



DATE: September 11, 2023

TO: Senate

FROM: Dr. David Hornsby, Vice-Provost and Associate Vice-President (Academic), and Chair,  
Senate Quality Assurance and Planning Committee

RE: Final Assessment Report and Executive Summary: Undergraduate and Graduate Programs  
in Geography and Environmental Studies

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The purpose of this memorandum is to request that Senate approve the Final Assessment Report and Executive Summary arising from cyclical program review of the undergraduate and graduate programs in Geography and Environmental Studies.

The request to Senate is based on a recommendation from the Senate Quality Assurance and Planning Committee (SQAPC), which passed the following motion at its meeting of August 24, 2023:

**THAT** SQAPC recommends to SENATE the approval of the Final Assessment Report and Executive Summary arising from the cyclical program review of the graduate and undergraduate programs in Geography and Environmental Studies.

The Final Assessment Report and Executive Summary is provided pursuant to article 5.4.1. of the provincial Quality Assurance Framework and article 7.2.24 of Carleton's Institutional Quality Assurance Process (IQAP). Article 7.2.24.3 of Carleton's IQAP (passed by Senate in November 2021 and ratified by the Ontario Universities Council on Quality Assurance in April 2022) stipulates that, in approving the Final Assessment Report and Executive Summary 'the role of SQAPC and Senate is to ensure that due process has been followed and that the conclusions and recommendations contained in the Final Assessment Report and Executive Summary are reasonable in terms of the documentation on which they are based.'

In making their recommendations to Senate and fulfilling their responsibilities under the IQAP, members of SQAPC were provided with all the appendices listed on page 2 of the Final Assessment Report and Executive Summary. These appendices constitute the basis for reviewing the process that was followed and assessing the appropriateness of the outcomes.

These appendices are therefore not included with the documentation for Senate. They can, however, be made available to Senators should they so wish.

Any major modifications described in the Implementation Plan, contained within the Final Assessment Report, are subject to approval by the Senate Committee on Curriculum, Admission, and Studies Policy, the Senate Quality Assurance and Planning Committee (SQAPC) and Senate as outlined in articles 7.4.1 and 5.1 of Carleton's IQAP.

Once approved by Senate, the Final Assessment Report, Executive Summary and Implementation Plan will be forwarded to the Ontario Universities' Council on Quality Assurance and reported to Carleton's

Board of Governors for information. The Executive Summary and Implementation Plan will be posted on the website of Carleton University's Office of the Vice-Provost and Associate Vice-President (Academic), as required by the provincial Quality Assurance Framework and Carleton's IQAP.

**Senate Motion September 22, 2023:**

**THAT** Senate approve the Final Assessment Report and Executive Summary arising from the Cyclical Review of the Undergraduate and Graduate programs in Geography and Environmental Studies.

**CARLETON UNIVERSITY COMMITTEE ON  
QUALITY ASSURANCE  
Cyclical Review of the undergraduate and graduate programs  
in Geography and Environmental Studies  
Executive Summary and Final Assessment Report**

This Executive Summary and Final Assessment Report of the cyclical review of Carleton's undergraduate and graduate programs in Geography and Environmental Studies are provided pursuant to the provincial Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP).

**EXECUTIVE SUMMARY**

The undergraduate and graduate programs in Geography and Environmental Studies reside in the Department of Geography and Environmental Studies, a unit administered by the Faculty of Arts and Social Sciences.

As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-7.2.14).

The External Reviewers' report offered a very positive assessment of the programs. Within the context of this positive assessment, the report nonetheless made a number of recommendations for the continuing enhancement of the programs. These recommendations were productively addressed by the Chair of the Department of Geography and Environmental Studies and the Dean of the Faculty of Arts and Social Sciences in responses to the External Reviewers' report and Implementation on Plan that was submitted to SQAPC on August 24<sup>th</sup>, 2023.

## FINAL ASSESSMENT REPORT

### Introduction

The undergraduate and graduate programs in Geography and Environmental Studies reside in the Department of Geography and Environmental Studies, a unit administered by the Faculty of Arts and Social Sciences. This review was conducted pursuant to the Quality Assurance Framework and Carleton's Institutional Quality Assurance Process (IQAP). As a consequence of the review, the programs were categorized by Carleton University's Senate Quality Assurance and Planning Committee (SQAPC) as being of good quality. (Carleton's IQAP 7.2.13-14).

The site visit, which took place on April 25-27, 2022, was conducted by Dr. David Goldblum from University of Western Ontario, and Dr. Todd Randall from Lakehead University. The site visit involved formal meetings with the Provost, the Vice-Provost and Associate Vice-President (Academic), the Associate Dean of the Faculty of Arts and Social Sciences, the Dean of the Faculty of Graduate and Postdoctoral Affairs, and the Chair of the Department of Geography and Environmental Studies. The review committee also met with faculty members, staff, and undergraduate and graduate students.

The External Reviewers' report, submitted on May 30<sup>th</sup>, 2022 offered a very positive assessment of the program.

This Final Assessment Report provides a summary of:

- Strengths of the programs
- Challenges faced by the programs
- Opportunities for program improvement and enhancement
- The Outcome of the Review
- The Implementation Plan

This report draws on five documents:

- The Self-study developed by members of the Department of Geography and Environmental Studies (Appendix A)
- The Report of the External Review Committee (Appendix B).
- The response and implementation plan from the Chair of the Department of Geography and Environmental Studies (Appendix C)
- The Response from the Dean of the Faculty of Arts and Social Sciences and the Dean of the Faculty of Graduate and Postdoctoral Affairs (Appendix D).
- The internal discussant's recommendation report (Appendix E).

Appendix F contains brief biographies of the members of the External Review Committee.

This Final Assessment Report contains the Implementation Plan (Appendix C) developed by the Chair of the Department of Geography and Environmental Studies and agreed to by the Dean of the Faculty of Arts and Social Sciences for the implementation of recommendations for program enhancement identified as part of the cyclical program review process.

The Implementation Plan identifies who is responsible for implementing the agreed upon recommendations, as well as the timelines for implementation and reporting.

## **Strengths of the programs**

### *General*

The External Reviewers' Report states that "DGES has a good collegial governance model, and there is a common vision for the DGES's programming situated with the Faculty and wider University; members of the department in leadership roles have appropriate release from teaching and there is good collaboration and commitment amongst all DGES faculty to contribute to the academic and service work of the department as well as the FASS. DGES is an innovative and responsive unit and is an active participant at the Faculty-level and more broadly in collaborations across campus" (p. 1).

### *Faculty*

Speaking with regard to faculty, the external reviewers' stated that "DGES is well-equipped in terms of its faculty expertise and programming to make substantive contributions to leading/co-leading interdisciplinary programming and research in areas of key societal interest (i.e., climate change, urban systems) at both undergraduate and graduate levels (p. 1).

