



MAINSTREAMING THE TRANSDISCIPLINARY APPROACH TO DRRM THROUGH A GENERAL EDUCATION COURSE

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INTRODUCTION

- Disaster Risk Mitigation, Adaptation, and Preparedness Strategies (DRMAPS) is an general education course offered by the University of the Philippines Diliman.
- It is administered by the Institute of Civil Engineering.
- DRMAPS has been offered during the 1st and 2nd semester of each Academic Year since June 2013.
- It can be taken by UPD undergraduate students to fulfill the Science, Technology, and Society GE requirement.
- This presentation explains how the Transdisciplinary Approach to DRRM is mainstreamed through DRMAPS.

INTERDISCIPLINARY, COLLABORATIVE, AND COOPERATIVE

TEACHING TEAM



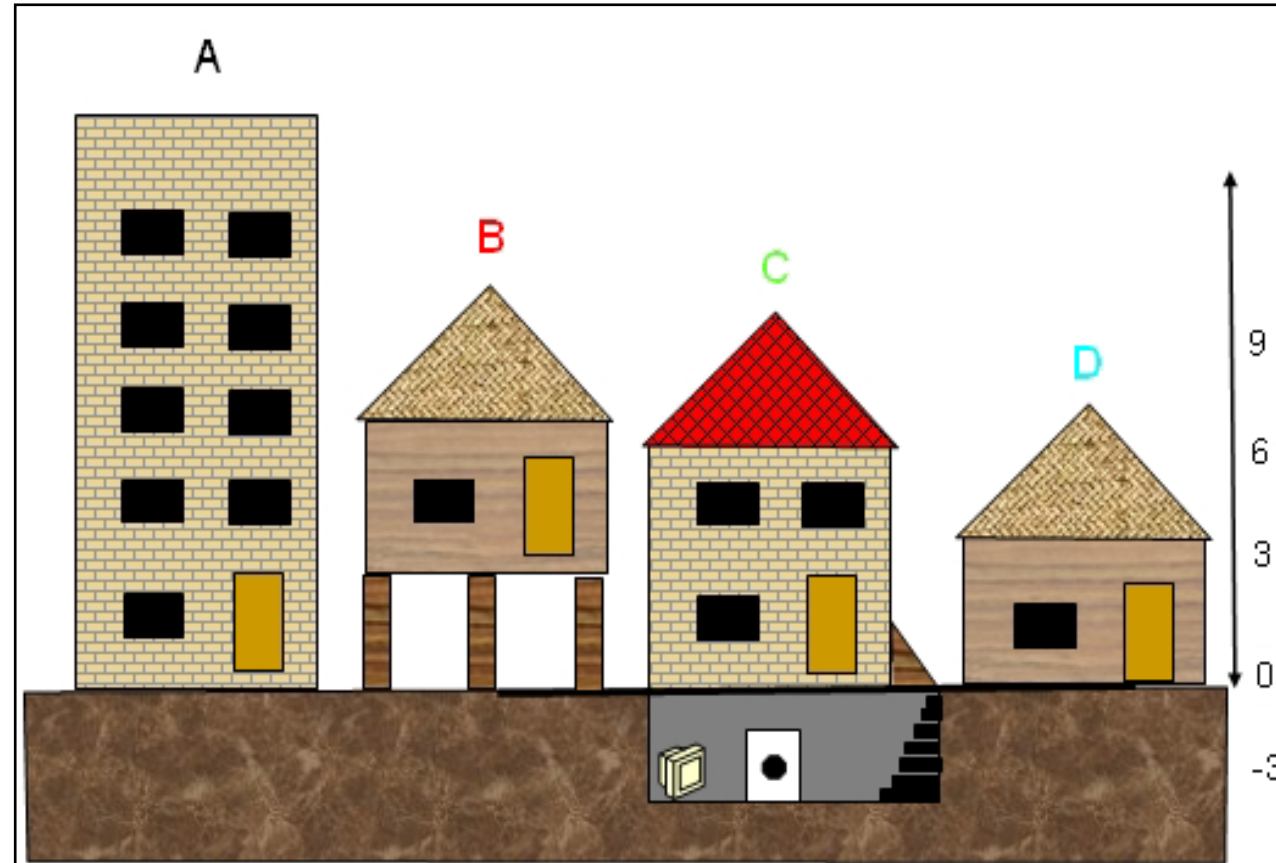
INSTRUCTIONAL DESIGN

- Instructional design is based on a blended-learning model based on the flipped classroom.
- Students are organized into multidisciplinary groups.
- In-exercises consist of group activities aimed at developing teamwork and leadership.
- Major requirement of the course involves developing a proposal for risk assessment case study.

