

# Master of Disaster & Emergency Management

Student Handbook 2024-25





# MASTER OF DISASTER AND EMERGENCY MANAGEMENT

# **STUDENT HANDBOOK**

2024/2025

York University offers the most comprehensive disaster and emergency management program with all four levels of education; the Certificate, Bachelors, Masters and PhD in Disaster and emergency management in Ontario.

The Master of Disaster and Emergency Management (MDEM) is designed to meet the critical need for professionals with advanced level knowledge and skills in this exciting and important field. The program will appeal to those currently working in the field looking to advance knowledge to assume positions of increasing responsibility as well as those aspiring to become Disaster & Emergency Management professionals. Studying on either a full-time or part-time basis, you will develop the knowledge and skills to prevent, mitigate, prepare for, respond to and recover from local, national and international disasters and emergencies. The program is interdisciplinary drawing on the strengths of York faculty and professionals in the field to offer a wide range of expertise in areas





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Sabina Passarelli (Lackner)

#### **GRADUATE PROGRAM ADMINISTRATOR**

Sabina has been with the program since 2006, one year after the launch of the program, and as a Graduate Program Administrator since 2007. She ensures the smooth running of the administrative aspects of the program and supports faculty and students everyday. **Expertise**: excellent communication skills, compassionate, and administration of two graduate programs—MDEM and MFac (Master of Financial Accounting). She has two lovely daughters, Ava and Ella. **Education**: BA, Sociology, York University, 2005.

### **Degree Options and Requirements**

To complete the program there are two options available:

Major Research Paper (MRP): 24-course credits, equivalent to 8 3-credit courses + MRP, worth 6 credits

Course work: 30-course credits, equivalent to 10 3-credit courses

\*

You don't have to know exactly which option to choose right away; this will be something you want to determine in your second term after taking some courses and getting a feel for the program etc. These two options can be completed on a part-time basis or a full-time basis. The recommended course load for a full-time student is three 3-credit courses per semester and for a part-time student is 1-2 3-credit courses per semester. The recommended time to completion is 4 terms for full-time students and 8 terms for part-time students

	MAJOR RESEARCH PAPER (MRP)	COURSE WORK		
Total number of courses	8 courses (24 credits)	10 courses (30 credits)		
Other requirements	MRP (80-100 pages) (6 credits)			
Required courses	DEMS 5020 – Disasters: Concepts & Causes DEMS 5030 – Social & Behavioural Dimensions of Disasters DEMS 5051 – Research Design & Qualitative Methods DEMS 5052 – Quantitative Research Methods	DEMS 5020— Disasters: Concepts & Causes DEMS 5030 — Social & Behavioural Dimensions of Disasters  EITHER DEMS 5051 — Research Design & Qualitative Methods OR DEMS 5052 — Quantitative Research Methods		

# **MDEM Degree by Major Research Paper**

#### Courses:

Students must successfully complete 24 course credits including the following:

Core required courses: 6 credits

DEMS 5020 3.0 Disasters: Concepts and Causes/Same as Environmental Studies

DEMS 5030 3.0 Social and Behavioural Dimensions of Disasters

#### Six additional credits in research methods:

DEMS 5051 3.0 Research Design and Qualitative Research Methods AND

DEMS 5052 3.0 Quantitative Research Methods

In consultation with the student's supervisor, alternative 6 credits research methods course(s) from other graduate programs in the university may be acceptable. <u>Twelve</u> additional credits selected in consultation with student's supervisor, <u>six</u> of which must be from courses within the MDEM program, and the rest may be from the MDEM program and/ or from appropriate graduate courses offered across the university based on student's field of specialization.

Major Research Paper (MRP): students in the MRP option are required to write a major research paper on an approved topic by mutual agreement with a faculty member (supervisor) from the program. Topics can either be a critical evaluation and synthesis of the current state of knowledge and research within a defined area of study or may focus on a specific research topic in depth. Papers must comprise original material of scholarly nature, demonstrate that the student is capable of independent research and critical analysis and be of publishable quality. The MRP should be between 80-100 pages. A sample template for the MRP proposal structure is available after course descriptions' page. The paper is graded on a pass/fail basis by a committee composed of the student's supervisor and one other faculty member (a second reader) who is a second expert on the topics.

