RISK METHODS SCHOOL
10 – 22 SEPTEMBER 2018
ARDHI UNIVERSITY - DAR ES SALAAM

Stream One: Investigating and Assessing Africa's Urban Risks: Geo-spatial applications

Course I: *Assessment and Mapping of Urban Risks in Africa: Introduction to urban risk and Geographic Information Systems (GIS)*

Date: *10 -14 September, 2018*

This intensive, introductory course introduces participants to the terminology, basic concepts and theories of urban risk, including urban risk trends in East Africa. It introduces both Geographic Information Systems (GIS) and Remote Sensing and their application to urban risk management in Africa. The course includes practical exercises on risk and vulnerability assessment, using GIS and Remote Sensing applications.

This course is useful for post-graduate students and emerging academics and practitioners who have had no prior or limited experience with GIS, and who require an introduction to urban risk mapping, analysis and modelling.

On completion of the course, participants will be able to:
- Explain core concepts related to urban risk as these apply to rapidly changing African towns and cities.
- Understand and apply core elements of GIS and Remote Sensing tools and methods, including ArcGIS software (also ArcCatalog, ArcMap and ArcToolbox).
- Apply geospatial tools to map flood hazards, vulnerability and risks for the purposes of urban risk assessment and management.
- Create a flood risk map for selected informal settlements in Dar es Salaam.

Course content
- Introduction to urban risks, DRM and GIS & RS concepts
- Introduction to ArcGIS software, including ArcCatalog, ArcMap and ArcToolbox
- GIS and Remote Sensing analysis, and applications to urban risks
- Hazard, Vulnerability and Risk Assessment Practical

Entry prerequisites and requirements
- Minimum of a Masters degree in Geography, Urban Planning, Disaster (Risk) Management, Development Studies or related field.
- Participants should be fluent in reading and speaking English.

Equipment implications
While Ardhi will provide access to GIS computer laboratory facilities, participants are also encouraged to bring their own laptops or other equipment. Please check the Administrator Rights, to ensure that settings can be adjusted if necessary.

http://www.riskreductionafrica.org/events/periperi-u-risk-methods-school.html

Stream One: Investigating and Assessing Africa's Urban Risks: Geo-spatial applications

Course presenters

Dr Guido Uhinga

Dr. Uhinga is a Geomatician and a climate change expert. He holds a PhD in Climate Change Studies, specializing in Climate Change Modeling, from Ardhi University and a Master of Science (M.Sc.) degree in GIS and Remote Sensing from the International Institute for Geo-Information Sciences and Earth Observation (ITC) of the Netherlands.

Dr Uhinga has fifteen years' experiences in teaching, research and consultancy activities related to GIS, Remote Sensing and Disaster risk management (DRM). His consultancy activities include National Hazard and Vulnerability Assessment Project, Phase II; Disaster Risks and Capacity Needs Assessment for Tanzania Mainland and Zanzibar; Advancing the use of ICT for Disaster Risk Management in Africa (AIDA) – African and European institutions using ICT to meet disaster challenges; and Participatory Community Risk Assessment and Mapping.

Dr Joseph Mayunga

Dr Joseph Mayunga is a Supporting Lecturer at Ardhi University, Dar es salaam, Tanzania. He is a Disaster Risk Management expert with more than 15 years' experience. He holds a PhD in Urban and Regional Sciences specializing in Environmental Hazard Management, from Texas A&M University in the United States. He also holds an MSc. degree in Urban Planning and Management, specializing in Geographical Information Systems and Remote Sensing from the International Institute for Geo-Information Sciences and Earth Observation (ITC), the Netherlands. Dr Mayunga has been involved in various training, research and consultancy projects related to urban and regional sciences, disaster risk management and the application of geographical information system and remote sensing.

http://www.riskreductionafrica.org/events/periperi-u-risk-methods-school.html