MASTER IN CRISIS AND DISASTER RISK MANAGEMENT (MCDRM):
A Strategic Innovation of the Philippine Public Safety College (PPSC) with Partner Institutions

FSINSP MARICELIA L. ANTONIO*

Introduction

Climate change, disasters, and crises threaten the survival of humans and the sustainability of our natural environment. Under these conditions, we need to develop adaptive policies and capacities to protect the people, mitigate disasters, manage crisis situations, and preserve Mother Earth.

The introduction of sustainable development precepts in the agenda of the Philippine Government can be traced back to its active participation in the United Nations (UN) Conference in Rio de Janeiro, Brazil in 1992.¹ Because of the realities of climate change, Filipinos have become aware of the concept of sustainable development and the need for disaster risk management through cooperative endeavors and concrete programs of action. The advocacy for sustainable environment was amplified in 168 countries in the Asia Pacific including the Philippines when the Asian Development Bank (ADB) piloted the institutionalization of the Hyogo Framework of Action (HFA) 2005-2015 that included the platforms for Disaster Risk Management (DRM), Disaster Risk Reduction (DRR), and the so-called “Green Development.”² In March 2015, the World Conference on Disaster Risk Reduction Management under the Hyogo Framework of Action (HFA) 2005-2015 that included the platforms for Disaster Risk Management (DRM), Disaster Risk Reduction (DRR), and the so-called “Green Development.”

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She is a registered nurse and a holder of a Master’s Degree major in Public Administration. She later earned units in Doctor in Public Administration studies at the Pamantasan ng Lungsod ng Maynila.

SINSP ANTONIO is renowned for her leadership abilities and outstanding work ethics. She was nominated for the Civil Service Commission Pag-asa Award Category in 2014 by the Philippine Public Safety College (PPSC) and the Bureau of Fire Protection (BFP). She was also accorded various awards and recognition such as PPSC Plaque of Recognition in 2015 as the Project Coordinator for the donation and training projects of the Firefighters Without Borders (FFWOB) Foundation, The Netherlands, Model Employee of the Year in Officer Category in 2012, and the Masipag Award. She is also being recognized as one of the international instructors of the courses under the Program of Enhancement for Emergency Response (PEER) National Society for Earthquake Technology (NSET) of USAID.

¹ Papers during the UN Conference in Rio de Janeiro, Brazil in 1992 can be retrieved from http://geog.ucsb.edu/~carr/Dcarr_Publications/Norman_Carr_Rio_07.pdf.

² Hyogo Framework of Action (HFA) can be retrieved from https://www.unisdr.org/we/coordinate/hfa.
Reduction in Sendai, Japan adopted the “Sendai Framework for Disaster Risk Reduction for 2015–2030.” This applies to the risks of small-scale and large-scale, frequent and infrequent, and sudden and slow-onset disasters and natural or man-made hazards, as well as environmental, technological, and biological hazards.

The Philippine government passed into law Republic Act No. 10121 otherwise known as the “Philippine Disaster Risk Reduction and Management Act of 2010.” This law establishes the National Disaster Risk Reduction and Management Council (NDRRMC), which is headed by the Secretary of the Department of National Defense (DND) as the Chairperson and the Secretary of the Department of the Interior and Local Government (DILG) as Vice-Chairperson for Disaster Preparedness. The Secretaries of other Departments act as Vice-Chairpersons on other thematic areas of disaster management. Given this mandate, the DILG Secretary has the authority to commission the Local Government Agency (LGA) as its education and training arm for personnel of local government units (LGUs) in partnership with the Philippine Public Safety College (PPSC) as the academic and training center for personnel of the Interior sectors as well as of other public and private entities engaged in disaster management.

Over the past decade, millions of Filipinos have been adversely affected by natural disasters such as typhoons, floods, earthquakes, landslides, volcanic eruptions, and tsunamis. To note, the World Risk Index ranked the Philippines 3rd in 2012 and 2nd in 2014 due to Typhoon Yolanda (international name Haiyan). Lessons learned from the Philippine experiences serve as an impetus for strategic innovations, which include the field of professional training and education in disaster management.