# **MDEM Degree by Course Work**

The program is offered on a full-time and part-time basis. The recommended time to completion is 4 terms (16 months) for full-time students and 8 terms (32 months) for part-time students.

Courses: Students must successfully complete 30 course credits including the following:

Core required courses: 6 credits

DEMS 5020 3.0: Disasters: Concepts and Causes / Same as EU/ENVS 6401 3.0

DEMS 5030 3.0: Social and Behavioural Dimensions of Disasters

#### 3 additional credits in research methods from either:

DEMS 5051 3.0: Research Design and Qualitative Research Methods OR

DEMS 5052 3.0: Quantitative Research Methods

An alternative 3 credits Research Methods course from any other graduate programs at the university may be acceptable in consultation with MDEM program director.

**21 additional credits:** 12 (minimum) of which must be from courses within the MDEM. Other courses may be selected in consultation with the Program Director from appropriate graduate courses from other graduate programs at the university.

Other Program Element For Both Degree Options: participation in the annual Tabletop Emergency Exercise (TEE). This will allow students to apply the knowledge they have gained in the classroom to an exercise based on a disaster scenario. The TEE will typically be a one day event on the last Saturday of March; however the date will be confirmed every year through DEMSA and the DEM DASHBOARD (See Page 10 for details on DEMSA and DASHBOARD).

# **Optional/Elective Courses**

GS/DEMS 5000 3.0 Directed reading

GS/DEMS 5010 3.0 Advanced Disaster and Emergency Management (not offered in 2024)

GS/DEMS 5040 3.0 Natural Disasters

GS/DEMS 5053 3.0 Topics in Business Continuity

GS/DEMS 5060 3.0 Terrorism Studies I

GS/DEMS 5080 6.0 Emergency Management Practicum

GS/DEMS 5082 3.0 Medical and Public Health Issues in Disasters - An introduction

GS/DEMS 5083 3.0 Disaster & Emergency Management (EM) Legislation

GS/DEMS 5710 3.0 Critical Infrastructure Protection

GS/DEMS 6070 3.0 Disaster Ethics

GS/DEMS 6999 3.0 Major Research Paper

For more potential elective courses from other Faculties and graduate programs, please, visit their websites. For example:

The Faculty of Environmental & Urban Change (EUC)

www.yorku.ca/gradstudies/environmental-studies/current-students/courses/

Earth and Space Science and Engineering

lassonde.yorku.ca/esse/academics/graduate/graduate-courses/

You will need permission to take graduate level courses from outside of the MDEM program and from another university in Ontario. The forms for this purpose can be found here:

For courses outside MDEM at York:

www.yorku.ca/gradstudies/students/current-students/registration-enrolment/fgs-forms/

For courses in another Ontario University:

www.yorku.ca/gradstudies/wp-content/uploads/sites/184/2021/03/ovgs-application.pdf

# **Course Descriptions**

#### GS/DEMS 5000 3.00 Directed Reading

May be taken with permission of the Graduate Program Director if the student can find a faculty member, who is willing to supervise the topic. It is recommended for students who are short one course for graduation.

#### GS/DEMS 5010 3.00 Advanced Disaster and Emergency Management

This course explores the applications of advanced theory, methods and technologies in disaster and emergency management. Disaster and emergency management decision and planning methods and models, decision support systems, information systems and disaster databases, geographic information systems, remote sensing, various disasters and emergency management software and their applications are discussed.

#### GS/DEMS 5020 3.00 Disasters: Concepts and Causes

This course focuses on the risk to society from hazards and disasters, and how society adapts to those risks. Course content will focus on disaster theory and the processes within society and the environment that creates vulnerability. An interdisciplinary and mainly social science approach with a global perspective will be taken, but with some emphasis on Canadian content. General topics will include (1) disaster data and theory, (2) patterns of risk, (3) processes that create vulnerability & resilience, (4) human response and coping mechanisms, (5) impacts of disasters, and (6) case studies of disasters.

#### GS/DEMS 5030 3.00 Social and Behavioural Dimensions of Disasters

This course examines social and behavioural dimensions of human interactions before, during and after emergencies and disasters, including behavioural myths and realities; linkages between individuals, families, groups, organizations, community social systems, and various levels of government; social vulnerability and the disproportionate impact of disasters upon various societal groups.