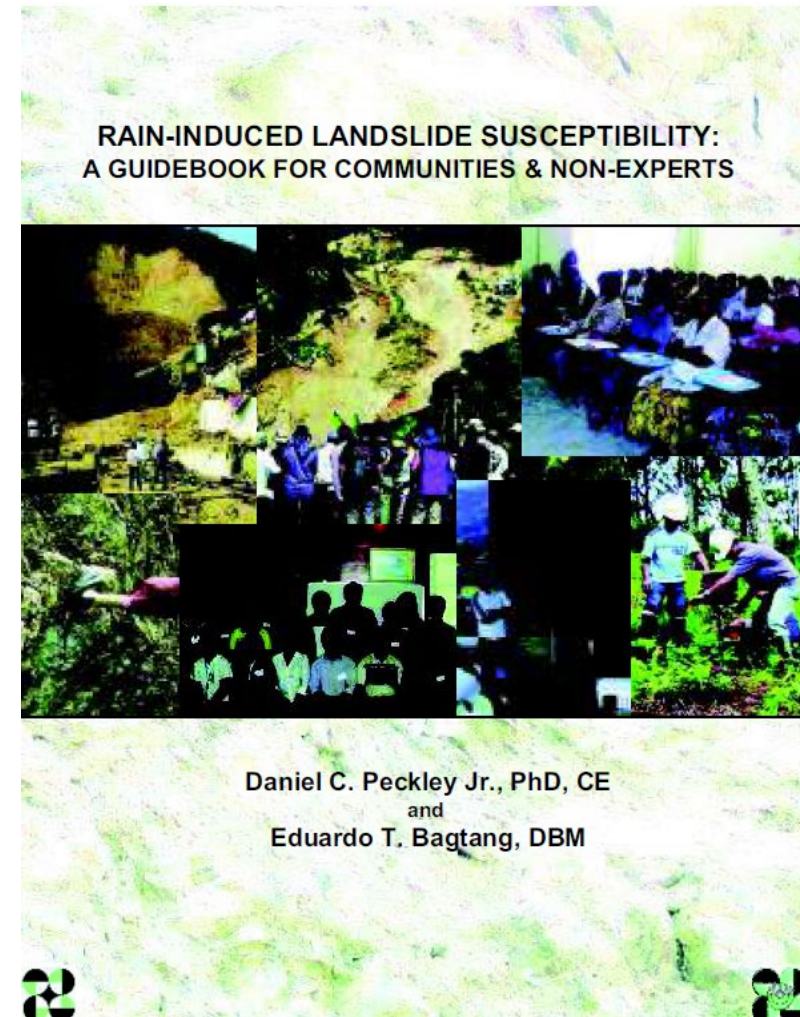
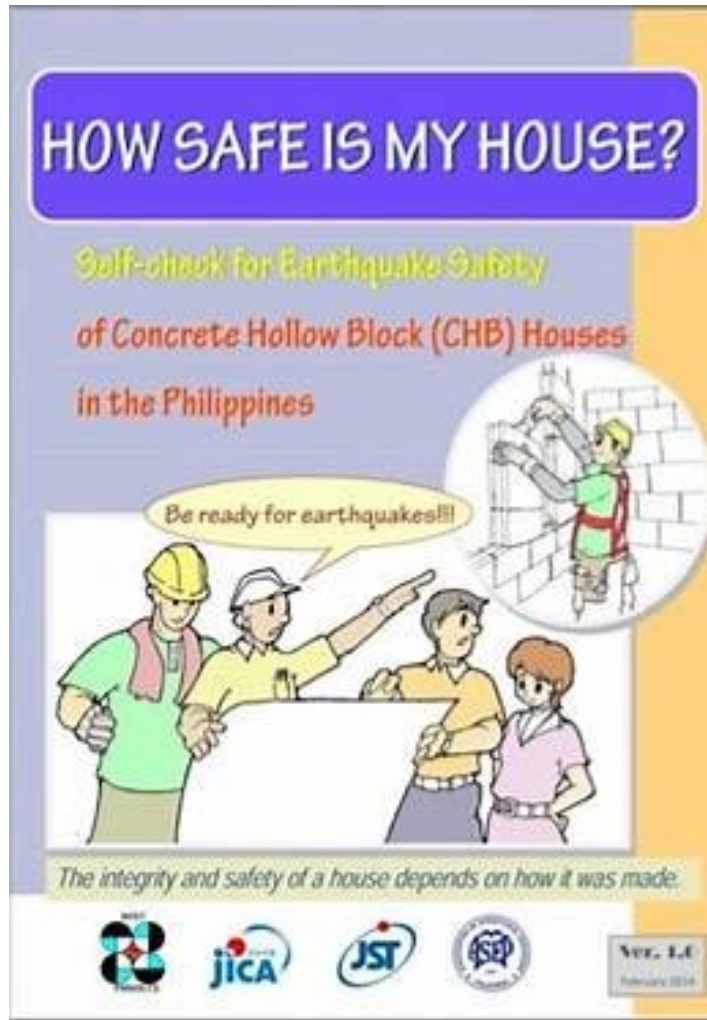
COURSE COVERAGE

