

CALL FOR APPLICATIONS Announcement

UNITED NATIONS UNIVERSITY Institute for Environment and Human Security Intensive Summer Course 2016



"Advancing Disaster Risk Reduction to Enhance Sustainable Development in a Changing World"

20 June -1 July 2016, UN Campus, Bonn

Accepting applications until 31 March 2016

Location: UNU-EHS, UN Campus, Bonn, Germany

Email: blockcourse@ehs.unu.edu

We are inviting qualified PhD and Master's students, as well as practitioners who have an interdisciplinary focus and are working on research related to vulnerability and resilience in the context of disaster risk reduction (DRR) and climate change adaptation (CCA) to apply for the UNU-EHS Course entitled "Advancing Disaster Risk Reduction to Enhance Sustainable Development in a Changing World" to be held 20th June – 1st July 2016 in Bonn, Germany. PhD students would ideally be in the early stages of their research while Master's students in the advanced stage of their research. Applications of interested candidates must be submitted no later than 31 March 2016 via email to: blockcourse@ehs.unu.edu



Purpose

The Institute for Environment and Human Security of the United Nations University (UNU-EHS) assesses the vulnerability and coping capacity of communities facing natural and human-induced hazards in a changing environment. It leads United Nations University's (UNU) research and capacity building activities in the broad interdisciplinary field of risk and vulnerability. One of the institute's major educational activities is the UNU-EHS Intensive Summer Course, which highlights the complexity and importance of vulnerability and resilience in DRR and CCA. The UNU-EHS Intensive Summer Course is offered every year and is designed for postgraduate candidates in the early stages of PhD research (or about to begin PhD studies) and advanced Master's degree students but also for practitioners working in the fields of Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA).

About the Intensive Summer Course

The growing frequency and magnitude of extreme environmental events (such as floods, landslides and drought) have intensified research interest in these events, in particular regarding the level of risk they pose in different locations, the vulnerability of communities and their response capabilities. The concept of human security focuses on threats that endanger the lives and livelihoods of individuals and communities. Safeguarding human security requires a new approach and a better understanding of many interrelated variables (such as social, political, economic, technological and environmental factors) that determine the impact of extreme events when they occur.

The overall goal of the Intensive Summer Course is to increase awareness regarding the complexity and importance of vulnerability and resilience in the fields of DRR and CCA. The Course is based on key research questions of UNU-EHS, and covers the following overarching themes:

- Environmental, physical, social, and economical dimensions of vulnerability;
- Processes and conditions that have an impact on vulnerability and determine vulnerability patterns (such as human mobility);
- Measures and activities which enable shifting from vulnerability to resilience policy recommendations (such as the use of insurance and risk transfer);
- International law and a rights based approach in the 2016 /Post-2016 discussions on DRR, development, and climate change;
- Early Warning Systems and Geospatial Technologies in support of disaster management, emergency response preparedness, DRR and CCA;
- Disaster coordination and management within national and international organizations (including Simulation Exercise).

The time allotted for the Course is two weeks.





Units and Learning Objectives

Epistemology / History of Risk and Vulnerability

- observing the "Anthropocene" is it an effective paradigm to describe the cumulative impact of civilization and the way humans have modified earth?
- understand the evolution of the field
- learn the major theories and concepts in the field
- understand different types of risk, hazards, vulnerability, etc.

Methodology (epistemic chain) and Indicator development

- learn processes and tools of identifying, quantifying, and prioritizing (or ranking) the vulnerabilities and risks
- learn how to develop indicators

Political ecology of risk

understanding the interplay between societies at risk, those who are vulnerable and how policies are shaped

Why ecosystems matter for DRR and CCA

- awareness of the role and opportunities of ecosystems and ecosystem services in disaster risk reduction
- understanding the principles and approaches of ecosystem based disaster risk reduction and climate change adaptation (EcoDRR/CCA)
- understanding the concept of the ecosystem services (ES) approach and being able to identify ES in specific case studies
- awareness of the advantages, co-benefits and limitations of EcoDRR
- knowledge of different approaches on how to assess the potential of ecosystem-based disaster risk reduction
- awareness of synergies with development planning processes and biodiversity conservation

