

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

## Coastal and Marine Hazard and Resilience

2223-2-F7502Q007

#### **Aims**

The course explores the complexity of the relationships between culture, risk and disaster. The aim of the course is to improve the knowledge and understanding of the risks associated with coastal and marine environments in order to better manage them and analyse people's resilience to risk, exploring the cultural dimension of disaster.

#### **Contents**

Definitions and uses of the terms hazard, risk, disaster, vulnerability and resilience. Culture, knowledge and world views related to hazards. Cultural and political aspects of disasters, catastrophes and natural hazards (tsunamis, floods, climate change) in marine and coastal areas: adaptation, mitigation and resilience. The cultural dimension of disaster risk reduction (DRR). Sustainability in relation to the promotion of the Sustainable Development Goals (SDGs), identified by the UN Agenda 2030. Governance, stakeholders, communication and participation.

#### **Detailed program**

The course examines the development of the meaning, uses and applications of the terms hazard, risk and resilience in marine and coastal areas, and explores the cultural dimension of disaster.

The significance of "culture" must be understood and incorporated into any attempt to deal with natural hazards (tsunami, storm surges, inundations, sea level rise) and disasters. The cultural dimension of disaster provides an understanding of human and social vulnerability to hazards, identification of stakeholders, local knowledge and resilience and social response at the local level.

In the course, case studies will be presented, focusing on the resilience-based responses to hazards and risk of

multiple sets of actors (women, children, older people, local communities, international agencies, political institutions) and human activities in different contexts.

#### **Prerequisites**

None

## **Teaching form**

Frontal lectures. Students will be engaged in case studies, discussions of scientific papers, analysis of national and international reports, oral presentations and reading of environmental assessments.

## **Textbook and teaching resource**

All teaching resources are digital and can be found on the University website.

Krüger F., Bankoff G., Cannon T., Orlowski B., and Schipper E.L.F. (Eds.) (2015), *Cultures and Disasters: Understanding Cultural Framings in Disaster Risk Reduction*, Abingdon and New York, Routledge

or, alternatively:

Kelman I. (2020), Disaster by Choice. How our actions turn natural hazards in catastrophes, Oxford University Press.

And the four articles:

- 1) Alexander D.E. (2013) "Resilience and disaster risk reduction: an etymological journey", *Nat. Hazards Earth Syst.* Sci., 13, 2707–2716,
- 2) Weichselgartner J., Kelman I. (2015), "Geographies of resilience: Challenges and opportunities of a descriptive concept", *Progress in Human Geography*, Vol. 39(3) 249–267
- 3) Kelman I., Gaillard J.C., Mercer J. (2015), "Climate Change's Role in Disaster Risk Reduction's Future: Beyond Vulnerability and Resilience", *Int. J. Disaster Risk Sci*, 6:21–27
  - 4. Adger W.N., Hughes T. P., Folke C., Carpenter S.R., Rockström J. (2005), "Social-Ecological Resilience to Coastal Disasters", *Science* 309, 1036–1039

#### Semester

First semester

#### **Assessment method**

Oral final examination.

For attending students the final evaluation will be based on:

- 1. attendance and participation in the course,
- 2. articles presentations,
- 3. group presentation and ppt,
- 4. oral presentation of one's contribution to teamwork
- 5) writing assignment

For not attending students:

Oral discussion with open questions about the textbook and articles listed in the program to allow the non-attending students to acquire expertise on topics addressed by the lecturer through lessons and classroom discussion

### Office hours

Appointment by e-mail:

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# **Sustainable Development Goals**

NO POVERTY | GENDER EQUALITY | REDUCED INEQUALITIES | CLIMATE ACTION | LIFE BELOW WATER | PEACE, JUSTICE AND STRONG INSTITUTIONS