- Disaster Risk Management Concepts
- DRRM Perspectives
 - Psycho-social : Quantifying risk perception and acceptance.
 - Socio-Political: Interplay of Politics/Governance, Economics, Social, and Environmental factors.
 - Ecocritical: How the media ecosystem shapes risk perception and acceptance.
- Disaster Risk Assessment
- Disaster Risk Communication
- Disaster Risk Management

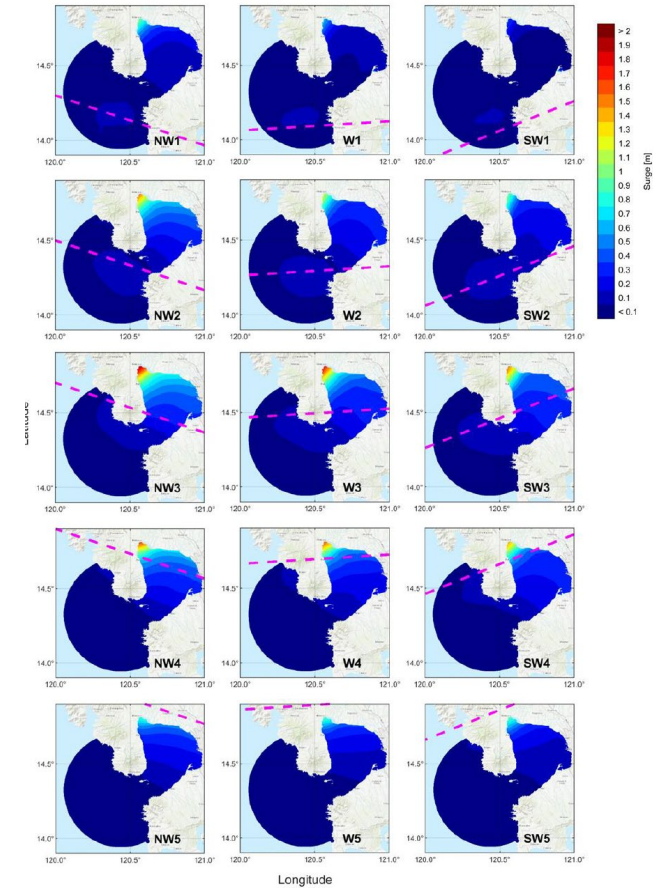
CORRELATING OBJECTIVE AND SUBJECTIVE RISK



NON-EXPERT RISK ASSESSMENT METHODS



EXPERT ASSESSMENT METHODS



3-D PARTICIPATORY MAPPING



CASE STUDY PROPOSAL

SUMALI SA AMING PAG-AARAL!

Ang aming pag-aaral na pinamagatang '**Pagsusuri sa Pananaw ng mga Manininda sa España Boulevard, Sampaloc Manila tungkol sa Panganib na dulot ng Pagbaha**' ay naglalayon na:

- Malaman ang pananaw ng mga manininda sa mga impormasyong ibinibigay ng PAGASA.
- Matukoy ang pananaw ng mga manininda sa mga proyekto ng DPWH upang maireresolba ang pagbaha.
- Malaman ang kamalayan ng mga manininda sa mga serbisyong hatid ng LGU bago ang pagbaha.

