

Final Assessment Report of the Review of the School of Planning programs (BES, MA, MES, MAES and PhD)

December 2014

Introduction

This final assessment report includes reviews of the following degree programs:

- Bachelor of Environmental Studies (Planning) (Honours BES)
- Master of Arts (Planning) (MA)
- Master of Environmental Studies (Planning) (MES)
- Master of Applied Environmental Studies (Planning) (MAES)
- Doctor of Philosophy (Planning) (PhD)

In accordance with uWaterloo's Institutional Quality Assurance Process (IQAP), this final assessment report provides a summary and synthesis of (i) the external review of the undergraduate and graduate programs in Planning, (ii) the School of Planning response to the external review, and (iii) an implementation plan for improvements that lists specific actions, timelines, required resources and responsibility.

The School of Planning (SOP) prepared their augmented self-study report to cover the period Fall 2007 to Spring 2012. The self-study document was written to fulfill the reporting expectations for the accreditation by the Canadian Institute of Planners (CIP) for the BES, MA and MES degrees, but in the end, the CIP review did not materialize, and the review process followed the requirements of uWaterloo's IQAP.

Self-Study Process and Site Visit

The review document was prepared by several faculty members, which included the Director, Associate Chairs of Undergraduate and Graduate Studies, and support staff including the Academic Service Manager, Undergraduate Advisor, and the Graduate Studies Administrator. Information was garnered from many sources which included School and faculty records, student and alumni surveys and discussions with student association representatives (Association of Graduate Planners and the Planning Student Association).

The self-study was received March 7, 2014 and the site visit occurred May 5-6, 2014. The external reviewers were Prof. Paul Hess, Director, Graduate Programs in Planning, Department

of Geography and Planning, University of Toronto and Prof. Andrew Seidel, Chair of School of Environmental Planning, University of Northern British Columbia. The internal member of the review committee was Prof. Jack Callaghan, Department of Kinesiology. During the visit, the team met with university, Faculty of Environment and Planning Program administrators, faculty, sessional instructors, staff, graduate students and undergraduate students. The review team's report was received on September 24, 2014, and the program's response and implementation plan and Dean's endorsement were received on December 15, 2014.

This Final Assessment Report is derived from selected direct and paraphrased extracts from the self-study, the reviewers' report, the program response and the program implementation plan.

Previous Reviews

The SOP has undergone a number of reviews over the last decade. The two most recent and relevant were:

- 1) in 2007 to address provincially mandated periodic assessment of the undergraduate program as well as the CIP accreditation review of both the undergraduate and graduate degree programs; and
- 2) in 2008, the OCGS review of SOP's graduate programs.

All programs were CIP accredited to February 2013, with the exception of the MAES program, which fell short of requirements in several areas, and currently remains unaccredited. The PhD is currently accredited until 2014. However, a change in CIP policy has PhD programs no longer eligible to be accredited subsequently.

The primary outcome from the 2007 undergraduate review was a significant review of the undergraduate curriculum, revising the program core program, increasing the number of required courses and most significantly, deciding to offer a co-op only BES Honours in Planning starting in Fall 2010. Much effort was applied to evaluating course offerings and ensuring that they addressed intended learning outcomes, aligning with the learning expectations various regulatory bodies.

Characteristics and Goals of the Planning Programs

Waterloo's SOP is recognized across Canada and internationally as a leader in planning education. In fact, feedback from the planning community suggests that the SOP provides the best preparation for practicing planners among Canadian planning departments.

The School uses an interdisciplinary approach to address the range of environmental and planning issues, with its programs focusing on planning as a process, which includes policy-making, research, and decision making. The undergraduate and graduate programs, curricula, and faculty research that comprise the SOP prepare students for basic and applied research as

well as professional practice in planning, designing, and management of natural, human and built environments in Canadian and international settings.

