



Graduate Courses in Disaster Risk Science (Honours and Masters within Environmental and Geog Science)



Course	Learning Outcomes	Critical Content Areas	Learning Activities/ Methods	Assessment Methods
DRS I: HONOURS Integrated understanding of disaster risk & its implications	<p><u>Understanding of:</u> Theoretical/ applied disciplines that define disaster, vulnerability and risk</p> <p>Impacts & underlying socioeconomic, political, environmental & infrastructural risk factors – including roles of HIV/AIDS & climate variability</p> <p>Patterns of urban/rural disaster risk in southern Africa</p> <p>Patterns of urban/rural disaster risk</p> <p><u>And capacity to:</u> Integrate and synthesize different disaster risk perspectives</p>	<p>Critical conceptual frameworks & DR terminology</p> <p>Hydrometeorological risks and agricultural drought, famine and food security, public health risks and epidemiology</p> <p>Contemporary humanitarianism and complex emergencies</p> <p>Applied disaster risk research, information gathering & interpretation: focus on early warning and structural & non-structural mitigation measures and strategies</p> <p>Overview of Hyogo Framework for Action, Disaster Management Act & National Disaster Management Framework, Sphere, Code of Conduct</p> <p>Applied field research & Social science/natural science analytic methods, participatory risk assessment methods</p>	<p>Seminar style</p> <p>Extensive guided reading</p> <p>Reaction papers requiring evidence of individual research initiative</p> <p>Group project – field assessment, application of field settlement, application of field research skills (Service learning)</p> <p>End to end research project</p>	<p>Class participation</p> <p>4 reaction papers</p> <p>Midterm project</p> <p>Open book exam</p> <p>DRS research report of 10 000 words</p>
DRS II: MASTERS Builds on DRS I & builds strategic analytical & management capabilities across sectors	<p>Synthesizing hazard & vulnerability science</p> <p>Understanding & analysing disaster risk occurrences, patterns & trends</p> <p>Analytic and strategic planning competencies in addressing priority risks</p> <p>Knowledge of ethical principles, critical risk reduction strategies & implications for implementation</p>	<p>Hazard & vulnerability conditions that drive specific disaster risks</p> <p>Legal & policy frameworks for managing specific priority risks</p> <p>Risk determination and monitoring</p> <p>Critical risk reduction interventions</p>	<p>Seminar style</p> <p>Guided reading</p> <p>Reaction papers</p> <p>End to end research project</p>	<p>4 Reaction papers</p> <p>Midterm group project</p> <p>Open book exam</p> <p>mini-thesis of 15 000 – 25 000 words</p>
Disaster Risk Assessment & Monitoring Methods and Tools	<p>Knowledge of a wide range of hazard, vulnerability and risk assessment tools/methods</p> <p>Skills in: - selecting different methods for specific risk types, geographical scales and practical constraints</p> <p>-integrating disaster risk assessment methods with other tools</p> <p>-designing and undertaking appropriate risk assessments and to interpret and present results</p>	<p>Urban risk assessment</p> <p>Community risk assessment methods</p> <p>Wild-land (veld) fire assessment</p> <p>Coastal & marine risk assessment</p> <p>Riverine flood assessment</p> <p>Georisk/ seismic risk assessment</p> <p>Food insecurity assessment</p> <p>Overview of international approaches to disaster risk assessment</p>	<p>Reading of relevant disaster risk assessment literature</p> <p>Mentored teaching by skilled risk scientists in eight priority risks</p> <p>Generation of a portfolio of risk assessment approaches</p> <p>Generation of consolidated risk assessment approaches sowing evidence of integrated analysis</p>	<p>Risk assessment portfolio</p> <p>Integrated risk assessment compilation project</p> <p>Open book examination</p>

Journals:
Disasters
Environment and Urbanisation Journal
Emergency Management Australia
Humanitarian Practice Network publications

Books:
 Pelling. 2003. *The Vulnerability of Cities: Natural Disasters and Social Resilience*
 Wisner et al. 2004. *At Risk: Natural Hazards....*
 ECLAC. 2003. *Handbook for Estimating Socio-economic and Environmental Losses to Disasters*
 Twigg. 2004. *Disaster Risk Reduction*
 UNDP. 2004. *Reducing Disaster Risk*

Websites:
www.proventionconsortium.org
reliefweb.int
eldis.ids.ac.uk
www.unisdr.org