### *Students*

The external reviewers noted that "During the review period (2016-2021), DGES undergraduate programs have been consistently attracting students, with generally stable enrollment numbers, and DGES retention statistics align (or exceed) FASS averages" (p. 1).

### *Curriculum*

The external reviewers noted that "DGES has a set of programming options that are interdisciplinary and actively participates in several others across campus. While there are distinct Environmental Studies, Physical Geography, and Geomatics program options at the undergraduate level, the cross-offering of cores to all three streams results in graduating students that understand both the physical and human systems, but also their interactions and interrelationships with each other. DGES provides experiential learning opportunities in all program areas (field courses, laboratory work, internships, and Co-op options) that take advantage of both urban and regional landscapes available close at hand that explore a range of human, physical and environmental dimensions. Laboratory facilities for physical geography and geomatics courses appeared of good quality (in our virtual tour of the department) and meet current needs" (p. 1-2).

## **Opportunities for program improvement and enhancement**

The External Reviewers' Report made 19 recommendations for improvement:

1. Strengthen the marketing of DGES programming as a place to study the science of and societal impacts and response to climate change. Consider adding a new certificate or concentration in climate change for undergraduate programming, to complement recent proposals for such specializations in the MA/MSc programs. **Opportunity**
2. Explore course-based professional masters, graduate certificate/diplomas and/or micro-credentials in geospatial technology or other departmental strengths that would result in new student enrolment. These new revenue generation streams could serve to provide incentives back to the Faculty/Unit level when successful in recruiting new students -- such funds could be

directed toward thesis student support and to enhance recruitment/enrolment in DGES.

**Opportunity**

3. DGES should be involved in discussions of any new graduate programming in Environmental Science (Faculty of Science) to minimize overlap between programs and assure that new and existing programs are complementary. **Concern**
4. Continue the department's practice of deploying engaged instructors to lower year DGES courses and first-year interdisciplinary seminar courses as a best means to recruit non-majors to DGES programming. Develop a department-wide messaging plan to consistently provide first year students with reasons to seriously consider a degree program in Geography, Environmental Studies and/or Geomatics. This plan should include: first-year courses that are topical, compelling, and focus on issues important to students (climate change, environmental impacts, geospatial technology, and data considerations, etc.); common PowerPoint slides provided to year 1 instructors with future course offerings; and various ways to highlight career opportunities in Geography and as a mix of in-person and virtual visits from practitioners.

**Opportunity**

5. Practicums and co-ops are desirable and valuable experiences for students. Challenges have arisen with regards to students' success on securing practicum and co-op placements. DGES should monitor closely to determine if there are residual challenges finding placements post-COVID. A concerted and organized effort by DGES faculty and staff to grow practicum and co-op relationships could ease challenges for students. **Concern**
6. Augment opportunities for experiential learning on Human Geography side of the DGES undergraduate curricula to be more on par with the majority offered to Physical Geography and Geomatics students. Given the location of campus, there are many ways to enhance the undergrad human geography courses/program with field-based experiences. **Opportunity**
7. More fully integrate and require alternative/Indigenous ways of knowing across all undergraduate programs. Consider adding this to the list of Learning Outcomes and including the INDG 2015 course (Indigenous Ecological Ways of Knowing) in all programs or developing additional Ways of Knowing course(s). **Opportunity**
8. Strategies are needed to help newer faculty members increase graduate student recruitment and supervision to maintain and enhance the strong scholarship track record in the department. Take full advantage of support offered by FASS and FGPA to recruit graduate students. Explore greater promotion of graduate programs through CAG listserv, social media, perhaps in coordination with FGPA. **Concern**
9. Develop strategies to expand international graduate student enrolment in DGES programming, leveraging incentives towards international graduate student recruitment from the relevant Deans (FASS and FGS). Request targeted bursaries for international Masters students that would enable more junior faculty hires to recruit international students to their research groups as they are not yet able to take advantage of the existing international PhD bursaries. **Opportunity**
10. The elimination of a required undergraduate thesis (allowing for additional coursework) in the honours degree may have undermined student consideration of graduate degrees. Promoting the undergraduate thesis, while increasing faculty supervisor load, could be a strategy to increase interest in MA/MSc programming. **Concern**
11. Review the content covered in the required PhD core courses (GEOG 6000 and 6001) and explore a team-teaching approach for these to better balance the human/physical sides of the discipline thereby enhancing student views of Geography as an integrated discipline. **Concern**
12. To address long completion times in the MA and MSc programs, consider a more formal "milestone" tracking structure, potentially including a mandatory supervisory committee meeting at the end of year 1. **Weakness**

13. TA funding for PhD candidates is now in place for five years but time-to-completion remains a concern. Support DGES in its stated intent to explore program enhancements in the PhD program to shorten times-to-completion. Some efficiency could be gained in combining the candidacy exam process with proposal defence process. **Weakness**
14. Explore possible undergraduate transfer pathway programs from suitable college diplomas (e.g., Environmental Technician, Geomatics Technician) to DGES undergraduate degrees. Potential partners in Ontario include: Algonquin, Fleming, and St. Lawrence. **Opportunity**
15. DGES is currently served by a lab technician that is skilled in supporting physical lab and field equipment needs. Given the recent growth of the Geomatics and likely future growth in other geospatial and geocomputational areas, DGES could benefit from a dedicated IT technician. This will be especially necessary if DGES moves to more technical specializations/certificates/etc. **Opportunity**
16. While options may be constrained, the review of DGES noted two space issues: 1) The space provided to undergraduate students and the undergraduate student club is small and limits opportunities for academic and social interactions. 2) Graduate student office space may not be large enough to accommodate larger graduate cohorts that are closer to departmental aspirations and Graduate School targets. This latter point may become acute when in-person patterns return post-COVID. **Concern**
17. In alignment with directives from the University on post-pandemic course delivery and in responses to a different style of learning and expanded access to computer lab resources that students have been accustomed to, develop a plan to offer some courses/labs in a mixed modality and maintain some use of virtual lab environments where appropriate/suitable. **Opportunity**
18. Expand the promotion of achievements of DGES students, staff and faculty to increase the profile of the department to wider audiences through social media and university-wide opportunities (e.g., the FASS “Meet Your Professor” series) and re-establishment pre-pandemic practice of students and alumni as “program ambassadors” as part of student outreach (to local high schools) and on campus recruitment activities. Consider hosting community-accessible lecture series on topics facing the Ottawa community (urban, environmental, social, etc.). **Opportunity**
19. Build connections with alumni by creating “career” events to bring alumni back to campus to meet with students. **Opportunity**

### **The Outcome of the Review**

As a consequence of the review, the undergraduate and graduate programs in Geography and Environmental Studies was categorized by Carleton University’s Senate Quality Assurance and Planning Committee (SQAPC) as being of **GOOD QUALITY** (Carleton's IQAP 7.2.13-14).