The composite academic and technical requirements for institutionalizing DRM in the Philippines call for building up capacities and educating a critical mass of crisis and disaster risk managers in education and training institutes. It is in this light that the PPSC, through the National Fire Training Institute (NFTI), has institutionalized disaster management training programs in partnership with the Office of the Civil Defense (OCD) on courses such as the Incident Management System, Medical First Responder (MFR), and Collapsed Structure Search and Rescue (CSSR). Since the domain of Disaster Risk Management is related to Crisis Management, the clientele of the training programs also needs up-to-date assessments.

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3 The Sendai Framework adopted by the US after the UN Conference at Sendai is retrieved from www.unisdr.org/we/coordinate/sendai-framework.
4 The Sendai Framework can be retrieved from tg.
5 The establishment of the NDRRMC is provided for by RA 10121 that can be retrieved from http://www.ndrrmc.gov.ph/attachments/article/45/Republic Act 10121.pdf.
8 INSET PEER courses funded by the USAID were institutionalized at NFTI.
and knowledge on cyber security, supply chain, terrorism, pandemics, disaster risk trends, emergency response, leadership, data breach, and social media.

The PPSC—along with partner agencies both local and abroad—has been working to institutionalize a “ladderized” Crisis and Disaster Risk Management Program (CDRMP). The consortium has been forged as a response to global crises, climate change, and disasters. Considering that the Philippines lies on the Pacific Ring of Fire, there is thus a need to develop a pool of competent policy advisors and disaster managers and come up with courses of action to ensure public safety and human security in the country and the region.

It is in this light that the PPSC initiated actions to develop the curriculum of the Master in Crisis and Disaster Risk Management (MCDRM) Program\(^9\) to establish a pool of graduates that are competent in disaster risk management and disaster risk reduction. As the higher educational institution under the DILG, the PPSC has the mandate to confer academic degrees from undergraduate to graduate levels, as well as special diplomas and certificates on public safety education which includes a specialized course in disaster and crisis management.\(^10\) The PPSC acts as the Center for Accreditation for related trainings or seminars offered.

This paper documents the academic journey of the proponent institution to construct a graduate program curriculum on crisis and disaster risk management. The paper is divided into five parts. The first part highlights the process of the curriculum development of the MCDRM, taking into account lessons learned from previous crises and disasters. The curriculum was developed and benchmarked against the educational programs of government and non-government institutes which offer disaster-related courses and training on disaster and risk management. The second part of the paper delves on institutional outcomes, following the model of Outcomes-Based Education (OBE) that gives emphasis to the holistic development of scholars. The third part presents the curriculum and course descriptions of the foundational and major subjects included in the one-year MCDRM degree program. The fourth part elaborates on the target competencies and attributes that students must possess upon completion of the graduate program. Finally, the fifth part of the paper presents the conclusion.

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\(^9\) PPSC Board Resolution No. 04, Series of 2016 creates the MCDRM as a specialized program in the professional training and education of uniformed personnel in the Philippine National Police (PNP), the Bureau of Fire Protection (BFP), and the Bureau of Jail Management and Penology (BJMP), as well as selected fellows from other government institutions, the academe, non-government organizations, and civil societies.

\(^10\) House Bill No. 93 otherwise known as PPSC System Act of 2013 Sec.7 (d) Grant and confer academic degrees and diplomas and proficiency certificates from degree and non-degree courses.
The Curriculum Development of the Master in Crisis and Disaster Risk Management (MCDRM)

The Process

First Focus Group Discussion Exercise. The Technical Working Group (TWG) benchmarked the proposed MCDRM against other educational institutions in government and universities which offered similar courses on disaster management here and abroad. The Curriculum Development, conducted at the Development Academy of the Philippines (DAP) in Tagaytay City from March 8 to 10, 2016, used focus group discussions (FGDs) with subject matter experts (SMEs) from premier universities in the Philippines, government agencies, and non-governmental organizations in the field of disaster risk management. The FGDs on curriculum development attained a significant level of confidence in defining key precepts and strategic requirements for the MCDRM.

