

*York University*  
*New Program Brief*  
*of the*  
*Doctoral Degree*  
*in*  
*Disaster and Emergency Management*  
*Revised: November 28 2022*

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## 1.0 Introduction

### 1.1 Brief Statement of Degree Program Proposed

This document proposes the creation of a new Doctoral Degree (PhD) in Disaster and Emergency Management (DEM) to be offered at York University. The program is designed for holders of Masters Degrees in DEM and related fields (such as environmental studies/sciences, public policy, health, and many similar disciplines) who wish to pursue advanced studies and research. These new scholars – and the knowledge they produce – will contribute to the development of theory and practice that will help those in Canada and around the world reduce the negative impacts of disasters and emergencies.

The Doctoral Degree in Disaster and Emergency Management would join an already existing Bachelors of Disaster and Emergency Management (BDEM) and Masters of Disaster and Emergency Management (MDEM) that are offered at York University. The name of the degree (“Disaster and Emergency Management”) conforms to standard terminology in the field and is intentionally selected to represent training and specialization in both large-scale events (e.g., disasters like wildfires, earthquakes, terrorism, or pandemics) and more routine emergencies (e.g., policing, incident response, event planning, and business continuity).

### 1.2 Quality Council Endorsed Fields

Disaster and Emergency Management is, in and of itself, a highly interdisciplinary field which combines methods, theories, and insights from a large number of existing fields. For the purpose of the proposed Doctoral Degree, however, there are no requested sub-fields within the DEM degree.

### 1.3 Development of New Program Brief

This program brief was developed through the input of the DEM program members and broader University community within York, as well as through the input of professionals and practitioners in the field. The design of the pedagogy, courses, and overall degree was led by the full-time faculty assigned to the existing bachelor’s (BDEM) and master’s (MDEM) degrees in Disaster and Emergency Management.

Following the creation of an initial proposal, additional input on the degree’s design was solicited from faculty and leadership within the School of Administrative Studies, as well as a number of other allied faculties from across the campus (see Letters of Support). Student input was incorporated from both existing MDEM students, and additional feedback on specific proposals was solicited upper-stage PhD students and faculty from programs elsewhere in Canada and the United States.

These inputs were compiled into a more refined proposal, which was then received multiple rounds of feedback from the Faculty of Graduate Studies on pedagogical design, learning outcomes, and document completeness. Finally, a visit by two experts in the field – Dr. Jessica Jensen and Dr. David McEntire – provided an external perspective on the program design and suggested changes, which have been incorporated into this version.

### 1.4 Faculty/Unit Anchor

The new Doctoral Degree in Disaster and Emergency Management will be anchored in the School of Administrative Studies, alongside the existing BDEM and MDEM programs. The School of Administrative Studies is located within the Faculty of Liberal Arts and Professional Studies, an ideal home for a set of programs that emphasize both professional application (e.g., training MDEM students for careers in disaster and emergency management) and the use of Liberal Arts disciplines (including sociology, anthropology, and philosophy) to critically study the processes of disaster and emergency management.

While DEM constitutes a significant and growing field in its own right, the field of Disaster and Emergency Management is also highly interdisciplinary. As such, the PhD program will be collaborative

in nature, enabling students to pursue advanced studies and research in a number of relevant and related disciplines. In addition to strong research partnerships across these faculties (i.e., between DEM and those located elsewhere across the university), this collaboration will be accomplished by enabling students to be supervised by professors who are members of DEM PhD program, yet who also have academic “homes” in other departments throughout York University. Interdisciplinary collaboration will also be enabled by encouraging students to take approved, relevant courses offered by other departments to develop the requisite breadth and depth of expertise to effectively complete their graduate projects. Departments and individual professors within LA&PS from diverse disciplines have already expressed support for such cross-pollination, with these collaborations aiding the spread of supervision responsibility beyond the core DEM faculty.

## 2.0 General Objectives of the Program

### 2.1 Brief Description of the Program Objectives

Disaster and Emergency Management (DEM) is an emerging, transdisciplinary field of inquiry dedicated to improving the ways society addresses all forms of hazards and crises. The field is highly inclusive, incorporating research on a wide variety of hazards (e.g., ‘natural’ hazards like floods, fires, hurricanes, and similar; ‘technological’ and ‘human-made’ hazards like cyber-attacks or financial crises; and ‘health’ hazards like pandemics and emerging diseases; to name a few). It also adopts an inclusive approach to disciplinary traditions, blending anthropological, sociological, historical, political, and natural science approaches to studying these crises. The field of DEM is also characterized by close connections between academic research, an emerging push for evidence-based practice, and the need for more rigorous approaches to community engagement – a triad of key elements that shape the design of this PhD program. Contemporary events like COVID-19, rapidly expanding wildfire seasons, and increasingly devastating floods and heatwaves underscore the critical importance of the field.

The PhD in Disaster and Emergency Management is designed to link academic study and professional practice in rigorous ways that support the development of evidence-based theories, methods, policies, and practices for the field. This will be accomplished through a rigorous academic process incorporating advanced courses, focused mentorship from faculty in DEM, relationship development with practitioners and DEM organizations, the conduct of field-leading research, and the development high-quality skills in teaching and public outreach.

While a significant portion of the students in the program are expected to be academics-in-training pursuing a track towards careers as faculty members (see 3.2 for a discussion of the need for such faculty), the program is also designed to serve a need identified by external stakeholders and partners: because of the increasing demand for evidence-based practices in the field, and the ongoing professionalization of the practitioner community, there is a growing need for expert personnel who have the capacity to conduct research, lead rigorous program evaluation, and translate theory into practice. As such, our program is designed to provide mentorship and training for knowledge production and knowledge mobilization in both academic and practitioner contexts; a design that is woven throughout the courses proposed and the approaches to supervision and mentorship.

The general objectives in designing the DEM PhD program are to create:

- An academic program that integrates scholarly activity and professional practice in DEM.
- A doctoral degree that imparts the knowledge, skills, and abilities necessary for its graduates to be effective as future faculty in the field of DEM, to work in research roles in the public sector, and to serve as academically informed DEM professionals.
- A rigorous academic curriculum that engages students in analyzing, exploring, questioning/critiquing, and synthesizing theories from DEM-related behavioral and applied sciences and practices in the DEM field.
- Collaborative interactions with faculty, students, and practitioners from numerous specialty fields involved in DEM to support scholarly discourse, research design, and effective implementation of academic contributions into real-world change.
- The publication of novel and rigorous research findings for the purpose of improving societies’ ability to improve disaster risk reduction policies, programs, and activities.

The curriculum is designed to provide students with both a breadth and depth of critical knowledge in the field of Disaster and Emergency Management. Among other issues, the curriculum will emphasize:

- DEM as a field of study and profession, including understanding natural and human-induced (e.g., technological, terrorism) disasters; the human, social, and physical consequences of such events; and the means to mitigate, prevent, prepare for, respond to and recover from the impact of such events.
- In-depth knowledge of DEM practices as a basis for a comprehensive and holistic approach to the study of disaster risk reduction for natural and human-induced (e.g., technological, terrorism) disasters.
- Dominant and emerging paradigms, perspectives, and approaches to research and practice in DEM.
- Political, organizational, and social contexts of DEM.
- Human behavior in mass emergencies and disasters.

Through coursework, comprehensive examinations, and dissertation research, graduates of the program will demonstrate a high degree of proficiency in both qualitative and quantitative research methods, general academic scholarship, and knowledge areas within DEMS including:

- Disaster and emergency management academic theory and professional practice
- Risk, vulnerability, and resilience
- Public policy for DEM
- Research methods and knowledge mobilization practices within DEM
- DEM teaching, pedagogy, and mentorship in academic and professional settings
- Ethical practice and professional values, including accountability, integrity, engagement, and transparency

## 2.2 Alignment with University and Faculty Missions and Academic Plans

The proposed Doctoral degree in DEM was initiated with strong support and as an integral part of York University's mission. The Strategic Mandate Agreement between York University and the Government of Ontario, signed by President Shoukri for 2014-2017 formally committed the university to developing "a new doctoral program in Disaster and Emergency Management [that] will address a widely-recognized need for researchers and teachers in this field."

This mandate is also recognized by the Higher Education Quality Council of Ontario. The importance of this PhD program have been reaffirmed consistently since, including as part of building the pan-university emerging organized research effort related to disaster, emergency, and crisis management.

The proposed program aligns closely with priorities identified in the University Academic Plan (UAP) and Strategic Resource Plan (SRP). Thematically, the degree aligns closely with the priorities of 'Living Well Together' and 'Knowledge for the Future' within the UAP. Supporting both fundamental inquiry and critical applied knowledge, the program will be a university-leader in blending rigorous academic work with practice-driven impact. Managing emergencies effectively – and building more resilient communities – is essential for 'building health lives, communities, and environments,' as well as addressing the significant ways that disasters can exacerbate and worsen societal inequality and unsustainability ('forging a just and sustainable world'). Moreover, disaster studies and management offers crucial windows for exploring how to manage the adverse consequences of technologies, as well as for critically interrogating the ways that current, highly quantified approaches to emergency management can adversely affect marginalized communities ('exploring and interrogating the frontiers of science and technology').

York University is an ideal location for this doctoral degree because of its long-standing and internationally recognized Bachelors- and Masters-level DEM program, its strong group of core and affiliated faculty, and its interdisciplinary approach to tackling challenges in disaster and emergency management. York University has also recently founded a new, university-wide Organized Research Unit in the area – Y-EMERGE, or the York Emergency Mitigation, Engagement, Response, and Governance Institute – which helps to further develop York's interdisciplinary capacity on the subject. Moreover, the program will benefit from strong existing research collaborations with practitioners and other universities, as well as substantial existing investment (such as the over \$1 million in

COVID-19 related research funding to core DEM faculty, as well as ADERSIM, the Advanced Disaster,

Emergency and Rapid-response Simulation, which has received over \$3 million in federal and provincial investment to develop laboratory and training capacity).

### 3.0 Need and Demand

#### 3.1 Similar Programs offered at York and in Ontario

In addition to the significance of the subject discussed in section 3.2 and the resulting demand for leadership in the field (i.e., the increasing risk of disasters, including thanks to climate change, growing and aging populations, and an increasingly technically complex world), the need for this program also stems from the lack of any similar program offered at York University, at any university in Ontario, or indeed, at any university in Canada.

A small number of universities and colleges in Ontario offer training in Disaster and Emergency Management or related fields at the Bachelors, Masters, or certificate level. George Brown College offers an in-person program in public safety, for instance, while Wilfrid Laurier University offers an online masters degree in the same subject. Beyond York University, a handful of universities offer degrees in DEM. Cape Breton University, Brandon University, and the Justice Institute of British Columbia offer bachelor's degrees, while Royal Roads and the University of British Columbia offer master's degrees. These programs help meet the need for early career professional training, while creating a significant and growing demand for faculty capable of conducting research and teaching in the field. Moreover, because of the increasing importance of evidence-based emergency management; the increasing pressures around science advising as part of disaster planning and response; and the need to mobilize increasingly vast bodies of theory to support practice, there is also a growing demand for practitioners at senior and analysis levels with doctoral training. Yet, no Canadian institution offers a Doctoral degree in the field of DEM, which leads to the issues discussed below (including the inability to create, mentor, and hire Canadian faculty members at these programs across the country).

Occasionally, students interested in DEM topics pursue studies through a variety of other doctoral programs, including environmental studies, public administration, urban planning, engineering, and social sciences. However, none of these programs could be considered competitive with the proposed PhD in DEM at York because they lack the core faculty strength with DEM expertise; the design of these programs makes DEM aspects of the research a secondary component (vis a vis the primary disciplinary affiliation); and the degrees obtained are not in disaster and/or emergency management. Moreover, the PhD in DEM at York is designed to provide opportunities for students to pursue interdisciplinary mentorship, studies, and projects (see sections 2.0 and 4.0 for details on how this structure will be supported).

#### 3.2 Brief Description of Need and Demand for the Proposed Program

There is a need for such a program on several levels: to create the knowledge needed to understand and reduce the ever-rising impacts of disasters; to meet the needs within society for complex policymaking; and to develop the next generation of leaders in scholarship and practice within the field of disaster and emergency management.

In a societal context, the cost of disasters has been growing in recent decades, not only within Canada but globally. This is due to a number of complex reasons related to globalization, environmental degradation, the increasing complexity and connectedness of critical infrastructure, and poor planning decisions. This complexity leads – even among practitioners – to the need for training that leverages theoretical paradigms, methodological tools, and a focus on the production of reliable knowledge within emergency management. In other words, there is a need within society for decision makers who are knowledgeable about disasters in Canadian and global contexts, who understand research in the field, and who can translate that research into effective policies. This need is addressed by the proposed PhD program.

The DEM program at York began because of an expressed need by Emergency Management Ontario in 2003, which met with various colleges and universities and indicated that the profession of emergency management required a higher level of education than was currently possessed by most practicing emergency managers. While our successful programs at the bachelors and masters level help to provide training for those entering the field, there is a need for

more advanced training for those who will teach, produce knowledge, and shape policy within emergency management. As expressed in the letter of support from Public Health Ontario, for instance, there is a critical “need for the development of evidence- based knowledge and critical thinking to frame and support integrated emergency management in all sectors.” Likewise, the letter from the City of Toronto Office of Emergency Management specifically calls out the “need for a doctoral program that would promote novel research and expertise in DEM” to help address the “extensive research gaps... [and] era of increasing disruption” we currently face. The lack of doctoral-level development within the field also extends beyond Canada, creating fruitful opportunities for student placement into academic and professional or practitioner (e.g., think tank, government, private sector) roles.

The demand for doctoral-level scholars is evident in both academia and practice. In academia, the growth of programs in emergency management, disaster studies, and public safety across Canada – coupled with hiring challenges experienced at York and elsewhere in finding suitable candidates – underscores the opportunities as Canada’s first and only doctoral program in emergency management. The need, however, extends well beyond the academy. For example, we have been approached by numerous current practitioners in the field of emergency management – from epidemiologists and policy analysts to program directors – who are specifically seeking out the opportunity to complete a PhD in the field to allow them to examine challenges they’ve faced in practice, improve their evidence- based decision-making, and to build more rigorous approaches to emergency management within their programs. Moreover, the letters from practitioner groups like CRHNet and the NGO Alliance indicate the need for more doctoral-level candidates for non-academic positions, bringing methodological tools, theoretical knowledge, and a deep understanding of the Canadian context to their leadership roles.

This doctoral program also builds off of successful and growing programs at the undergraduate and masters level. Within the BDEM program, we have experienced significant growth, with a notable increase in undergraduate student headcount from 78 in 2017 to 134 in 2021. The MDEM program has also established a steady state enrollment between 50-60 students, providing a potential pathway for some (although we expect significant numbers of students from other masters majors, including environmental studies, policy and public administration, and other social sciences). There has also been growth in similar programs elsewhere, such as the emerging Masters of Public Safety program at WLU, which now enrolls approximately 150 students in an online-only program. The creation of the first Canadian PhD program in DEM will help to increase the capacity for academic leadership, research, and teaching within the field, among both domestic and international students. With no current PhD program in DEM in Canada, this is a significant academic gap that York University is well-positioned to fill. Moreover, this can help reduce the potential of losing strong York and Canadian students to American institutions.

This is a field of inquiry that will thrive in a comprehensive university with strong research institutions; active research, knowledge mobilization, and pedagogical programs; and a strong cadre of collaborative researchers, both internally and with external partners. The field of DEM is interdisciplinary and requires integrative research into complex topics that encompass interactions between the built and natural environments, and social/political systems. It is difficult to fully address them within traditional academic disciplines – thus the need for a degree program that explicitly deals with relevant issues within an interdisciplinary paradigm.

## 4.0 Program Content and Curriculum

### 4.1 Program Requirements

Disaster and Emergency Management is a rapidly evolving and highly interdisciplinary field. The curriculum, therefore, is designed to provide graduates with a thorough understanding of the different disciplinary perspectives in the field; to equip them to conduct research and remain up to date as methods, practices, and case studies evolve; and to become effective teachers, mentors, and researchers capable of applying their skills in academic, practitioner, and multi-sectorial careers.

The program has four core requirements:

- Coursework, including comprehensive courses in the field of DEM, structured opportunities to develop their areas of research specialization, training in qualitative and quantitative methods, and subject-

- specific electives to prepare them for work on their specializations (e.g., wildfire; terrorism; aviation safety; etc).
- Two comprehensive exams designed to test both mastery of DEM as a field and sufficient depth within their area of specialization.
- Dissertation proposal and defence, structured to ensure that students are ready to undertake independent, mentored research within their specialization.
- Dissertation and oral defence designed to ensure quality and rigour of the final research project.

These program requirements are discussed in detail below. The coursework requirements – and the ‘core course’ in particular – are worth specific attention. To balance the need for disciplinary training with the importance of independent research, supervisor-directed development, and specialization- focused research, the proposal develops a new two-term course that provides students with an understanding of the current state of the field and the tools they need to conduct research from different disciplinary perspectives. For additional detail on this, see section 4.2 and the attached course proposal.

#### 4.2 Courses Offered

The DEM PhD program requires 12.0 credits of core classes, with 6.0 credits administered in the form of a two-term seminar on the fundamentals of the field, 3.0 credits on teaching, training, and pedagogy, and 3.0 as a seminar supporting the design and development of successful dissertation projects. The following table provides the relevant details on each course.

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|-------------------------------------|---|
| DEMS<br>7700<br><br>Fall-<br>Winter | <p><b>Part 1: Risk, Vulnerability, and Resilience.</b> Disasters and emergencies have long been understood through three meta-narratives: risk, vulnerability, and resilience. In this course, we explore in depth each approach to understanding, preparing for, and responding to disasters. Material covered includes risk, vulnerability, resilience, and disaster theory; risk governance and the construction of risk in society; and introduction to types of hazards. <u>Students will apply these concepts to real-world scenarios and contemporary events.</u></p>  |
| 6.0<br>credits<br>(3.0<br>each)     | <p><b>Part 2: Research and Practice in Disaster and Emergency Management.</b> Disasters and emergencies attract a wide variety of attention from practitioners, academics, governments, and the public. In this course, we explore the different disciplinary approaches to academic research on disasters (including sociology, anthropology, philosophy, science and technology studies, systems theory, decision-making, and public administration) and the practitioner experiences in the field (including government, non-governmental, and private sector roles). The course is based on deep-dive visits by experts from each field, with an emphasis on critical reflection between the issues raised by each perspective.</p> <p><i>This year-long course is a proposed new course. See Appendix F for its full proposal.</i></p>   |
| DEMS<br>7750<br><br>3.0<br>credits  | <p><b>Research Design &amp; Dissertation Proposal Development.</b> To become a successful scholar, students need to develop a high degree of competence in designing and executing research projects. In this seminar, we introduce key skills in research project design, including scoping a research question, determining appropriate methodological tools, and conducting effective literature reviews. We emphasize the many different formats a dissertation can take on in the field of DEM, from traditional academic work to applied and partnered projects with practitioners. Students will also be introduced to project execution methods, including managing data, writing, revising, disseminating, and finding funding. Particular attention will be paid to applying these skills in support of developing a first draft of your dissertation proposal, with regular deliverables used to solicit peer and faculty feedback.</p> <p><i>This is a proposed new course. See Appendix G for its full proposal. DEMS 7730 and 7740 would be pre-requisites.</i></p> |

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| DEMS<br>7790<br><br>3.0<br>credits | <p><b>Teaching, Learning, and Pedagogy in Emergency Management.</b> This course examines pedagogical theory and teaching and learning frameworks relevant to emergency management education in university and professional settings. Students will explore a wide range of teaching and learning strategies, and have the opportunity to develop personal insights into their own teaching styles and competencies. To ensure viability, this course will be cross-listed to be available for a limited number of MDEM students, with permission of instructor.</p> <p><i>This is a proposed new course. See Appendix J for its full proposal.</i></p> |
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| DEMS<br>7730<br>3.0 credits | <p><b>Qualitative Methods in Disaster and Emergency Management.</b> This course examines best practices in qualitative research, including survey, interview, ethnographic, and unobtrusive methods. Students will be required to design and execute a qualitative research project as well as present the findings in both a written paper and oral presentation. The course will cover research skills including inductive and deductive coding, qualitative data management, and mixed methods approaches. An emphasis will be placed on applying qualitative methods in both academic and program evaluation settings as well as on the specific challenges, needs, and techniques that arise in performing qualitative research in the post-disaster and emergency setting.</p> |
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The doctoral degree requires a further 6.0 credits of methodological training. To successfully complete a dissertation and to be prepared for long-term careers in academia, government, or the private sector, students must demonstrate a competence in designing, executing, and critically analyzing both qualitative and quantitative research.

