



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Coastal and Marine Hazard and Resilience

2627-1-F7504Q015

Aims

The course explores the complexity of the relationships between culture, risk and disaster in marine and coastal areas. 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 in marine areas.

1. Knowledge and understanding skills: Participants will gain knowledge of the key and in-depth concepts of marine and coastal areas hazard and resilience, including definitions, spatial and temporal patterns, and the description of major hazards.
2. Ability to apply knowledge and understanding: Participants will be able to apply the acquired knowledge to case studies, through the understanding of key concepts and analysis of risk and resilience issues related to coastal and marine environment and culture
3. Independent judgment skills: Participants will be able to independently identify relevant issues and the most effective methodologies for studying, protecting, and approach marine and coastal environments, in risk situations with a cultural approach
4. Communication skills: Participants will be able to express themselves clearly and in a scientifically accurate manner on topics related to marine and coastal areas hazard and resilience, also through the analysis of current case studies.
5. Learning skills: Participants will be able to independently deepen their understanding of topics related to marine and coastal areas hazard and resilience and integrate the acquired knowledge with future courses on the diversity and conservation of the coastal and marine environment related to culture.

Contents

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. The teaching content and syllabus are consistent with the training objectives of the Course of Studies

Detailed program

'No water, no life. No blue, no green.' This phrase by Sylvia Earle highlights the fundamental connection between the ocean, terrestrial life and human well-being. This interconnectedness is crucial when considering hazards and resilience in marine and coastal areas. The ocean is a complex and dynamic space imbued with meaning and significance through human interaction. The course examines the development of the meaning, uses and applications of the terms as hazard, risk and resilience, etc. 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

The entire course will be held online. Students will be engaged in case studies, discussions of scientific papers, oral presentations and reading of environmental assessments. At the end of the course students will analyse the impact of a hazard in a given community and the resilience of the stakeholders involved.

Teaching will be organised as follows:

10 two-hour lectures, on line, delivered didactically on the keywords of the course.

5 two-hour lectures, on line, on case studies, delivered didactically

8 hour group article reading, discussion and questions, online e-tivity, interactive mode

4 hours group case studies presentations and discussion, online e-tivity, interactive mode

PDFs of the lectures will be uploaded on the site. Lectures will be recorded and made accessible on request

Textbook and teaching resource

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

The teaching materials consist of two texts (one of them only in part) and four articles:

Texts:

The entire volume : Kelman I. (2020), "Disaster by Choice. How our actions turn natural hazards into catastrophes", Oxford University Press.

5 essays, of your choice, from the text: 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

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. 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
3. Gaillard, J.C. & Gomez, C., 2015, 'Post-disaster research: Is there gold worth the rush?', *Journal of Disaster Risk Studies* 7(1), pp. 1-6
4. Gaillard JC, Sanz K, Balgos BC, Dalisay SNM, Gorman-Murray A, Smith F, Toelupe V., "Beyond men and women: a critical perspective on gender and disaster". *Disasters*. 2017 Jul;41(3):429-447

Semester

Second semester

Assessment method

Final oral examination in presence. For those attending the course, the final assessment will be based on the following:

1. attendance and participation in the course
2. presentations of the four articles analysed during the course
3. choice of a group case study related to the topic 'Coastal and Marine Hazard and Resilience'; a group PPT and a presentation of the chosen case study in the last lecture of the course.
4. in the final exam, students will be required to give an individual oral presentation on their personal contribution to case study, as well as presenting a mental map. Students will be required to identify the role of their stakeholder group in the case study and in negotiations with other stakeholders.

The aim is to test one's skills and competences in the presentation of the proposed project and to assess one's review of the scientific literature, knowledge of the topics and teamwork skills, as well as the ability to make connections between concepts, think critically and use appropriate scientific language.

For those who cannot attend the course, an oral presentation of the teaching resources (books and articles) and PDFs of lectures uploaded on the website is required. During the oral examination, comprehension of the topics covered in class and the course material, textbooks and articles listed in the syllabus will be assessed by means of general and specific questions. The choice of the oral interview as exam mode is consistent with the teaching objectives, as it allows, through a dialogical communicative situation, to interact with the student in order to assess his or her ability to critically understand the course topics and to connect theory and practice.

Score: 18-30/30

Office hours

Appointment by e-mail:

marcella.schmidt@unimib.it

Sustainable Development Goals

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