Atty. Gisella N. Dizon-Reyes and Atty. Aleta C. Nuñez, both from University of the Philippines (UP) Law Center, provided insights on Republic Act No. 10121 (also known as the creation of Philippine Disaster Risk Reduction and Management Council) and other domestic and international legal frameworks on crisis and disaster risk management.

Professor Bernard LM Karganilla of the College of Arts and Sciences in UP Manila, on the other hand, gave emphasis to “thinking outside of the box” in dealing with crises and disasters. According to him, “leadership is focusing public attention on hardest problems, even before they occur.” Professor Karganilla introduced participants to the “Tenth Man Technique” in which one person plays the role of the wild card in a group of ten people and challenges group consensus by thinking of worst-case scenarios.

Dr. Inocencio E. Buot of the UP Faculty of Management and Development Studies (FMDS) lectured on the role and relationship of society to its environment. According to him, the Philippines was blessed with natural resources, which must be regarded and respected as living entities with their own rights. Referring to these as “Supra Community,” Governor Andrew O. Nocon of the Philippine Red Cross in Laguna shared their experience as

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11 Letter Order Number2016-091, creation of TWG including the members.
12 Sections 3 and 4 of the PPSC Faculty and Student Manual.
13 Proposed Development of Curriculum (DACUM) activities submitted to PPSC by the Project Management Team (PMT) dated February 15, 2016 and Timeline of MCDRM Program Development.
14 Presentation of Atty. Gisella N. Dizon-Reyes and Atty. Aleta C. Nuñez during the Focus Group Discussions (FGDs) for the Curriculum Development conducted from March 8 to 10, 2016 at the Development Academy of the Philippines (DAP), Tagaytay City.
15 Presentation of Professor Bernard LM Karganilla during the Focus Group Discussions (FGDs) for the Curriculum Development conducted from March 8 to 10, 2016 at the DAP, Tagaytay City.
a volunteer organization that was able to “deliver humanitarian services at par or even sometimes better than those the government can offer.”

Prof. Jose Mari Daclan of the Earthquakes and Megacities Initiative (EMI) ascertained that “disasters are development issues given that they are most destructive on developing countries like the Philippines.” On the other hand, Dr. Emmanuel Luna of the Center for Disaster Preparedness (CDP) described disaster as a social phenomenon which boiled down to vulnerabilities. In an equation, “No Vulnerability = No Disaster.”

Dr. Fay Lea Patria M. Lauraya, former President of Bicol University, advised that the curriculum being established by the FGD was to have “generalist practitioners” in the field of crisis and disaster risk management, with options or directions on core specializations that graduates would want to take in the future.

Dr. Ernesto R. Gonzales of the University of Santo Tomas (UST), Dr. Ricardo T. Bagarinao of the FMDS, and Mr. Alan Taule of the Department of Science and Technology (DOST) discussed the repercussions of a clash between nature and human beings as a consequence of the latter’s greed and abuse of natural resources. One of the greatest challenges the world is facing in this century is climate change and its effects on human lives. Aside from developing awareness, students must be able to think critically, make sound decisions, learn how to respond with limited resources, and develop passion and leadership to influence, advocate, empower, and create a humane connection with the community.

Professor Joel Yuvienco of the E-Kindling Organization presented the advantages of knowing the latest in technology and utilizing this in disaster management. Mr. Alan Taule of the DOST explained the 4-Point Agenda for Community Preparedness, which were: (1) Local Risk Knowledge Enrichment; (2) Early Warning System; (3) Testing Warning and Communication Protocol; and (4) Building Response Capability coined as “EARLY WARNING, EARLY ACTION.”

Director Vicente F. Tomazar of the Office of Civil Defense (OCD) in Region 4A explained on the other hand the implementation of RA 10121 while Ms. Claire Balde of the
National Economic and Development Authority (NEDA) presented the “Build Back Better” programs of government in the previous disasters.\textsuperscript{21}

In the end, the FGDs gathered and synthesized the fundamental characteristics of MCDRM graduates as a critical mass of leaders and managers. In particular, emphasis was given to instilling in disaster managers dedication and compassion to people.