### **The Implementation Plan**

The recommendations that were put forward as a result of the review process were productively addressed by the Chair of the Department of Geography and Environmental Studies, the Dean of the Faculty of Arts and Social Sciences, and the Dean of the Faculty of Graduate and Postdoctoral Studies in a response to the External Reviewers’ report and Implementation Plan that was considered by SQAPC on August 24, 2023. The Department agreed unconditionally to recommendations #1 (i), 2, 3, 4 (ii) and (iii), 5 (i) and (ii), 6, 7 (i), 8 (i-iii), 9 (ii), 10, 11, 12 (i) and (ii), 13 (i), 14, 18 (i) and (iii) and 19. They also agreed to recommendations #1 (ii), 4 (i), 7 (ii) and (iii), 9 (i), 15, 16 (i and ii), 17 and 18 (ii) in principle. They did not agree to 13 (ii).

It is to be noted that Carleton's IQAP provides for the monitoring of implementation plans. A monitoring report is to be submitted by the academic unit(s) and Faculty Dean(s), and forwarded to SQAPC for its review by June 30th, 2026.

**The Next Cyclical Review**

The next cyclical review of the undergraduate and graduate programs in Geography and Environmental Studies will be conducted during the 2028-29 academic year.



**Geography and Environmental Studies**  
**Unit Response to External Reviewers' Report & Implementation Plan**  
**Programs Being Reviewed: Undergraduate and Graduate Programs**

**Note: This document is forwarded to Senate, the Quality Council and posted on the Vice- Provost's external website.**

**Introduction & General Comments**

The Department of Geography and Environmental Studies values tremendously the work of the external reviewers during this recent Curriculum Program Review (CPR) process. The External Reviewers' Report has been shared with faculty and staff, and our response has been generated through broad consultation and iterative feedback. We remain committed to the continual improvement of our programs to enhance the student, staff, and faculty experience. This document contains both a response to the External Reviewers' Report and an Implementation Plan (Section B) which have been created in consultation with Associate Dean Augustine Park.

We appreciate the external reviewers' overall assessment that DGES is a "cohesive and collegial academic unit" with "no real concerns identified." We are especially pleased with this assessment given that we house four distinct yet interconnected programs: Environmental Studies, Human Geography, Physical Geography, and Geomatics. Then add to this complexity the fact that we have engaged in this CPR process for both our undergraduate and graduate programs concurrently.

This constructive and iterative process of review, critique, response, and action has elucidated the need to better explain our curriculum, pedagogical approaches, and programmatic strengths. We fully agree that we are uniquely situated to address thorny, pressing social and environmental challenges. To this end, we see ourselves as: "A community of scholars concerned about the climate crisis, inequality, colonialism, and social and environmental injustice... DGES is a collegial, research-intensive group strongly committed to ensuring equity and expanding diversity, both in terms of the backgrounds of our faculty and in our curricular offerings for Carleton's wide-ranging student body." Further, we remain committed to "recruiting and mentoring students from underrepresented groups."

Please note that many of the opportunities/concerns/weaknesses raised by the external reviewers involved compound suggestions, which we have delineated for greater clarity and nuance. We have addressed them in the order presented in the External Report on the Curriculum Program Review.

For each recommendation **one** of the following responses must be selected:

**Agreed to unconditionally:** used when the unit agrees to and is able to take action on the recommendation without further consultation with any other parties internal or external to the unit.

**Agreed to if additional resources permit:** used when the unit agrees with the recommendation, however action can only be taken if additional resources are made available. Units must describe the resources needed to implement the recommendation and provide an explanation demonstrating how they plan to obtain those resources. In these cases, discussions with the Deans will normally be required and therefore identified as an action item.

**Agreed to in principle:** used when the unit agrees with the recommendation, however action is dependent on something other than resources. Units must describe these dependencies and determine what actions, if any, will be taken.

**Not agreed to:** used when the unit does not agree with the recommendation and therefore will not be taking further action. A rationale must be provided to indicate why the unit does not agree (no action should be associated with this response).

#### **Calendar Changes**

If any of the action items you intend to implement will result in calendar changes, please describe what those changes will be. To submit a formal calendar change, please do so using the Courseleaf system.

#### **Hiring**

Where an action item requires additional hiring (faculty or staff) the owner should at minimum include the Dean of the faculty and member of the unit.

## UNIT RESPONSE AND IMPLEMENTATION PLAN

Programs Being Reviewed: BA BAH ENST; BA BAH BSc GEOG; BAH BSc GEOM; MA MSc GEOG; PhD GEOG

Prepared by (name/position/unit): Patricia Ballamingie, Interim Chair, Geography and Environmental Studies

External Reviewer Recommendation & Categorization	Unit Response (choose only one for each recommendation): 1- Agreed to unconditionally 2- Agreed to if additional resources permit (describe resources) 3- Agreed to in principle 4- Not agreed to Rationales are required for categories 2, 3 & 4	Action Item	Owner	Timeline	Will the action described require calendar changes? (Y or N)
<p><b>1. Opportunity:</b></p> <p>(i) Strengthen the marketing of DGES programming as a place to study the science of and societal impacts and response to climate change.</p> <p>(ii) Consider adding a new certificate or concentration in climate change for undergraduate programming, to complement recent proposals for such specializations in the MA/MSc programs.</p>	<p>(i) 1 – Agreed to unconditionally</p> <p>(ii) 3 – Agreed to in principle</p>	<p>(i) Review all online and print marketing materials (websites, program descriptions and brochures, recruitment materials) and strengthen language related to DGES as an ideal place to study physical and social science aspects of climate change, including both mitigation and adaptation.</p> <p>(ii) New specialization on climate change at the graduate level was an option as of Fall 2022 (1 new MSc student selected that option). We will study the possibility at the undergraduate level, but if based on the existing graduate model, that would entail collaboration across disciplines and faculties, and identification of champions and resources.</p> <p>- Several of our faculty (Hébert, Karunanathan, Mitchell) are involved in the Climate Commons activities; they will look for ways to highlight DGES programs.</p>	<p>All of the following will be involved in both (i) and (ii): Undergraduate Program Supervisors; Graduate Program Coordinator; Program Support Officer; Chair</p>	<p>Status = underway , ongoing</p>	<p>N</p>