Because of the content and pedagogical design of these courses; opportunities to link different forms of research across the graduate programs; and to ensure coverage by full-time faculty, DEMS 7730 and 7740 would be cross-listed with the current MDEM methods courses. These courses are already receiving significant attention with respect to opportunities for experiential education, project based learning, and research in partnership with practitioners and stakeholders, allowing doctoral students to benefit from this pedagogical innovation and focus. While not being new offerings, prior to the first cohort of the PhD program, the courses would be thoroughly reviewed to ensure that they are designed to meet the needs of both student groups and are optimized to prepare graduate students for both major research papers and PhD dissertations.

Students who have received and can demonstrate high-quality methodological training in qualitative and/or quantitative methods as part of previous, recent graduate work are able to apply for either a “waiver” or “advanced standing” with respect to methodological training. Students who enter the Doctoral program from the MDEM could apply, for instance, for a waiver based on their completion of these courses during the MDEM program. The waiver would release them from needing to retake these courses, although they would still be required to fulfil 6.0 credits worth of other training related to their work in DEM that helps to support their dissertation success and completion. Alternatively, a hypothetical student who took equivalent masters courses elsewhere as electives and did not use them for the purpose of a previous degree could apply for advanced standing, thereby completing the methodological requirements. A grade of over 80% in the equivalent courses (qualitative and/or quantitative methods) from the Masters of Disaster and Emergency Management at York University will automatically be considered to grant a waiver. Equivalencies from other programs will be granted based on a meeting with both the Graduate Program Director and the instructor of the relevant course.

Note that the students in the doctoral program are expected to meet distinct and more stringent standards in their methodological skills than counterparts who take the MDEM alone. While 7730 and 7740 are cross-listed courses – teaching essential skills in qualitative and quantitative methods – they are designed to integrate smoothly with 7750. In 7750, students build upon the ‘building block’ skills that they learn in 7730 and 7740

(whether taken as a part of their MDEM degree or their PhD in DEM). In the course, they are required to move from mastering methodological tools to being able to deploy these tools in service of large-scale research projects. DEM 7750 will emphasize developing effective dissertation- and grant-scale research questions, deploying a suite of mixed-methods approaches to addressing these large-scale topics, and being able to supervise and mentor others as part of such projects (e.g., how to train and mentor undergraduate research assistants). This furthering and refining of skills in DEM 7750 represents a much higher bar than 7730 and 7740 alone, helping to both distinguish the PhD methodological training from the MDEM program (despite including cross-listed classes), and ensuring that our graduates emerge ready to direct labs, successfully obtain grants, and carry out large and meaningful research projects that benefit the field of DEM.

Students will also be required to complete a minimum of 9.0 credits (or 3 x 3.0 credit courses) in electives, although more will be encouraged as appropriate to help support student development. Elective courses can be chosen from two categories and for two purposes:

1. Elective courses within DEMS, with the aim of broadening their understanding of the field of disaster and emergency management, refining skills for professional and academic application, and analyzing past and present topics in DEM.
2. Elective courses beyond DEMS, with the aim of deepening expertise in a subject of particular interest. Students might choose, for instance, to take a course on forest ecology if they were conducting a dissertation on wildfire management, or within sociology or immigration law if they were working on a topic related to refugee resettlement. The Graduate Program Director, faculty, and staff will work to help students gain access to these courses on an as-needed basis, using both cross-listing and individual permission to help support this individualized development.

Generally, students would take these elective courses in their second year, once their area of research has been sufficiently focused to ensure the electives can be optimally tailored to supporting development in relevant areas of expertise. As part of the annual student review (occurring beginning at the end of the first year and including both a written progress report and an in-person follow up meeting with the supervisor and committee), the student's supervisor would provide advising and mentorship on the appropriate selection of these courses prior to June online enrolment. Students would be assisted in making initial selections for proposal by the compilation of a recommended course list, provided by the graduate program director to all students annually in March. With appropriate guidance from the supervisor, these courses can include directed readings aligned with the student's area of study.

Elective courses within the DEMS program currently can be drawn from the following:

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|------------------------|---|
| DEMS 6040, 6.0 credits | Hazard Risk Analysis: Practical Experience Abroad. This course deals with hazard identification and analysis and risk assessment, disaster impact estimation, and risk reduction methods and strategies using field-based experiential education.   |
| DEMS 6052, 3.0 credits | Enterprise Risk Management, Theory to Practice. This course aims to foster students' critical understanding of the concept, issues and practices in ERM (Enterprise Risk Management) and Business Continuity structures of modern corporations, as well as students' ability to synthesize and apply this knowledge in a cooperative environment. |
| DEMS 6053, 3.0 credits | Public Safety. This course critically explores the issues related to Public Safety in Canada. The course will explore the challenges, both, natural and man-made, and the capacity to manage these challenges within the existing framework. The course will then address a new   |

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|------------------------|--|
| DEMS 6066, 3.0 credits | Post Disaster Recovery and Reconstruction: Theory & Practice. This course examines the current scholarly research and professional practices in post disaster recovery and reconstruction from a global and multi-disciplinary perspective. Key post disaster recovery and reconstruction planning and policy issues and challenges are reviewed. A number of most recent post disaster reconstruction cases are comprehensively discussed.  |
| DEMS 6070, 3.0 credits | Disasters and Ethics. This course examines ethical theory as it applies to issues and uncertainties associated with disasters and emergencies. Students develop an understanding of the ethical decision-making process and moral reasoning. They have the opportunity to explore the moral imperatives associated with emergency management in a variety of contexts, both locally and globally. The emphasis of the course is on applied ethics and the development of moral competence in response to issues, and implications for socially responsive environmental and disaster management. |
| DEMS 6071, 3.0 credits | Management Skills for Emergency Managers. The purpose of this course is to provide students in the Graduate Program in Disaster and Emergency Management basic 'familiarity of' and 'skills for' practitioners in this field. It is focused on practical expectations and requirements in this field. It is further focused on the 'how to' of Disaster Management. It is intended to complement the theoretical knowledge acquired in other courses in the  |
| DEMS 6072, 3.0 credits | Crisis Communication for Emergency Managers. The purpose of this course is to provide students in the Graduate Program in Disaster and Emergency Management with a basic understanding of and skills related to Crisis Communication. This follows from the fact that Crisis Communication is a key to the effective management of Disasters and Emergencies. As a practically focused course it is intended to complement the skill set of students in the program, particularly, those who expect to work in the field.  |
| DEMS 6073, 3.0 credits | Public Capacities for Disaster Management (Public Policy, Governance, and International Response). This course discusses public institutional capacities for disaster and emergency management, with a focus on public policy and governance. It critically examines the management of crises from the perspective of international and regional collaboration, and crosscutting themes such as the politics-administration dichotomy, media and public relations, involvement of non-state actors, civil-military collaboration, and partnerships   |
| DEMS 6090, 3.0 credits | Leadership. This course explores important research findings and current issues related to leadership in contemporary organizations. The main focus is on examining roles and behaviours of leaders during time of crisis, emergency and disaster. The course begins with an examination of leadership theories and concepts, which form the basis for subsequent analyses of selected leaders. Pre-requisite: DEM 5030 Social and Behavioural Dimensions of Organizations (or equivalency as determined by the course director).  |

Our expectation is that students and their committees will also consider a wide range of prospective elective courses from other programs and faculties, including environmental studies and sciences, political science and public policy, health, and beyond. As discussed earlier, the essential role of these electives is to prepare the student with the conceptual, theoretical, and disciplinary foundations essential for the successful completion of their dissertation. As such, we expect each student will use a different combination of courses drawn from across the university as a whole.

Please see Appendix F for the course proposal for DEMS 7700, Appendix G for the course proposal for DEMS 7750, and Appendix J for the course proposal for DEMS 7790.

#### 4.3 Program Requirements in the Graduate Calendar

Please see Appendix E for a copy of the program requirements as they will appear in the Graduate Calendar.

#### 4.4 Graduate Course Requirement

Graduate students would be required to take a minimum of two-thirds of the course requirements from graduate level courses. This is easy for them to obtain, given that the core courses and methodological courses are uniformly required to be at the graduate level.

### 5.0 Program Structure, Learning Outcomes, and Assessment

#### 5.1 Program Learning Outcomes

At the program level, there are six major degree level expectations/learning outcomes that motivate the design of the overall pedagogy. We discuss each of these in turn below, followed by more granular program learning outcomes as related to the coursework and requirements.

**Breadth and depth of knowledge:** Graduates are expected to demonstrate a deep mastery in current and emerging topics in the field of DEM, including key concepts, debates, and ideas in the field (taught through both DEMS 7700 and supervisor mentorship). They are also expected to demonstrate contributory-level expertise in their field of specialization, in which they'll focus their dissertation research. This depth underpins their ability to conduct future research in the field, to teach courses on the subject in future faculty positions, and to contribute to improving practice through both research and contributions to the field. Graduates are also expected to develop a breadth of knowledge in the field of DEM – and in related fields – that provides context for their particular specialization. This includes developing a fluency in the way that different disciplinary perspectives address core questions and debates in the field (e.g., how a sociological approach to studying DEM would differ from an anthropological, political, or psychological approach).

**Research and scholarship:** Two courses specifically address research methods, providing students with advanced training in developing and executing both qualitative and quantitative projects. In addition, DEMS 7750 provides focused application of these skills in service of developing an effective dissertation proposal and beginning their journey of professionalization. Furthermore, all courses have a research component that will allow students to develop their scholarship to a highly professional level. Under the supervision of a faculty member the required dissertation or research papers will build on previous course work and give the student the opportunity to build their research and scholarship skill up to a professional academic level.

**Linking theory and application:** The field of DEM requires a close relationship between theory and practice, given the significant importance of disaster and emergency management in the real-world. The program and courses are comprised of a mix of theory and practical application, and there is a significant emphasis on the practical aspects of disaster risk reduction within a theoretical context. This emphasis on application involves both close engagement with the practitioner community (including guest speakers in courses and field research for the dissertation), as well as critical engagement with their models, approaches, and techniques. For instance, in the DEM 7700 course, students (a) learn about the theory of disaster risk reduction and current debates on the subject, (b) meet practitioners to understand the differences between theory and practice, and (c) use different disciplinary approaches to critique and improve these practices.

**Professional capacity/autonomy:** Beyond the content knowledge of the program, significant emphasis is placed on the development of professional capacity and autonomy. Our graduates will be effective critical thinkers, have well-honed abilities to construct and execute research projects, develop leadership skills relevant to academic departments and practitioner settings alike and have refined ethical foundations for working in a crisis-based field. Some of these skills are honed through close mentorship by supervisors and committees, while other training is obtained through the DEMS 7750 course (guidance in developing a program of research, building relationships with practitioners for collaborative research, and developing their personal portfolio for a professional career).

**Communication skills:** Given the employment trajectories of current doctoral graduates – which include both tenure-track and non-academic paths – it is essential that graduates emerge with a suite of effective communication abilities. Our graduates will be effective at producing traditional academic outputs, including journal publications, longer

manuscripts, and conference presentations. They will be mentored in effective teaching and best pedagogical practices. And, they will be trained at effective communication in practitioner-oriented venues, including professional reports, action-research, and policy documents. Awareness of limits of knowledge: Both through theory and case studies there will be an emphasis on uncertainty and how that affects decision making. This is of particular importance to issues such as climate change adaptation, and the mitigation of low probability, high impact risks.

In the table below, we illustrate the relationship between specific portions of these learning objectives and the courses required in the PhD program

|                                | Courses that address ELOs:  |   |   |   |   |   |   |
|--------------------------------|---|---|---|---|---|---|---|
|                                | Graduates are expected to:  |   |   |   |   |   |   |
| Breadth and depth of knowledge | Be knowledgeable in a wide range of disaster topics and able to converse intelligently with disaster and emergency management professionals in different job functions; | X |   |   |   | X | X |
|                                | Understand different disciplinary approaches to studying disasters;   | X |   |   | X | X | X |
|                                | Develop deep expertise in   | X |   |   | X |   | X |
| Research and scholarship       | Be able to conduct research using readily available disaster databases, at a level expected in a research analyst role (or higher) in different sectors.                | X | X | X | X |   | X |
|                                | Be able to generate well written, well- structured and formatted research reports.  | X | X | X | X |   | X |
|                                | Have an appreciation of theoretical and empirical academic research in the disaster and emergency management field.   | X | X | X | X |   | X |
|                                | Be familiar with the top scholarly outlets in the field.  |   |   |   |   |   |   |
| Linking theory and application | Be able to apply their knowledge to new contributions to the field, such as the   | X | X | X | X |   | X |

|                                  |   |   |   |   |   |   |   |
|----------------------------------|---|---|---|---|---|---|---|
|                                  | development of disaster management strategies and policies;<br>Be able to assess hazard, risk and vulnerability in communities and organizations, and develop risk reduction strategies that are contextually appropriate;<br>Be able to collaborate closely with practitioners in the field for conducting research.   | X | X | X | X |   | X |
|                                  |   | X | X |   |   |   | X |
| Professional capacity/autonomy   | Understand the ethical dilemmas that a disaster management professional may face, and be able to propose appropriate ways to resolve them;  | X |   |   |   |   | X |
|                                  | Be able to function as a practicing independent academic (e.g., design research projects; supervise and teach students; fulfill service roles; present well on job market) or non-academic researcher (e.g., conduct research; understand the structures of the public service; identify prospective funding mechanisms and work within institutional constraints); | X | X | X | X | X |   |
|                                  | Become effective critical thinker and collaborator.   | X | X | X | X | X | X |
| Level of communication skills    | Be able to write concise, well researched and professionally formatted and structured reports;  | X | X | X | X | X | X |
|                                  | Be able to present and communicate ideas clearly and effectively;   | X | X | X | X | X | X |
|                                  | Be able to put together effective and professional presentation slides.   | X | X | X | X | X | X |
| Awareness of limits of knowledge | Be cognizant of the limitations of theoretical and applied models, and of empirical findings;   | X | X | X | X |   | X |
|                                  | Be aware of different schools of thought in disaster and emergency management, and how the strengths and weaknesses of  | X | X | X | X | X | X |

## 5.2 Research Requirements for Degree Completion

In line with common practice for a Doctoral degree, PhD candidates will be required to complete a dissertation in the field of Disaster and Emergency Management. This dissertation must demonstrate a mastery of their area of specialization and must make a contribution to the field. A 'contribution to the field' is measured, in broad terms, as something that has – or would be likely to – merit publication under stringent peer-review standards in a major journal in DEM or a related field. Students have a responsibility for obtaining ethics clearance for their work in accordance with Faculty and University requirements.

There are two formats for a dissertation in the doctoral program in Disaster and Emergency Management: a traditional monograph or a manuscript-based dissertation. In both formats, the student must demonstrate a mastery of the relevant literature, a clear understanding of their theoretical and/or empirical

question and contribution, and a high-quality set of results and analysis. Dissertation projects that take on applied questions of importance to practitioners and real-world challenges in rigorous, theoretically, and methodologically suitable ways are welcomed.

A manuscript-based dissertation must include at least three articles of a quality sufficient to be published in a peer-reviewed journal. In most circumstances, the expectation would be that at least one of these manuscripts is accepted for publication by the time of defence, and that the other two are near or under review. The manuscripts must also be accompanied by a strong introduction and conclusion that justify their relatedness and establish a clear program of study that spans the three papers. While up to two of the papers may be co-authored, the student must play the role of lead author and co-authors must be able to provide a written declaration of the student's primary role in all elements of the paper (including project design, data collection, analysis, writing, and editing).<sup>1</sup>

In both formats, there are common and high expectations. Both forms of dissertations should yield data and analysis that is a quality that could be published in a peer-reviewed journal. Both forms of dissertations should establish a program of study that is coherent and makes both theoretical and empirical contributions to the discipline.

The decision of which format to undertake requires close consultation with – and ultimately approval from – the supervisor and supervisory committee. Students are encouraged to work with their supervisory committee to establish a provision plan for dissemination (e.g., peer reviewed publication)

Technical specifications for the dissertation (e.g., formatting, sections, and abstract) should be produced in compliance with Faculty of Graduate Studies guidelines.<sup>2</sup> Students and their supervisory committees are also responsible for following FGS requirements in terms of deadlines for manuscript submission and scheduling key milestones like the oral defence.

All students in the program will be required to complete an oral defence of their dissertation per FGS guidelines. All dissertation defences held in the DEM doctoral program will be open to the public for the presentation and Q&A period, before proceeding into a closed-door session for committee-driven questions and deliberation. Results will be communicated via the FGS guidelines.

The dissertation-based research requirements are suitable for this doctoral program, as they not only establish the content knowledge within the DLEs, but also serve to fulfil the aims of professionalization and skill development through the mentored process of designing a research project, executing this data collection and analysis, and learning how to shepherd a manuscript to publication.

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<sup>1</sup> As an example, a student may decide to publish the chapters or manuscripts of their dissertation as co-authored projects with members of their supervisory committee or other mentors. The key barometer is that the mentors can attest to the primacy of the student in designing and executing the work. of the dissertation material during and after the PhD in support of both advancing the field and supporting the student's successful transition into a career.

<sup>2</sup> For the full list of up-to-date guidelines, see <http://gradstudies.yorku.ca/current-students/thesis- dissertation/>.

### 5.3 Methods of Assessing Student Achievement

Because of the range of learning outcomes articulated in section 5.1, the doctoral program requires a variety of matching mechanisms for assessing student achievement. There are several key moments and forms of assessment during the program:

| Assessment Technique   | Pairing with Learning out comes   |
|--|---|
| Course-based evaluation in 7700, 7730, 7740, 7750, 7790 and electives. | Assess breadth and depth of knowledge (e.g., content acquisition and testing in 7700 seminar); research and scholarship (e.g., testing on qualitative and quantitative research methods); linking of theory and practice (e.g., assignments requiring application of theory to real-world examples); and level of communication skills (e.g., written assignments in different genres). |
| Comprehensive examinations   | Explicitly assesses breadth and depth of knowledge and linking of theory and practice through the specific questions asked. Assess oral communication skills during the defence.  |
| Dissertation proposal & oral defence                                   | Evaluate whether students have sufficient mastery of the subject to be able to begin their project, and whether they have clarity about their own – and the discipline’s – limits of knowledge in framing their contribution. Focused evaluation of their ability to link practice (a real, pressing question and case study) with theory (the contribution they’ll make to the         |
| Dissertation & oral defence  | Ultimate evaluation of the learning achieved during the program, including breadth and depth of knowledge, their contributions to research and scholarship, and their awareness of their own – and  |
|  | limitations of knowledge. Assess oral communication skills during the defence.  |
| Annual progress reviews  | In addition to assessing progress on all of the above, also provides an opportunity for formal feedback on the student’s development of professional capacity and autonomy.   |

For a more detailed discussion of how the Comprehensive Examination process works, see Appendix H.