The undergraduate program prepares students for a career in urban and regional planning. The undergraduate program is co-operative only, although prior to Fall 2010, both regular and co-operative streams were available. Students may choose to complete various elective specializations, diplomas, options, and minors. Typically at least 60% of a graduating class would obtain a specialization (Decision Support and GIS, Environmental Planning and Management, Land Development Planning and Urban Design).

The thesis-based, CIP-accredited Master's programs (MA and MES) are two-year degrees that aim to teach graduate students advanced research methods, as well as practice fundamentals that are needed for professional planning practice.

The course-based, non CIP-accredited Master's program (MAES) is a one-year program and focuses on skills development and the provision of the base of knowledge that is necessary for effective planning practice. It has a lesser emphasis on research, but has the requirement for prior professional experience.

The PhD program trains graduate students in advanced research principles, skills and methods. Graduates of this program are prepared for careers in university-level teaching and research or research-oriented positions in the public or not-for-profit sectors. Evidence of the ability to pursue independent research (prior Masters degree) fits squarely with the expectations for independent and original research as an outcome of the PhD program.

Fields offered in the graduate programs are in two areas of specialization, and the interstices between them: the *Physical/Natural Environment*, and the *Human and Built Environment*. The program core includes planning history, methods, philosophy and process. Core faculty members have expertise in one or both specialty fields and there have been no changes in the fields since the last appraisal.

Students

Combining both undergraduate and graduate programs, the SOP at Waterloo is the largest Planning program in Canada. Over the review period (2007-2012), student complement increased overall by 18% - from 450 students (largely full time – 80/20 undergraduate/graduate split) to 529 students (Fall 2012). From 2005 to 2011, an average of 73 students registered in the co-op undergraduate program, and from 2005 to 2009 an average of 11 students registered in the regular program. The number of degrees granted at the undergraduate level has ranged over the last seven years from a low of 51 in 2009 to high of 90 in 2010.

The average number of MAS, MES, MAES and PhD students entering each year on average is 11, 6, 4 and 6 students per year, respectively. The data indicate that in the most recent time frame, PhD numbers have declined while Master's numbers have increased, reflecting both the

emphasis on funding domestic Master's students and the challenge of meeting institutional requirements for guaranteed funding levels for PhD students.

An exit survey administered to undergraduates upon graduation reveals the following results (2011, n = 50). Over half of the students had full time employment upon graduation, 9% were working part-time whereas 26% were looking for employment. A further 13% were undertaking further education. For many undergraduates, the co-op aspect of their education was instrumental in their success and 96% would recommend Waterloo to other students while 86% were satisfied or very satisfied with their career preparation.

The self-study notes a lack of hard data on the employment prospects of its graduate students post-graduation, although alumni reports indicate many finding fulfilling rewarding career options across the country.

Faculty

There are currently 16 faculty members in the SOP, including 1 lectureship position, for a total of 14.5 FTE. On average, each faculty member teaches 4 courses per year, although this varies significantly depending on administrative appointments, sabbaticals, and other factors. The SOP continues to be a leading institution for planning research in Canada. The SOP focuses on applied solution oriented research categorized into four broad themes: sustainable community planning and design, infrastructure and transportation, land use planning, and environment and health. As a whole, the SOP is very productive and would be comparable in the rate of output to other prominent Canadian planning schools such as McGill, UBC, and Queens. Planning faculty publish on average of 2.5 peer reviewed publications per year, comparing favorably to top schools in the US in terms of productivity, even with a much higher overall student-to-faculty ratio. Total project value from 2005/2006 to 2011/12 was over 12.3 million dollars, averaging approximately \$118,000 per faculty member per annum.

A number of core faculty have been recognized through the receipt of prestigious awards (e.g., Best Article of the Year Award, Distinguished Teacher Award) and many are involved with professional/disciplinary associations, including editorial roles with academic and professional journals.