<p><b>2. Opportunity:</b></p> <p>(i) Explore course-based professional masters, graduate certificate/diplomas and/or micro-credentials in geospatial technology or other departmental strengths that would result in new student enrolment. These new revenue generation streams could serve to provide incentives back to the Faculty/Unit level when successful in recruiting new students – such funds could be directed toward thesis student support and to enhance recruitment/enrolment in DGES.</p>	<p>(i) 1 – Agreed to unconditionally</p>	<p>(i)</p> <p><u>Regarding micro-credentials:</u></p> <p>We have tested the waters on this concept, offering ad-hoc professional, non-credit courses, and they have worked very well. DGES has put on a few 4-5-day workshops with administrative support from ODFASS (e.g., Google Earth Engine for Remote Sensing in July 2021).</p> <p>DGES will engage in an open conversation about how to allocate faculty teaching to micro-credentials versus core program offerings, and whether doing so is desirable.</p> <p><u>Regarding a course-based, professional masters/grad diploma:</u></p> <p><u>Northern Studies</u> (not technically one of our programs, but housed in our department) offers a one-year, professional MA/MSc and <u>Diploma</u> option. From this program, we have learned that course-based masters require a champion and can prove resource intensive.</p> <p>Several eastern Ontario post-grad institutions (including Algonquin College in Ottawa) already offer these options and there may be diminishing returns to attempt to compete with them. Rather, we should ensure our graduate geomatics-focused course offerings are well advertised at Carleton and Ottawa U to generate sufficient enrollments to strengthen our unique ability to offer geomatics training through thesis-based MA, MSc, and PhD programs.</p>	<p>Chair; Graduate Program Coordinator; MA Working Group</p>	<p>Status = underway , ongoing</p>	<p>N</p>
<p><b>3. Concern:</b></p> <p>(i) DGES should be involved in discussions of any new graduate programming in Environmental Science (Faculty of Science) to minimize overlap between programs and assure that new and existing programs are complementary.</p>	<p>(i) 1 – Agreed to unconditionally</p>	<p>(i) DGES has a long history of positive interaction with Environmental Science (ES) [e.g., 3 faculty members are cross appointed between ES and DGES (Steve Cooke and Vivian Nguyen at 100/0 + Jesse Vermaire at 80/20)].</p> <p>Kevin Hamdan interacts with the Faculty of Science as DGES representative to review curriculum.</p> <p>Jesse Vermaire serves as a liaison on the Environmental Science Program Committee. He has confirmed that there are currently no formal discussions regarding a new graduate program in ES. However, we will keep abreast of program developments in ES (at both undergrad and grad levels) to ensure new and existing programs are complementary and to minimize overlap.</p>	<p>Physical Geography &amp; Geomatics Program Supervisor</p>	<p>Status = underway , ongoing</p>	<p>N</p>

		<p>Grad supervisor will keep abreast of new MSc programs vis-à-vis the appropriate FASS-level grad curriculum body.</p> <p>We see the development of graduate programming in Environmental Science as a potential risk to our MSc program, and we would strive to be involved throughout related discussions to understand the magnitude of its impacts.</p>			
<p><b>4. Opportunity:</b></p> <p>(i) Continue the department’s practice of deploying engaged instructors to lower-year DGES courses and first-year interdisciplinary seminar courses as a best means to recruit non-majors to DGES programming.</p> <p>(ii) Develop a department-wide messaging plan to consistently provide first-year students with reasons to seriously consider a degree program in Geography, Environmental Studies and/or Geomatics. This plan should include: first-year courses that are topical, compelling, and focus on issues important to students (climate change, environmental impacts, geospatial technology, and data considerations, etc.); common PowerPoint slides provided to year 1 instructors with future course offerings.</p> <p>(iii) Find various ways to highlight career opportunities in Geography and as a mix of in-person and virtual visits from practitioners.</p>	<p>(i) 3 – Agreed to in principle</p> <p>(ii) 1 – Agreed to unconditionally</p> <p>(iii) 1 – Agreed to unconditionally</p>	<p>(i) Our lower-year course instructors have been selected to engage students and attract them to our programs. (Instructors include full-time faculty such as Kevin Hamdan, David Hugill, Meera Karunanathan, Murray Richardson, Sheryl-Ann Simpson, and Paul Williams + longtime CIs such as Luke Struckman and John Wall); second-year courses are almost always taught by full-time faculty (with consistency across years) (e.g., Emilie Cameron, Pablo Mendez, and Paul Williams).</p> <p>Teaching allocations remain contingent on several parameters, many of which are beyond our control (teaching preferences, sabbaticals, other course demands, life demands, CI availability, seniority, etc.); we do our best amidst these constraints.</p> <p>(ii) We have engaged in various activities over the years (e.g., Sheryl-Ann Simpson organizes “faculty speed dating” sessions in GEOG/ENST 1020 to familiarize students with the exciting range of possibilities offered by the discipline + FYSMs have proven effective vehicles for recruiting non-majors into our major and minor programs), but the suggestion is well taken. DGES will develop common materials for all to benefit from, and revisit in accordance with instructor changes.</p> <p>We acknowledge the ongoing challenge of relaying to prospective students what geography, geomatics, and environmental studies entail. DGES will create short explanatory videos to explain each of these programs to show active involvement of faculty in the field. We are decent at retaining students, but we must work harder to better recruit students.</p> <p>(iii) DGES will update its various program career pamphlets, and coordinate with Carleton’s Coop—Career Services to highlight opportunities. Faculty will be encouraged to continue inviting practitioners into the classroom as guest speakers (with honoraria for low-income or precariously employed individuals sponsored by DGES).</p> <p>Part of the practicum evaluation involves a short video presentation of what students did in their practicum, and this now represents a body of video clips that could be used to highlight career opportunities.</p>	<p>(i) Chair</p> <p>(ii) Undergraduate Program Supervisors</p> <p>(iii) Undergraduate Program Supervisors + Program Support Officer</p>	Status = underway / ongoing	N