### 5.4 Documenting Degree Progression and Performance

Degree progression and milestones are supported through the policies and procedures of the faculty of graduate studies. Within the program, however, an annual report process (described below) will help to ensure successful and timely progress through the program, as well as early identification of any challenges (in order to provide upstream assistance and support).

To ensure productive progress through the program, students must submit an annual Report on Progress to the Graduate Program Director by the end of April each year. This process looks different depending on where the student is in the program:

- Prior to identification of a supervisor (which may occur prior to admission or during the first year of the program, depending on situation; see timeline and later discussion), the Report on Progress is submitted by the student directly to the GPD.
- Once a supervisor has been identified, the student must submit the Report on Progress to the supervisor. The supervisor and student must meet to discuss the report, prior to a copy being submitted by the supervisor to the GPD.
- Once a supervisory committee has been appointed (normally by the end of the second year), the student must submit a copy of the Report on Progress to the supervisory committee and organize a meeting of the full committee. Following this meeting, wherein the committee evaluates the

report offered, the supervisor will forward the report to the GPD.

Unsatisfactory reports on progress may result in a requirement by the student to withdraw from the program of study or graduate program. Appeals and conflict resolution mechanisms are detailed by the Faculty of Graduate Studies.<sup>3</sup>

### 5.5 Completion Length and Support

The PhD in DEM program is designed to be completed in a period of approximately 4-5 years of full-time study, dependent on student progression and fieldwork requirements for the dissertation. The program begins with a series of core courses that are required to establish disciplinary competency and support doctoral student development. As the degree progresses, mentorship and development increasingly focuses on supervisor guidance and independent research.

During the first year of the program, students will be expected to complete a two-term core course, establish their methodological foundations, and use a pair of electives to acquire specialization-relevant expertise and explore issues in DEM. During the second year of the program, emphasis shifts to preparing students for comprehensive exams and dissertation proposal defence. These milestones are defended and completed in the second and third year of the program, with students using years four and five to complete their research and defend their dissertation.

In addition to the course requirements, students must pass two comprehensive examinations (see Section 3.3) and write a high-quality dissertation that advances knowledge within the field of DEM (see Section 3.4).

The typical student timeline is indicated in the table below, although the diversity in dissertation topics and disciplinary approaches may result in slightly expedited (e.g., working with quickly-collected datasets) or prolonged timelines (e.g., where new foreign language is required):

| Term | Year 1  | Year 2  | Year 3   | Year 4 & 5   |
|------|---|---|--|--|
| Fall | (1) DEMS 7700, Part 1: Risk, Vulnerability, and Resilience<br>(2) DEMS 7730: Qualitative Methods<br>(3) DEMS or dissertation-related elective | (2) DEMS or dissertation-related elective<br>(3) DEMS 7790: Teaching, Learning, and Pedagogy<br>Continued preparations for comprehensive exams. | Continued pilot research<br><br>Latest deadline for dissertation proposal. | Continuing dissertation research and writing<br><br>Defence scheduled.<br>Job applications (as appropriate).<br>Revisions as required. |

<sup>3 3</sup> See <http://gradstudies.yorku.ca/current-students/thesis-dissertation/supervision/#section5b>.

|        |   |   |  |
|--------|---|---|--|
| Winter | (1) DEMS 7700, Part 2:<br>Research and Practice in<br>DEM<br>(2) DEMS 7740:<br>Quantitative Methods           | Comprehensive exams<br>(April).<br>Development of<br>dissertation proposal<br>(recommended by end<br>of Summer, Y2).<br>Conducting pilot<br>research. |  |
| Summer | Preparation for<br>comprehensive exams;<br>participate in conferences,<br>research, professional<br>practice. |   | Dissertation<br>research/data<br>collection. |

Successful student progress is supported through multiple mechanisms:

- Annual progress reports are completed by the student and approved by the supervisor, with
- oversight from the GPD, providing a formalized mechanism through which to check whether the student is progressing appropriately and provide targeted advice as required.
- Supervision by faculty members is designed to provide personalized mentorship and professionalization, ranging from advice in course selection to help in preparing for an
- eventual job search. Faculty member supervisors are responsible for ensuring students are effectively supported towards completing their degree requirements in timely fashion and for providing them with general academic advice (including, but not limited to, preparing for
- their comprehensive examinations; selecting elective courses; applying for scholarships and teaching fellowships; writing their dissertation; attending and contributing to scholarly conferences and learning how to prepare scholarly papers for publication in learned
- journals; and undertaking a job search either in academia or non-academic sectors).
- Finally, student success is supported through clarity of structure, including a program handbook, early delivery of the reading lists for the common comprehensive examination,
- and documentation of different paths available (e.g., past electives completed by previous students; collection of job application documents to provide samples for future cohorts).

### 5.6 Modes of Delivery

The program is intended for in-person delivery of the courses. In particular, students are expected to be present for in-class training in DEMS 7700, 7730, 7740, 7750, and 7790 as well as their selected electives. This in person attendance is important for meeting the desired learning outcomes, which involve the use of a variety of teaching (e.g., lectures, group activities, projects) and assessment (e.g., quizzes, presentations, analytical assignments) mechanisms that are best conducted in-person. DEMS 7700 and 7750 are also heavily discussion based, meaning that virtual participation is generally not a sufficient substitute for the in-person experience.

It is important to recognize, however, that during their third, fourth, and fifth years, many students will need to conduct travel or other field research in support of their dissertation research. Should students be working away from the Toronto area during this time, it is expected that they and their supervisor will establish regular meetings virtually (e.g., via a platform like Zoom or Skype) to ensure ongoing mentorship and successful progress. Students are also encouraged, wherever possible, to attend departmental events (e.g., talks, emergency exercises, social events) as part of their professionalization experience.

### 5.7 Experiential Learning

The nature of the field means that working closely with communities and practitioners is required. Experiential learning is embedded throughout courses (e.g., a requirement in 7730 and 7740 to conduct a community-based research project, and guest speakers from the practitioner community attending sessions of 7700 for discussion-based learning) and dissertation process. In particular, because of the highly applied, engaged nature of

the field of DEM, we expect that nearly all dissertations will have stakeholder engagement and knowledge translation elements.

The Teaching, Learning, and Pedagogy course (DEMS 7790) will also be an active opportunity for experience-based learning. Assignments involve teaching demonstrations, assessments of various teaching approaches, and other hands-on skill development.

In addition, the DEM program is currently exploring opportunities to increase the experiential education available to students at all levels (including the new doctoral students). Dr. Rozdilsky, for instance, leads an annual fieldtrip to civil defence sites in Ontario for place-based learning. In addition, Dr. Kennedy is the co-founder and director of Science Outside the Lab (SOTLnorth.ca), an experiential education program that brings together exceptional graduate students from across the country to learn about science policy and meet leaders in the field. Dr. Kennedy is exploring opportunities to expand this program to the DEM context, which would be available to doctoral students. And, DEMS 6040 offers a study abroad course to help increase internationalization and global experiences.

## 6.0 Admission Requirements

### 6.1 Admission Requirements and Alignment with Program Learning Outcomes

The doctoral program in DEM aims to competitively recruit from high-calibre prospective students across Canada and around the world. To ensure that students are able to succeed with respect to the learning outcomes, prospective students must meet several criteria:

- Demonstrated academic excellence, or the potential of academic excellence combined with notable non-academic experience.
- Clarity about the skills, knowledge, and professional development desired as a student within the doctoral program.
- An incipient vision for a possible research topic relevant to the field.
- Students must also possess a master's degree in a relevant subject area from an accredited university with at least a B+ average. Because of the highly interdisciplinary nature of the DEM field, it is likely that highly successful students will come not just from training in DEM, but also from fields like environmental studies, urban planning, science and technology studies, engineering, and other natural and social sciences.

To identify and draw high-calibre students domestically and internationally, the recruitment for the program will be a year-round effort, including promotion at relevant conferences, outreach to related master's and bachelor's degree programs, and personal networking by faculty members. Details about the application process will be released in September of the year preceding the prospective admission, with applications due according to York timelines and acceptance decisions released in a timely manner.

Each year, an Admissions Committee will be formed consisting of the GPD and at least two other full members of the program. The committee will be responsible for releasing the application process documents in September, making the decisions, and notifying all candidates (both successful and unsuccessful) of their standing in a timely manner.

Students will be required to submit the following documents for review by the Admissions Committee:

- Transcripts from undergraduate and master's level study
- Curriculum Vitae/Resume
- Three letters of reference, including at least two from academic sources
- A statement of research interests (which must identify up to three prospective supervisors with a ranking), goals for their time in the program, and rationale for applying to the York DEM program
- A sample of writing between 6,000-10,000 words
- For students whose first language is not English, a minimum TOEFL score of 600 (paper-based) or 250 (computer-based) or a YELT score of 1 will be required.

The Admissions Committee will also oversee development of a process to interview short-listed candidates.

## 6.2 Alternative Requirements

Much like our existing offerings in the BDEM and MDEM programs, we expect that the Doctoral program will draw significant interest from practitioners in the field. The Director of Emergency Management for a major Canadian city, for instance, has already stated significant interest in being part of the initial cohort of the program.

As such, it is recognized that prospective students might not follow a 'traditional' path from earlier education. In the case of a professional applying with experience in the field, the Admission Committee will be given flexibility to emphasize the "potential of academic excellence combined with notable non-academic experience." This may also require flexibility in understanding grades obtained in earlier degrees when combined with significant development of skills since (e.g., professionally demonstrated ability to communicate effectively). The committee will also take this into account when considering letters from reference (e.g., allowing additional professional references rather than academic referees) or encouraging writing samples from applied contexts (e.g., if the prospective student authored a policy analysis, for instance, in lieu of a traditional academic paper).

In the case of students who do not have formal graduate training in DEM, the committee may also institute other requirements upon admission, such as the completion of additional leveling coursework in the DEM area to prepare for the initial 7700 class or the completion of courses supporting reading and writing skills appropriate to the doctoral level.

## 6.3 Supervisory Matching Process

To ensure that students are provided with appropriate supervision and mentorship, it is critical to invest thought and effort into the student/supervisor matching process. At the time of application, each student is required to identify up to three potential supervisors based on alignment with their research interests and long-term goals.

During the selection process, faculty should be given the opportunity to review and comment upon the files of any students who have raised interest in working with them. In the gentle matching that follows, the admissions committee will attempt to admit a cohort that can be effectively spread among prospective supervisors. Each incoming student will be linked to a provisional faculty mentor who will support their integration and initial progress, as well as serve as a first attempt at a supervisor.

However, pairings will be allowed to evolve over time, and students and faculty alike will be encouraged to make adjustments as needed to ensure optimal fit and mentorship.

As such, the matching process will work as follows:

- (1) Students identify prospective supervisors in their application package.
- (2) Prospective supervisors are given the opportunity to review each file that mentions working with them, and to provide the admissions committee with feedback about the perceived suitability of the student and desire to admit.
- (3) The admissions committee will endeavour to admit no more students than number of faculty willing to take on supervisory roles. The admissions committee will also endeavour - within the goal of admitting strong and high potential students, as well as a demographically, experientially diverse cohort - to admit a cohort that diversifies the supervisory load (i.e., does not overload one faculty member, and spreads supervision across many supervisors).
- (4) Based on this initial selection, feedback, diversification, and matching process, students will be assigned an initial supervisor for the first year to help support initial mentorship and program progress. However, students and faculty alike will foster a culture where students are welcome to switch supervisors early in the degree to find the ideal fit.

(5) In any given year, it will be normal for faculty to be matched with approximately one student each. However, over the long term, the GPD and admissions committee will monitor the relative supervisory loads of each faculty member, ensuring that attention is not spread too thin via too many total students assigned to any given faculty member.

## 7.0 Resources

### 7.1 Areas of Faculty Strength

The full-time faculty in the DEM area (Doctors Agrawal, Asgary, Bogdan, Etkin, Kennedy, Mamuji, Spinney, and Rozdilsky) have a diverse set of disciplinary and hazard expertises that provide a broad knowledge base suitable for delivering an interdisciplinary program such as disaster management. These areas include natural hazards, economics and urban planning, disaster risk reduction, leadership, human resources, institutional decision-making, climate change, ethics, comprehensive emergency management, technological hazards, socially-mediated hazards, and risk analysis. The core faculty is supplemented by a number of York faculty from other related areas, and contract faculty with instructor or adjunct membership in FGS who teach courses related to their specific areas of expertise.

All our full-time faculty are members of the International Association of Emergency Managers, the Ontario Association of Emergency Managers, and the Canadian Risk and Hazards Network. Over the past five years, the faculty have collectively achieved 9 authored books, 6 edited books/special issues, 34 peer reviewed book chapters, 113 peer reviewed journal articles, 75 peer reviewed/published conference presentations, 43 conference proceedings, 51 invited lectures, 52 other publications/activities, and 10 awards/recognitions at institutional or higher level.

Textbooks in DEM have been published by Professor Etkin (Elsevier and Amazon) and by Professor Agrawal (Springer). Professor Asgary has been playing an important role at the Disaster Risk Reduction Platform, Geneva, Switzerland since 2011, and Professors Agrawal and Asgary have been a part of the Global Risk Forum, Davos, Switzerland since 2012. Professor Agrawal serves on the editorial board of the Canadian Journal of Emergency Management. Professors Etkin and Rozdilsky regularly participate in FEMA annual conference in Maryland, USA. Professor Rozdilsky regularly participates in the Natural Hazards Workshop in Colorado USA sponsored by the Natural Hazards Center at the University of Colorado Boulder. Rozdilsky has written multi-jurisdictional hazard mitigation plans and he has earned the Professional Development Series training standard from the Federal Emergency Management Agency (USA). Professor Rozdilsky has completed several quick-response type of field research projects related to weather disasters in the Midwestern (USA). Prof. Professors Asgary, Etkin and Agrawal have all received several merit awards each from York University. Professor Mamuji was the recipient of the 2013-2014 Cadieux-Léger Fellowship from Canada's Department of Foreign Affairs, Trade & Development, for her work on interdepartmental collaboration in federal responses to natural disasters abroad. Professor Kennedy runs an international methods working group on disaster survey research and a Canadian not-for-profit organization working on policy dimensions, as well as the Collaboration on Emergency Management, Policy, and Preparedness Research (CEMPPR Lab) at York. Professor Spinney has written policy statements for the American Meteorological Society, as well as conducted extensive quick response research on tornadoes and other natural hazards.

### 7.2 Role of Contract Instructors

Because of the strong connection to real-world practice, the DEM programs make significant use of contract instructors. Instructors like James Kilgour (Director of Emergency Management, City of Toronto), Alain Normand (Director of Emergency Management, City of Brampton), and Walter Perchal (retired Canadian Forces) help to bring real-world experience, lessons learned, and partnerships with practitioners. They also provide teaching capacity for the BDEM and MDEM programs.

At the moment, the doctoral program would be designed to be taught entirely by full-time faculty. This helps to ensure quality, consistency, and academic rigour in a research-focused program. However, these exceptional leaders in their fields have expressed a willingness to assist as visiting guest experts, to provide connections and networks for PhD students looking to conduct research, and to generally support the integrated course offerings in DEM.

### 7.3 Major Laboratory Facilities

No new laboratory facilities will be required for the proposed program. The DEM area has access to a variety of laboratory facilities, including:

- The DEM Lab facility in Room 2004 Dahdaleh Building, which is equipped with hardware and software tools for qualitative, quantitative, and spatial analyses.
- The ADERSIM Lab (Advanced Disaster, Emergency, and Rapid Response Simulation) facility, an interdisciplinary initiative with researchers from across campus. When opened, the facility will include a mock emergency operation centre available for training and teaching purposes.
- For social research, PhD students will have a large number of options for participating in funded research projects, including through ADERSIM (Dr. Asgary), CEMPPR (Dr. Kennedy), and EM for All (Dr. Mamuji and Rozdilsky), among others.
- The laboratory facilities of other faculty members, such as Dr. Costa Armenakis (Lassonde School of Engineering) and Dr. Jianhong Wu's (Mathematics).
- The Y-EMERGE ORU, which will have an office facility and draw from researchers across campus, programming here, including ECR training, seminar series and research opportunities, will provide substantial support for students in the program.

### 7.4 Office, Laboratory, and General Research Space

No new initial space supports will be required for the program. The full-time faculty in the program already have office space as part of the School of Administrative Studies, which is sufficient for the program implementation.

Upon approval of the program, we intend to explore options for providing a basic space (e.g., office or common room) for graduate students who are spending significant amount of time on campus (e.g., during coursework or dissertation writing phases). Providing a physical office space on campus for co-working, consultation with faculty members, and networking between graduate students would improve the quality of student experience. We hope to be supported by the School and Faculty, depending on space availability and the number of graduate students who would make use of the space.

During the external review, reviewers also noted the importance of co-locating DEM faculty offices to help build professional community, make faculty more accessible, and improve impressions for outside visitors. As space allows, we will also explore these requests with the appropriate pathways.

### 7.5 Academic Supports and Information Technology

The doctoral program would benefit from the already extensive IT and academic supports available within the School of Admin Studies. The DEM program already has a graduate director, who will provide the most direct academic oversight. The program is supported through a cadre of talented administrative personnel in the main SAS office. Given the small number of new courses added, there should be limited increased burden. Finally, DEM and SAS is well supported by the existing Faculty-level computing support systems for IT needs.

### 7.6 Financial Support and Supervisory Loads

There are currently eight full-time faculty in the DEM area. We anticipate support in replacement hires of new Assistant Professors upon retirement of senior personnel.

Importantly, because any full member in the program can supervise a doctoral student in the program, the supervisory capacity is significantly larger than the eight full-time faculty dedicated to the program. In the chart below (Section 7.7), we illustrate the full membership of the program which will be able to provide supervision of students. For the purpose of initial planning, we assume the bulk of new students (6-8 students in 2022, 2024, and onwards from 2026) will be supervised by the core faculty. This creates an average load of 2 students per faculty member initially (pending average program completion in 4-5 years as designed), which helps to provide high quality mentorship and supervision. The staggered admission process, therefore, also allows for time to 'on-board' these additional full members, allowing for increased supervision capacity. The large number of courses offered within the DEM bachelor program will help to support TAship opportunities for incoming PhD students, following the processes and procedures of York University and

the FGS.

As research funds become available, there will be increased opportunities to offer RAships. For example, Prof. Asgary (Co-PI) has received an industry stream NSERC CREATE grant for \$1.65 million over 6 years to fund the Advanced Disaster, Emergency & Rapid Response Simulation (ADERSIM) Program (May 2015 to May 2021), as well as \$1.45 million through the Ontario Research Fund (ORF).

The ADERSIM program will train postdoctoral fellows and graduate students with strong theoretical and professional skills in information searching, data mining, knowledge management, modelling and simulations to meet Canada's current and future demands in emergency management and public safety industry. The program team includes a number of our adjunct professors from York University and other institutions. These funds will assist the program in supporting masters, PhD, and post-doctoral fellows working in the DEM area.