Program Strengths and Challenges

All Planning programs

Waterloo's SOP is recognized across Canada and internationally as a leader in planning education, and provides the best preparation for practicing planners among Canadian planning departments. The external reviewers indicated clearly their very favourable overall impression of the Planning programs, referring to them as a "very solid, well-developed, well-focused, appropriately supported by faculty, set of programs." They further noted that the outcomes and

expectation of the Planning programs were fully in alignment with the institutional mission of the University of Waterloo. Admission requirements were viewed as appropriate for all programs. Responding to whether the program's structure and regulations allowed students to meet specified program learning outcomes and degree level expectations, the reviewers wrote that "...not even a rumor of a concern in this area was reported ...". The curriculum was judged to reflect the current state of the area of study, but the reviewers noted that "these programs focus a bit more on design than some programs within this field and a bit less than some others. This is completely appropriate." Modes of program delivery and student assessment in the undergraduate and graduate programs were deemed to be appropriate and no major concerns were brought forward.

The reviewers indicated that SOP faculty "are clearly committed to bring their research into the classroom, and in actively engaging with students and their learning. Program and pedagogical goals have been carefully considered. We have no concerns that the SOP will continue to ensure the intellectual quality of the student experience."

The following strengths and challenges of the Planning programs were determined from the self-study and the external reviewers' report.

Strengths

- There is high demand for Planning programs.
- High quality students - most students from all Planning programs have low attrition, mostly timely program completions and favourable employment outcomes following graduation.
- Student gender balance is even across all programs.
- High quality, productive, accessible faculty are able to attract research funding and awards recognizing their research and teaching.
- The SOP's human, physical and financial resources are appropriately and effectively employed.

Challenges

- Current student-to-faculty ratio (30:1) is very high in comparison to peer programs, but there are few other schools that offer the full suite of undergraduate, master's, and Ph.D. level programs.
- Faculty members in the SOP teach 3 lecture courses and 1 seminar per year, compared the uWaterloo norm for course loads being 2.8 courses.

Specific to the Bachelor Program

Strengths

- Co-op employment rates are strong, employers rank students well.

Challenges

- The undergraduate program has low numbers of international students (most are from Ontario)
- Co-op employment is not diverse (very reliant on public sector employment).
- In undergraduate urban design studio teaching, the student-to-faculty ratio was judged by the external reviewers as being too high to provide effective teaching.

Specific to the Graduate Programs

Strengths

- Graduate students bring a diversity of backgrounds and experience to the programs.
- MA and MES students often gain career-relevant work experience while pursuing their degrees – but this also causes lengthening time for completion of their programs
- Graduate level advising and research supervision appears to be excellent.
- Graduate students routinely publish their research.

Challenges

- Time to complete Master programs is 2.5 years (rather than 2 years) and for PhD programs the time is currently 5 years and appears to be lengthening. This seems to be an issue for many fields and universities, however.
- There is a lack of hard data on employment outcomes.
- Attracting PhD students challenging, as it is for many other graduate programs at uWaterloo.
- The two recognized fields (human and built environment and physical/natural environment) in the graduate program are unevenly represented among the SOP's faculty. Twelve faculty carry out research in the human/built area but faculty in other academic units have research interests related to Planning and effectively broaden the pool of expertise available for the graduate program.
- A number of 600 level graduate courses mix undergraduate and graduate students.

Program Response and Implementation Plan

The following is the response and implementation plan provided by the SOP based on the issues identified in the external reviewers' report. Note that not all of the challenges listed above were identified as issues by the reviewers. Below, the SOP indicates how they will respond to those issues identified by the external reviewers, as well as flag a number of responses for incorporation into a 2-year work plan.

1. Undergraduate communications course

The report highlights an area of difficulty with a "communications course" – PLAN 102 Professional Communications, which is a core course in our program. The source of this concern arose in reviewer discussion with senior undergraduate students.