OBHEKTIBONG PAGSUSURI

Paggamit ng **HazardHunterPH** upang makita ang mga posibleng sakuna

- Pagsusuri ng **kasaysayan at datos** ng pagbaha sa España
- Pag-aaral ng **PAGASA local warning system** at paggamit ng **flood instruments**

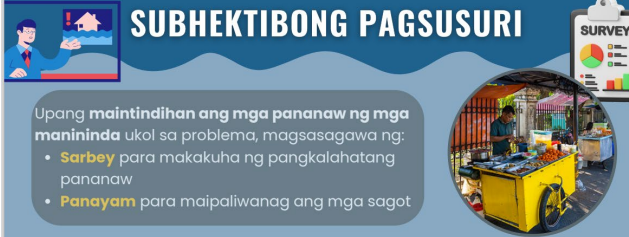
TANDAN ANG PAGASA ADVISORY

Level	Color	Meaning
RED	Red	Immedyong pagbaha
ORANGE	Orange	Immedyong pagbaha
YELLOW	Yellow	Possibleng pagbaha
GREEN	Green	Possibleng pagbaha sa ilalim ng lugar

SUBHEKTIBONG PAGSUSURI

Upang **maintindihan ang mga pananaw ng mga manininda** ukol sa problema, magsasagawa ng:

- **Sarbey** para makakuha ng pangkalahatang pananaw
- **Panayam** para maipaliwanag ang mga sagot




WFUSC - DA BOMB


LAND SUBSIDENCE AND SEA LEVEL RISE

Assessment of the Local Government Response to Land Subsidence and Sea-Level Rise in Sasmuan, Pampanga

Pampanga has been identified as one of the areas in the Philippines that has **shown evidence of land sinking at an alarming rate**, together with the provinces of Bulacan and Metro Manila



Pampanga's coastal towns are geographically located just adjacent to the Manila Bay, making them the **most vulnerable to sinking**



Sasmuan is **sinking at two to four centimeters per year**.

Excessive groundwater extraction causes **land subsidence at 40.6 centimeters per year**.

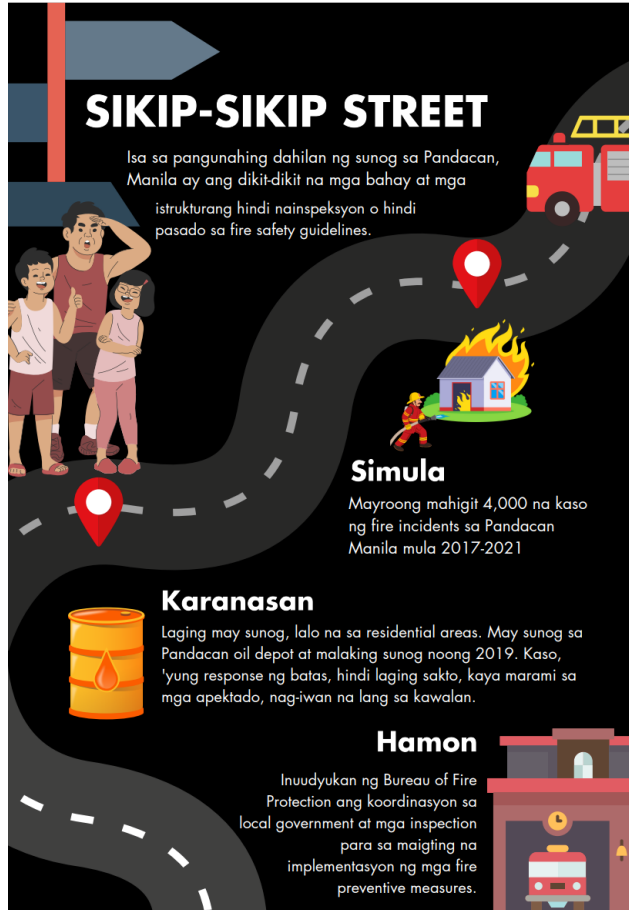
ATTENTION PLEASE!