Funding for targeted DEM research is available through Public Safety Canada, and more generally from SSHRC.<sup>4</sup> Students would also be eligible to apply for Ontario Graduate Scholarships. APCO International offers two scholarships: Silent Key & Commercial Advisory Committee Scholarship and the John D. Lane Scholarship.<sup>5</sup> The International Association of Emergency Managers (IAEM) Scholarship Program<sup>6</sup> is available to students pursuing studies in disaster and emergency management; the amount of the award varies according to donations to the IAEM. The Ontario Association of Emergency Managers offers annual awards of \$1000 and \$500. The Natural Hazard Centre at the University of Colorado offers an annual scholarship to support attendance at the Annual Natural Hazards Research and Applications Workshop.<sup>7</sup>

### 7.7 Listing of Faculty

The program would be launched with the following full members, whose CVs can be found in Appendix I. These members include the full-time DEM faculty described above.

| Name & Rank                     | Home Unit | Primary to the DEM Graduate Program? | Area(s) of Specialization or Field(s) |  |  |
|---------------------------------|-----------|--------------------------------------|---------------------------------------|--|--|
|                                 |           |                                      |                                       |  |  |
| Nirupama Agrawal, Professor     | DEM/SAS   | Yes                                  | Natural disasters & risk management   | Flood resilience & community engagement                        | Decision support systems   |
| Ali Asgary, Associate Professor | DEM/SAS   | Yes                                  | Urban Planning/Design                 | Post disaster recovery and reconstruction, business continuity | Disaster simulation and modeling, AI, and virtual reality in DEM |
| Eva Bogdan, Assistant Professor | DEMS      | YES                                  | Disaster and Emergency Management     | Community Resilience   | Leadership   |

<sup>4</sup> For example, the Kanishka Project, which is a 5 year \$10 million fund targeted at terrorism and violent extremism (<https://www.publicsafety.gc.ca/cnt/ntnl-scrt/cntr-trrrsm/r-nd-flight-182/knshk/index-eng.aspx>) and the Stewart Nesbitt annual award for \$19,250 <http://www.postgraduatefunding.com/award-2628>.

<sup>5</sup> 5 APCO International Scholarships: <https://www.apcointl.org/training-and-certification/scholarships.html>

<sup>6</sup> IAEM Scholarship Program: <http://www.iaem.com/documents/2016-Graduate-Scholarship-Application.pdf>

<sup>7</sup> 7 Natural Hazards Centre Scholarship: <https://hazards.colorado.edu/awards/myers-scholarship>

|  |         |     |                                       |                                       |  |
|--|---------|-----|---------------------------------------|---------------------------------------|--|
| David Etkin,<br>Professor                | DEM/SAS | Yes | Disaster &<br>Emergency<br>Management | Risk                                  | Disaster Ethics                              |
| Eric B. Kennedy,<br>Assistant Professor  | DEM/SAS | Yes | Disaster &<br>Emergency<br>Management | Institutional<br>Knowledge<br>Systems | Decision-Making<br>Under<br>Uncertainty      |
| Aaida Mamuji,<br>Associate Professor     | DEM/SAS | Yes | Disaster &<br>Emergency<br>Management | Public Policy                         | Humanitarian<br>Assistance &<br>Coordination |
| Jennifer Spinney,<br>Assistant Professor | DEM/SAS | Yes | Disaster<br>Governance                | Disaster Risk<br>Reduction            | Social Resilience                            |
| Jack Rozdilsky,<br>Associate Professor   | DEM/SAS | Yes | Disaster &<br>Emergency<br>Management | Long-term<br>disaster<br>recovery     | Post disaster<br>field studies               |

The program would be launched with the following associate members. We anticipate this list to grow over the initial years of operation.

| Name & Rank                                     | Home Unit  | Area(s) of Specialization or Field(s)                          |  |  |
|---|--|--|--|--|
|   |  | Area 1   | Area 2   | Area 3   |
| Costas Armenakis,<br>Associate Professor        | Earth & Space<br>Science; Engineering                                      | Unmanned<br>Aerial Mapping<br>Systems                          | GIS and remote<br>sensing applications to<br>disaster management | Situational<br>Awareness and<br>Geospatial<br>Intelligence |
| Jane Marie<br>Heffernan,<br>Associate Professor | Department of<br>Mathematics &<br>Statistics                               | Disease &<br>infection<br>Modelling                            | Mathematical<br>modeling   | Computer<br>simulation                                     |
| Rongbing Huang,<br>Associate Professor          | School of<br>Administrative<br>Studies; Decision<br>Sciences               | Supply Chain<br>Management                                     | Facility Location  | Transportation   |
| Dan Palermo,<br>Associate Professor             | Department of<br>Civil Engineering   | Seismic<br>repair and<br>retrofit of<br>concrete<br>structures | Behaviors of<br>structures subjected<br>to tsunami loading       | Resilient<br>structures                                    |
| Fuminori Toyasaki,<br>Associate Professor       | School of<br>Administrative<br>Studies; Logistics and<br>Decision Sciences | Humanitarian<br>and disaster<br>logistics                      | Non-profit sector<br>operations                                  | Supply chain risk<br>management                            |

7.8

|  |                                    |  |  |                              |
|--|------------------------------------|--|--|------------------------------|
| Michaela Hynie,<br>Professor                   | Psychology                         | Refugee<br>Resettlement                      | Environmental<br>Migration               | Migration and<br>Health      |
| Usman Khan,<br>Assistant Professor             | Department of<br>Civil Engineering | Flood risk<br>assessment and<br>uncertainty. | Sustainable water<br>resource management | Impacts of<br>climate change |
| Adriano O.<br>Solis,<br>Associate<br>Professor | SAS                                | Operations,<br><br>Logistics,                | Applied<br>modeling &<br>simulation      | Decision<br>Sciences         |
| Jianhong Wu,<br>Professor                      | Mathematics and<br>Statistics      | Disease<br>Modelling                         | Disaster Simulation                      | Applied<br>Mathematics       |

Graduate

Supervision

|                                     | Completed (within past eight years) |        |              |     | In Progress                  |        |                           |     |
|-------------------------------------|-------------------------------------|--------|--------------|-----|------------------------------|--------|---------------------------|-----|
|                                     | MRP                                 | Thesis | Dissertation | PDF | MRP                          | Thesis | Dissertation              | PDF |
| <b>Full, Primary Members</b>        |                                     |        |              |     |                              |        |                           |     |
| David Etkin                         | 27                                  | 0      | 0            | 0   | 0                            | 0      | 0                         | 0   |
| Eva Bogdan,                         | 0                                   | 0      | 0            | 0   | 0                            | 0      | 0                         | 0   |
| Ali Asgary                          | 20                                  | 5      | 8            | 11  | 3                            | 2      | 0                         | 3   |
| Nirupama<br>Agrawal                 | 13                                  | 1      | 0            | 0   | 1                            | 0      | 1                         | 0   |
| Aaida Mamuii                        | 1                                   | 0      | 0            | 0   | 3                            | 0      | 0                         | 0   |
| Jack Rozdilsky                      | 4                                   | 0      | 0            | 0   | 2                            | 0      | 0                         | 0   |
| Eric Kennedy<br>(New Hire 2018)     | 3                                   | 0      | 0            | 0   | 3 primary;<br>3<br>committee | 0      | 1 primary; 2<br>committee | 0   |
| Jennifer Spinney<br>(New Hire 2020) | N/A                                 | N/A    | N/A          | N/A | 1                            | 0      | 0                         | 0   |

## 7.9 Research Funding Received by Faculty

Please see Appendix A for a full list of funding received by faculty primary to the graduate program.

## 8.0 Enrolment Projections

Because of the significant domestic and international needs for emergency management professionals, the increased attention on the field of DEM, and the synergistic opportunities both within academia and alt-academic careers, we anticipate healthy enrolments despite being an emerging discipline.

Our goal is to recruit high-calibre, internationally competitive cohorts of between 6-8 students no more than once per year. We have a relatively large number of interested parties who are waiting for the emergence of the program, who will help to support health sized initial cohorts. A comprehensive recruitment plan will include targeting graduates from relevant GTA, domestic, and international masters programs programs, drawing from practitioners with an interest in doctoral-level training, and developing a strong reputation within professional associations. We will work closely with the relevant offices at York University to support these recruitment strategies.

## 9.0 Support Statements

Appendix D contains statements of support from relevant parties. As part of this approval process, we are seeking the statements of support from the VP Academic and Provost and the Dean.

Please note that some of the statements of support were obtained earlier during the program proposal process. Their updates are underway and will be included in future revisions of the document

## Appendices

### Appendix A: Research Funding received by Core Faculty

#### Nirupama Agrawal

|             | <b>Source</b>      |                                   |                  |                      |
|-------------|--------------------|-----------------------------------|------------------|----------------------|
| <b>Year</b> | <b>Tri-Council</b> | <b>Other Peer<br/>Adjudicated</b> | <b>Contracts</b> | <b>Institutional</b> |
| 2021/22     |                    |                                   |                  |                      |
| 2020/21     |                    |                                   |                  |                      |
| 2019/20     |                    |                                   |                  |                      |
| 2018/19     |                    | \$11,915                          |                  |                      |
| 2017/18     | \$17,000           |                                   |                  |                      |

#### Ali Asgary

|             | <b>Source</b>      |   |                  |                      |
|-------------|--------------------|---|------------------|----------------------|
| <b>Year</b> | <b>Tri-Council</b> | <b>Other Peer<br/>Adjudicated</b>       | <b>Contracts</b> | <b>Institutional</b> |
| 2021/22     |                    | \$100,000                               |                  | \$20,000             |
| 2020/21     |                    | \$1,344,000                             |                  |                      |
| 2019/20     |                    | \$507,120 USD                           |                  |                      |
| 2018/19     |                    | \$1,874,000                             |                  |                      |
| 2017/18     |                    | \$95,000 (PI &<br>Co-PI)<br>\$1,436,426 |                  | \$8,500              |

#### David Etkin

|             | <b>Source</b>                |                                   |                  |                      |
|-------------|------------------------------|-----------------------------------|------------------|----------------------|
| <b>Year</b> | <b>Tri-Council</b>           | <b>Other Peer<br/>Adjudicated</b> | <b>Contracts</b> | <b>Institutional</b> |
| 2021/22     |                              |                                   |                  |                      |
| 2020/21     | \$183,903 (co-<br>applicant) |                                   |                  |                      |
| 2019/20     |                              |                                   | \$21,000         |                      |
| 2018/19     |                              |                                   |                  |                      |
| 2017/18     |                              |                                   | \$3,000          |                      |

## Eric Kennedy

|         | Source      |                        |           |               |
|---------|-------------|------------------------|-----------|---------------|
| Year    | Tri-Council | Other Peer Adjudicated | Contracts | Institutional |
| 2021/22 |             |                        |           | \$4,995       |
| 2020/21 |             |                        | \$10,000  | \$6,952       |
| 2019/20 | \$502,000   |                        |           |               |
| 2018/19 |             | \$117,000              |           |               |
| 2017/18 | \$20,000    |                        |           | 17,000 USD    |

### Appendix B: Alignment with University and Faculty Missions and Plans

The University Academic Plan and Strategic Research Plan – alongside broader societal priorities, like the Sustainable Development Goals – lay out an ambitious framework for research and teaching that addresses pressing global issues. The new PhD in Disaster and Emergency Management (DEM) is uniquely positioned to contribute to these priority areas, thereby advancing York’s mission while helping to create safer, more resilient, and more inclusive communities in the face of disaster.

In these documents, the university identifies six areas of thematic strength:

1. Advancing Fundamental Inquiry and Critical Knowledge
2. Analyzing Cultures and Mobilizing Creativity
3. Building Healthy Lives, Communities and Environments.
4. Exploring and Interrogating the Frontiers of Science and Technology
5. Forging a Just and Equitable World
6. Integrating Entrepreneurial Innovation and the Public Good

The PhD program is uniquely situated to contribute to York’s advancement on several of these portfolios. In addition to its aforementioned emphasis on blending fundamental inquiry with critical applied knowledge, the PhD program emphasizes the importance of healthy communities, a just world, and safer and more equitable scientific and technological futures. In a world increasingly stressed by climate-induced disasters – alongside other issues like migrating populations, increasingly interdependent sociotechnical systems, and hyperpolarized politics – emergencies are becoming an incredibly frequent part of life. The program will help to develop ways to preserve and protect public health; to help communities become safer and more resilient in the face of natural and technological hazards; and to improve the sustainability of our natural systems (for instance, restoring ecological and indigenous perspectives to fire and flood management).

Likewise, disasters all too often exacerbate and further increase existing inequalities. Marginalized communities can struggle to prepare for disasters, suffer from a lack of resources during the response, and often are faced with increased adversity in recovery. Forging a just and equitable world demands dealing with these moments of crisis and interruption, ensuring that world-shaping events like the COVID-19 pandemic do not simply further marginalize already oppressed communities.

Moreover, disasters provide a critical area for interrogating the role of science and technology. In the field of DEM, we anticipate, investigate, and prepare for ways in which technological inventions and increasingly tightly coupled technical systems can themselves become victim to new disasters (e.g., cybercrime, attacks on critical infrastructure, or interconnected and cascading failures). Moreover, the discipline asks difficult questions about the way that technological and techno-scientific ‘fixes’ can exacerbate inequalities in emergency response, such as the way that COVID-19 related testing, vaccinating, and supporting communities has disproportionately benefited privileged groups at the expense of communities of colour.

The proposed PhD program in DEM will also contribute to areas that York has identified as requiring focused attention. For instance, the theme of ‘Healthy Individuals, Healthy Communities and Global Health’ is profoundly advanced through inquiry into health crises, the health impacts of natural and technological disasters, and public health mechanisms for improving emergency response. Moreover, the emphasis on global health is a feature of the research of several of our faculty members – and many prospective doctoral candidates – underscoring the role that York can play on the global stage in advancing equity, resilience, and safe communities. Likewise, the theme of “Public Engagement for a Just and Sustainable World” aligns closely with the program’s emphasis on community and stakeholder engagement, not to mention its focus on issues of equity and sustainability.

This alignment with York’s priorities is longstanding and long lasting. For example, an external Program Review in 2016 for the DEM area noted that “Program objectives support the missions and academic plans for the University and the Faculty of Liberal Arts and Professional Studies in a number of critical ways. Specifically, the academic programs emphasize interdisciplinarity, experiential learning, innovation, and applied research to meet the critical needs of this rapidly evolving profession of DEM.

The program also plays a very important service role by promoting disaster risk reduction and the application of evidence-based policies and practices in the process.” These connections remain as true as ever as the program has grown and become even more closely aligned with a well-funded, active, and influential program of emergency management research.

We would also note that the PhD proposal in DEM aligns with key global priorities that York shares and invests in. For instance, there is clear alignment with several of the United Nations Sustainable Development Goals, including:

- Reducing the unequal impacts of disasters in terms of goals 1 (no poverty), 5 (gender equality),
- and 10 (reduced inequality).
- Preparing for and recovering from disasters that can affect abilities to fulfil basic needs,
- including goal 2 (hunger), 3 (good health), 6 (clean water and sanitation), and 9 (...infrastructure).
- Creating more sustainable and ecologically friendly methods for managing environmental and natural hazards – many of which are exacerbated by a changing climate – including with goals 11 (sustainable communities), 13 (climate action), and 14/15 (life below water/on land).
- Building stronger, more equipped institutions for supporting civil protection, disaster mitigation, and emergency preparedness, via goal 9 (industry and innovation...), 16 (strong
- institutions), and 17 (partnerships for the goals).

Taken together, the PhD program in DEM will advance both university and global priorities. As evidenced by recent disasters – from hurricanes to wildfires to COVID-19 – the need to prevent, address, and build back better from disasters is profound. This program will equip the next generation of teachers and researchers, and support improving emergency management practices now and into the future.

#### Appendix C: Process for Adding Full and Associate Faculty Members

In line with the criteria offered by the Faculty of Graduate Studies, the doctoral program in DEM will have full and associate members. (For the full suite of membership possibilities and their specified roles, see <https://gradstudies.yorku.ca/faculty-staff/academic-affairs/faculty-membership/appointments-policy/>).

Pertinent to supervisory capacity, however, are the following: Full Members shall hold a tenure-track/tenured position at York University. They may act as the principal or as a co-supervisor of DEM doctoral dissertations; may serve on supervisory and examining committees; may teach graduate course courses for the program; and may participate in decision-making processes in accordance with program governance procedures. Full Members hold an appointment that is continuing unless (i) a limited term is deemed appropriate, (ii) it is determined that the individual no longer satisfies the conditions for Full Membership, and/or (iii) their tenure-track/tenured position at York comes to an end.

Associate Members shall hold a tenure-track/tenured or contractually limited position at York University. They may be

permitted act as a co-supervisor of doctoral dissertations; may serve on supervisory and examining committees within the program; may teach graduate course courses; and may participate in decision-making processes in accordance with program governance procedures. Associate Members may not act as the principal supervisor of doctoral dissertations and may serve as a co-supervisor of doctoral dissertations on the condition that the other co-supervisor is a full member of the graduate program. Associate Members may hold an appointment that is continuing unless (i) a limited term is deemed appropriate, (ii) it is determined that the individual no longer satisfies the conditions for Associate Membership, and/or (iii) their tenure-track/tenured or contractually limited position at York comes to an end.

Existing Full and Associate Member appointments have already been outlined in the current DEM PhD Proposal. For future additions into Full and Associate membership statuses, the following criteria must be met:

- At a minimum, candidates for appointment to the Faculty of Graduate Studies must:
  - hold a PhD (or equivalent) degree or otherwise have demonstrated achievement as a
  - researcher, scholar, professional or artist in accordance with the expectations of the discipline;
  - ☑ demonstrate that he or she is continuing to make a contribution to research or scholarship or
  - professional or artistic activity as evidenced by a clear process of peer review and critical analysis; and
  - ☑ where previously engaged in graduate teaching or supervision, demonstrate satisfactory
  - performance as an instructor and/or supervisor.
- To be appointed as Full or Associate Member in the DEM PhD Program, candidates must:
  - ☑ demonstrate contribution to research or scholarship or professional or artistic activity related to
  - Disaster & Emergency Management and associated fields, based on peer-adjudicated work, examples of which include peer-adjudicated publication, peer-adjudicated research grants, invited presentations at conferences and symposia, curated, critically reviewed or peer appraised exhibitions or performances, and any other mode of presenting work in a public forum which has been subjected to a clear process of peer review.

Full or Associate Member candidates must:

- submit an updated CV at the stage of applying to become a member of the DEM PhD program, and submit an updated CV to the DEM Graduate Program Director (GPD) every three years
- thereafter,
- submit a cover letter describing their research and areas of interest, as well as areas of expertise
- for the supervision of graduate students

The DEM Graduate Program Director is responsible for:

- approving a candidate's application to become a Full or Associate member of the DEM PhD
- program.
- ensuring that the peer-adjudicated work of the Full or Associate Member candidate is directly
- related to the discipline of Disaster & Emergency Management and published in reputable journals and avenues, given the interdisciplinary nature of the field. Insufficient evidence of continued research, scholarship, professional or artistic activity at an advanced level, or in field not directly related to the Disaster & Emergency Management field will result in an appointment that excludes principal supervision of DEM doctoral dissertations, i.e. Associate Membership.
- ensuring that the candidate will be able to successfully meet the requirements of doctoral supervision through assessing the candidate's evaluations from previously supervised students,
- and peer evaluation by, in particular, members of supervisory and examining committees of students supervised by the candidate, taking into account such matters as the availability and effectiveness of the supervisor and his or her relative contribution to the quality of the student's work and its completion within a reasonable time.
- approving a Full or Associate Member's ability to teach courses in the doctoral program based
- on peer evaluation and student evaluation of teaching and curriculum design, taking into account such matters as the scholarly or creative content of teaching materials, the application of.

The DEM PhD program shall establish an Executive Committee consisting of the DEM GPD and at least two members of the DEM Faculty in order to advise on program-specific appointment criteria, procedures and appointments. The composition of the committee will be known to the program at the start of the doctoral program and will change every three years. The committee may delegate responsibility to the Graduate Program Director regarding the approval or recommendation for approval of appointments, as appropriate.

## Appendix D: Statements of Support

Letters of support in favour of creating the PhD program in Disaster and Emergency Management are included from several key academic units and professional organizations.