		<p>A practicum student surveyed past practicum opportunities since 2005 to understand where our graduates are now (e.g., types of jobs, career paths, etc.).</p> <p>Alumni events prior to pandemic were typically held during Geography Awareness Week. Program Support Officer will coordinate an alumni event during DGES fête at end of year (spring 2023).</p> <p>Data on alumni exists from 2015-2022. We are in process of analyzing and integrating this data into career brochures and sharing on the website.</p> <p>Encourage faculty to identify undergrad alum with cool jobs, and do a series: e.g., <i>I am a Program Manager at World Wildlife Fund, I studied geography at CU.</i></p> <p>Consider a graduated pathway to expose students to existing CU career resources across the years in their program (e.g., visit to Career Services in year 1; workshops on CVs, cover letters, job interviews, etc. in years 2 and 3; networking events and environmental career fairs in years 3 and 4).</p>			
<p><b>5. Concern:</b></p> <p>(i) Practicums and co-ops are desirable and valuable experiences for students. Challenges have arisen with regards to students' success on securing practicum and co-op placements. DGES should monitor closely to determine if there are residual challenges finding placements post-COVID.</p> <p>(ii) A concerted and organized effort by DGES faculty and staff to grow practicum and co-op relationships could ease challenges for students.</p>	<p>(i) 1 – Agreed to unconditionally</p> <p>(ii) 1 – Agreed to unconditionally</p>	<p>(i) Past and present practicum coordinators will closely monitor placements post-COVID, and coordinate to produce a summary.</p> <p>(ii) There has been an ongoing, concerted effort to grow practicum opportunities for several years through alumni connections, and extension of existing professional networks. Practicum coordinators have created a master list of experiential learning opportunities across campus.</p> <p>DGES faculty, staff and Adjuncts will be strongly encouraged to identify potential practicum and co-op partners to add to a repertoire of student placements.</p> <p>Our Program Support Officer will keep potential practicum opportunities in mind when liaising with alumni.</p> <p>Our Undergraduate Programs Administrator will be included in discussions around practicums so that she can better field questions from students.</p> <p>NB the Government of Canada has threatened to no longer offer practicum opportunities due to contest around paid/unpaid internships (not yet implemented, but a potential constraint). DGES will engage in a broader discussion about whether unpaid practicums should continue, and if so, under what circumstances, and whether they could be offered as an option within a broader selection of choices.</p>	<p>(i) Practicum Coordinator</p> <p>(ii) Practicum Coordinator; Program Support Officer</p>	<p>Status = underway / ongoing</p>	<p>N</p>

		This suggestion begs a larger discussion around the mandatory nature of practicums, especially given the experiential component of many courses.			
<p><b>6. Opportunity:</b></p> <p>(i) Augment opportunities for experiential learning on Human Geography (HG) side of the DGES undergraduate curricula to be more on par with the majority offered to Physical Geography and Geomatics students. Given the location of campus, there are many ways to enhance the undergrad human geography courses/program with field-based experiences.</p>	<p>(i) 1 – Agreed to unconditionally</p>	<p>(i) We agree that this is important, and that’s why we have been doing it. If these opportunities were not evident to the reviewers, we would argue that these constraints are mainly due to COVID.</p> <p>Examples of experiential learning on the HG side: GEOG/ENST 4007 (<i>Localizing Food Systems</i>) – a regional field course involving travel to many sites; GEOG 3026 (<i>Ottawa Community Geography Field Course</i>) based downtown at Dominion Chalmers Church; GEOG 3030 (<i>Regional Field Excursion</i>) – previously to Mexico City to learn about informal housing + a cancelled trip to Cuba (due to COVID); GEOG 3021 (<i>Geographies of Culture</i>) has involved a commemorative landscape walk and photo essay.</p> <p>FYSMs often include local city excursions (e.g., National Gallery, community cleanups, War Museum, green buildings, local monuments, Hogs Back/Canal).</p> <p>We strive to use the city of Ottawa as a living lab – to optimize the “Capital Advantage”, and to use the campus (legal graffiti wall under Bronson underpass, cleanup of Rideau River, visit to community gardens, Just Food Farm, Sustainable Campus Walking Tour).</p> <p>All human geographers will be asked to consider how they might increase the experiential component of their courses, and what resources this would require. (Important to know in advance to incorporate into budgetary request from FASS. We are fortunate to have support for field experiences from our Program Support Officer.)</p>	<p>Human Geography &amp; ENST Program Supervisor;</p> <p>Chair</p>	<p>Status = underway , ongoing</p>	<p>N</p>
<p><b>7. Opportunity:</b></p> <p>(i) More fully integrate and require alternative/Indigenous ways of knowing across all undergraduate programs.</p> <p>(ii) Consider adding this to the list of Learning Outcomes; and</p> <p>(iii) Include INDG 2015 (<i>Indigenous Ecological Ways of Knowing</i>) in all programs or developing additional Ways of Knowing course(s).</p>	<p>(i) 1 – Agreed to unconditionally</p> <p>(ii) 3 – Agreed to in principle</p> <p>(iii) 3 – Agreed to in principle or as resources allow</p>	<p>(i) Although perhaps not visible in the course calendar, engaging with Indigenous knowledges and knowledge systems is woven into a substantial number of our ENST and HG courses and some of our GEOM courses, including: ENST 2001, ENST 3000, FYSM 1108, GEOG 2300, GEOG 3501, GEOG 4024, GEOG 5003, GEOG 6000, GEOG 6001, GEOM 3007, and GEOM 4008. We plan to determine more formally which courses currently engage with Indigenous knowledges and content (including which Learning Bundles are currently being used or could be used), as well as exploring how to best integrate Indigenous peoples and knowledges across all our programs, including potentially adding INDG 2015 to various program requirements.</p>	<p>Undergraduate Program Supervisors;</p> <p>Graduate Program Coordinator</p>	<p>Status = underway / ongoing</p>	<p>TBD</p>