#### GS/DEMS 5040 3.00 Natural Disasters

This course focuses on natural processes including geological, hydrological, meteorological, and biophysical and how they impact people, property, and the environment around the world. Students will learn the causes and physical dynamics of various natural hazards such as earthquakes, tsunamis, hurricanes, floods, extreme weather, climate change, and pandemics to name a few. Course credit exclusion: LE/ESSE 1410 6.00: Natural, Technological and Human-induced Disasters.

#### GS/DEMS 5051 3.00 Research Design and Qualitative Research Methods

This course provides students with an introduction to philosophical bases of research design as well as a practical introduction to qualitative methods. Students will gain an understanding of the paradigmatic foundations of research, how to design and evaluate qualitative research and experiment with a range of qualitative methods (i.e., interview, focus groups, observation, archival analysis).

#### GS/DEMS 5052 3.00 Research Design and Quantitative Methods

Students are provided with a comprehensive knowledge and understanding of various quantitative research methods and their applications in disaster and emergency management. Using statistical methods, students will learn to analyze data and formulate hypotheses and conceptual relationships.

#### GS/DEMS 5053 3.00 Topics in Business Continuity

This course discusses the knowledge, methods, and procedures to understand the impacts of disasters on businesses and how to develop risk management and business continuity programs and plans. The course is based on the past and recent scholarly research, business crisis cases, existing standards such as ISO 31000 and ISO 22399, CSA Z1600 and BSI 25999.

#### GS/DEMS 5060 3.00 Terrorism Studies I

The purpose of this course is to give the student, a background to, and, overview of: terrorism in the 21st Century. It will serve to give students, in the program, an understanding of this element of the threat spectrum. It will further sensitize them to the potential dangers and probabilities that grow out of this area of critical concern.

#### GS/DEMS 5082 3.00 Medical and Public Health Issues for Non-Medical Personnel

This course addresses the common and important health issues that arise during both sudden and chronic emergencies, for victims and responders.

#### GS/DEMS 5083 3.00 Disaster & Emergency Management (EM) Legislation

This course will provide an understanding of disaster and emergency management-related legislation, orders in council and regulations within Canada, as well as how it relates internationally to NGOs and international disaster response. It will prepare students to integrate themselves into various emergency management roles within municipalities, provinces, federal government, NGOs and private sector organizations.

#### **GS/DEMS 5710 3.00 Critical Infrastructure Protection**

In this course, students will research threats, vulnerabilities and risks to critical infrastructure from the perspective of managing risks to ensure for reliability through appropriate protection and resiliency measures, regulations/laws strategies and practices as well as the importance, ways and means, of conducting periodic risk and resiliency assessments. This course is integrated with AP/DEMS 4707.

#### **GSDEMS 5080 6.00 Emergency Management Practicum**

The course provides opportunities for practical experience in the field. Students must enroll in the course in the first Winter term, upon joining the program, and carry out the placement in the following summer (May-August). Even if students are not sure about taking this course, they are advised to enroll in the course in the winter term, as the enrollment window is not available in summer. Please note, the two prerequisites DEMS 5020, DEMS 5030. The practicum can be paid or unpaid and entails 220 hours of work at the hiring organization. Placement opportunities will be announced as they become available (they are plenty) throughout the fall/winter/summer terms through course eClass. Most opportunities come along in spring so be patient and you are sure to land a placement. A noteworthy advantage of this course includes the potential for a regular job offer by the hiring organization. **Course Director:** Dr. Nirupama Agrawal; **Email**: nirupama@yorku.ca

York International: Students can explore York International for placement/ internship opportunities. The MDEM program will sup-

**GS/DEMS 6999A Major Research Paper (MRP):** The purpose of the MRP develops the student's ability to do research beyond a normal course paper. In its style and quality, the MRP should be a publishable academic work. The MRP is supervised by a faculty member of the Disaster & Emergency Management program. Students, in consultation with their supervisor, submit the MRP proposal to program office for approval before starting the work.

#### Sample Template MRP Proposal for Approval

(Note: Running head (header) may contain: Title, Your Full Name, Date)

#### **MAJOR RESEARCH PAPER PROPOSAL**

Your name

**Master in Disaster & Emergency Management** 

**York University** 

**Date** 

Supervisor's name

Title of MRP

**Research Focus/ broad area:** Example: Disaster and emergency management and planning in the First Nations communities in Ontario.