October 3, 2022

Eric B. Kennedy  
Disaster & Emergency Management  
School of Administrative Studies  
Atkinson Building, Room 282  
4700 Keele Street

Dear Professor Kennedy:

**Re: Decanal Support for the Major Modification for the New PhD Program in Disaster and Emergency Management (DEM)**

**FACULTY OF  
LIBERAL ARTS &  
PROFESSIONAL STUDIES**

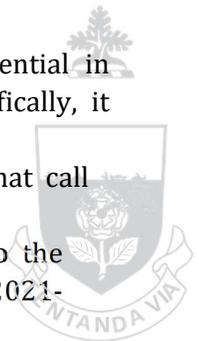
**Office of the Dean**

S900 ROSS BLDG.  
4700 KEELE ST.  
TORONTO ON  
CANADA M3J 1P3  
T 416 736 5220  
F 416 736 5750  
laps.yorku.ca

On behalf of Dean J. J. McMurtry in the Faculty of Liberal Arts & Professional Studies, I am pleased to provide you with a letter of support for the major modification proposal for the Doctoral Program in Disaster and Emergency Management (DEM), to be offered by the School of Administrative Studies in the Faculty of Liberal Arts and Professional Studies. I have reviewed the proposal and I am satisfied that the degree is timely, innovative, interdisciplinary and likely to draw significant student interest.

With this program, York University will be the only university in Ontario and Canada to offer a doctoral degree in the field of DEM. The proposed doctoral credential successfully aligns itself with the University Academic Plan (2020-25). The creation of the new graduate degree credential supports fundamental inquiry and the critical application of knowledge to contemporary real-world problems. Graduates from the program will add to the profession as specialists in the field of managing emergencies effectively and building healthy and sustainable communities and environments. The proposed program also aligns with the University’s Strategic Mandate Agreement (SMA) (2020-2025); the program has strong pathways to professional and practitioner roles linking research and job outcomes. The graduate level credential will also help enhance graduates’ employability in the highly competitive employment environment and will offer our students a professionalizing advantage.

By allowing York University students the opportunity to gain a doctoral credential in DEM, the intention aligns to the principles of the UAP (2020-25). Specifically, it supports the principles of “twenty-first century knowledge”, to continually reinvent our programs to address emerging issues and labour market needs that call for new pedagogical approaches and cross-disciplinary thinking. The proposal to develop a new doctoral level credential in DEM also aligns to the principle of the Faculty of Liberal Arts & Professional Studies Academic Plan (2021-26) to “offer a broad range of rigorous curricular programs that engage with emerging and longstanding local and global concerns and needs, including education for sustainable development.” The proposed program will be highly interdisciplinary and allow for collaboration opportunities for its students.



In terms of resources, I note that you are requesting an allocation of study/workspace for the PhD students and a seminar room for common activities. In addition, I take note that you are proposing to create three new courses, which will not involve extensive new resources to implement or deliver because, as you have stated in the proposal, these courses will not require the hiring of new faculty to teach them; additionally, as you mention in the proposal, you have been approved for an additional hire in 2022. I can confirm that the Faculty is prepared to support the resourcing of your program plan appropriately to the program's needs and enrolment demand. Keele Campus has a full complement of administrative staffing, as well as the infrastructure and space needed, to support students and faculty in the graduate program. I also note that the proposal is to admit students into the degree only every two years, rather than annually. Overall, the Dean's office does not expect that the creation of a doctoral degree in DEMS will require significant additional new resources to launch the program.

The addition of a doctoral degree to the existing Bachelor's and Master's options in the field ensures the ongoing curricular and programmatic currency of the School of Administrative Studies and ensures that graduates of the existing programs have a robust option for continuing their studies in the field of disaster and emergency management at York University.

This is a high quality proposal and the Dean's Office is in full support.

Sincerely,



JJ. McMurtry

Dean

Faculty of Liberal Arts & Professional Studies

cc: Professor Eric Kennedy, Assistant Professor DEMS  
Professor Alice Pitt, Acting Vice-Provost Academic

Date: February 4<sup>th</sup>, 2022

To Whom it May Concern

**Re. Support for the School of Administrative Studies Proposal for New Doctoral Degree (PhD) in Disaster and Emergency Management (DEM)**



**School of Administrative Studies**

282 Atkinson Building,  
4700 Keele St.  
Toronto ON  
Canada M3J 1P3  
Tel: 416-736-5210  
Fax: 416-736-5963

It is my pleasure, on behalf of the School of Administrative Studies to support the proposal for the new Doctoral Degree (PhD) in Disaster and Emergency Management. This degree will join an already existing Bachelors of Disaster and Emergency Management (BDEM) and Masters of Disaster and Emergency Management (MDEM) that are offered at the School of Administrative Studies, York University. I confirm that the initial proposal, additional input on the degree's design was solicited from faculty and leadership within the School of Administrative Studies, as well as a number of other allied faculties from across the campus. Student input was incorporated from both existing MDEM students, and additional feedback on specific proposals was solicited upper-stage PhD students and faculty from programs elsewhere in Canada and the United States.

I would like to emphasize the importance of a PhD program in Disaster and Emergency Management. From pandemics to natural hazards, disasters continue to stress our social systems, exacerbate inequalities, and negatively affect our communities. This PhD program will produce the cutting-edge research and next generation of DEM leadership to help mitigate, respond to, and recover from these perils. Furthermore, the proposed program aligns closely with priorities identified in the University Academic Plan (UAP) and Strategic Resource Plan (SRP). Thematically, the degree aligns closely with the priorities of 'Living Well Together' and 'Knowledge for the Future' within the UAP. Supporting both fundamental inquiry and critical applied knowledge, the program will be a university-leader in blending rigorous academic work with practice-driven impact.

I strongly believe this is a very important program that aligns with the key strategic documents at York University, as well as compliments and leverages resources within other departments and programs. Therefore, I fully support the development and approval of the PhD Program.

Sincerely Yours,

A handwritten signature in blue ink, appearing to read "N. Waweru".

Nelson Waweru CMA, CPA, PhD  
Professor of Accounting  
Director, School of Administrative Studies



8 February 2022

Dr Ravi De Costa,  
Associate Dean for Research and Graduate Studies,  
Faculty of Liberal Arts and Professional Studies, York  
University.

**FACULTY OF  
ENVIRONMENTAL AND  
URBAN CHANGE**

**Office of the Dean**

**Philip Kelly**  
Associate Dean, Research,  
Graduate and Global Affairs

Ross N418  
4700 KEELE ST.  
TORONTO ON  
CANADA M3J 1P3  
T 416 73612100 EXT 66199  
[pfkelly@yorku.ca](mailto:pfkelly@yorku.ca)  
[eucadrgg@yorku.ca](mailto:eucadrgg@yorku.ca)

Dear Ravi,

I am pleased to offer support from the Faculty of Environmental and Urban Change (EUC) for the proposed PhD program in Disaster and Emergency Management (DEM).

With well-established Bachelor's and Master's degrees in DEM at York, the creation of a doctoral program is the logical next step in ensuring that the most innovative thinking in the field is being done on our campuses. The program will be the first of its kind in Canada, ensuring that there is a 'home-grown' training ground for researchers who will then apply their skills in professional settings or in academic programs across the country.

The academic and administrative structures that are laid out in the proposal are very sound and reflect many of the best practices established in other doctoral programs at York. The core of the program is appropriately rooted in the DEM area under the School of Administrative Studies, where the BDEM and MDEM are located. Associated faculty members (who will not have primary supervisory privileges) are drawn from other units at York, including LAPS, Science, Health and the Lassonde School of Engineering. The proposal envisages an expansion of the program's membership in the future and I would hope that this will include colleagues from EUC, both because the current complement of potential supervisors in DEM is limited in number, but also because there is untapped expertise to be drawn upon for PhD students in the DEM field. Among EUC faculty, this includes researchers working on biophysical processes of environmental change, urban responses to pandemics, the politics of risk and post-disaster reconstruction, global humanitarian responses to disasters, and the ethics of emergency management.

The coursework structure for the new program is very well-conceived and looks set to provide a rigorous training that encompasses theoretical, methodological and professional preparation for doctoral students. Several of these courses are likely to be of interest to doctoral students in EUC's graduate programs in Environmental Studies and Geography, and so we welcome them as additional options for our current and future students. I can also imagine that the DEM PhD itself will be appealing to graduate students in our MES, MA and MSc programs who are seeking to move on to a doctoral program with a thematic focus around disaster management.

I congratulate the proponents for their work on this proposal, which represents a well-conceived and thorough plan, and a welcome addition to York's graduate offerings.

Yours sincerely,



Dr Philip Kelly  
Professor of Geography,  
Associate Dean for Research, Graduate and Global Affairs,  
Faculty of Environmental and Urban Change, York University



9 February  
2022

**Re: PhD in Disaster and Emergency Management, proposal**

**To Whom it May Concern:**

I am writing to express support for the proposal for a new PhD program in Disaster and Emergency Management (DEM), to be housed in the School of Administrative Studies in the Faculty of Liberal Arts and Professional Studies. The program builds on existing, timely, and successful undergraduate and Master's programs in disaster and emergency management at York. The addition of a PhD program in DEM would solidify York's position as a national leader in disaster and emergency studies, and represents an urgent and intelligent response to the need to better understand the many dimensions posed by disasters such as forest fires, flooding, and tsunamis.

The Department of Philosophy is particularly pleased to offer its support for this new program, as it corresponds with interests of students and faculty, for example, Prof. Idil Boran, who works at the intersection of environmental philosophy and political theory (and in particular the issue of climate change and governance), Prof. Alice MacLachlan, who works on the nature and conditions of civility in society, and Prof. Michael Giudice, who works on the challenges that natural and human disasters pose for the maintenance of legal order.

There would therefore be much interest in our Department to be affiliated with such a graduate program, and we would welcome the opportunities to be involved as they arise.

The Department is therefore happy to strongly support the proposal for the PhD program in DEM. If I can be of any other assistance, please let me know.

Sincerely,



Michael Giudice, PhD



**FACULTY OF  
LIBERAL ARTS &  
PROFESSIONAL STUDIES**

**School of Public Policy &  
Administration**

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F 416 736 5382  
lapssppa@yorku.ca

Dear Colleagues,

The School of Public Policy and Administration (SPPA) is happy to support the creation of a new Doctoral Degree (PhD) in Disaster and Emergency Management (DEM). We appreciate the comprehensive and soundly formed objectives, program content and curriculum as

detailed by the developers of the proposal. They have worked effectively in designing core and elective courses that are ideal in supporting development in relevant areas of expertise, while still maintaining its interdisciplinary approach to tackling challenges in disaster and emergency management by designing the PhD in DEM as able to provide opportunities for students to pursue interdisciplinary mentorship, studies and projects.

We find in general that the offerings of this PhD in DEM and the proposed program content and curriculum are complementary to the direction of many of our own Master's in Public Policy, Administration and Law (MPPAL) students, and we believe SPPA students would consider such a program when contemplating doctoral studies. We also feel encouraged that DEM graduate students may take courses in our MPPAL program that can complement their core DEM courses (i.e., Program Evaluation & Public Policy Analysis, Leadership and Human Resource Management). As both programs are committed to collaborative interactions with practitioners from numerous specialty fields, coupled with MPPAL's consistent intake of a high number of experienced and professional public servants, we note that there are several avenues of possible collaboration that we hope can develop between the two programs in the future.

Overall, the proposed program is nicely aligned with the visions and goals of both the Faculty of Graduate Studies and the University at large and allows for the expertise of scholars from multiple areas across the university. We do not see any overlap, duplication, or competition with our own professional master's program in Public Policy, Administration and Law (MPPAL); on the contrary, we hope to explore opportunities for resource sharing and collaboration.

Please do not hesitate to contact me with further questions.

Sincerely,



Alena Kimakova, PhD  
Associate Professor and Director, School of Public Policy and Administration  
Email: [akimakov@yorku.ca](mailto:akimakov@yorku.ca)  
<https://www.yorku.ca/laps/sppa/> | *Education for Good Governance*



**From:** Alena Kimakova akimakov@yorku.ca   
**Subject:** Re: DEM PhD Proposal - Requesting Letter of Support  
**Date:** January 31, 2022 at 6:07 PM  
**To:** Eric B. Kennedy ebk@yorku.ca  
**Cc:** Joanne E Magee jmagee@yorku.ca

AK

Dear Eric,

Thank you for consulting with us on this new program proposal. We agree that the proposal is both strong and timely, and I am happy to provide a letter of support. Please see the attachment and let me know if you think any revisions are needed.

I would also like to add a few comments as friendly, constructive feedback for consideration by you and your colleagues:

We noticed that the proposal references public policy and practice of DEM in multiple places, but doesn't actually include "public policy" and "public administration" as examples of relevant fields for master's degrees in the first bullet point of the Admissions criteria in Appendix E, p. 71 of the proposal. We think that your PhD program would be very attractive to working professionals in the public and non-profit sectors who might have Master's in "public policy" or "public administration".

We are also wondering why only course work and not relevant professional experience in the practice of disaster and emergency management are envisioned to be accepted as part of the qualifying criteria for admission. The admission requirements state that all applicants (including those with (and without) significant relevant professional experience) need to have "completed a significant amount of coursework or thesis research related to disasters or emergency management" as per the first bullet. The Alternative Requirements (Section 6.2, p. 28) refer to levelling coursework for those (presumably professionals with experience) without formal graduate training in DEM but this alternate pathway is not reflected in the calendar wording. I noticed that your Master's admission criteria do include this alternative pathway by adding "or extensive experience in the field" as an alternative to the coursework requirements (second bullet point at <https://dem.gradstudies.yorku.ca/admission-requirements/> )

I am copying on this email Joanne given that she holds a cross-appointment between SAS and SPPA, and can hopefully ensure I am explaining the points above OK.

Thank you again and all the best,  
Alena

**Alena Kimakova, PhD**  
**Director, School of Public Policy and Administration**  
Associate Professor, SPPA and Department of Economics  
Office: McLaughlin College 122  
Email: [akimakov@yorku.ca](mailto:akimakov@yorku.ca)  
Phone: (416) 736 2100 ext. 66066 or (416) 736 5384  
<https://www.yorku.ca/laps/sppa/> | *Education for Good Governance*

*Mailing address:*

School of Public Policy and Administration | York University | McLaughlin College 119 |  
4700 Keele St. | Toronto, ON M3J 1P3, Canada

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**From:** "Eric B. Kennedy" <ebk@yorku.ca>  
**Date:** Tuesday, January 25, 2022 at 5:04 PM  
**To:** Alena Kimakova <akimakov@yorku.ca>  
**Subject:** DEM PhD Proposal - Requesting Letter of Support

Dear Dr. Kimakova,

I am reaching out on behalf of York's Disaster and Emergency Management program. We are in the midst of submitting a proposal for a PhD in Disaster and Emergency Management (DEM).

I'm reaching out for two reasons. First, we were hoping that you might be able to provide a letter of support on behalf of the School of Public Policy & Administration as part of the curricular review. Second, we are very amenable to welcoming prospective affiliate members in the program who have track records of research related to disasters and emergencies, so would welcome recommendations of colleagues that might be appropriate affiliate members as our program grows.

Now, more than ever, the importance of a PhD program in disaster & emergency management is obvious. From pandemics to natural hazards, disasters continue to stress our social systems, exacerbate inequalities, and negatively affect our communities. This PhD program will produce the cutting-edge research and next generation of DEM leadership to help mitigate, respond to, and recover from these perils.

I was hoping you would be able to offer a strong letter of support for our program, the proposal of which is attached. If you have any questions, I'm happy to address them.

Ideally, we'd request your letter of support for submission by Friday, February 4th, although are happy to work with you on an alternative deadline if required.

Best,

Eric

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**Eric B. Kennedy**  
Assistant Professor & Undergraduate Area Coordinator  
Disaster & Emergency Management, York University

Director, Science Outside the Lab North  
[SOTlnorth.ca](http://SOTlnorth.ca) | [info@SOTlnorth.ca](mailto:info@SOTlnorth.ca)

[eric.kennedy@yorku.ca](mailto:eric.kennedy@yorku.ca)  
ericbkennedy.ca | @ericbkennedy

Associate Dean, Research and Graduate Studies  
Faculty of Liberal Arts & Professional Studies

**Support from FSc for the creation of a PhD program in Disaster and Emergency Management.**

Dear Ravi,

I am pleased, on behalf of the Faculty of Science, to offer support to your proposal for the establishment of a new PhD program in Disaster & Emergency Management (DEM) within the School of Administrative Studies in the Faculty of Liberal Arts and Professional Studies. The focus and scope of this new program is to train students that will develop policies and procedures to mitigate responses to global disasters and emergencies. This program will be accessible to students with advanced degrees in a wide variety of disciplines.

**FACULTY OF  
SCIENCE**

**OFFICE OF THE DEAN**

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Tel 416.736.5051

science.yorku.ca

The establishment of this new PhD program follows the successful establishment of both Bachelor's and Master's programs in Disaster and Emergency Management. This is a very timely proposal for a new PhD program as we are in the midst of the COVID-19 Pandemic which has demonstrated their urgent need for planning and preparedness for disasters and emergency management. The advanced training in evidence-based theories, methods, policy development and practice are essential to help us get through future disasters or emergencies. This program is essential not only for training a new set of scholars in Disaster and Emergency Management, but for preparing these scholars for careers with external stakeholders or partners.

York University already has significant expertise in Disaster and Emergency Management and the creation of this new PhD program will help to strengthen our reputation in this discipline. There is a core group of faculty members that are experts in this field that can both teach the courses described in the application but also supervise research projects. Additionally, the COVID-19 pandemic will result in an increased demand for post-graduate programs in Disaster and Emergency Management. As more people have become aware of our vulnerability with respect to natural disasters, pandemics and other emergencies, preparedness for these events is absolutely essential. The graduate training that will be provided will allow future scholars the opportunities to better understand the consequences of disasters and emergencies, through many lenses. These scholars will guide us to prevent, prepare, respond and recover from the threats.

The development of this new PhD program in Disaster and Emergency Management aligns with both the University Academic and Strategic Resource Plans by building healthy lives, communities and environments.

The Faculty of Science supports the creation of this new PhD program in Disaster and Emergency Management.

Sincerely,



Vivian Saridakis, PhD  
Associate Dean, Research & Graduate Education



February 4<sup>th</sup>, 2022

RE: Faculty of Health's support for the PhD Program in Disaster and Emergency Management

Dear Reviewers,

It is my pleasure to write this letter expressing the Faculty of Health's full support of the PhD program in Disaster and Emergency Management (DEM) proposed by the School of Administrative Studies (Faculty of Liberal Arts & Professional Studies).

The program brief of the PhD in DEM has been reviewed by the Graduate Program Directors of the Faculty of Health, who unanimously endorse the value, interdisciplinary lens, and structure of the proposed program. The School of Administrative Studies is to be commended for the development of a comprehensive curriculum, which includes a broad array of proposed partnerships, and a holistic approach, which considers mind, body, community and societal perspectives. That this proposal builds on the success of an established MA – one of only two such programs in Canada – speaks to both the suitability and need for such a PhD program.

York University's Strategic Research Plan, a component of which focuses on *"building healthy lives and communities"* and *"healthy individuals, communities and global health"* aligns closely with this highly collaborative and impactful program. The proposed PhD in DEM builds on expertise of many cross-Faculty alliances, and will be of interest to researchers across our Faculty, including those in health policy and management, global health, epidemiology and public health, among others. Indeed, our Faculty has complementary expertise in quantitative and qualitative methods, risk analysis, ethics, public health and policy, crisis management, humanitarianism, nursing, post-traumatic stress, behavioral profiling, and clinical management of mental health in relation to the broader field of DEM. These are only a few of the many examples of possible teaching, learning, and research collaboration between the proposed PhD program and our Faculty.