Urban vulnerability

• understanding the impact that climate change and other hazards have on urbanized populations and infrastructure

Looking at human-made hazards: e-Waste

creating awareness about e-waste management and sustainable electronics cycles

Climate Change and International Law

- learn how principles of international law are relevant to climate change, particularly concepts such as hybrid law
- gain an understanding of how international law and a rights based approach are featuring in the landmark 2016 / post-2016 discussions on disaster risk reduction, development, and climate change

Climate change, environmental change and migration

- learn about most recent research on climate change and human mobility
- gain awareness of the key debates about climate change and human mobility



How insurance and risk transfer can help vulnerable communities and countries increase their resilience against weather shocks

- learn how insurance and risk transfer can reduce the stress that communities suffer from weather impacts
- understand how the tool can improve the livelihoods of affected people by adding to their portfolio of risk management strategies and how it can prevent them from falling deeper into poverty by properly including them into the formal financial system

Loss and Damage

- learn about the emerging concept of loss and damage, major issues and areas of discussion in policy and practice, and an overview of policy directions.
- gain understanding into a research approach and emerging methods toolkit to understand and measure loss and damage, featuring results from case studies.

Regionalization and globalization of risk patterns

- learn about risk pathways and fundamental differences in risk profiles
- understand 'meta analysis' publication
- find out what is the global impact and learn about differences and similarities between countries and continents

Geospatial technologies in support of Disaster Risk Reduction (DRR) and Emergency Response

- learn about space-based solutions for DRR and DRM; critical reflection on the limitations of remote sensing in the context of disaster management
- learning about frameworks and crucial elements of early warning systems; technological limits; critical reflection on the Last-Mile topic and implications for EWS
- International actors and major mechanisms: international initiatives in the field of Earth Observation and Disaster Risk Management

Disaster Risk Management and Humanitarian Response

- learn about civil protection mechanisms and humanitarian response architecture from the national to the global level
- learning about operational coordination within disaster management and humanitarian response

Putting Theory into Practice: Rapid Assessment Simulation Exercise

• gain hands-on experience regarding field assessment, geo-referencing, coordination, and communication

Conclusion

wrapping up key concepts taught during the 2 weeks



Major Themes Covered

Theme	Topics	Assignments
Terminology	Disaster risk management	Comparative analysis of a disaster risk
	(DRM Terminology)	management terminology
Hazards	Hazard types	Mapping historical hazards
	 Historical spatial and temporal 	Hazard frequency-magnitude- damage analysis
	hazard distribution	
	 Assessing hazards 	
	 Measuring hazards' impact 	
Dimensions	 Definition of a system 	•Analysis of the basic elements of particular system
	•Infrastructure	Practical exercise on describing applied systems
	•Economical	
	•Environmental	
	•Social	
	 Coupling two or more 	
	dimensions	
Vulnerability	Basic principles	Discussion of the applicability different frameworks
	•Theoretical basis	•Improved understanding of the
	 Conceptual frameworks 	Different conceptual and theoretical approaches
	 Vulnerability and sustainable 	
	Development	
	 Assessing vulnerability 	Perform data collection
	 Indicator and indices 	•Examples of qualitative analysis
	 Qualitative versus quantitative 	•Examples of quantitative analysis
	assessment	•Exercises using indicators and indices
	 Input data collection methods 	
	 Vulnerability models 	•Assessing vulnerability using selected models
	 Progression of vulnerability 	•Analysing root causes for different
	•Root causes	vulnerability patterns - context specific
	•Dynamic pressure	•Human mobility -
	 Unsafe conditions 	Qualitative tools and methods
	•Environmentally Induced	•Human mobility – stories
	Migration	info on cases