		<p>Survey online educational options that we could acknowledge through our Co-Curricular Record, such as: the online MOOC, “Indigenous Canada” offered by the University of Alberta (<a href="https://www.ualberta.ca/admissions-programs/online-courses/indigenous-canada/index.html">https://www.ualberta.ca/admissions-programs/online-courses/indigenous-canada/index.html</a>) or courses offered through eCampus Ontario, such as “First Nations: Traditional Knowledge” offered by St Lawrence College. (<a href="https://search.ecampusontario.ca/#/detail/1/2/295479?k=%22first%20nations%22&amp;itemTypes=1&amp;sortCol=1&amp;nextPage=true&amp;page=1">https://search.ecampusontario.ca/#/detail/1/2/295479?k=%22first%20nations%22&amp;itemTypes=1&amp;sortCol=1&amp;nextPage=true&amp;page=1</a>).</p> <p>Our ENST program offers INDG 2015 or PHIL 2380 as a program requirement, and INDG credits are included as Approved ENST Electives: INDG 2015 (Indigenous Ecological Ways of Knowing) + INDG 3011 (Indigenous Rights, Resistance and Resurgence).</p> <p>(ii) We agree this could be added to the list of Learning Outcomes for ENST. Inclusion of this LO in geography and geomatics would require permission from School of Indigenous and Canadian Studies (SICS) and broader DGES consultation.</p> <p>(iii) DGES will engage with the SICS to determine the capacity for INDG 2015 to accept more students; we added it as an option in the program requirements in recent years, and at that time SICS approved of that change unconditionally but noted that changing it to a requirement would require more discussions about how to sustainably resource the offering.</p> <p>NB We continue to look for opportunities to hire an Indigenous scholar with disciplinary formation in geography. We have a recent 100/0 cross-appointment with Julie Tomiak (SICS), with whom David Hugill collaborates.</p> <p>DGES faculty are encouraged to watch Dr. Kahente Horn-Miller’s (Assistant Vice President, Indigenous Initiatives, in the Office of the Provost and Vice-President, and Associate Professor in the School of Indigenous Studies, Carleton University) presentation on the Kinàmàgawin Strategy (January 28, 2022): <a href="https://youtu.be/yBHREd_pbYg">https://youtu.be/yBHREd_pbYg</a></p> <p>Several DGES faculty and their graduate students interact with Indigenous communities (e.g., MOU between Carleton and the First Nation of Na-cho Nyak Dun, established research relations with various Inuit and First Nation communities).</p>			
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<p><b>8. Concern:</b></p> <p>(i) Strategies are needed to help newer faculty members increase graduate student recruitment and supervision to maintain and enhance the strong scholarship track record in the department.</p> <p>(ii) Take full advantage of support offered by FASS and FGPA to recruit graduate students.</p> <p>(iii) Explore greater promotion of graduate programs through CAG listserv, social media, perhaps in coordination with FGPA.</p>	<p>(i) 1 – Agreed to unconditionally</p> <p>(ii) 1 – Agreed to unconditionally</p> <p>(iii) 1 – Agreed to unconditionally</p>	<p>(i) Chair will organize individual meetings with all faculty for whom graduate recruitment has been challenging.</p> <p>Established faculty will be asked to share successful recruitment strategies [e.g., transitioning 4<sup>th</sup>-year thesis students into master’s program, soliciting students through discipline-specific listservs (e.g., CAGlist, ESAC), advertising on Twitter, Facebook]. DGES website could include specific link to grad supervisor to help match prospective students-supervisors. Our website looks good – we could be more specific about the minimum amount of funding available to support students.</p> <p>DGES will work more intentionally with university-level graduate student recruiters.</p> <p>All DGES faculty will be encouraged to respond to potential applicants, and to list research interests related to their program of research (and adjacent interests).</p> <p>Undergraduate Program Administrator will identify strong 4<sup>th</sup> year undergrads and send out invitation to attend a Brown Bag or Pizza Lunch where the Graduate Program Coordinator will present graduate study opportunities.</p> <p>DGES will review Grad Studies’ Viewbook page on each program to ensure accuracy and resonance.</p> <p>(ii) FASS and FGPA resources will be investigated and broadcast.</p> <p>(iii) Graduate committee/ MA Working Group will review promotional strategy to ensure optimal coverage, in consultation with FGPA</p> <p>We do a very good job at lauding the accomplishments of our graduate students, shared through social media.</p>	<p>Chair;</p> <p>HG PhD / MA Working Group;</p> <p>Undergrad Program Administrator</p> <p>Graduate Program Coordinator;</p> <p>Grad Committee;</p> <p>Graduate Program Administrator;</p> <p>Program Support Officer</p>	<p>Status = underway / ongoing</p>	<p>N</p>
<p><b>9. Opportunity:</b></p> <p>(i) Develop strategies to expand international graduate student enrolment in DGES programming, leveraging incentives towards international graduate student recruitment from the relevant Deans (FASS and FGS).</p> <p>(ii) Request targeted bursaries for international Masters students</p>	<p>(i) 3 – Agreed to in principle</p> <p>(ii) 1 – Agreed to unconditionally</p>	<p>(i) We would like to have more international students, but without adequate institutional supports, we don’t see this as possible.</p> <p>We do have a doctoral bursary in place to allow international doctoral students to pay domestic fees. Supports offered at doctoral level should be extended to masters’ level. Although there have been regular calls across the university for similar financial support for masters’ students, there does not appear to be any interest in pursuing this by upper admin. As a result, international recruitment is largely limited to the PhD level. Further, our unit receives only 1 international TAsip award and thus any faculty interested in supervising an international PhD must be able to provide upwards of \$20k/year x 4 years for the student to have a chance of successfully completing their program, unless they are financially</p>	<p>Graduate Program Coordinator</p>	<p>Status = underway / ongoing</p>	<p>N</p>

<p>that would enable more junior faculty hires to recruit international students to their research groups as they are not yet able to take advantage of the existing international PhD bursaries.</p>		<p>independent. Our experience has shown that without sufficient funding, international (and domestic) students have great difficulty focusing on their studies.</p> <p>We continue to dedicate some endowment funding (Maatje Nix Endowment Award) to international students (\$2500/year x 4 years for PhD students, \$4000/year x 2 years for MA/MSc students) on acceptance and international students are eligible for other endowed awards with the rest of the graduate cohort during the Department-specific competition in January. However, some of our endowed awards are not allowed to be allocated to non-residents. Thus, there are limits to what we can accomplish working on our own. Further, the Chair has previously paid international students out of DGES overhead fund on an ad hoc basis, not to set a precedent, but to mitigate student distress in extenuating circumstances.</p> <p>(ii) DGES will continue to push for more funding for international masters' students, plus application of domestic fees for masters' students. (There is currently no funding for MA/MSc students, and they pay 2x tuition as domestic fees, making their studies financially untenable.)</p>			
<p><b>10. Concern:</b></p> <p>(i) The elimination of a required undergraduate thesis (allowing for additional coursework) in the honours degree may have undermined student consideration of graduate degrees. Promoting the undergraduate thesis, while increasing faculty supervisor load, could be a strategy to increase interest in MA/MSc programming.</p>	<p>(i) 1 – Agreed to unconditionally</p>	<p>(i) The elimination of a required undergraduate thesis may have diminished interest in our graduate programs. To mitigate this potentially inadvertent effect, we intend to pursue several strategies:</p> <ul style="list-style-type: none"> <li>- Undergraduate Program Administrator to identify strong students (CGPA &gt; 9.0) as they complete their third year and encourage consideration of an undergraduate thesis.</li> <li>- Encourage faculty to dovetail their research interests/ research programs with thesis opportunities for undergrads.</li> <li>- Raise awareness among faculty of various funding sources to support undergrad research (e.g., i-CUREUS, FASS Research Internships, CEWIL, etc.).</li> <li>- Consider (re-)offering GEOG 4906 (<i>Honours Research Project</i>) as a class to help students negotiate literature reviews, environmental scans, ethics clearance, primary data collection, analysis, dissemination, and knowledge mobilization. Assess over time the efficacy of this course delivery in relation to Learning Outcomes.</li> <li>- Encourage faculty to consider the applied research needs of their community partners and seek strong students to fulfil those needs as a thesis or directed studies credit.</li> <li>- Make students more fully aware of graduate degree possibilities within DGES.</li> </ul>	<p>Undergrad Program Administrator; Undergrad Program Supervisors</p>	<p>Status = underway / ongoing</p>	<p>N</p>