**Specific Research Topic/Question:** Example: Are there emergency plans and procedures in place for the First Nation communities and if so, are they culturally appropriate?

**Theoretical framework:** Describe which theoretical disaster models and concepts you will apply in the study, and how and why.

Justification: Speak to why the research topic and focus are necessary and how the study will contribute to the field.

**Methodology:** Describe the process, including the kind of literature (scholarly, policy, industry, sector-based, etc.), qualitative and/or quantitative research tools to be employed, data and information, and other details pertaining to the process of conducting the research.

Bibliography: supervisor-preferred referencing system with consistency of application.

Work Plan Timeline: varies according to the method and topic or focus chosen for research

# **MRP Work Plan Timeline Sample**

Task/Steps	Timeline – If graduating in 4 terms
Choose research area	By beginning of Term 2
Make connection with potential supervisor	
Develop loose plan (in conjunction with supervisor): Research Questions, Choose theoretical frame, methodology	
Ethics application	End of Term 2/Beginning of Term 3
Finalize by Proposal	By end of Term 2
Literature Review	
Protocol development (i.e. interview, survey, etc.)	
Data collection	Term 3
Data analysis (i.e. transcribing, coding, analysis)	Term 4
Final Paper	

**Research Ethics Process:** students interested in pursuing research involving human participants are encouraged to speak to their supervisor for guidance. The MDEM Ethics Review Committee will review and approve ethics applications. Details and Forms can be found here:

www.yorku.ca/gradstudies/students/current-students/thesis-and-dissertation/research-ethics/

FALL 2024									
Subject	Course Number	Course Title		Section	Day	Time	Professor or Instructor	Delivery	
DEMS	5020	Disasters Concepts and Causes		А	Wed	2:00	Jack Rozdilsky	In person	
DEMS	5051	Research Desig Qualitative Reso Methods	А	Thu	11:30	Eric Kennedy	In person		
DEMS	5060	Terrorism Stud	dies I	Α	Wed	7:00	Jack Rozdilsky	In person	
DEMS	5710	Critical Infrastruct tection	ure Pro-	А	Tue	2:30	David Baumken	In person	
			W	INTER	2025				
DEMS	5030	Social and Behavioral Di mensions of Disasters		А	Wed	2:30	Jennifer Spinney	In person	
DEMS	5052	Quantitative Me	М	Thu	4:00	Kaz Higuchi	In person		
DEMS	5053	Topics in Business Conti- nuity		М	Tue	11:30	Jack Rozdilsky	In person	
DEMS	5080	Disaster & Emergency Management Practicum		М	N/A	~	Niru Agrawal	N/A	
DEMS	5082	Medical and Public Health Issues for Non-Medical Personnel		М	Tue	4:00	Andrew Moull & Ian Attard	Remote	
			SU	MMER	2025				
DEMS	5040	Natural Disast	ters	Α	Tue, Thu	5:00	Niru Agrawal	Remote	
DEMS	5083	Disaster & Emergency Management Legislation		А	Mon	5:00	Richard Pereira & Ramya Sree	In person	
	Other Important Dates								
	Fourth Weekend of October. Prerequisite: IMS 100 (Available Free Online).								
	· & Emerge onference	ncy Management (DEMCON)	October 22-23, 2024. Student discounts available (flat rate \$200), class attendance excused for students.						
Tableto	p Emergen	cy Exercise ( <u>TEE</u> )	Fourth Saturday of March. More information will be released closer to the exercise date.						

The MDEM program fees are paid per term; therefore the number of courses students take will not be a factor in the fees per term. The fees do vary, however, based on domestic or international students, and between full time and part time students. Table 1 (Below) summarizes the fees for September 2023, although please note that these amounts are the fees listed for Fall/Winter 2023. Fees may vary from term-to-term/year-to-year. It is therefore recommended you check the link below for more up-to-date information: <a href="https://sfs.yorku.ca/fees/courses">https://sfs.yorku.ca/fees/courses</a>

Fall/Winter	Tuition		Supplementary Fees		Total (per term)	
<b>Graduate Fees</b>	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Domestic	\$1,435.51	\$717.75	\$292.03	\$148.51	\$1,727.54	\$866.26
International	\$6,275.00	#3,137.50	\$292.03	\$148.51	\$6,567.03	\$3,286.00