Coordinated Assessment and	Emergency response and	UN humanitarian system
Information Management	coordination	IASC (Inter-Agency Standing Committee)
within the United Nations	Response tools	• Introduction to Coordinated Assessments in Humanitarian Crises
System	Information management tools	• UN response tools (OCHA: UNDAC, INSARAG)
	and processes	Information management tools and processes
		Safety and Security
Geospatial technologies and	 Remote sensing applications for 	•Introduction of space-based technologies for risk and disaster
Early Warning Systems for	Disaster Risk Reduction (earth	management
Disaster Risk Management	observation, navigation,	Discussion of various tools and methods
	communication)	Analysis of existing international response and support mechanisms
	Early Warning Systems	Practical exercises
		Introduction to concept and implementation of early warning systems
Vulnerability to Resilience	On theory of resilience	Assessing progression of resilience
	 Progression of resilience 	Achieving safe conditions for selected hazard
	 Achieving safe conditions 	Steps towards a culture of resilience
	Reducing hazard impact	Linking vulnerability assessment and adaptation strategies
	 Development of safety culture 	



By the end of the course student should be able to:

- understand the multi-dimensional nature of vulnerability and the necessity for an interdisciplinary approach;
- critically evaluate and understand different concepts and frameworks of vulnerability
- analyse the role of vulnerability and resilience in disaster risk management and development planning;
- understand and implement models and methods for vulnerability assessment;
- implement measures and activities which enable shifting from vulnerability to resilience;
- have improved capacities to apply methods and tools;
- understand main mechanisms in international disaster management;
- explain main players and actors in international disaster management and humanitarian response;
- understand of use of geo-spatial technology in DRM;
- understand coordination and communication during field assessments.

The final programme will be distributed before the start of the course to the participants.

Course Organization and Materials

The UNU-EHS Course consists of a series of lectures conducted by experts, students' practical work, discussions, group work, and simulations. Upon completion of the course, participants will be given a certificate of completion by the UNU-EHS.

Course materials will be provided by UNU-EHS in class. A course platform¹ will be used to provide students with access to course materials.

Required Qualifications for Participants

- PhD and/or Master Students in geography, economics, social science, engineering, anthropology, environmental and/or natural science or related disciplines
 - Doctorate candidates in the early stages of PhD research or about to begin PhD studies
 - Master's candidates in late stages of study

OR

- Experienced Practitioners working in fields related to vulnerability, risk and/or disaster management who hold a Bachelor's Degree.

- Fluency in English (B1/2)
- Basic computer user knowledge

¹ The platform is only available to students of the course. Access will not be provided to anyone who is not taking part of the course.



Application Process

To apply for the UNU-EHS Course 2016, please submit the following materials:

- 1. A **completed and signed application** form found on the UNU-EHS website (http://www.ehs.unu.edu/article/read/phd-block-course-from-vulnerability-to-resilience-in-disaster) (REQUIRED)
- 2. **Résumé/CV**: A current résumé including a chronological listing of employment and other significant activities. (REQUIRED)
- 3. **Motivation letter:** Applicants must provide **a written statement**, one to two pages in length, **describing their motivation**, relevance of your research/ educational background and practical experience to the course, and why they feel participation in this course is relevant to their future work. (REQUIRED)
- 4. One letter of recommendation (REQUIRED)
- 5. For non-native English speakers, **English language proficiency** certificate. (RECOMMENDED)

Only digital versions sent via email will be accepted. We do not accept applications sent via post. Completed application packets must be received by the date of deadline, **31 March 2016**, **23:59 CET** (Central European Time) for Bonn, Germany. Any applications received with timestamps of 24:00 CET or later for the following day will be automatically excluded.

The UNU-EHS will select 20 applicants according to the qualifications and previous achievements. Notifications will be made by the end of April 2016.

Financial Information

The UNU-EHS Intensive Summer Course is free of charge. Each participant is expected to finance (or seek funding) and to organize his/her travel, local transport, per diem, and accommodation. Please note that UNU-EHS will not provide for any of these costs.

For questions or further information about the UNU-EHS Intensive Summer Course please contact us via email: blockcourse@ehs.unu.edu