As observed by participants from the graduate school of UP Manila, the conduct of the FGDs on the MCDRM was a milestone from conceptualization to implementation. The academic exercise employed the best SMEs who shared their valuable insights and theoretical frameworks that gave form and substance to the curriculum development of the MCDRM.\textsuperscript{22}

On the whole, the TWG in March 2016 issued findings and recommendations on the following:

(1) The development and description of courses that constitute the one-year Master’s program in Crisis and Disaster Risk Management;
(2) The integrity and quality of the admission process for prospective scholars of the program;
(3) The development and facilities and equipage for the MCDRM;
(4) The provision of reference materials, which include values, theories, and best practices in crisis and disaster risk management; and
(5) The continuous development of the MCDRM curriculum before the opening of the graduate program this year.\textsuperscript{23}

Second Focus Group Discussion Exercise. With the first FGD held in March 2016 as jump point, the curriculum development of the MCDRM was bolstered by the second round of FGDs with SMEs in crisis management, communication, and leadership held at UP Diliman on April 11, 2016.

Prof. Karganilla of the Graduate Program of UP Manila expounded on the topic of Public Relations (PR) particularly in the field of emergency management, community resilience, precaution and uncertainty, health and safety, and citizen engagement. The PR practitioners were said to be known as manipulative “spin doctors,” press agents, “schmoozing” with the public, image consultants, publicists, spokespersons, and lobbyists.\textsuperscript{24}

\textsuperscript{21} Presentation of Dir. Vicente F. Tomazar during the Focus Group Discussions (FGDs) for the Curriculum Development conducted from March 8 to 10, 2016 at the DAP, Tagaytay City.
\textsuperscript{22} Terminal Report on the Focus Group Discussions (FGDs) for the Curriculum Development conducted from March 8 to 10, 2016 at the DAP, Tagaytay City.
\textsuperscript{23} Recommendations and Conclusions as stated in the Terminal Report on the Focus Group Discussions (FGDs) for the Curriculum Development conducted from March 8 to 10, 2016 at the DAP, Tagaytay City.
\textsuperscript{24} Discussion of Prof. Karganilla during the Focus Group Discussion (FGD) held last April 11, 2016 at the University of the Philippines (UP), Diliman, Quezon City.
Dr. Melinda P. Bandalaria, Chancellor of the UP Open University (UPOU), discussed Organizational Leadership and Management. According to her, to become a good leader, one must possess good communication skills and must know the proper use of words to effectively connect with people. The Chancellor expressed the intention to share the “tech-know-how” to implement a blended learning structure since UPOU operates on this type of platform. With this, she said, the PPSC will be able to reach more learners, including those in our neighboring countries.\footnote{Presentation of Dr. Melinda P. Bandalaria, Chancellor, UPOU during the Focus Group Discussion (FGD) held last April 11, 2016 at UP Diliman, Quezon City.}

Dr. Kristoffer B. Berse of the UP National College of Public Administration and Governance (UP-NCPAG) discussed Risk Assessment and Crisis Communication. According to him, the challenge in effective crisis communication is how to make people believe in the result of risk assessment. This is the process of exchanging information among interested parties about the nature, magnitude, significance, or control of risk. The bottom line of all this is the recognition that the public needs extra consideration and special communication in terms of crisis and disaster.\footnote{Presentation of Dr. Kristoffer B. Berse during the Focus Group Discussion (FGD) held last April 11, 2016 at UP Diliman, Quezon City.}

Mr. Oscar Lizardo from the Department of Science and Technology (DOST) presented the Digital Web Application Project NOAH, otherwise known as Nationwide Operational Assessment of Hazards. Project NOAH uses cutting-edge technology to deliver information related to hydro-meteorological and geological hazards to the public in collaboration with national and international organizations. Mr. Lizardo also mentioned the ongoing Project ISAIAH, which stands for the “Integrated Scenario-based Assessments of Impacts and Hazards”. This is set to implement capacity building activities, including Information, Education and Communication (IEC).\footnote{Presentation of Mr. Oscar Lizardo during the Focus Group Discussion (FGD) held last April 11, 2016 at UP Diliman, Quezon City.}