Response: This course has been a challenge to deliver at the right level for incoming students, who often bristle at the suggestion that their communication skills need to be further developed. In 2012, there was a transition to another faculty member who introduced changes to the course, likely experienced by the cohort of students interviewed. In 2014, it was assigned to a recent hire in our unit as one of their primary responsibilities. This individual has retooled the course again, based on feedback from former students and instructors, and injecting lessons from their decade long experience in the private sector, prior to joining the University. We are confident that this course is fulfilling the learning outcomes required of our program and the feedback received to date has been positive. The specific learning outcomes in this course include 1) understand the importance of written and oral communication skills for university and career success 2) develop the practical communication skills professors and employers need and expect and 3) apply those skills in contexts relevant to the profession .

Work plan: Monitor evaluations and instructor experience (through discussions) before and after each delivery through to 2016.

Responsibility: Director of the SOP through his responsibility for course evaluations and assignments, will discuss with the instructor and solicit input from the undergraduate administration team within the SOP

2. Faculty course load/work load

The report raises the issue of faculty course load and workload, suggesting that it be reduced to 3 courses per year, especially given the emphasis on securing research funding to support graduate students at a research-intensive institution like UW. It further flags the high student faculty teaching ratios of 30:1 as being a potential issue for continued delivery of our high quality programming.

Response: The present course load expectations in the Faculty of Environment are 4 courses per year, with those courses distributed over 2 school terms. Within the SOP, we have already introduced a 3 /4 course system in alternating years, and balance off exposure to core and elective classes. For example, a faculty member teaches 4 courses one year and then 3 courses the next year, typically dropping an elective course from the 4. In our scheduling, we ensure that students are aware of this cycle and can take electives when appropriate. However, the current requirements for developing online courses, combined with administrative appointments and research related course buy outs and sabbaticals, has constrained the 3 / 4 model. The course assignments are carefully reviewed each year and we're comfortable in our ability to support the requirements of both teaching and research within the unit.

Further, the Faculty of the Environment is addressing the challenges of graduate student support directly. The Associate Dean for Graduate Studies is providing resources (guaranteed funding) to remove some of the funding pressure on domestic PhDs. The Dean is also

supportive of expanding the faculty complement as a longer run solution, provided the needs are demonstrable.

Work plan: Monitor and evaluate the annual performance of faculty and the quality of our programming as per normal practice. Develop a plan by 2016 to expand the faculty complement.

Responsibility: Director of the SOP through leadership of Annual Review Process, interaction with Undergraduate and Graduate Chairs, and input through the SOP meeting process: Further, any requests for new faculty positions will be initiated and implemented by the unit chair in time for the Fall 2016 hiring cycle.

3. Mixed graduate/undergraduate courses

There is a concern expressed around the number of 600 level graduate courses that mix undergraduate and graduate students.

Response: There are a number of 4th year elective course offerings that include a graduate level offering (600 level) as part of the delivery. The obvious benefit is to offer graduate students a richer mixture of elective offerings, with the obvious challenge being that they are not in a purely graduate course. This issue is becoming less pronounced in our unit because of the redevelopment of the MA/MES level graduate degree, and the transition (to online delivery) of our MAES (course based professional masters). We have increased the number of 700 level courses offered and we are developing more elective courses for online delivery as well as pursuing approvals for our graduate students taking electives from other online UW programs.

Work plan: Monitor graduate student enrollments in all courses over the 2012 to 2016 period to track impact of program changes and student choice. Evaluate graduate student experience in mixed courses to ensure compliance with program learning outcomes and optimal student experience.

Action will include a report by Spring of 2017 on the status of mixed courses, the experience in the revised program (MA/MES), and recommendations on program changes as needed.

Responsibility: Associate Chair, Graduate Studies within the SOP in conjunction with the Director:

4. Student-to-faculty ratios in urban design courses

The concern is PLAN 210 in particular – one of 2 core urban design courses in our program with typical enrollments of 110 to 120 students per offering. The external reviewer report indicates that the current student-to-faculty ratios are beyond the limits of effectiveness. They suggest we consider options such as removing the requirement for the course or finding additional teaching support.