The interdisciplinary linkages that will be made possible through this PhD aligns with York's Strategic Research and Academic plans by offering an inclusive training environment for students from various disciplinary perspectives and backgrounds. Its focus on training and research to serve marginalized and vulnerable populations, with local to global partners, is likely to attract students from a diversity of backgrounds. The range of faculty expertise available to support the PhD in DEM is also synergistic with the Faculty of Health's mission to enhance health, health equity, health care, and wellbeing through critical inquiry, creative world leading ideas, education, service and partnerships for the public good.

In summary, the PhD program in DEM has the enthusiastic support of the Faculty of Health. The proposed curriculum aligns with research interests of our Faculty and students, and we look forward to contributing to the program's growth and success.

Sincerely,

Paul W. McDonald, PhD, FRSPH, FCAHS  
Dean, Faculty of Health





**Ravi de Costa (he / him)**  
**Associate Dean, Research and Graduate**  
**Faculty of Liberal Arts & Professional Studies**

January 29, 2022

Dear Professor, de Costa:

I am delighted to offer my strongest support to the proposed Doctoral Degree (PhD) in Disaster and Emergency management (DEM).

I have participated in the process of designing this proposed program, and I am eagerly anticipating its approval. York has well established facilities, expertise and success in its DEM undergraduate and master's level programs. Its faculty are regarded as among the very best nationally and internationally in terms of DEM teaching, practice, policy and research. As the range, frequency and intensity of disasters increases nationally and internationally, there is no time better – and no Canadian institution better equipped – to launch a PhD program in DEM. The proposal is multidisciplinary in its orientation, and takes a strong critical problem-solving approach to engaging and improving existing DEM teaching, practice and research, and to supporting the development of new paradigms, policy and practice in DEM.

The Dahdaleh Institute for Global Health Research has and continues to work closely with several LAPS faculty who are core to this proposal. We have currently funded research in for example, 1) modelling and developing disaster interventions around the health impacts of climate change, 2) the development and use of Artificial Intelligence capacities for understanding COVID dynamics in eight African countries, and here in Canada, 3) the development, testing and use of AI based tools to maximize safe water in crisis settings and in refugee camps. We have ongoing participation in creating joint pan-university research initiatives and funding proposals on training of High-Quality Personnel for disaster response for Healthy Cities, and in research aimed at developing new strategies and IT tools for greater equity in urban contexts faced with pandemic disease, extreme weather events, technological disasters or critical infrastructure failure. These draw heavily on municipal, national and international partnerships, and are excellent opportunities for future PhD Students in DEM.

This is an outstanding proposal, designed to meet national and international 21<sup>st</sup> Century challenges in disaster and emergency management, and to conceive, test and improve new research, policy tools aimed at meeting these through the research and training of PhD students. It graduates will be among the best in the country and the world, and the program will certainly enjoy the full support of the Dahdaleh Institute, and I am very eager to plan joint seminars, PhD student supervision, and research.

Sincerely,

James Orbinski OC, MSC, MD, MA, MCFP

Director, Dahdaleh Institute for Global Health Research, York University  
Full Professor, School Global Health, faculty of Health, York University  
Full Professor (Status), Clinical Public Health, University of Toronto Dalla Lana School  
of Public Health



DAHDALEH  
INSTITUTE FOR  
**GLOBAL  
HEALTH  
RESEARCH**

**James Orbinski**  
Director

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EXT 34447  
orbinski@yorku.ca  
dighr.yorku.ca

February 2, 2022



Re: Support for PhD in Disaster and Emergency Management

To Whom It May Concern:

It is my pleasure to write this letter on behalf of the Department of Economics in support of the proposal for a new PhD in *Disaster and Emergency Management* to be offered by the School of Administrative Studies at York University.

**FACULTY OF  
LIBERAL ARTS &  
PROFESSIONAL  
STUDIES**

**Department of  
Economics**

1144 Vari Hall  
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Canada M3J 1P3  
Tel 416 736-5083  
Fax 416 736-5987

We have reviewed the new program proposal and there is no significant overlapping of curricula between the proposed program and the PhD and MA Programs offered by the Department of Economics. The only course that may appear to have some topics overlapping with those in our courses is DEMS 7740 Quantitative Methods in Disaster and Emergency Management. The brief does not include a sample reading list or a list of topics for this course, and therefore, it is impossible for me to judge the level of statistics covered in this course. It could be that it is not a new course (that is, the course may well be offered in the MA- DEMS program). In any case, I do not think that the technical level at this course does not reach that of our graduate core or elective courses in econometrics.

We are excited about this new program as we believe this is an exciting and valuable area that a wide variety of students will be interested in, and it will provide a synergistic potential interest across the university.

To conclude, we fully support the School of Administrative Studies in the development of the PhD Program in Disaster and Emergency Management at York University. We look forward to continued conversations between our two units regarding future opportunities for collaboration.

Sincerely,

A handwritten signature in black ink, appearing to read "Ahmet Akyol".

Ahmet Akyol,  
Graduate Program Director and Associate Professor of  
Economics Department of Economics  
Faculty of Liberal Arts and Professional Studies  
York University

14 February 2022

Dear colleagues,

On behalf of the School of Human Resource Management, I would like to express our support for the proposal for a new doctoral program in Disaster and Emergency Management.

After a careful review of the new program proposal I have found that there is no significant overlapping curricula between the proposed program and the programs offered at the School of Human Resource Management.

This is a timely proposal that has the potential to strengthen York's scholarly leadership in this field of study. There are many ways in which HRM and DEM are related and SHRM looks forward to exploring ways to work together. SHRM welcomes the opportunity to support the program where possible.

We wish our colleagues the best as they prepare to launch this exciting new program.

Kind regards,



Marie-Hélène Budworth  
Director, SHRM



January 11, 2022

To Whom It May Concern:

Re: Proposal for Doctoral Degree in Disaster and Emergency Management Program

The program proposal for the new Doctoral Degree (PhD) in Disaster and Emergency Management has been reviewed by the Graduate Learning, Curriculum and Students (GLCS) committee at the Lassonde School of Engineering.

On behalf of the committee, we support the establishment of this program and look forward to future synergies between our respective programs.

Sincerely,



Usman T Khan, PhD, PEng

Chair, Graduate Learning, Curriculum and Students (GLCS) Committee  
Lassonde School of Engineering

Associate Professor & Graduate Program Director, Civil Engineering

[usman.khan@lassonde.yorku.ca](mailto:usman.khan@lassonde.yorku.ca)



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**Eric B. Kennedy**

Joy Kirchner, Dean of Libraries

February 11, 2022

**Subject:** Dean of Libraries Support Letter for the Doctoral Degree in Disaster and Emergency Management Program

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York University Libraries (YUL) is strongly positioned to support the curriculum and research needs of students and faculty in the Doctoral Degree in Disaster and Emergency Management program. As noted in the Statement of Library Support, YUL provides access to an extensive array of resources and services that support the academic engagement of students and faculty in this program. Given the interdisciplinary nature of the program and the complexity of the resources that apply to the program, I strongly advise integrating our curricular offerings within the program inclusive of specialized expertise offered through our digital scholarship centre.

We also provide researchers with consultations on enhancing global visibility and impact of research, guidance on publication agreements, consults on research data management and other consultations to support research intensification efforts.

We look forward to contributing to the success of students and faculty in the Doctoral Degree in Disaster and Emergency Management program.

cc: Patti Ryan, Director, Content Development and Analysis  
Andrea Kosavic, Associate Dean, Digital Engagement and Strategy  
Jack Leong, Associate Dean of Libraries, Research and Open Scholarship  
Kalina Grewal, Teaching & Learning Librarian





**Doctoral Degree in Disaster and  
Emergency Management  
Library Statement of Support**

**February 2022**

This statement of support for the proposed Doctoral Degree in Disaster and Emergency Management (DDDEM) outlines the many and varied services and resources provided by the York University Library system (YUL). The proposed DDDEM combines the theoretical understanding of human-made and

“natural” emergencies and disasters with the practical application of DEM best practices in various sectors and industries. Any doctoral degree requires access to specialized library resources and services. Degrees that are interdisciplinary or multidisciplinary pose a challenge in that there may be no hard distinction on which library resources may be deemed relevant. In this statement, reference will be made to core resources in the most applicable disciplines and to publications within DEM studies.

**General Information on Library Collections (Electronic and Paper)**

York University Libraries have robust and multidisciplinary collections that are responsive to emerging curriculum and research needs. We have adopted an “e-preferred” approach for new content, meaning that any requests for new titles will be fulfilled with e-book purchases whenever available or affordable, and with as few access restrictions as publishers will allow. YUL also participates in consortia such as the Canadian Research Knowledge Network (CRKN) and the Ontario Council of University Libraries (OCUL) both of which provide access to a growing collection of electronic content that can be discovered through OMNI, YUL’s primary search interface.

Print materials relevant to the programs can also be found via OMNI, and York community members can arrange to have materials held at any of our libraries. Aside from York’s collection, our partnership with the OMNI network provides students and faculty members with access to print materials housed at any of our 16 partner institutions across Ontario.

Interlibrary loan and document delivery options are available through RACER for any additional

information needs that may arise. There is no limit to the number of articles that a student or faculty member may order through RACER per year, and these are delivered to the desktop, free of charge.

Last updated: 21/01/2020

Books can also be requested through this system free of charge. Registration and requesting is available from: <http://www.library.yorku.ca/cms/resourcesharing/services-for-york-faculty-and-students/illrequestform/>.

Apart from print and electronic materials, York University Libraries has a large collection of government documents, microfilms, and a broad collection of maps. The Maps Library also has resources and services for the use of GIS in teaching and research.

### **Library Sources Specific to DEMS**

DEMS is an interdisciplinary / multidisciplinary field of study. The topics students could explore range from emergency preparedness for human and natural disasters; planning and policy for emergency medical relief; specific aspects of preparedness like mass evacuation and many others. To inform their work, students will require access to scholarly articles, trade information, government publications, news sources, and data.

The Libraries provide access to hundreds of thousands of journals, the vast majority of which are accessible online. *Ulrichs' Serials Directory* lists 35 core journals in DEM of which 32 are available through YUL. These include *Academic Emergency Medicine*, *American Journal of Emergency Medicine*, *Australasian Journal of Disaster and Trauma Studies*, *Disaster Management & Response*, *Disaster Prevention and Management*, *Disasters*, *International Journal of Emergency Management*, *International Journal of Mass Emergencies and Disasters*, and *Journal of Disaster Research*. Other related publications like *Fire Safety Journal*, *Simulation Modelling Practice and Theory*, and *Building and Environment* will also help. Articles in these and other journals are discoverable through the Omni library catalogue or through the Libraries' extensive set of full-text and abstracting & indexing databases such as *Business Source Complete*, *EBSCOHost CINAHL*, *Environment Complete*, *PsycInfo*, *Sociological Abstracts*, and *Worldwide Political Science Abstracts*, among others.

York University Libraries publishes research guides related to disciplines and topics addressed by York programs. These guides are developed to help students navigate through relevant sources of scholarship, information, and data. Existing guides of interest to this program are [Disaster & Emergency Management](#), [Canadian Government Policy](#), and [Data & Statistics](#).

Last updated: 21/01/2020

### **Open Content**

As part of its commitment to Open Access and Open Education, York University Libraries is placing increased emphasis on openly licensed and public domain materials for teaching and learning, including sources of open data. In addition, an increasingly wide range of Open Educational Resources (OER) are available through York University Libraries, and we have a guide to finding and evaluating these resources at <https://researchguides.library.yorku.ca/OER>. Sources of Open Data from Canadian jurisdictions include <https://open.toronto.ca> and [Open Data Portal: Government of Canada](#).

### **Advanced Instruction in Library Research Processes**

We suggest integrating library instruction into DEMS 7700 Part 1: Research and Practice in Disaster and Emergency Management. DEMS requires knowledge of government policy, industry regulations, universal best practices, societies and organizations devoted to DEM along with the usual academic sources. Students may not come equipped with knowledge of the vast array of library and non-library sources, so a session with a librarian would be a huge asset. An in-class session should be organized and booked in advance of each semester's offerings, and requests can be submitted at <https://classrequests.library.yorku.ca/>.

### **Digital Scholarship Centre and Specialized Programming**

The [Digital Scholarship Centre](#) (DSC) at York University Libraries houses knowledge in a range of digital tools and methods for web crawling and scraping, data cleaning, data curation, text processing and analytics, social graph analysis, data visualization, and linked open data applications, with an emphasis on sustainable, low-barrier approaches and open-source tools. The Digital Scholarship Centre draws expertise from a variety of departments within York University Libraries. The Digital Scholarship Infrastructure (DSI) supports students and faculty seeking assistance with

[digital scholarship and digital humanities projects](#), open repositories, [digitization best practices](#), digital preservation, [research project design](#), eLearning, and [Open Educational Resources](#). The Open Scholarship department (OS) supports student and faculty needs around [open access publishing](#), retaining author rights, [improving research visibility](#), [research data management](#), and adopting open science workflows. The department also hosts a [data services team](#) that can provide guidance on how to find and evaluate aggregated data and

Last updated: 21/01/2020

microdata sources for research projects as well as on how to document, publish, and preserve research data objects.

### **Email, Chat, and Consultation Services**

In-person assistance with research, citation and other information is readily available from York University Libraries. Students in this program may also take advantage of our consultation service, where individuals or groups meet with a subject specialist or data services librarian to discuss specific, assignment- or research-related questions about information sources, search strategies, data storage and preservation questions, data analysis and visualization tools, and more. These consultations are available at regular hours throughout the week, and can be booked online at <https://www.library.yorku.ca/web/ask-services/book-a-consultation-with-a-librarian/>

### **Immersive Spaces at Markham Centre Campus Library**

The **Visualization Wall, Gaming Lab and Virtual Reality (VR) Lab** are in a single dynamic, configurable space, with the Visualization Wall augmenting VR and gaming experiences. The Visualization Wall, with a massive viewable area of 28 x 14 feet, allows for enhanced research and teaching applications such as the visualization of large data sets, engagement with sophisticated software platforms, and detailed viewing and modelling of complex structures. The gaming capabilities of the space are leveraged to factor in backwards compatibility for legacy equipment for instructors and allow multiple users to concurrently engage with the visualization wall in a variety of configurations. This infrastructure enables faculty to use VR as a teaching tool by narrating a student's VR experiences as projected on the visualization wall to a class of students. VR applications intensify connection to place and create

an

extraordinary opportunity to build empathy through lived experiences. Library programming includes introductory instruction in the creation of VR environments.

## **Conclusion**

York University Libraries welcome the opportunity to support the curricular and research needs of students and faculty in the proposed Doctoral Degree in Disaster and Emergency Management. Our external partnerships program-integrated offerings of technology, space and expertise, and collaborative, multi-institutional collection building and the many programs and services mentioned above will contribute to the success of DDEMS in the years to come.

Last updated: 21/01/2020

February 4, 2021

Dr. Eric B. Kennedy  
Assistant Professor & Undergraduate Area  
Coordinator Disaster and Emergency Management  
York University  
4700 Keele Street  
Toronto, ON, M3J 1P3

Dear Professor Kennedy,

**Re: PhD Program at York University**

I am writing to express support for the creation of a Doctorate of Philosophy (PhD) program in Disaster and Emergency Management at York University.

As the world has been gripped by the COVID-19 pandemic for over two years with anticipated impacts reaching far into the future and climate change has led to increasingly frequent and destructive extreme weather events, the need for top level research, knowledge translation, and training in disaster and emergency management is greater than ever.

York University is the only university in Canada that offers undergraduate and graduate (Master's level) programs in Disaster and Emergency Management. The creation of a PhD program is a natural, timely and necessary extension of this academic leadership and fulfills a need for the development of evidence-based knowledge and critical thinking to frame and support integrated emergency management in all sectors. This does not currently exist in Canada; it is my view that York has a critical mass of faculty and graduate students and is well positioned to initiate this endeavour.

Public Health Ontario (PHO) is a Crown corporation dedicated to protecting and promoting the health of all Ontarians and reducing inequities in health. PHO links public health practitioners, frontline health workers and researchers to the best scientific intelligence and knowledge from around the world. PHO provides expert scientific and technical support to government, local public health units and health care providers relating to the following: communicable and infectious diseases; infection prevention and control; environmental and occupational health; emergency preparedness; health promotion, chronic disease and injury prevention; and public health laboratory services. PHO's work also includes surveillance, epidemiology, research, professional development and knowledge services.

As a knowledge generator and user in the health and public health sectors, providing scientific and technical advice regarding pandemic planning, response and recovery to the Ministry of Health, local

public health units and other health system partners, PHO continuously observes and experiences gaps in evidence-based emergency management. These gaps need to be addressed to ensure optimal preparedness for, response to, and recovery from health threats such as large outbreaks, pandemics, extreme weather emergencies and human initiated catastrophic events in Canada. We believe that a new PhD program at York can begin to address these gaps in scientific emergency management research.

As an academic public health organization, we conduct research and collaborate with academic partners from multiple disciplines to generate, interpret and apply new knowledge to inform emergency preparedness and response, such as through data analysis and modelling. We would enthusiastically welcome colleagues with whom we can work to raise the level of academic expertise in disaster and emergency management across domains. I am therefore highly supportive of York University's proposal to create a doctoral program in emergency management.

Sincerely,

A handwritten signature in black ink, appearing to read 'Brian Schwartz', with a horizontal line underneath.

Brian Schwartz, MD, MScCH, CCFP(EM), FCFP  
Vice President, Science and Population Health  
Public Health Ontario  
Associate Professor, Department of Family and Community Medicine  
and Dalla Lana School of Public Health  
University of Toronto



February 10, 2022

Mr. Eric B. Kennedy  
Assistant Professor & Undergraduate Area Coordinator  
Disaster & Emergency Management, York University

Dear Mr. Kennedy,

Re: York University New Doctoral Degree in Disaster and Emergency Management -  
OAEM Letter of Support

On behalf of the Ontario Association of Emergency Managers (OAEM), we are very pleased to provide a statement of support for the new York University Doctoral Degree (PhD) in Disaster and Emergency Management (DEM). Our support of this initiative is aligned with our strategic mission to enhance emergency management within the Province of Ontario and to promote the academic advancement of the discipline's next generation.

York University is recognized as a leader in Disaster and Emergency Management education and we are fully supportive of the new program designed for holders of Masters Degrees in DEM and related fields who wish to pursue advanced studies and research in areas such as environmental studies/sciences, public policy, health, etc. – providing a multi-disciplinary experience.

OAEM is a volunteer professional association representing the interests of Ontario's public and private sector emergency management community since 2004. Our role is to be proactive on behalf of our members by advancing key issues affecting the future of our industry, promoting professional standards, and member engagement. Our mission is to raise awareness of the role and importance of emergency management as core to organizational and community resilience, as well as advance the profession by promoting the principles of emergency management, providing professional development opportunities, mentorship, collaboration, and networking.

We are confident that our members will support the York University Disaster and Emergency Management Doctoral Degree as it will serve to enhance our collective understanding of this transdisciplinary field and improve the ways communities address all forms of hazards and crises while providing an inclusive approach linking academic study and professional practice.

This new program will truly be a significant step forward in emergency management. We champion the program and its success.

Sincerely,

Mesha Richard, Director of Education  
Ontario Association of Emergency Managers

Paula-Marie Jannetta, President  
Ontario Association of Emergency Managers

OAEM 468 Queen Street East, LL-02 Toronto ON M5A 1T7 Visit us at [www.oeam.ca](http://www.oeam.ca)

Brampton, Monday, February 14, 2022



Eric Kennedy  
Assistant Professor & Undergraduate Area Coordinator  
Disaster & Emergency Management, York University  
Director, Science Outside the Lab North  
Faculty of Liberal Arts and Professional Studies  
York University, 4700 Keele St.  
Toronto, ON M3J 1P3

Re: Application for PhD program in Disaster and Emergency Management

Dear Professor Kennedy,

On behalf of myself and as chair of the NGO Alliance of Ontario, I would like to offer my support for the development of a PhD program in Emergency Management at York University. NGOs are a critical resource in the development of efficient and caring emergency management practices and as such we are always trying to find new avenues to improve ourselves and to provide better services to our clients.