Dr. Sonny N. Domingo of Charles Sturt University, Australia and research fellow of the Philippine Institute for Development Studies (PIDS) presented the methods and tools of research studies in the graduate school. Students need quantitative and qualitative research methods in policy, disaster, crisis management, public relations, fiscal management and organizational leadership and Crisis Management to produce the academic literature of the MCDRM.\footnote{Presentation of Dr. Sonny N. Domingo during the Focus Group Discussion (FGD) held last April 11, 2016 at UP Diliman, Quezon City.}
The qualities of graduates in the MCDRM Program are patterned after the KSA (Knowledge, Skills and Attitude) Model. On Knowledge, graduates should have a clear understanding of the policies and lessons on disaster management. On Skills, they should know how to read technical maps, for instance. On Attitude, they should be able to establish linkages with other agencies, mobilize resources, and make both ends meet.29

When participants in the FGD were asked to describe the qualities of scholars and graduates of the MCDRM, the following were specified: (1) management and leadership competence; (2) pragmatic and academic knowledge; (3) motivation; and (3) stability and composure.

The FGD also highlighted classical theories and literature in management, case studies, journals, news reports, video narratives, mock traders, pop culture, and fiction. It also emphasized the use of simulation, role playing, specialized card goals, skill-based approach, flipped classroom, co-creation mode, practice-based approach, and digital tools on blended learning.30

To note, the first FGD at DAP in Tagaytay delved on the substance of the MCDRM Program while the second FGD at UP Diliman focused on the procedural components of the program. On the whole, the FGDs spearheaded by the NFTI, through the support and encouragement of top level PPSC learning managers of PPSC, were highly effective in serving the purpose of developing the curriculum of the MCDRM Program.

**Rudiments of Learning Modality**

Through the guidance of PDDG Ricardo F De Leon (Ret.), Ph.D., PPSC President, and in partnership with the UP Open University,31 a seminar-workshop on the rudiments of blended learning modality was conducted from June 20 to 21, 2016 at UP Diliman, Quezon City. The workshop was intended to empower the PPSC Management Team and the faculty in the utilization of blended learning teaching methodology.

Blended learning is a formal education program in which the curriculum is delivered through a combination of both face-to-face classroom instruction and web-based online learning. This modality is appropriate for the MCDRM Program considering that the scholars

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29 Recommendations of the subject matter experts during the Focus Group Discussion (FGD) held last April 11, 2016 at UP Diliman, Quezon City.

30 Terminal Report on the Focus Group Discussion (FGD) held last April 11, 2016 at UP Diliman, Quezon City.

31 Memorandum of Understanding (MOU) between PPSC and UP Open University signed last June 21, 2016 at the University Hotel, UP Diliman, Quezon City.
are from different regions of the country and its approach will be supplemented by field visits and seminars.\textsuperscript{32}

The highlight of the seminar-workshop was the signing of the Memorandum of Understanding (MOU) between the PPSC, represented by its President PDDG Ricardo F De Leon, and the UPOU, represented by Chancellor Melinda P. Bandalaria.\textsuperscript{33} As stated in the MOU, UP will assist PPSC in building the capability of its faculty members and staff in blended learning mode, as mandated by RA 10650 otherwise known as the Open Distance Learning Act, and make available the Open Educational Resources (OERs).\textsuperscript{34} Notably, this is an added contribution to PPSC’s vision of becoming one of the best public safety educational and training systems in Southeast Asia, globally competitive and committed to the delivery of effective and efficient public safety services.

\textit{Established Linkages}

The Project Management Team (PMT) has established linkages with premier educational institutions, as well as government and non-governmental organizations in the country and abroad (Figure 1).

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\includegraphics[width=\textwidth]{linkages_framework.png}
\caption{Linkages Framework.}
\end{figure}

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\textbf{Figure 1.} Linkages Framework.
\end{flushleft}


\textsuperscript{33} Memorandum of Understanding (MOU) between PPSC and UP Open University signed last June 21, 2016 at the University Hotel, UP Diliman, Quezon City.

