



Academic Year 2017-2018

Syllabus

Natural Disasters: Prevention and Reaction

CFU 6

Prof. Donato Abruzzese, Prof. Erdem Ergin

Course Description

The interaction of our societies with the natural environment is under stress. Factors such as rapid urbanization, demographic shift, consumption patterns etc. increase the risk in our societies. We indeed see an upward trend of extreme events around the world; causing significant human suffering and negative impact on socio-economic on development and growth. To the known natural events such as earthquakes, floods, landslides etc. we now have to add the impact of climate change. The combination of these factors is unique to each country/city/business/household and building resilience means a tailored disaster risk management (DRM) strategy. The course takes a systemic approach to DRM and is structured around 3 modules, aiming to:

- Develop an understanding of disaster risk management concepts, terminology and dynamics;
- Provide a detailed overview of various DRM strategies including sample/case studies;
- Build up capacity to integrate DRM strategies into various field of interest.

Teaching Method

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

Schedule of Topics

Session 1	Concepts: Risk, Disaster and Resilience
Session 2	Overview of Natural Hazards
Session 3	Overview of Structural Changes
Session 4	Risk Assessment and developing scenarios
Session 5	Risk Management: Prevention & Protection
Session 6	Risk Management: Preparedness
Session 7	Disaster Management: Response
Session 8	Disaster Management: Recovery & Reconstruction
Session 9	Building Resilience: Critical Infrastructure
Session 10	Building Resilience: Social safety nets
Session 11	Building Resilience: Water security
Session 12	Building Resilience: Business Continuity

Textbook and Materials

The course is presented as distinct stand-alone modules that complete each other. The instructor will circulate the presentation and material used in class after each class session. For those interested in acquiring more material, a good reference textbook is: Introduction to International Disaster Risk Management, Damon Coppola, (3rd edition), 2015, Butterworth-Heinemann. This is NOT a mandatory textbook.

Assessment

The grading will be based on the following: keep a class journal (15%), 2 tests (20% each), final exam (30%), and class participation (15%). Both the tests and final will be written exams.

Non-attending students (more than 20% absence) will receive class material and directly take the final exam.

In case students reject their final exam score, they can retake the exam at a later date. In this case all previous scores from the class journal and the tests are voided. The score the student gets from the retake of the final becomes their course grade.

Office hours

Erdem Ergin, Wednesday upon appointment (erdemergin6@gmail.com).