We wholeheartedly support this initiative as we know more research is needed in this growing field of expertise. In particular, we currently rely mostly on our US partners for advancement and development, but we are eager to see a Canadian component to the research. The legislation, standards and codes of conduct differ in Canada in a number of ways that affect how research is implemented and we see the PhD program as an asset in expanding our abilities in Canada.

We see the extension of the YorkU DEMS program into the PhD as a logical next step and we will commit to continue our support the university's development we have done in the past. As an organization, the NGO Alliance represents twelve of the most active disaster relief agencies in Ontario and Canada and we can assure you of our support in the development and implementation of the PhD program.

Alain Normand  
Chair, NGO Alliance of Ontario  
Consulting Associate, ADRA Canada  
alainnormand@rogers.com  
<http://alainnormand.wixsite.com/booksplus>  
Cell 416-725-9451  
ADRA.ca

TEL: 416.725.9451

EMAIL: [alainnormand@rogers.com](mailto:alainnormand@rogers.com)

Communication, Cooperation, Collaboration, Coordination



Simon Wells, CD, MA, CEM  
Principal  
Canadian Journal of Emergency Management  
38 Pilot Street  
Scarborough, Ontario M1E 2C5

27 January 2022

Dr. Eric B. Kennedy  
Associate Professor  
Disaster & Emergency Management  
York University

LETTER OF SUPPORT –  
DOCTORAL PROGRAM IN EMERGENCY  
MANAGEMENT AT YORK UNIVERSITY

Dear Dr. Kennedy,

In discussion with my colleagues I have become aware of your new program brief for a doctoral program in disaster and emergency management (DEM) at York University. I am writing to offer my vocal support for this proposed program on behalf of the *Canadian Journal of Emergency Management* (CJEM).

It would be trite to refer to the disruption and "unprecedented" nature of COVID-19. Instead, I look forward to what I believe is a period of significant disruption, emergency, and disasters affecting us either directly or indirectly in this globalized world. Whether approaching DEM through humanitarian, critical infrastructure, meteorological and environmental, or supply chain lenses, there has never before been such acute need for Canadian-bred, Canadian-focused DEM expertise. I am resolute in my position that your proposed doctoral program can produce a new cohort of scholarly and strategic leadership, able to identify, comprehend, and respond to what will be a very dynamic global hazard environment.

Your new program brief has my complete support. Yours in service,

Simon Wells  
Principal  
CJEM

*Letter of Support, City of Toronto*

Tracey Cook  
Deputy City Manager**Fire Services**  
4330 Dufferin Street  
Toronto, Ontario M3H 5R9Tel: (416) 338-9051  
Fax: (416) 338-9060  
E-mail: [Matthew.Pegg@toronto.ca](mailto:Matthew.Pegg@toronto.ca)

January 31, 2022

Dr. Eric B. Kennedy  
Associate Professor, Disaster and Emergency Management  
Faculty of Liberal Arts and Professional Studies  
Disaster & Emergency Management  
York University  
4700 Keele Street  
Toronto, ON M3J 1P3

Re: Letter of Support – Doctoral Program in Disaster and Emergency Management at York University

Dear Dr. Kennedy,

I am writing in my capacity as the City of Toronto's Fire Chief and General Manager of Emergency Management, the City of Toronto's COVID-19 Incident Commander, and as the Senior Contributing Editor of the *Canadian Journal of Emergency Management* (CJEM). I am pleased to offer my wholehearted and enthusiastic support for the development of a doctoral (Ph.D) program in disaster and emergency management (DEM) at York University.

York University is already a national leader in DEM education, offering robust baccalaureate and graduate level DEM programs. Graduates of these degree programs often go on to perform high profile roles in municipal, provincial and federal government DEM programs, as well as in the non-governmental organization space and the private sector. In my professional capacity in both emergency management and emergency response, and most recently in my role as Toronto's COVID-19 Incident Commander, I have the privilege of working alongside numerous such professionals each day.

The need for the continued advancement of disaster and emergency management research and application has never been higher than today. I am fully confident that the creation of this program will be an important factor in shaping the future of disaster and emergency management, as well as large-scale incident management system doctrine and practice, as the world continues to transition into the post COVID-19 pandemic reality.

In my role in CJEM, I see first-hand that there are extensive research gaps that need to be filled. I appreciate the role that dedicated DEM scholarship and policy making plays in informing strategic and operational DEM leaders in their program and emergency work.

As the COVID-19 Incident Commander for the largest city in Canada, I have direct and uncommon experience that both underscores and confirms the global need for a doctoral program that would promote novel research and expertise in DEM, right here in the heart of Canada's financial and economic engine.

It is clear that we are moving into an era of increasing disruption, resulting from a multitude of complex and compounding hazards, such as climate change, social inequality, and geopolitical factors. As such, we have a duty to prepare our communities, provinces and territories, and our country to mitigate, prepare for, respond to, and recover from what will undoubtedly be a future bringing increasing turbulence.

I am confident that your program brief presents the right curriculum and interdisciplinary approach to produce the next generation of DEM leaders in Canada. I also note that my local municipal peers offer their support and am pleased to join their ranks in doing so.

On a personal note, if there is anything I can do, to personally assist in the development or delivery of this groundbreaking program, please do not hesitate to ask.

I wish you and your colleagues the best outcome in establishing this important program.



Matthew Pegg, ECFO  
Fire Chief & General Manager – Emergency Management  
COVID-19 Incident Commander  
City of Toronto

***Letter of Support, City of Brampton***

April 6, 2022

Eric B. Kennedy  
Assistant Professor & Undergraduate Area Coordinator  
Disaster & Emergency Management  
York University  
4700 Keele St.  
Toronto, ON M3J 1P3

Dear Professor Kennedy,

On behalf of the City of Brampton Emergency Management Office, I would like to offer my support for the development of a PhD program in Emergency Management at York University. Our office has always valued the partnership with York University as mutually beneficial and will continue to maintain this relationship within the scope of a PhD program.

We have been involved in the development and maintenance of the Certificate, Bachelor and Master's degree programs in the form of curriculum creation advice, mentorship to students, case study opportunities, guest speakers, and templates for various documents. In return, we have benefited from the work of many students doing internships with us, study groups providing recommendations on our emergency management program, and a graduate pool to select employees from when positions open up.

We feel the kind of program is very beneficial for both York University and the City of Brampton. As such, we see the extension of the program into the PhD as a logical next step and we will commit to continue our support in similar fashion to what we have done in the past.

As practitioners, we have limited time to devote to research and development in the field. We tend to copy what has been tested in other jurisdictions, hoping we can adapt programs to our own community. The arrival of a PhD program will spell a new era for the research and development of the field of emergency management as we see this as an opportunity to have PhD candidates play an important role in bringing local and Canadian content to the field.

For all of these reasons, you can count on the support of the Brampton Emergency Management Office.

Rick Bernard  
Manager, Emergency Management  
Brampton Fire and Emergency Services

Date: February 1,  
2022

RE: Letter of Support for York University's Disaster and Emergency Management PhD Program

Dear Mr. Kennedy,

The Canadian Risk and Hazards Network (CRHNet) is a not-for-profit organization established in 2003 to promote and strengthen disaster risk reduction and emergency management in Canada. The Network creates an environment for hazards research, education, and emergency management communities to effectively share knowledge and innovative approaches that reduce disaster vulnerability. This letter conveys CRHNet's continuing support for the development and offering of the PhD program by York University relating to emergency management and disaster risk reduction.

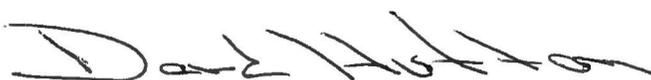
The increasing impacts of climate change and the COVID-19 pandemic clearly demonstrate the critical ongoing need to advance knowledge, strategies and tools related to Canada's emergency management and disaster risk reduction capacities. Confronted by the growing complexity of this field, the demand for formal education at the doctorate level has increased substantially as organizations, practitioners, and academics alike seek greater knowledge to respond to this global change. A doctorate program at York University will do much in addressing the demand for research and evidence-based practices in Canada.

Additional information on the CRHNet can be accessed at <https://crhnet.ca/>. You may also contact our President at [president@crhnet.ca](mailto:president@crhnet.ca) should you require additional information. Thank you.

Best regards,



Jodi Manz-Henezi, President CRHNet



## Appendix E: Admission Requirements

*The following information will be appended to the current Disaster and Emergency Management description available in the graduate calendar.*

### **Admission Requirements**

The deadline for applications is published on the Admission website.

Applicants must have:

- ☐ A master's degree, or equivalent, from a recognized university in field(s) relevant to disaster and emergency management, with a grade average of at least B+. Examples of degrees relevant to disaster and emergency management include master's degrees in environmental studies, urban planning, science and technology studies, anthropology, sociology, or other fields, where the student has completed a significant amount of coursework or thesis research related to disasters or emergency management.
- ☐ Three letters of recommendation.
- ☐ A statement of interest that provides a cogent rationale for undertaking studies in disaster and emergency management.
  - ☐ A sample of written work relevant to graduate studies in disaster and emergency management.
- ☐ A Curriculum Vitae or Resume that demonstrates academic and/or professional excellence.

### **Degree Requirements**

The PhD program is an advanced training program with the purpose of equipping graduates with the ability to advance theory, practice, and teaching within the field of disaster and emergency management. The program culminates in the preparation of a dissertation that makes an original contribution to scholarship in the field of disaster and emergency management.

All PhD students and candidates are required to develop a plan of study in which they provide an integrated, coherent rationale for their studies as they relate to their coursework, comprehensive examination, and dissertation. This plan will be updated by the student and reviewed annually by the student's supervisor and the Graduate Program Director.

All PhD candidates must have a faculty member agreed upon by the student, the faculty member, and the Graduate Program Director by the end of their first year in the program. Faculty member supervisors are responsible for ensuring that students develop an integrated, coherent plan of study.

Faculty

member supervisors are also responsible for ensuring students are effectively supported towards completing their degree requirements in timely fashion and for providing them with general academic advice (including, but not limited to, preparing for their comprehensive examinations; selecting elective courses; applying for scholarships and teaching fellowships; writing their dissertation; attending and contributing to scholarly conferences and learning how to prepare scholarly papers for publication in learned journals; and undertaking a job search either in academia or non-academic sectors).

## **1. Course Requirements**

a) Students are required to take the equivalent of four graduate courses in the field of DEM, including 6.0 credits of core DEM theory (DEMS 7700) a 3.0 credit seminar for the development of dissertation proposals (DEMS 7750), and a 3.0 credit course on Teaching, Learning, and Pedagogy.

b) Students are required to take an additional 6.0 credits in qualitative and quantitative methods (7730 and 7740), unless granted a waiver or advanced standing as described in the program handbook.

c) Students are required to take an additional 9.0 credits of electives to support their area of specialization for dissertation research, as approved by their supervisor. These courses may include directed reading classes, as deemed appropriate by their supervisor.

## **2. Comprehensive Examination**

Graduates need to demonstrate a mastery of the field of disaster and emergency management in order to be successful contributors to academic- and practice-based research. The comprehensive exam process is designed to provide students with the mentorship and support to gain this mastery, and to require a high-quality demonstration of knowledge before they proceed into their dissertation. The comprehensive examination is also a pivotal point for determining whether students should be allowed to proceed with their studies or be guided to withdraw from the program.

The comprehensive exam process consists of two written examinations and a confirmatory oral examination, with the timelines laid out in the program handbook. The examinations will be evaluated by a three-person Comprehensive Examination Committee, convened by October 1<sup>st</sup> of each year by the Graduate Program Director.

The first examination will consist of an in-person, 2-3 essay-based questions designed to ascertain the PhD candidate's grasp of essential DEM theoretical concepts and materials covered in the required course. The second examination consists of 2-3 questions linked to the Doctoral student's specific research areas of interest. The provisional reading list for the exam is developed by the student, their supervisor, and approved by the Graduate Program Director. This exam is a take-home, essay-based exam.

The final stage in the comprehensive examination process is an oral exam intended to confirm the student's mastery of PhD coursework, methodological training (including material from DEMS 7730 and 7740), and exam responses. The oral exam will last between 60 and 90 minutes and will be conducted in a closed-door session with the student and the Comprehensive Examination Committee. The comprehensive examination committee is required to provide the assessment of each candidate within 5 business days of the comprehensive examination.

Following the completion of the written and oral examinations, the Comprehensive Examination Committee will assign one of the following assessments to the exam:

- Clear pass (i.e., no further work needed)
- Conditional pass (i.e., portions of one or both exams must be rewritten)
- Fail with rewrite (i.e., one or both of the written exams and/or oral exam must be retaken)

☒ Fail with no re-write (i.e., failure with withdrawal from the program required)

### **3. Language Requirement**

Students working in an area where the language is other than English must demonstrate to the members of their dissertation supervisory committee that they have the ability to read primary sources and secondary literature in that language.

### **4. Dissertation**

Students must complete a dissertation that makes an original contribution to science and technology studies scholarship.

### **Time Limits**

Full-time students are expected to complete their studies within five academic years of admission (15 terms).

**1. Program:** Ph.D. Disaster & Emergency Management

**2. Course Number:** DEMS 7700

**3. Credit Value:** 6.0

**4. Long Course Title:** Critical Theory and Practice in Disaster & Emergency Management

**5. Short Course Title:** Critical Theory and Practice in DEM

**6. Effective Session:** Fall 2022, pending approval of the PhD program

**7. Calendar (Short) Course Description:**

Students will develop an understanding of theories, approaches, methods, and issues in comprehensive emergency management through a deep reading of seminal literature and debates in the field. Case studies from within and beyond Canada will be discussed, considering aspects of risk, vulnerability and resilience. Contrasting disciplinary perspectives on the critical studies of disaster will be analyzed and compared. Pre-/co-requisites: None

**8. Expanded Course Description:**

This is a required, full-year course for students in the DEM doctoral program. The course is divided into two parts (one semester each): Part 1) Risk, Vulnerability, and Resilience; Part 2) Research and Practice.

*Part 1: Risk, Vulnerability, and Resilience.* Disasters and emergencies have long been understood through three meta-narratives: risk, vulnerability, and resilience. In this course, we explore in depth each approach to understanding, preparing for, and responding to disasters. Material covered includes risk, vulnerability, resilience, and disaster theory; risk governance and the construction of risk in society; and introduction to types of hazards. Students will apply these concepts to real-world scenarios and contemporary events.

*Part 2: Research and Practice in Disaster and Emergency Management.* Disasters and emergencies attract a wide variety of attention from practitioners, academics, governments, and the public. In this course, we explore the different disciplinary approaches to academic research on disasters (including sociology, anthropology, philosophy, science and technology studies, systems theory, decision-making, and public administration) and the practitioner experiences in the field (including government, non- governmental, and private sector roles). The part of the course is based on deep-dive visits by experts from each field, with an emphasis on critical reflection between the issues raised by each perspective.

**9. Course Learning Outcomes:**

Upon completion of this course students should be able to:

- ☐ Situate Disaster and Emergency Management (DEM) as both a field of practice and study, understanding the historical evolution, current state, and contemporary challenges in each.
- ☐ Demonstrate familiarity with the variety of fast- and slow-onset hazards that exist in Canada and globally, as well as fluency in hazard-specific and all-hazard approaches to emergency management.

- ☒ Understand the concepts of risk, vulnerability, and resilience, and be able to critically interrogate competing narratives about disasters and emergencies.
- ☒ Identify current practices in the construction, management, and governance of risk, and be able to identify areas that require improvement and emerging best practices.
- ☒ Critically reflect on the ideas of DEM as a profession and DEM as an interdisciplinary pursuit, and be able to practice in both academic and non-academic sectors in an ethical and methodologically rigorous way.
- ☒ Be able to articulate the differences between each discipline's approach to studying DEM, effectively communicate with DEM researchers from each perspective, and appreciate the limits of one's knowledge about in each of these disciplines (and how to continue learning within each).
- ☒ Appreciate differing forms of expertise, including from varying disciplines, professions, and epistemic communities, including Indigenous and traditional knowledge. Understand how these perspectives can be rigorously integrated into research and practice.

### **10. Rationale:**

DEMS 7700 will form the backbone, core course of the new doctoral program in Disaster and Emergency Management. The course is responsible for ensuring that all doctoral students have a sufficiently strong foundation in the field, its practice, and its varying disciplinary perspectives to be able to successfully undertake a dissertation in the field. The course represents an entirely new course when compared to existing offerings in the DEM Bachelor's and Master's programs.

### **11. Evaluation:**

Evaluation for this course follows the same format for both semesters. They are as follows:

- ☒ Weekly Reflection Papers - 10%
- ☒ Seminar (Attendance, Presentation, and Participation) - 15%
- ☒ Term Paper - 45%
- ☒ Final Examination - 30%

Seminars are lived intellectual experiences and “conversations with a purpose.” Each week's 3-hour meeting will begin with a 15- to 30-minute presentation on the week's topic by the instructor. It will then be followed by a student-led discussion, where the assigned readings are critically discussed. Each

seminar member will be ready to elaborate on at least one major idea from the readings or from elsewhere, with references. Participation in the seminar is a requirement for this course.

Details on the evaluation criteria are provided below:

#### **Weekly Papers (10%):**

- ☒ Students are expected to read the required material ahead of each seminar session and be prepared to critically discuss the topic in class. Students are required to prepare 2 written questions on these materials and submit them to the instructor at the start of each seminar.

#### **Seminar Participation & Leadership (15%):**

- ☒ Each student must lead at least two of the weekly seminars based on the literature assigned

that week. Students will be required to provide a short summary of the material to demonstrate mastery, offer a critical reflection on a real-world disaster using the theoretical ideas from that week, and facilitate discussion on the topic. A special effort should be made to use teaching aids such as PowerPoint presentations and/or summary handouts. Students are expected to participate fully in each seminar session, even those they aren't leading.

#### Term Paper (30%):

- ☐ Students are to select a crisis event (local, provincial, federal or international), and discuss it through the lens of one of the perspectives discussed in class. Students are to submit a two-page proposal on their term paper by Week 3. This proposal is not marked, but the instructor must approve the proposal in order for the student to proceed with the term paper. The proposal must include a substantive topic, a brief analysis of the topic, a research question(s), a thesis or argument, and a preliminary bibliography. The instructor will be available to discuss each proposal with students
- ☐ Maximum of 8,000 words (25-30 typewritten double-spaced pages, excluding bibliography).

#### Final Exam (30%)

- ☐ The final exam is a take-home, open book essay exam that will give students the opportunity to summarize and synthesize what they have learned in the class. Grading emphasis will be on content and coverage rather than length. Questions will be handed to students on the last day of class and students will have one week to submit the exams. This exercise is designed as a way to begin the preparation process for the comprehensive examination process that will follow, and to offer an opportunity to get feedback in a lower-stakes environment.

#### **11. Integrated**

**Courses:** Not applicable

#### **12. Crosslisted**

**Courses:** Not applicable

#### **13. Faculty Resources:**

All core DEM Faculty (Drs. Agrawal, Asgary, Etkin, Kennedy, Mamuji, Bogdan, Spinney, and Rozdilsky) are qualified to teach this course, although attention must be paid to the continuity of experience between both semesters of 7700 and 7750 (for instance, considering co-teaching arrangements).