Scholarships are usually given out to students with outstanding academic achievements; bursaries, awards and loans focus more on financial assistance on the basis of students' need. There are different criteria for eligibility in terms of awards, loans, bursaries and scholarships. Students are encouraged to look through these criteria and apply for these accordingly. For more information on awards, scholarships and bursaries, visit <a href="yorku.ca/grads/money\_matters/money\_matters.html">yorku.ca/grads/money\_matters/money\_matters.html</a>

To apply for scholarships and bursaries within graduate studies, students must complete their **Student Financial Profile** (SFP). Once enrolled, students can access this information online through their Passport York account. More information on this can be viewed at: <a href="mailto:sfs.yorku.ca/aid/sfp/">sfs.yorku.ca/aid/sfp/</a>. Please note that there are deadlines associated with these financial scholarships or assistance. Students must carefully review eligibility criteria and deadlines early on through the term to best prepare themselves for their submissions. Furthermore, York University offers financial advising for students simply seeking advice on how to handle their finances in terms of fees. There is online help as well as a number of informational brochures available under the "Financial Advising" section at the above link.

#### **Information for New Students**

Online student financial account can be accessed here:

sfs.yorku.ca/fees/your-student-account

Fee details per term can be found here:

sfs.yorku.ca/fees/courses/2022-2023/fall-winter/graduate-studies/masters

How to make payments is listed here:

sfs.yorku.ca/fees/your-student-account/how-and-when-to-pay#how-to-make-payments

Passport York account: <a href="mailto:registrar.yorku.ca/enrol/guide/ppy/">registrar.yorku.ca/enrol/guide/ppy/</a>

Additional useful information to familiarize yourself with:

YU card: This card can be used to access the library/printing and other areas at York: <a href="http://yucard.info.yorku.ca/">http://yucard.info.yorku.ca/</a>

Printing: <a href="www.yorku.ca/uit/student-services/printing/">www.yorku.ca/uit/student-services/printing/</a>
Map of Keele Campus: <a href="maps.info.yorku.ca/keele-campus/">maps.info.yorku.ca/keele-campus/</a>

Housing at campus: www.yorku.ca/housing

Building Acronyms Page: https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/10/wo/

HUIxtf9vEHLj2fNZTqYMnM/0.3.4.59.0

**Faculty of Gradate Studies:** important dates and external scholarship deadlines as well as academic requirements/ regulations to maintain or graduate programs: **gradstudies.yorku.ca** 

**Computer labs**. DB 2027, 2032, 2114, 2116 and 2118 are available for LA&PS students to use when there are no classes being held. The drop-in hours for these labs are: Monday - Thursday, 9am - 7pm Friday, 9am - 6pm. ArcGIS Pro is installed on all of our DB lab computers and is available for use by anyone logging into one of these computers. However, we only have 10 concurrent licenses available for ArcGIS Pro.

**Canadian Union of Public Employees (CUPE)**: CUPE 3903 is the York chapter of CUPE, a national union representing workers in areas including health care, education, social services, transportation and more. For more information about the specific benefits please visit: <a href="https://3903.cupe.ca/">https://3903.cupe.ca/</a> or contact someone from the CUPE office, listed on the website.

Graduate students must maintain continuous registration to remain active in the program. If you need to take a term off you need to apply officially through the petition office here:

www.yorku.ca/gradstudies/students/current-students/regulations/graduate-academic-petitions/

York University Libraries: library.yorku.ca/

**Librarian** liaisons and other useful links can be found here:

www.library.yorku.ca/web/about-us/contact-us/liaison-librarians/

#### **Disaster & Emergency Management (DEM) Dashboard**

DEM Dashboard is an online platform (eClass-based) to share information related to the program's various aspects, including announcements, forms and documents, and much more for students and faculty. Make sure to visit it regularly. You can enrol yourself by going to: eclass.yorku.ca/course/view.php?id=95601#section-2

#### **Disaster and Emergency Management Students Association (DEMSA)**

DEMSA is a graduate student association at York University. DEMSA is ran by volunteer student executives who work with the student body to organize social and academic events. New students in the MDEM program are encouraged to join the DEMSA executive committee as it is an excellent opportunity to network and represent the interests of students. Please join our WhatsApp group as it's the best way to get to know other students and find out about events!