DE SILVA, FRANCESCA MARIE | LEE, JOANNA ANGELA | MARCELO, ANDREA DENISE | MORENO, FRANCINE GAYLE

CASE STUDY PROPOSAL

SIKIP-SIKIP STREET

Isa sa pangunahing dahilan ng sunog sa Pandacan, Manila ay ang dikit-dikit na mga bahay at mga istrukturang hindi nainspeksyon o hindi pasado sa fire safety guidelines.



Simula

Mayroong mahigit 4,000 na kaso ng fire incidents sa Pandacan Manila mula 2017-2021

Karanasan

Laging may sunog, lalo na sa residential areas. May sunog sa Pandacan oil depot at malaking sunog noong 2019. Kaso, 'yung response ng batas, hindi laging saktong, kaya marami sa mga apektado, nag-iwan na lang sa kawalan.

Hamon

Inuudyukan ng Bureau of Fire Protection ang koordinasyon sa local government at mga inspection para sa maigling na implementasyon ng mga fire preventive measures.

ANO ANG BUILDING CODES?

National Structural Code of the Philippines (NSCP)

Ang NSCP ay ginagamit upang masiguro na matibay ang pagkagawa sa isang gusali.

Ang NSCP ang basehan ng National Building Code of the Philippines (NBCP), na isang batas.

Sinisiguro ng NBCP na ang gusali ay makatatagal sa mga kalamidad.

SINO ANG NAGPAPATUPAD NG NATIONAL BUILDING CODE?

- Department of Public Works and Highways (DPWH) Secretary
 - nangangasiwa sa pagpapatupad ng NBCP at sa mga parusa sa mga paglabag
- Building Officials, Licensed Civil Engineers, Architects
 - itinatalaga ng DPWH secretary sa bawat munisipalidad
 - taga-proseso at apruba ng mga building permit
 - taga-isyu ng mga parusa sa mga lumalabag o nagkakamali

ANIM NA HAKBANG SA PAGKUHA NG BUILDING PERMIT

- SUMANGGUNI SA INYONG INHINYERO AT ARKITEKTO PARA SA PLANO NG BAHAY O GUSALI
- IHANDA ANG MGA SUMUSUNOD NA REQUIREMENTS:
 - (5) BUILDING PERMIT FORMS
 - (3) SANITARY PERMIT FORMS
 - (3) ELECTRICAL PERMIT FORMS
- KUMUHA MULA SA REGISTER OF DEEDS NG ISANG CERTIFIED TRUE COPY (CTC) NG TRANSFER CERTIFICATE OF TITLE (TCT) NG LOTE
- I-SECURE MULA SA TREASURER'S OFFICE ANG TAX CLEARANCES AT SA ASSESSOR'S OFFICE ANG TAX DECLARATION NG LOTE
- MAGBAYAD NG KARAMPATANG MGA KABAYARAN
- I-CLAIM ANG INYONG BUILDING PERMIT

MAARI RING MAG-APPLY ONLINE!
[HTTPS://QCESERVICES.QUEZONCITY.GOV.PH](https://qcservices.quezoncity.gov.ph)

HUWAG TULARAN

Ang Chuzon Supermarket sa Porac, Pampanga, gumuho matapos ang lindol noong Abril 2019, ay nagpapakita kung gaano kahalaga ang pagsunod sa Building Codes at pagkuha ng Building Permits. Sa imbestigasyon, lumitaw na lumabag ito sa building code, workmanship, at supervision regulations. Wala rin itong mga kinakailangang dokumento, permit, at plano, at malang seismic analysis sa building plan.

ANG CHUZON SUPERMARKET

ay isang babala dahil sa pagsuwat sa mga batas ng kaligtasan at kahandaan.

"ANG TAMANG PAGSUNOD SA BUILDING CODES AT BUILDING PERMITS AY NAGLALARAWAN NG MAHALAGANG HAKBANG UPANG MATIYAK ANG KALIGTASAN NG MGA MAMAYAN AT ANG KAPAKANAN NG KOMUNIDAD"

SUMMARY

- Since first being offered in June 2013, more than 3000 students have taken DRMAPS.
- Many case study proposals have been funded and implemented as undergraduate student research projects.
- Efforts are currently underway to implement similar versions of DRMAPS in other campus of the University of the Philippines System.
- There are plans to implement a MOOC version of the DRMAPS which would allow non-credit students to enroll in DRMAPS.



THANK
YOU