfully complete the comprehensive exam in the 4^{th} term, or early in the 5^{th} term (if there are scheduling issues). We believe this timing should be maintained to ensure that students move on to their thesis research in a timely manner. Delaying the

timing of the comprehensive exam would unnecessarily slow students' progress through the PhD program.

We will review the current structure of the evaluative pieces of the comprehensive exam with respect to stated desired learning outcomes.

9. The opportunities to prepare for a career that includes teaching, including advancing an understanding of delivery of pedagogy and developing teaching skills, should be made more explicit for PhD students. The possibility of incorporated this as requirements for completion of the doctoral degree should be considered.

PhD students are currently made aware of resources on the two campuses to assist them in the development of their teaching skills. We can examine efforts to reinforce the availability and awareness of these resources (e.g., via GEOG 691). We will explore the possibility of incorporating teaching skills into the requirements for the degree. However, adding the requirement that a PhD student teach a class will not be possible or advisable, for a variety of reasons.

10. The potential for developing a course-based Masters degree in Geomatics should be explored. There looks to be support for this amongst the Geomatics faculty, and it would be consistent with the desire on the part of UW to increase the number of professional Masters programs.

UW has discussed the possibility of creating a course-based masters in Geomatics before. This will be discussed again.

c) Resources

Given the current fiscal realities we do not offer specific recommendations for holding onto existing or securing new resources. However, we recommend following:

11. That the impact of not replacing vacated faculty positions on each of: 1) the joint graduate degree under review, 2) each Department's undergraduate programs, and 3) other graduate program initiatives the two Departments are involved in, be given very careful consideration when it comes to reallocating or investing new resources in the Faculty. More specifically, we recommend that close consideration be given to a replacement tenure-track position at WLU in the Environment and Resources Management field not only to ensure coverage of critical needs in the undergraduate curriculum, but also to regain capacity to offer graduate courses and to supervise students in this field in the program. We understand that the strategic need for this position is recognized by the Administration at the highest level.

We agree with this recommendation.

12. It was brought to our attention by the students that there may not exist equal ease of access to facilities at the "other" university. The problem may arise in part from lack of awareness by all students of how access may be secured, in part from lack of awareness on behalf of the UW and WLU administrative structures as to why equal access is important given the nature of this joint-program. We recommend that W-LGPIG investigate and negotiate the resolution to issues of unequal access.

We are aware of historic complaints regarding access to resources. It should be pointed out that access to academic resources is equal for students from both campuses. Students from WLU and UW have the same access to wireless internet, the library, lab, online learning resources, and Ithenticate (through UW). The only difference, when it comes to access, is in the "social" resources - i.e. athletics, bus pass etc. These services are part of student fees and specific to each campus. We understand that WLU provides more access here. For example, UW students may use the WLU athletic facilities, but WLU students may not use those at UW. However, this is not a W-LGPIG issue and beyond the control of our academic units.

The Dean of Environment at UWaterloo has endorsed the department's response to the reviewers' recommendations.

This report will go to Senate Graduate and Research Council on June 8, 2015, and to Senate on June 15, 2015.