DEM WhatsApp Group Chat: <a href="https://chat.whatsapp.com/KDNqrRIXVWxDteUf3Agmw9">https://chat.whatsapp.com/KDNqrRIXVWxDteUf3Agmw9</a>

#### **Career Opportunities**

MDEM graduates have a wide spectrum of areas where they could seek employment including, but not limited to:

Disaster Risk Management

Business Continuity Professional at Public and Private Sectors

Emergency Manager/ Coordinator at all levels of government

Non-profit Organizations (NGOs), including Humanitarian Assistance and Relief Organizations

**Emergency Preparedness Planning and Decision Making** 

Canadian Military

Fire Safety and First Responders

Federal, Provincial, Municipal Police

Health Sector and Paramedic

Insurance Industry and Disaster Recovery

**Financial Institutions** 

Disaster and Emergency Management Technologies and Services

Dam Safety and Power Generation

Conservation Authorities and Stormwater Management

<u>Institute for Social Research (ISR):</u> The ISR offers short courses on research methods and much more. They are not for academic credit but very useful. Check them out here: <a href="https://www.yorku.ca/isr/">www.yorku.ca/isr/</a>

#### **ASSOCIATIONS**

#### **Ontario Association of Emergency Managers (OAEM)**

OAEM is a non-profit, professional association representing the interests of Ontario's emergency management community since 2001. Its mission is to advance the modernization of emergency management in Ontario while promoting information exchange, collaboration, networking and professional development opportunities for member communities - diverse, multi-sector and multi-disciplinary public, private, indigenous and non-government emergency management professionals and students. Website: <a href="https://www.oaem.ca/">www.oaem.ca/</a>

#### **International Association of Emergency Managers (IAEM)**

The International Association of Emergency Managers (IAEM) is a non-profit educational organization dedicated to promoting the Principles of Emergency Management and representing those professionals whose goals are saving lives and protecting property and the environment during emergencies and disasters. Website: <a href="https://www.iaem.com/home.cfm">www.iaem.com/home.cfm</a>

#### **Canadian Journal of Emergency Management (CJEM)**

CJEM is a journal of Emergency MANAGEMENT researchers, practitioners, and students alike. Publishing research and case studies about disasters, emergency management and crisis in Canada and around the world, students in DEM program can publish their research and volunteer with this open access journal. To learn more visit <a href="cdnjem.ca">cdnjem.ca</a> or talk to Dr. Kennedy, the Editor-in-chief.

#### **Disaster Recovery Institute (DRI)**

DRI Canada is a non-profit organization that provides internationally recognized education and certification to business continuity, disaster recovery and emergency management professionals in Canada. These professionals empower Canadian organizations, communities and businesses to be resilient and better prepared for any emergency or disaster.

Website: www.dri.ca/

#### **Disaster Recovery Information Exchange (DRIE)**

The Disaster Recovery Information Exchange (DRIE), along with its affiliates the Business Continuity Management Information Exchange (BCMIE) and le Réseau d'Échange en Continuité des Opérations (RÉCO-QUÉBEC), is a non-profit association of professionals dedicated all aspects of business continuity management, from emergency response to the resump-

#### **CERTIFICATIONS**

**Certified Emergency Manager** (CEM) is offered online by IAEM certification program for emergency managers to maintain professional standards; it is a program to certify achievements within the profession, but not offered by the MDEM.

Website: www.iaem.org/certification/intro

Associate Business Continuity Professional (ABCP) certification supports entry-level proficiency with some knowledge in business continuity planning, but who have not yet acquired a great deal of experience in the field. The ABCP certification will provide opportunities in this area and demonstrate your professional commitment in the industry. Please check out this link as some details may have changed post-pandemic: https://drii.org/certification/abcp

**Incident Management System** (IMS) certifications are offered in a series of courses including introductory IMS-100 (available online for free), IMS-200 (offered by Emergency Management Ontario and supported by MDEM), intermediate IMS-300 (check out below link for details) and advanced IMS-400 (check out below link for details). These are recommended for emergency managers and are offered through the Ontario Ministry of Community Safety & Correctional Services.