\textsuperscript{34} Ibid., page 4.
The MCDRM was benchmarked against the courses of the following foreign educational institutions: 35

(1) Netherlands Institute for Fire Service and Disaster Management (NIBRA)
(2) Netherlands Institute of Government (NISG)
(3) University of Manitoba, Canada

As for local educational institutions, the MCDRM Program consulted the following:
(1) Faculty of Management and Development Studies, University of the Philippines Open University (FMDS-UPOU)
(2) College of Arts and Sciences Graduate School, University of the Philippines Manila (UPM-CAS)
(3) University of the Philippines Law Center (UP-Law Center)
(4) University of the Philippines – National College of Public Administration and Governance (UP-NCPAG)
(5) Ateneo de Manila University (ADMU)
(6) Bicol University (BU)

The government agencies with which the Program has established links include the following:
(1) Office of Civil Defense (OCD)
(2) Climate Change Commission (CCC)
(3) Metro Manila Development Authority (MMDA)
(4) Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA)
(5) The Philippine Institute of Volcanology and Seismology (PHIVOLCS)
(6) Partnerships For Enhanced Engagement in Research (PEER)- USAID
(7) Department of Science and Technology (DOST)
(8) Bureau of Fire Protection (BFP)
(9) Philippine Institute for Development Studies (PIDS)

Lastly, the non-governmental organizations that are included in the network of the PPSC are as follows:
(1) Earthquakes and Megacities Initiative (EMI)
(2) Center for Disaster and Preparedness (CDP)
(3) Philippine National Red Cross (PNRC)

35 PPSC Student and Faculty Manual.
Institutional outcomes

The overall institutional outcome is the development and conduct of the Master in Crisis and Disaster Risk Management (MCDRM) that will be offered by way of scholarship grant to multi-faceted managers from the public and private sectors. The Academic Program follows the model of Outcomes-Based Education (OBE), which gives emphasis on professionalism, competencies, leadership skills, character, and values of scholars and graduates of MCDRM.

Specifically, the MCDRM Program aims to:
(a) Develop a critical mass of graduates with character attributes and competencies needed to respond to the demands and mandates of crisis and disaster management;
(b) Prepare the next generation of competent crisis and disaster risk managers with profound understanding of the nature, causes, and consequences of the problems at hand, as well as capability to fill the gap of human resource in this field;
(c) Establish linkages with other research and educational institutions, both foreign and abroad, and harness the pool of experts in private and public sectors as “front liners” in the field of crisis and disaster risk management;
(d) Strengthen communities in the country that are physically, politically, and socially weak in events of disaster by way of relevant training programs that can be extended by the students and faculty of the MCDRM Program; and
(e) Develop and introduce innovative and forward-thinking strategies, plans, and programs for use of government institutions and other organizations based on strong knowledge on climate change adaptations and sustainable development as well as international policy frameworks.  

Proposed MCDRM Program paper submitted to the PPSC President by the Project Management Team on February 15, 2016.
Module I: Foundational Courses

Course Title: Management: Theories and Principles (2 Units)

The course aims to provide students with the fundamental understanding of the principles, precepts, and praxis of management from diverse disciplinary and professional backgrounds. This subject will also provide students with broad knowledge of the basic functions of management—from planning, organizing, and staffing to directing, controlling, and budgeting—as well as broad knowledge of the socio-political and economic setting of disaster management.

Course Title: Perspectives on Public Safety (2 Units)

This course introduces students to public safety and security in the internal domain, with reference to existing literature in the country and the international academic and policy community. The subject takes public safety as a non-military component of national security. This is anchored on security sector reform (SSR) where civilian uniformed agencies are in charge of internal peace and security.

Course Title: Leadership and Human Behavior in Organizations (2 Units)

This subject involves the diagnosis of human behavior in organizations. One of the most important keys to the success of a leader is the ability to motivate people and generate their commitment to work on organizational goals. Doing this requires a thorough understanding of human behavior and motivational factors and how these are influenced by

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37 Courses with course description were identified to be foundational courses based on the output of the Focus Group Discussion (FGD) held from March 8 to 10 at the DAP, Tagaytay City.
organizational leaders in different conditions of the external environment. The course is designed to include both individual level and organizational level concepts to enhance management practices in crisis situations.