		NB Progress on this front must be part of a bigger conversation about the 4 <sup>th</sup> year experience – the shift towards course-based 4 <sup>th</sup> year that has swung back towards directed studies credits.			
<p><b>11. Concern:</b></p> <p>(i) Review the content covered in the required PhD core courses (GEOG 6000 and 6001) and explore a team-teaching approach for these to better balance the human/physical sides of the discipline thereby enhancing student views of Geography as an integrated discipline.</p>	(i) 1 – Agreed to unconditionally	<p>(i) GEOG 6001 already does this, with its balance of human and physical guests, and the applied/ professional nature of the readings and activities. GEOG 6000 is similarly interdisciplinary and includes guest speakers from across the department to ensure exposure to a balance of approaches.</p> <p>Our doctoral core courses have been co-taught in the past, and while we agree this brings significant merits, it would require a healthy number of doctoral students in each cohort to warrant those resources. If our numbers were to increase, we could re-consider a co-teaching approach.</p> <p>This “concern” begs a broader departmental conversation about how courses could be co-taught or team taught or otherwise shared. Peter Pulsifer and Scott Mitchell recently co-taught twice (while it wasn’t half the work, it was still worth it). We need to find models that might work in our context.</p>	Core Doctoral Course Instructors; Graduate Program Coordinator; Chair	Status = underway / ongoing	N
<p><b>12. Weakness:</b></p> <p>(i) To address long completion times in the MA and MSc programs, consider a more formal “milestone” tracking structure,</p> <p>(ii) Consider potentially including a mandatory supervisory committee meeting at the end of year 1.</p>	<p>(i) 1 – Agreed to unconditionally</p> <p>(ii) 1 – Agreed to unconditionally</p>	<p>(i) There are already structures in place to set and track milestones. The DGES Graduate Student-Supervisor Handbook currently includes expected milestones for the MA/MSc students.</p> <p>Below is an excerpt from the Thesis Advisory Committee and Progress Monitoring section:</p> <ul style="list-style-type: none"> <li>- <i>“The student and supervisor must meet at least once per term to discuss the research and the student’s progress as well as other issues.</i></li> <li>- <i>The complete advisory committee must review the student’s progress at least twice a year (Master’s) and once a year (PhD), preferably in a meeting with the student.</i> <ul style="list-style-type: none"> <li>o <i>Typically, such meetings involve a progress report (often sent to the committee before the meeting) and/or presentation from the student, followed by questions and advice from the committee.</i></li> <li>o <i>Within a few days of the meeting, the student should prepare a summary of the meeting that is approved by the committee.</i></li> <li>o <i>Note: Thesis committee members may be away for work or personal reasons at various times, particularly in the summer and during a sabbatical. Students</i></li> </ul> </li> </ul>	Graduate Program Coordinator; Grad Committee; Graduate Program Administrator; individual faculty	Status = underway / ongoing	N

		<p><i>and supervisors must effectively communicate with respect to expectations of each other during these times. The supervisor should arrange for alternate committee members if one or more members are not available for critical activities such as a comprehensive exam, review of the thesis proposal and the proposal defence (PhD only), etc.</i></p> <ul style="list-style-type: none"> <li>- <i>The student's progress will be formally assessed and reported to the department and to the Dean of Graduate Studies as follows:</i> <ul style="list-style-type: none"> <li>o <b>Master's:</b> <i>No progress report. Only those who are out of time in their program are notified and asked to complete an Extension of Time Request.</i></li> <li>o <b>PhD:</b> <i>A progress report is sent to the Dean of FGPA if a program milestone has been missed. An explanation is required and a timeline and plan must be provided for meeting the milestone.</i></li> <li>o <b>PhD program milestones:</b> <ul style="list-style-type: none"> <li>o <i>End of 2<sup>nd</sup> term - completion of both core and both field seminars;</i></li> <li>o <i>End of 5<sup>th</sup> term – completion of comprehensive exam and thesis proposal defence, but it is best if the comp exam is done by the end of the 4<sup>th</sup> term to allow time for the proposal defence.</i></li> <li>o <i>FGPA monitors student progress through these stages and requires milestone reports with justification and a timeline to be completed when the student has missed deadlines.</i></li> <li>o <i>It may be advantageous to plan committee meetings or meetings with the thesis supervisor just ahead of the deadline for submission of these progress reports."</i></li> </ul> </li> </ul> </li> </ul> <p>Further:</p> <p><i>Master's Programs (specific details)</i></p> <p><i>Coursework</i></p> <p><i>Full-time students should complete required course work as soon as possible, preferably in the first two terms of registration. Consult the calendar for specific program course requirements including collaborative specializations. Normally, MA students take three courses in one term and two in the other and MSc students take two courses/term.</i></p>			
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<p><b>13. Weakness:</b></p> <p>(i) TA funding for PhD candidates is now in place for five years but time-to-completion remains a concern. Support DGES in its stated intent to explore program enhancements in the PhD program to shorten times-to-completion.</p> <p>(ii) Some efficiency could be gained in combining the candidacy exam process with proposal defence process.</p>	<p>(i) 1 – Agreed to unconditionally</p> <p>(ii) 4 – Not agreed to</p>	<p>(i) Completion times during the pandemic were not representative, but rather, reflected extenuating circumstances. That said, DGES will consult existing and former graduate students to better understand how to shorten completion times.</p> <p>(ii) The comprehensive exam process has already been pared down from 2 to 1; further reduction would compromise the quality of our program. Our comprehensive exam is a course, while the thesis proposal is more of a flexible process (that could be completed closely after the comp exam, if the committee wished to couple them). Efficiency is not the aim of our graduate program, and combining these processes is not likely to address the issue with completion times.</p>	Graduate Program Coordinator	Status = underway / ongoing	N
<p><b>14. Opportunity:</b></p> <p>(i) Explore possible undergraduate transfer pathway programs from suitable college diplomas (e.g., Environmental Technician, Geomatics Technician) to DGES undergraduate degrees. Potential partners in Ontario</p>	<p>(i) 1 – Agreed to unconditionally</p>	<p>(i) This idea would be worth exploring for our physical geography, geomatics, and environmental studies programs. We will consider offering a 0.5 course release for someone to:</p> <ul style="list-style-type: none"> <li>- Glean the history of past articulation agreements;</li> <li>- Survey other articulation agreements (e.g., the existing collaboration between CU and Algonquin with the BA of Info Tech);</li> <li>- Explore potential articulation agreements and co-degree programs; and,</li> <li>- Begin preliminary communications with potential partners.</li> </ul>	Undergraduate Program Supervisors or Designated Faculty Member	1-2 years	TBD