Response: The SOP is aware of the challenges in delivering urban design courses to relatively large numbers of students and has been working with instructors to address this issue. It is already the most heavily resourced undergraduate course we offer – 1 instructor, 2 professional Studio Assistants (working professionals) and 6 TAs. We are currently reviewing a report submitted by the PLAN 210 instructor, which includes an option to offer the studio component only to those students pursuing the Urban Design specialization. This would ease the pressure on the “studio” component of the course. However, we also need to explore how the requirements for the two core urban design courses fit into the broader program expectations and the requirements for the specialization.

Work plan: a) Review the existing PLAN 210 report and experiences with other similar programs and their design course (e.g. Ryerson) and define terms for decision-making and implementation of changes in design courses.

(Spring 2015 deadline)

- b) - i) Define the learning outcomes in our core \specialization courses in design and their integration in the broader undergraduate curriculum.
- ii) Establish pedagogical approaches for design courses.
- iii) Propose course changes as needed.

(Spring 2015 deadline)

c) Approve proposed changes and implement official approval for (through course change process) Fall 2016.

Responsibilities: a) Director, Associate Chair Undergraduate

b) Design Course Instructors within SOP, Associate Chair Undergraduate

c) Associate Chair Undergraduate

5. Thesis completion in revised MA/ MES degree

Related to the increasing course requirements and internship milestone introduced in 2014 as part of our revised MA/MES degree, reviewers noted that the SOP should consider methods to facilitate thesis completion. They also felt that our time to completion average of 2.5 years was above the norm of 2 years.

Response: The average time to completion for the MA/MES degree has been influenced by the desire of our students to get practice experience and the potential for thesis related field data collection to lengthen degree time (discussed on page 119 of our augmented report). However, the changes in our degree requirements are going to increase time pressure (more courses) as noted by the external reviewers. For many comparable programs in Canada (accredited Master’s degree in Planning), a Major Research Paper (MRP) is the norm, rather than a thesis. However, we feel strongly that the thesis experience is valuable from an educational and professional development perspective.

We have introduced a recommended schedule for thesis completion as well as shared clear guidelines for students and faculty as to the structure and expectations for the thesis. This schedule includes taking Plan 710 in the Winter term of their first year – the output of which is a full thesis proposal. The guidelines will help to ensure that the scope and scale of thesis research is appropriate to our disciplinary degree expectations.

Work plan: Monitor time to completion on an annual and ongoing basis as per normal expectations

Actions: Issues with workload and completion time will be assessed as part of the continual assessment of program changes and overall program performance. The appropriate response to the issues will be established and proposed by the School’s internal Graduate Committee for broader approval.

Responsibility: Associate Chair Graduate Studies, School of Planning

6. On-line course offerings

The external reviewers recommend that we consider alternative models of delivery for online courses. In particular, they suggest exploring models that include an element of face-to-face interaction (in person).

Response: The SOP has embarked on transitioning our MAES degree to online delivery as per the strategic direction of the University – promoting technology enabled learning – and the

growing demands for ongoing professional education within the field of Planning. We are taking a cautious approach that has allowed instructors flexibility in the design of the on-line courses they are developing. There is no explicit face-to-face component in the program overall (as a program design feature). Instructors are incorporating as much interaction into the courses as they can and we are open to adjusting the face-to-face component as the program evolves (i.e. responding to demands in specific markets). Certainly, there are models that have built in weekends of in-person engagement (for example) at either end of the degree or term experience. Geographically, we did not want to constrain ourselves to specific markets nor present a barrier to those wishing to register in our program because of the timing and location any potential required face to face meeting.

Work plan: Monitor and evaluate enrollment and quality of engagement in on-line course offerings through 2016 and beyond. Solicit specific feedback from participants on the need for face-to-face engagement. Consider any adjustments to on-line offerings as part of a comprehensive review of the program (3 years in)

Responsibility: Director: through course evaluation review process
Associate Director Graduate Studies – to develop specific feedback (incorporated into online course evaluation instrument W 2015) and to lead comprehensive review