Module II: Core Courses

Course Title: Crisis Management (3 Units)
This course provides comprehensive knowledge and up-to-date assessments on crises and emergencies that threaten public safety and human security. The subject covers cyber security, supply chain, terrorism, pandemics, disaster risk trends, emergency response, and data breach, among others. Students will be given the tools, knowledge, and understanding to benchmark, assess, and improve public safety functions, disaster recovery, and crisis management programs. The course hones students with theories and best practices in the field of public relations and communication in crisis situations.

Course Title: Climate Change and Sustainable Development (3 Units)
This course provides students with multi-disciplinary knowledge of climate change and its impact on human security. Related to this is a critical understanding of the concept of sustainability as applied to resource and energy use. The course will give students the skills and competence required to develop creative and adaptive policies on climate change and disaster risk management. With this, this subject aims to meet growing demands for disaster managers and experts on climate change and sustainable development.

Course Title: Disaster Risk Management (6 Units)
This course refers to skills development on the following areas: (1) community-based disaster risk reduction management; (2) contingency planning and training of facilitators; (3) rapid damage assessment and needs analysis; (4) post-disaster needs assessment; (5) the Philippines’ local disaster risk reduction management simulation training of facilitators (6) Medical First Responder Course (MFR); (7) Collapsed Structure Search and Rescue (CSSR) (8) SPHERE Training of Trainers; and (8) Incident Command System. These subjects will be handled by the Office of Civil Defense (OCD), Department of Science and Technology (DOST), Philippine Red Cross (PRC), Metro Manila Development Authority (MMDA), and other agencies.

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38 Courses with course description were identified to be core courses based on the output of the Focus Group Discussion (FGD) held from March 8 to 10 at the DAP, Tagaytay City.
Module III: Major Subjects

**Course Title: Public Fiscal Management (3 Units)**

This course provides students with broad knowledge on public finance, revenue generation, and government budgeting from national to local governments. Students are expected to have a firm grasp of resource management and service delivery to the public.

**Course Title: Laws and Public Policies (3 Units)**

The course covers a broad spectrum of international and national laws related to disasters, humanitarian assistance, human rights, civil protection, environmental protection, risk reduction, and climate change through short lectures and interactive scenarios. This will provide a comprehensive overview of international legal frameworks, norms, and current debates on the global and regional levels. The subject will include lectures, discussions, and presentations by students on selected topics, practical exercises, and scenario building.

**Course Title: International Emergency Management (3 Units)**

This course deals with international emergency management of international organizations, both state and non-state. It provides practitioners and students with a comprehensive picture of the disaster management profession from a global perspective, which includes sources of risks and vulnerabilities, systems that manage hazards and risks, and the stakeholders involved.

This subject examines the impact of large-scale disasters on countries and communities as well as on the latter's efforts to mitigate and manage disasters. It also covers the achievements of the United Nations Hyogo Framework for Action (2005–2015) and the priorities for action in the Post-2015 Framework for Disaster Risk Reduction (Sendai Framework of Action).

Module IV: Research

**Course Title: Research Methods in the Study of Risks, Crises, and Disaster Management (3 Units)**

This course provides students the fundamentals of research methods in crisis and disaster risk management studies to prepare them for their thesis. In writing their research studies, students will have to use interdisciplinary theories and analytical tools to assess the extent, effects, and causes of crisis and disaster. Aside from providing students with the latest developments in the field, the course will also teach students the skills and competency to plan and execute research and engage in policy discourse. They will have to apply theories...

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39 Courses with course description were identified to be major courses based on the output of the Focus Group Discussion (FGD) held from March 8 to 10 at the DAP, Tagaytay City.

40 The components of the Research for the graduate level are based on the output of the Focus Group Discussion (FGD) held from March 8 to 10 at the DAP, Tagaytay City.
and models, evaluate information critically, undertake advanced conceptual analysis, use information sources effectively, develop new approaches to problem-solving, and communicate ideas clearly.

