University of Rome Tor Vergata Undergraduate Degree (B.A.) in Global Governance

Course Syllabus Natural Disasters Prevention and Reaction 6 CFU Prof. Erdem Ergin

Disaster Risk Management

Course description

The occurrence of extreme events is increasing around the world, causing significant human suffering and socio-economic on development and growth. Today we know that it is not only the existence of a specific seismic fault line or the presence of a river that creates a risk. But that factors such as unplanned growth of urban populations, inadequate management of natural resource, dramatic shifts in demographics, ill-planned development or growth policies, and/or changes in the climate all have an impact on a country's risk profile. The combination of these factors is unique to each country/city, as is its risk profile. Many cities and countries now face a risk profile with no precedent, forcing them to develop their own, tailored risk management strategies. Most striking examples include:

- The 2010 Haiti Earthquake, considered the first large-scale urban disaster in a developing country;
- The 2011 Fukushima Nuclear incident in Japan is the world's second largest nuclear incident;
- Hurricane Sandy (2012), which became the second costliest disaster of the USA, leading to the first non-war related closure of the New York City subway.

These events have highlighted the need across all professions and organizations to develop new Disaster Risk Management (DRM) policies, programs, practices, and innovative technologies. It is now a growing field of work, receiving substantial funding and offering interesting job opportunities from insurance to policy making and from social sciences to engineering.

Learning goals

The course takes a systemic approach to DRM and is structured around 3 modules, aiming to:

- Develop an understanding of risk management concepts and the current framework for action.
- Provide a detailed overview of various DRM strategies including sample/case studies from policies, programs and practices,
- Build up capacity to integrate DRM strategies into respective field of interest.



Figure 1 – Disaster Risk Management strategies

Required texts and references

The main reference for the class is the Global Assessment Report on Disaster Risk Reduction 2015, published by the United Nations in March 2015. It is available online (GAR 2015) or via the following link:

http://www.preventionweb.net/english/hyogo/gar/2015/en/home/download.html

The instructor will also hand additional notes, papers and references during the classes.

Attendance

The material will be covered using a mix of lectures, discussions and if possible a field visit. Regular class attendance and active participation are expected, as they will help achieve the learning goals and contribute to an overall positive learning environment.

Grading Policy

<u>Element</u>	<u>Points</u>
Class participation	10
Exams (2)	30
Quizzes	5
Homework	35
Journal article review	5
Presentations	15
Total	100

Office Hours By appointment or e-mail E-mail: erdemergin6@gmail.com