Website: <a href="https://training.emergencymanagementontario.ca/">https://training.emergencymanagementontario.ca/</a>

**Basic Emergency Management** (BEM) is a provincial training course, which provides an overview of emergency management in Ontario and helps students gain understanding in tactical and strategic components of mitigation, prevention, preparedness, response and recovery. You can complete the course yourself online.

**Emergency Management Ontario Website:** <a href="https://www.ontario.ca/page/emergency-management">https://www.ontario.ca/page/emergency-management</a>

#### **USEFUL DISASTER DATABASES**

International Database (EM-DAT): The international database is created and managed by the Center for Research on the Epidemiology of Disasters (CRED). It contains rich core data on the occurrence and effects of mass disasters in the world from 1900 to present with regular updates and trends by the geographical regions, hazard types, and impact. The database is compiled from various sources, including UN agencies, non-governmental organisations, insurance companies, research institutes and press agencies. Website: emdat.be/

The Canadian Disaster Database (CDD): The CDD contains detailed disaster information on natural, technological and other hazards and disasters from 1900 to 2017. The database is pretty rich and provides details of each event up to the local scale. Website: <a href="mailto:publicsafety.gc.ca/cnt/rsrcs/cndn-dsstr-dtbs/index-eng.aspx">publicsafety.gc.ca/cnt/rsrcs/cndn-dsstr-dtbs/index-eng.aspx</a>

#### **UNIQUE FACILITIES, TRAININGS, AND OPPORTUNITIES ONLY AT YORK**

Advanced Disaster, Emergency and Rapid Response Simulation (ADERSIM): ADERSIM was launched in 2018 as a platform for modern Emergency Operations Centre with the aim of evaluating and enhancing disaster planning and rapid emergency response strategies by stakeholders using cutting edge tools and simulation technologies. Details can be found here: adersim.info.yorku.ca/about/startup-companies

**CIFAL York:** Under the umbrella of the United Nations Institute of Training and Research (UNITAR)—the first CIFAL Centre in Canada was opened at York University in 2021 to enhance innovative, participatory and co-creative knowledge exchange opportunities to support Sustainable Development Goals. Details can be found here: <a href="www.yorku.ca/cifal/">www.yorku.ca/cifal/</a>

York Emergency Mitigation, Engagement, Response, and Governance Institute (Y-EMERGE): Y-EMERGE is a cross-sector platform for networking and cooperation, where experts, scholars, practitioners, students and citizens from all over the world come together to collaborate on innovative ideas that contribute to community and organizational resilience. For details and how to get involved, visit: yorku.ca/research/yemerge/about





DEMSA Facilitated, MDEM Sponsored Shivering Shores 2 EOC Functional Exercise: York University Keele Campus, March 23rd, 2024. Left Photo, left to right: Andrew L., Zach S., Carolyn T., Jacob H. Right photo, left to right: Alain N., Lexie H., Elite H., Sydney F., Cecilia P., James W.H., Richard P.



Nirupama Agrawal

Dr. Agrawal is a Professor and one of the three founding members of the program since 2005. She teaches Natural Disasters and DEM Practicum. Her current research projects include Canadian Defence and Security Network Mobilization of Insights and Extreme Weather Warning Communication. Her notable contributions include Tsunami Travel Time Atlas for the Atlantic Ocean and the textbook, "Natural Disasters and Risk Management in Canada: An Introduction" by Springer. Expertise: Natural Hazards, Disaster Risks and Management, Community resilience and adaption strategies, Optimization of response to large-scale nature-triggered emergencies, Multi-criteria Decision Support System, GIS/Remote Sensing. Education: PhD, Water Resources Engineering, Kyoto University; Master of Hydrology, Indian Institute of Technology (IIT) Roorkee. Email: nirupama@yorku.ca, Profile: profiles.laps.yorku.ca/profiles/nirupama/