**Course Title: Capstone Research and Presentation (6 Units)**

The course is conducted through seminar workshops designed to improve students’ capabilities in problem identification, strategic thinking, and policy formulation. The first seminar is primarily focused on the research questions, their formulation, viability or feasibility, and coherence with research design. The second seminar focuses on the choice of theoretical/analytical framework and the elaboration of the methodological approaches. Format may be that of a Re-entry Plan Report, Mixed Method Research, or Action Research.

At the end of the course, students are expected to present their research proposal and defend this before the panel.

![Figure 3. The Interdisciplinary Framework of Research in MCDRM.](image)

The Interdisciplinary Framework of Research in MCDRM (Figure 3) suggests outputs that are relevant to the study and within the realm of crisis management, disaster risk management, climate change, and sustainable development. Introduction of new theories and models, analysis, information utilization, new approaches to problem-solving, and significant recommendations as effective and efficient tools for crisis and disaster management can be extracted from the studies of the scholars. Crisis and disaster managers should be well-versed in these interdisciplinary concepts.

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41 The framework was conceptualized by the Project Management Team after a series of focus group discussions.
Recapitulation: Master in Crisis and Disaster Risk Management (MCDRM)

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<tr>
<th>Module</th>
<th>Subjects</th>
<th>Units</th>
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<tr>
<td>Module I: Foundational Courses</td>
<td>Management: Theories and Principles</td>
<td>2 Units</td>
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<td></td>
<td>Perspectives on Public Safety</td>
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<td>Leadership and Human Behavior in Organizations</td>
<td>2 Units</td>
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<tr>
<td>Module II: Core Courses</td>
<td>Crisis Management</td>
<td>3 Units</td>
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<td>Climate Change and Sustainable Development</td>
<td>3 Units</td>
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<td>Disaster Risk Management</td>
<td>6 Units</td>
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<tr>
<td>Module III: Major Subjects</td>
<td>Public Fiscal Management</td>
<td>3 Units</td>
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<td></td>
<td>Laws and Public Policies</td>
<td>3 Units</td>
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<td>International Emergency Management</td>
<td>3 Units</td>
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<tr>
<td>Module IV: Research</td>
<td>Research Methods in the Study of Risks, Crises, and Disaster Management</td>
<td>3 Units</td>
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<td></td>
<td>Capstone Research and Presentation</td>
<td>6 Units</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td>36 Units</td>
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Attributes and Competencies

At the conclusion of the Foundational Courses, students are expected to be imbued with values and principles of public service and equipped with skills and competencies in management. At the end of the Core Courses, they are expected to become critical thinkers, problem solvers, good communicators, effective mentors, ethical leaders, CDRM-incident commanders, and community organizers. Finally, after finishing the Major Courses, students are expected to possess and apply the target competencies of the program for Incident Commanders, Contingency Planners, Crisis Managers, International Humanitarian Assistance Coordinators, Strategic and Risk Communicators, Policy and Program Innovators, Program and Project Managers, Disaster Preparedness and Resiliency Program Implementers, and Moral Leaders. On the whole, the graduates of the program must possess management and leadership skills, pragmatic wisdom and academic knowledge, as well as stability and composure.42

Conclusion

Crises and disasters entail massive costs on human lives and societies, especially on those that are vulnerable and unprepared. In this regard, citizens must be encouraged to be knowledgeable, pro-active, development-oriented, and participatory to mitigate risks and reduce losses. The initiative of the Philippine Public Safety College or PPSC to develop and

42 Output of the series of focus group discussions held from March 8 to 10, 2016 and April 11, 2016 at the DAP and University Hotel, UP Diliman, respectively.
offer the Master in Crisis and Disaster Risk Management or MCDRM will address the need for skilled managers who will effectively respond in times of crises and disasters. The PPSC exemplifies its dedication and perseverance with its rapid transition from conceptualization to actual implementation of the MCDRM by employing the best subject matter experts in the field. The graduate program consists of a holistic blend of academic and skills-based disciplines to ensure the training and development of crisis and disaster risk managers.

With the knowledge and skills that will be gained from the program, the scholars will be more empowered to take the lead in their communities and local government units. As a result, costs of damages will be minimized, lives will be protected, and socio-economic growth will be sustained.