include: Algonquin, Fleming, and St. Lawrence.		We know from other institutions how labour-intensive coordination of such programs can be.  John Milton to survey what colleges in Ontario offer relevant programs for potential articulation.			
<p><b>15. Opportunity:</b></p> <p>(i) DGES is currently served by a lab technician that is skilled in supporting physical lab and field equipment needs. Given the recent growth of the Geomatics and likely future growth in other geospatial and geocomputational areas, DGES could benefit from a dedicated IT technician. This will be especially necessary if DGES moves to more technical specializations/certificates/etc.</p>	(i) 3 – Agree to in principle	<p>(i) We have only recently shifted to a new IT support structure – including support for geomatics teaching (this involves central computing people with help from FASS), which we hope will be more efficient.</p> <p>It would be great to have a lab technician more directly supporting the computer labs, but if we are constrained to existing positions, note that it can be challenging to redefine a union-protected job.</p> <p>We also need better support for field studies, physical geography research, and environmental field work related to both research and teaching.</p> <p>Our existing lab technician has been taking on new responsibilities in this regard, and we will continue to encourage ongoing skills training/ professional development where appropriate for existing staff to better support DGES in these areas.</p> <p>We will also look for opportunities when there are turnovers to re-task positions, as we did successfully with the Program Support Officer when a team member retired.</p>	Chair	TBD	N
<p><b>16. Concern:</b></p> <p>(i) While options may be constrained, the review of DGES noted two space issues: 1) The space provided to undergraduate students and the undergraduate student club is small and limits opportunities for academic and social interactions.</p> <p>(ii) Graduate student office space may not be large enough to accommodate larger graduate cohorts that are closer to departmental aspirations and</p>	(i) 3 – Agreed in principle (ii) 3 – Agreed to in principle	<p>(i) We agree that the Carleton University Geography and Environmental Studies Association (or undergrad student association) (CUGESA) space is small (and just adequate), but suitable for their meetings. We will remind CUGESA that they can book various DGES spaces for special activities (e.g., A220, A302, A410, A211). DGES will identify available time periods for pop-up events CUGESA might like to coordinate.</p> <p>Space remains a constraint across the institution, but we will continue to look for opportunities as renovations on campus continue because we recognize the potential for community, camaraderie, and collegiality. Other departments have a lounge (such as History, and Sociology/Anthropology), but we are indeed restricted.</p> <p>(ii) We feel grad spaces are adequate; though we must enforce that people take everything with them when they leave. The Graduate Program Administrator will review graduating students' desks and remind them to remove all items before the start of the next term.</p>	Departmental Administrator;  Chair;  Graduate Program Administrator;  Dean	Status = underway / ongoing	N

<p>Graduate School targets. This latter point may become acute when in-person patterns return post-COVID.</p>		<p>Certainly, if our graduate student numbers increase, we will need to revisit the space constraints.</p>			
<p><b>17. Opportunity:</b> (i) In alignment with directives from the University on post-pandemic course delivery and in responses to a different style of learning and expanded access to computer lab resources that students have been accustomed to, develop a plan to offer some courses/labs in a mixed modality and maintain some use of virtual lab environments where appropriate/suitable.</p>	<p>(i) 3 – Agreed in principle</p>	<p>DGES will solicit instructors to see who might be willing to offer courses/labs in mixed modality, or even online (asynchronously).</p> <p>Koreen Millard has carried over some of the virtual labs she received E-Campus Ontario money to develop during COVID. Murray Richardson accessed other Carleton funding to improve student engagement with online learning for first- and second-year GEOM courses by generating new online quiz material (GEOM 1004) and technical resources (GEOM 2007) for self-directed learning in GIS.</p> <p>Much of our PG labs are hands-on, and virtual environments do not adequately simulate the experience.</p> <p>GEOM labs where students have no previous experience using the software benefit from the in-person support an instructor can offer. We have, however, learned useful techniques in applying virtual machine and remote access possibilities that will continue to offer us flexibility in future programming. This may prove particularly effective for the micro-credential opportunities identified above in Section 2.</p> <p>DGES will consider discussing these opportunities with TLS.</p>	<p>Chair; Departmental Administrator</p>	<p>Status = underway / ongoing</p>	<p>N</p>
<p><b>18. Opportunity:</b> (i) Expand the promotion of achievements of DGES students, staff and faculty to increase the profile of the department to wider audiences through social media and university-wide opportunities (e.g., the FASS “Meet Your Professor” series) (ii) Re-establish pre-pandemic practice of students and</p>	<p>(i) 1 – Agreed to unconditionally (ii) 3 – Agreed in principle (iii) 1 – Agreed to unconditionally</p>	<p>(i) Patricia Ballamingie completed a <i>Meet Your Professor</i> video. DGES will suggest other faculty (representing physical geography, geomatics, and human geography) to FASS recruitment officer, Nick Ward.</p> <p>(ii) Our Program Support Officer ran these sessions virtually throughout COVID, and that proved successful. We think it would be advantageous to explore using a mix of in-person and online sessions moving forward.</p> <p>(iii) Where possible, we will combine community-facing lecture series with Founders efforts. DGES will continue to join FASS Healthy Cities panels, as appropriate (previously, Ballamingie, Hugill, and Simpson participated). DGES will continue posting News and Events on website and DGES social media.</p>	<p>Chair; Program Support Officer</p>	<p>Status = underway / ongoing</p>	<p>N</p>

<p>alumni as “program ambassadors” as part of student outreach (to local high schools) and on campus recruitment activities.</p> <p>(iii) Consider hosting community-accessible lecture series on topics facing the Ottawa community (urban, environmental, social, etc.).</p>					
<p><b>19. Opportunity:</b></p> <p>(i) Build connections with alumni by creating “career” events to bring alumni back to campus to meet with students.</p>	<p>(ii) 1 – Agreed to unconditionally</p>	<p>(i) Our Program Support Officer has organized alumni networking events in the past and will aim to coordinate one a year. They also maintain a database of alumni from 2000-present.</p> <p>DGES will also:</p> <ul style="list-style-type: none"> <li>- Encourage alumni to complete: <i>I work as [INSERT JOB TITLE]. I studied [INSERT PROGRAM] at Carleton.</i></li> <li>- Aim for 2-3 fuller alumni profiles each year (organized programmatically).</li> <li>- Investigate support available from FASS.</li> <li>- Encourage faculty to invite alumni as guest speakers (e.g., Mark Gallant spoke about Story Map in GEOM 1004, and students actively inquired about his career path following the talk).</li> <li>- Explore potential for meet-and-greet events for students to mingle (e.g., through CUGESA outdoor activities).</li> <li>- Fund a mentorship program (4<sup>th</sup>-year CUGESA students to do events with early-year undergrads).</li> </ul> <p>MacOdrum Library’s GIS Week will likely resume post-pandemic, and DGES will continue to coordinate.</p> <p>DGES regularly sponsors and participates in the local back-to-school GoGeomatics event to connect with alumni and ensure visibility for CU/DGES/GEOM to local businesses. This organization represents an important hub for the geospatial community.</p> <p>Our Geography Awareness Week offers our Program Support Officer excellent access to high schools. The pandemic allowed for even more virtual meetings, so we expect some hybrid moving forward.</p>	<p>Program Support Officer;  Chair</p>	<p>Status = underway / ongoing</p>	<p>N</p>