Ali Asgary

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Aaida Mamuji - GPD

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Jack Rozdilsky

Dr. Rozdilsky is an Associate Professor since 2016. His notable contributions include, the 2018 Toronto van attack, published in the *Canadian J Emergency Management*, Co-PI on a pandemic-related rapid research on Covid-19 related stigma, CIHR and PI on a Seed Grant in Critical Perspectives in Global Health by the Dahdaleh Institute for Global Health Research. Prior to joining York University, Dr. Rozdilsky was a university professor of emergency management in both Illinois and Texas. He teaches Terrorism and Business Continuity. **Expertise**: Disaster response and recovery, mitigation, preparedness, Natural disasters, Homeland security, Hurricane Katrina, Hurricane Ike, Tornadoes, Civil disturbance in Ferguson, Missouri, 9/11 memorialization, 70th anniversary of the first use of the atomic bomb. **Education**: PhD, Resource Development & Urban Studie§ Michigan State University; MA, Environmental Studies, University of Illinois. **Email**: rozdilsk@yorku.ca, **Profile**: profiles.laps.yorku.ca/profiles/rozdilsky/

#### FULL TIME FACULTY—PRIMARY MEMBERS OF DEM



**Evalvna Bogdan** 

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Dr. Spinney is an Assistant Professor since 2020. She studies connections between groups of people living and working at the intersections of environment and society, particularly extreme weather hazards and disasters, such as tornadoes, floods, hurricanes and heat, in Canada and the U.S. Her notable works include, the Northern Tornadoes Project; tornado safety in Ontario public schools, SSHRC; and Extreme weather alerting program in collaboration with Meteorologic Service of Canada, SSHRC. She teaches Social and Behavioural Dimensions of Disasters and Disaster Risk Management. Expertise: linguistic and sociocultural anthropology, and anthropology of disaster, risk and policy literatures. **Education**: MA & PhD, Sociocultural Anthropology, Western University. Email: jspinney@yorku.ca, Profile: profiles.laps.yorku.ca/profiles/spinney/

#### **FULL & PART TIME FACULTY FROM OTHER GRADUATE PROGRAMS**



**Kelly Thomson** 

#### School of Administrative Studies

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Dr. Higuchi is a part time faculty with MDEM since 2007. His past work experiences include, the Atmospheric Environment Service, the Arctic Weather Centre, University of Toronto, and Environment Canada at various capacities. He was the head of the carbon cycle modeling group in 2012 before joining York as an adjunct professor. He teaches Quantitative Methods. Expertise: Climate Change, Complex Systems Research, Weather events and DR Strategies, Systems Thinking. Education: PhD, University of Toronto, MSc, University of Toronto, BSc, Carleton University. Email: kazh@yorku.ca

#### PART TIME CONTRACT FACULTY—PRACTITIONERS WITH RICH FIELD EXPERIENCES

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Mr. Baumken is a professional consultant specializing in critical infrastructure protection, business continuity planning, government relations and emergency management. His past experiences include, Hydro One Networks Inc., where he developed an all hazard emergency preparedness program, business continuity planning and line of business risk assessment. He has extensive national and international experience in developing regulations, standards and guidelines for North America's electricity system. He teaches Critical Infrastructure Protection. Expertise: Critical Infrastructure Resilience, Emergency and Risk Management, Business Continuity, Emergency Response Simulations, Government Statuses and Regulations. Education: MA in Disaster and Emergency Management, BA in Business Administration, University of York. Email: Dbaumken@yorku.ca



James Kilgour

Mr. Kilgour is Director, Emergency Management Office at Durham Region (The Regional Municipality of Durham). He teaches the summer prerequisite course (AP/ADMB4799 0.0 M: Essentials of Emergency Management) for master's students who do not have background in DEM; and occasionally, other courses. **Expertise**: strategic leader in the areas of Emergency Management, organizational learning and Public Policy with more than several years of experience building and leading high performing teams. **Education**: MSc, Disaster Management, Coventry University, BA, Geography, University of British Columbia. **Email**: jameskilgour@gmail.com, **Profile**: ca.linkedin.com/in/jameskilgour/



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**Richard Pereira** 

Richard works for Emergency Management Ontario as a training and development officer. He assists in the design of courses and delivers Incident Management and Emergency Management training (in-person and virtual) to government ministries, as well as municipalities, police, fire, paramedics, NGOs, and private sector. Richard's career includes EM and operational experience with the Toronto Transit Commission, the City of Toronto's EOC and time within municipal and federal law enforcement. **Expertise**: EOC operations, training and education, emergency planning, incident response, exercise design. **Education**: MDEM, York University; BA, University of Toronto; EM Certificate, TMU; Adult Education & Staff Training Certificate, Seneca College. **Email**: pereirarichard@icloud.com



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# Confident in the face of Disaster



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