The course will be offered once every other year during the initial start-up phase of the Doctoral program (intake is only offered every other year for the first three cohorts). Once sustainability is proven and intake moves to annual, this course will be offered annually. On its own, this course has a low impact on the teaching load within the DEM program.

#### **14. Physical Resources:**

Given the seminar-style format of this course, it is recommended that the room provided have movable tables and chairs in order to create a U-shape to facilitate discussion, or a boardroom setup. The room must be equipped with audio-visual capabilities. No further lab facilities are required, although the instructors may elect to conduct 'field-trips' during some class sessions to professional emergency management locations (e.g., the City of Toronto Emergency Operations Centre) or to other faculties on campus (e.g., as part of the exploration of different disciplinary perspectives).

## 15. Bibliography and Library Statement:

The course is based on a series of weekly readings, expected to total 100-200 pages of reading per week. This volume of reading is necessary to prepare students for the comprehensive examination process

(and to help the students read many of these materials), and to help ensure that all students have a strong disciplinary foundation in DEM to be able to successfully propose a program of doctoral research.

Books used in this class include following, as well as several other resources to be added in the full course outline:

- Beck, U. (1992). *Risk society: Towards a new modernity*. Sage.
- Birch, E., & Wachter, S. (Eds.). (2006). *Rebuilding urban places after disaster: Lessons from Hurricane Katrina*. University of Pennsylvania Press.
- Etkin, D. (2014). *Disaster theory: an interdisciplinary approach to concepts and causes*. Butterworth-Heinemann.
- Eriksen, C. (2013). *Gender and wildfire: Landscapes of uncertainty*. Routledge.
- Fink, S. (2013). *Five days at Memorial: Life and death in a storm-ravaged hospital*. Atlantic Books Ltd.
- Gratz, R. B. (2015). *We're Still Here Ya Bastards: How the People of New Orleans Rebuilt Their City*. Bold Type Books.
- Katz, J. M. (2013). *The big truck that went by: how the world came to save Haiti and left behind a disaster*. St. Martin's Press.
- Klinenberg, E. (2015). *Heat wave: A social autopsy of disaster in Chicago*. University of Chicago Press.
- Larson, E. (2011). *Isaac's storm: A man, a time, and the deadliest hurricane in history*. Vintage.
- Laskin, D. (2009). *The children's blizzard*. Zondervan.
- Perry, R. W., Lindell, M. K., & Tierney, K. J. (Eds.). (2001). *Facing the unexpected: Disaster preparedness and response in the United States*. Joseph Henry Press.
- Rodríguez, H, Donner, W. and Train, J. (2018). *Handbook of disaster research*. Springer.
- Scott, J. C. (1998). *Seeing like a state: How certain schemes to improve the human condition have failed*. Yale University Press.

In addition to the books listed above, weekly readings will be drawn from several disaster and emergency management-related journals that are already maintained in the York University library.

Please see the Library Statement of Support in Appendix I.

## Appendix G: Proposal for DEMS 7750

**1. Program:** Ph.D. Disaster & Emergency Management

**2. Course Number:** DEMS 7750

**3. Credit Value:** 3.0

**4. Long Course Title:** Research Design & Proposal Development in Disaster and Emergency Management

**5. Short Course Title:** Research Design in Emergency Management

**6. Effective Session:** Fall 2022, pending PhD program approval

**7. Calendar (Short) Course Description:**

This seminar introduces key skills in research project design, including scoping a research question, situating it in the literature, determining appropriate methodological tools, and conducting effective literature reviews. Students will also develop skills in academic project management while working towards the development of a dissertation proposal. Pre-requisites: DEMS 7700, DEMS 7730, DEMS 7740.

**8. Expanded Course Description:**

As doctoral students in Disaster and Emergency Management, it is critical to be able to (a) identify effective and important research questions, (b) translate these questions into viable projects, (c) execute those projects and disseminate results, and (d) fit these individual projects into your overall research agenda and portfolio. This course is designed to help students progress from learning raw methodological skills in DEMS 7730 and 7740 – and from developing a deep understanding of what research in Disaster and Emergency Management looks like in DEMS 7700 – to being able to actually execute these skills in service of an effective and successful dissertation.

The core focus of this class is helping students to conceptualize an effective dissertation project and to translate this idea into a well-polished dissertation proposal. The class begins by analysing the range of successful dissertations and helping students assess the viability of their intended project. It then moves

to focusing on the nuts and bolts of effective literature reviews and methodological designs (building on 7730 and 7740). Finally, the course includes significant material focused on professionalization and career development, helping students to begin thinking about their long-term goals from early in the program.

**9. Course Learning Outcomes:**

Upon completion of the course, students will be able to:

- ☐ Identify the difference between an effective and an ineffective research project, gain increased confidence in separating good ideas from bad, and be able to provide themselves and peers with substantive, collaborative feedback on project ideas.
- ☐ Be able to translate a well-scoped project into an appropriate methodological design and develop strategies for carrying out all elements of the work effectively.

- ☒ Be able to write effective research proposals, both for the purpose of a dissertation proposal but also with respect to transferable skills for grant applications.
- ☒ Understand the ethical and practical roles and responsibilities involved in managing a large-scale research project and have developed the skills to do this effectively in a dissertation setting.
- ☒ Develop a set of writing skills and practices that will help them to be able to effectively undertake the dissertation as a project.
- ☒ Develop the documents and narrative needed to be successful on the job market and showcase their research as an entire pipeline.

### 10. Rationale:

DEMS 7750 is designed to be the key translation between theoretical courses (e.g., DEMS 7700, 7730, and 7740) and the practical skills of actually completing a successful dissertation. Even under the best of supervision, there are a set of common skills – like how to ask a good question, apply skills from the methods classes, and actually manage the complexities of a modern, large-scale research project – that require formal training to properly support our graduate students. This course is designed to be a key investment in their success as doctoral candidates, helping to ensure they transition smoothly from the coursework-based to research-based portions of the degree.

### 11. Evaluation:

Course participation and leadership – 15%

- ☒ Students will be expected to come to class having read the material and being prepared for discussion. Each student will be expected to lead discussion during one class on the assigned readings, including summarizing the practices of effective researchers articulated in the reading, making connections to applicability in DEM, and leading a discussion among the students about their adoption.

Initial draft, dissertation proposal – 20%

- ☒ Approximately 2/3rds of the way through the term, students will be required to turn in an initial draft of the dissertation proposal. This proposal will be developed based on the exemplars examined in class. It will then be used for the peer-review exercise.

Peer review – 20%

- ☒ Students will be guided through the process of peer reviewing two of their colleagues' dissertation proposal drafts. The purpose here is two-fold: to provide detailed feedback for students as they look towards their revised draft, and to provide a closely-mentored experience with providing high-quality peer review. This is a skill that is very important in both academic and professional settings and requires training and support to develop.

Reflection on writing practices – 15%

- ☒ Students will be required to produce a short reflection on their emerging reading, writing, and research practices. Becoming a successful, independent researcher – whether in an academic or a non-academic setting – requires strong skills in these areas. These skills require intentional development based on experimentation, guidance, and personal reflection. Students will be encouraged to experiment with different styles of writing and researching to determine what works effectively for them, and will be guided through the process of reflecting on these approaches to help them be more successful during the dissertation process and beyond.

- ☐ The major assignment of the term is to produce a strong draft of the dissertation proposal. The goal here is to ensure timely progress towards degree completion, as well as obtaining additional feedback from other faculty and peers. This draft will not be the final version of the proposal but will provide a strong starting point for further work with their supervisor and committee.

**11. Integrated**

**Courses:** Not applicable

**12. Crosslisted**

**Courses:** Not applicable

**13. Faculty Resources:**

All core DEM Faculty (Drs. Agrawal, Asgary, Etkin, Kennedy, Mamuji, Bogdan, and Rozdilsky) are qualified to teach this course, although attention must be paid to the continuity of experience between this course and the year-long 7700 seminar (for instance, considering co-teaching arrangements).

The course will be offered once every other year during the initial start-up phase of the Doctoral program (intake is only offered every other year for the first three cohorts). Once sustainability is proven and intake moves to annual, this course will be offered annually. On its own, this course has a low impact on the teaching load within the DEM program.

**14. Physical Resources:**

Given the seminar-style format of this course, it is recommended that the room provided have movable tables and chairs in order to create a U-shape to facilitate discussion, or a boardroom setup. The room must be equipped with audio-visual capabilities. No further lab facilities are required.

**15. Bibliography and Library Statement:**

In addition to individual journal articles on dissertation proposals, writing, and project management, students will use three common texts during their progress through this class:

Kelsky, K. (2015). *The professor is in: The essential guide to turning your Ph. D. into a job*. Three Rivers Press.

Sword, H. (2017). *Air and light and time and space: How successful academics write*. Harvard University Press.

White, E. B., & Strunk, W. (1972). *The elements of style*. New York: Macmillan.

Please see the library Statement of Support in Appendix I.

## Appendix H: Comprehensive Examination Process

Graduates need to demonstrate a mastery of the field of Disaster and Emergency Management in order to be successful contributors to academic- and practice-based research. The comprehensive exam process is designed to provide students with the mentorship and support to gain this mastery, and to require a high-quality demonstration of knowledge before they proceed into their dissertation. The comprehensive examination is also a pivotal point for determining whether students should be allowed to proceed with their studies or be guided to withdraw from the program.

The DEM PhD comprehensive exam process consists of two written examinations and a confirmatory oral examination (see timeline below). Normally, students will complete their exams in the second year of the program. The written exams will take place annually during March, and the oral exams will follow in April. There will be an opportunity for rewrites (see details below) the following September.

To ensure consistency and standards over time, the core reading list should 'weigh' at roughly 50-70 books (wherein one book can be substituted by roughly three articles, or an appropriate volume of non-academic reports and resources). The specialized reading list should comprise of roughly 40-60 books, with a similar conversion ratio.

By October 1<sup>st</sup>, the Graduate Program Director (GPD) will organize/confirm a three-person Comprehensive Examination Committee for all students taking the examination that year (consisting of York DEM full-time faculty members). This committee will stand for a period of one year, and its membership will be announced to all students in the program.

Note that in the first year of the program, the Committee will be convened at least six months earlier to allow for the development and approval of the reading list, which will be included in the graduate handbook. The committee will also be responsible for developing, prior to program start, a set of rubrics and guidelines for how the examinations will be assessed, which will also be distributed in the graduate student handbook.

The first written examination will consist of 2-3 questions designed to ascertain a doctoral student's grasp of selected essential DEM theoretical concepts and material covered in the program's required doctoral courses, as well as their comprehension of readings contained in the PhD in DEM comprehensive reading list. This reading list will be provided to each incoming PhD in DEM student during the initial program orientation, which will give them nineteen months to read

and comprehend the essential journal articles and books contained therein. Because this is an examination based on common materials and with common questions, it is administered as an in-person examination.

The second written examination will consist of 2-3 questions linked to the Doctoral student's grasp of theoretical concepts and material related to her/his specific research areas of interest. The provisional reading list for this exam will be developed by the student and the supervisor. By October 15<sup>th</sup> of their second year, this list will be submitted to the Comprehensive Exam Committee, and will be approved and returned to the student (either for study as is or with a requirement for modifications) by November 1<sup>st</sup>. This examination is administered as a take-home examination, as it is individualized to each student and is intended to be used as an ongoing resource as students work towards their proposal and dissertation.

The final stage in the comprehensive examination process is an oral exam intended to confirm the student's mastery of PhD coursework, methodological training (including material from DEMS 7730 and 7740), and exam responses. The oral exam will last between 60 and 90 minutes and will be conducted in a closed-door session with the student and the Comprehensive Examination Committee.

Following the completion of the written and oral examinations, the Comprehensive Examination Committee will assign one of the following assessments to the exam:

- Clear pass (i.e., no further work needed)
- Conditional pass (i.e., portions of one or both exams must be rewritten)
- Fail with rewrite (i.e., one or both of the written exams and/or oral exam must be retaken the following September and be reassessed by the same committee)
- Fail with no re-write (i.e., failure with withdrawal from the program recommended)
  - To remain in the program following a "fail with rewrite" result, the student must retake the requisite exams (same reading list but different questions) in September and achieve an assessment of either "clear pass" or "conditional pass."

Students are allowed to appeal the results of their assessment to the Comprehensive Examination Committee in writing within 14 calendar days of the release of results from the first set of exams. Any subsequent appeals, or appeals made in reference to the rewritten exam, must follow the petition procedures laid out by the Faculty of Graduate Studies.

The key timelines for the comprehensive examination process are as follows, with reference to the academic year of a given student's experience in the program:

**September, Year 1:** Students are provided with a list of examinable materials for the first (common) comprehensive examination, and a set of instructions for how to formulate their second comprehensive exam reading list.

**October 1, Year 2:** GPD announces three-person membership of the Comprehensive Examination Committee for the year.

**October 15, Year 2:** Students submit a 1-2 page proposal for their second comprehensive examination area of study. The proposal should detail the area of focus, its importance, its scope (e.g., what is included and excluded) and an early set (e.g., 10-20) of reading items on the list.

**January 15, Year 2:** Students submit a proposed reading list (developed by them and their supervisor) focused on their area of specialization (their intended dissertation topic) for their second comprehensive examination to the Comprehensive Examination Committee for review.

**February 1, Year 2:** Comprehensive Examination Committee returns proposed second examination readings lists, noting either “approved for study as is” or requiring specific modifications (e.g., addition of certain texts, decreased length, etc).

**Second week of April, Year 2:** First comprehensive examination is written by all students (in-person, six hours).

**Third week of April, Year 2:** Second comprehensive examination is written by all students (take- home, five days).

**Fourth week of April, year 2:** Oral examinations for each student.

**May 1, Year 2:** Deadline by which Comprehensive Examination Committee must release results of the comprehensive exams for all students.

**Early September, Year 3:** Make-up date for students who have been required to re-write a comprehensive examination.

## ***Appendix J: Course Proposal for DEMS 7790***

**1. Program:** Ph.D. Disaster & Emergency Management

**2. Course Number:** DEMS 7790

**3. Credit Value:** 3.0

**4. Long Course Title:** Teaching, Learning, and Pedagogy in Emergency Management

**5. Short Course Title:** Emergency Management Pedagogy

**6. Effective Session:** Fall 2022, pending PhD program approval

### **7. Calendar (Short) Course Description:**

This seminar examines pedagogical theory and teaching and learning frameworks relevant to emergency management education in both university and professional settings. Students will explore a wide range of teaching and learning strategies. They will also have the opportunity to develop personal insights into their own teaching styles and competencies, while developing expertise and experience across a variety of genres.

### **8. Expanded Course Description:**

Regardless of sector, researchers and professionals in the field of emergency management are invariably tasked with teaching, training, and mentoring colleagues and emerging professionals. This is certainly true within the academic world of emergency management, where graduates of the PhD program will be expected to plan courses, teach classes, and develop and evaluate program curriculum. It is also, however, true of those who work in professional and practitioner capacities, where they will be expected to lead training seminars, mentor their employees in managing complex emergencies, and facilitate learning about extreme – and at times unpredictable – events.

In this class, students will develop expertise in teaching and pedagogy across genres and sectors. They will have the opportunity to develop personal insights into teaching styles and philosophies, while learning about practical skills and techniques that are relevant for different audiences. Students will be introduced to the notion of evidence-informed pedagogy and become competent at assessing research from pedagogical studies. They will also be equipped to be innovators in disaster and emergency education, developing new techniques and strategies to improve training within the field.

### **9. Course Learning Outcomes:**

Upon completion of the course, students will:

1. Navigate research and evidence within the scholarship of teaching and learning.
2. Develop a personal understanding of teaching and learning theory and processes with respect to

emergency management education at the university level and in professional settings.

3. Develop of personal teaching style and repertoire based upon informed assessment of a variety of teaching and learning strategies.

4. Learn about and practice a variety of teaching and learning techniques, and foster an interest in ongoing pedagogical development.
5. Think explicitly and reflectively about adapting teaching techniques across different audiences and settings, including one-on-one mentoring situations in academic and professional settings alike.

### **10. Rationale:**

Many doctoral programs fail to equip their graduates for an essential part of their job: teaching and mentoring. This course represents an investment in that skill, as well as preparation for candidates heading towards job searches that require teaching demonstrations or portfolios. This course will also improve the quality of teaching provided by students within the program while in TA roles. By integrating theory and practice, students will gain both conceptual understanding and tangible skills in the discipline of evidence-informed teaching.

### **11. Evaluation:**

Lesson plan and lecture presentation – 25%

- ☐ As part of this course, students will prepare for and deliver a 3-hour lecture/presentation geared to assigned topic in an undergraduate EM course. The lecture material will be determined well in advance and will be approved by the course director. In conjunction with the host instructor, students will be required to develop a statement of learning outcomes, a lesson plan, and methods of evaluating student learning. The course instructor will provide detailed feedback and support. Students will complete a reflection on the experience in class and design process, and present a portfolio involving all of the materials from design to reflection.

Seminar Practicum – 25%

- ☐ Students will prepare the structural components and questions required to conduct an effective one hour seminar on a pre-approved topic of scholarly relevance to emergency managers. Fellow DEM PhD students will attend the seminar. The student lead will be required to provide them with a reading list of relevant background articles for the discussions well prior to facilitating the seminar session.

Class participation – 25%

There is an expectation that you will be actively involved in the ongoing class discussions. As this is a PhD-level seminar course, prior preparation outside of the classroom is essential for learning within each seminar session. Grades on this element of the course will be determined by the extent to which students demonstrate their knowledge and analysis of the relevant course material during class discussions. Students must bring ideas to the class that push discussions in new directions and thinking of the topics covered in the course. There is an expectation that students will:

- ☐ Come prepared to every class;
- ☐ Complete all work on time and with proper thought;
- ☐ Treat others and the course director with respect;
  - ☐ Turn off all electronic devices while in the seminar session, except when explicitly permitted

by the course director for course-related purposes.

Written assignment – 25%

☐ Students will be required to develop a written paper based on evidence-informed pedagogical practices relevant to their intended career. Specific instructions for this term paper will be provided by the instructor.

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**11. Integrated**

**Courses:** Not applicable

**12. Crosslisted Courses:**

This course will be cross listed with a course code appropriate for the MDEM program, by permission of instructor.

**13. Faculty Resources:**

Core DEM faculty with experience in the Scholarship of Teaching and Learning will teach this class. The course will be run in close integration with all core DEM faculty, due to the partnerships for experience- based learning in undergraduate classrooms.

The course will be offered once every other year during the initial start-up phase of the Doctoral program (intake is only offered every other year for the first three cohorts). Once sustainability is proven and intake moves to annual, this course will be offered annually. On its own, this course has a low impact on the teaching load within the DEM program.

**14. Physical Resources:**

Given the seminar-style format of this course, it is recommended that the room provided have movable tables and chairs in order to create a U-shape to facilitate discussion, or a boardroom setup. The room must be equipped with audio-visual capabilities. No further lab facilities are required.

**15. Bibliography and Library Statement:**

In addition to individual journal articles on the scholarship of teaching and learning, the following pedagogical resources will be used in class:

Preston, John (2012), *Disaster Education: Race, equity and pedagogy*, Springer E-books, Boston, ISBN: 9460918735 (electronic bk.), 9789460918735 (electronic bk.)

Aarabi, P. (2007), *The Art of Lecturing: A Practical Guide to Successful University Lectures and Business Presentations*, Cambridge University Press, Cambridge.

Davis, B. (2009), *Tools for Teaching*, Second Edition, Jossey-Bass, San Francisco.

Clawson, J. and Haskins, M. (2006), *Teaching Management*, Cambridge University Press, Cambridge.

Fry, H., Ketteridge, S., and Marshall, S., (2003). *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice*, Kogan Page, London

Please see the library Statement of Support in Appendix I.