ENVIHEI

Title of the PBL challenge: **Sociological and Socio-psychological Perspectives on Risk and Disaster**

Name of the responsible lecturer

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University / Department / Degree program

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Course / Subject in which implemented

2nd Course / Sociological and Socio-psychological Perspectives on Risk and Disaster

Implementation period (dates)

September 7, 2025 – December 2, 2025

Total duration (weeks/hours)

7 weeks / 38 hours

Number of students involved

38 students

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1. Project Design

1.1 Brief description of the project and the challenge proposed

This lecture introduces key concepts and approaches in the social-science study of risk and disasters, with a particular focus on the role of language in shaping how risks are understood, communicated, and responded to.

The course begins with an overview of the historical development of risk and disaster research and introduces important terminology used in the field. A central question is: What is language, and how does it influence our understanding of reality? Participants will explore how words, metaphors, narratives, and communication styles can affect the way people perceive threats such as natural hazards, technological accidents, health crises, or climate change.

A major topic is risk perception. The lecture examines why different individuals and groups may assess the same risk differently, and which social, cultural, emotional, political, and communicative factors influence these assessments.

The course addresses risk discourses, meaning the ways in which risks are discussed in media, politics, science, and everyday life. Students will learn how certain interpretations of risk become dominant and how language can frame responsibility, uncertainty, danger, safety, and vulnerability.

In the practical part of the course, participants will be introduced to critical discourse analysis and qualitative text analysis. Through exercises, students will analyse texts and communication materials related to risk in order to identify framing strategies, assumptions, power relations, and linguistic patterns.

The course includes group work, allowing students to apply the concepts collaboratively. The results of this work will be presented in a poster presentation, where groups communicate their analysis and findings to the class.

1.2 Expected learning outcomes (academic and transversal competences)

Upon completion students should have a basic understanding of central concepts in risk and disaster research from a social-science and applied linguistics perspective. The course aims to teach knowledge of how risk perception is formed and influenced as well as insight into the relationship between language, communication, and risk.

Students will become familiar with basic methods of critical discourse analysis and qualitative text analysis and experience analysing risk-related texts collaboratively. A presentation of posters marks the end of the course. presenting results in a poster format.

1.3 Targeted sustainability competences

This course supports students in developing sustainability competences that are relevant to understanding and addressing risks, disasters, and societal challenges. In particular, students will strengthen the following competences:

- **Systems-thinking competence**: Students learn to understand risk and disaster situations as complex social systems in which environmental, social, political, cultural, and communicative factors interact. They recognise that risk is not only a technical or natural phenomenon, but is also shaped by society. This is extremely valuable in the context of climate risks (present and future), which are used as examples.

- **Critical-thinking competence**: Through critical discourse analysis and qualitative text analysis, students learn to question how risks are described and framed. They will be able to identify assumptions, stereotypes, power relations, interests, and possible biases in media, political, scientific, or public communication.
- **Risk literacy and uncertainty competence**: Students develop an understanding of how people perceive uncertainty, danger, safety, and responsibility differently. They learn to interpret risk communication critically and to deal with incomplete, conflicting, or emotionally charged information

1.4 Sustainability approach and how it is integrated into the project

Risks and disasters can emerge in unbalances, unfair or charged situations. The sustainability approach in the course understands a sustainable world as one in which the "inclusive social well-being" (Matson et al., 2016) is reached. In times of weather extremes and climate stress, risk and disasters need to be understood form a critical perspective.

1.5 Methodologies and tools used (PBL structure, facilitation techniques, etc.)

The course uses an interdisciplinary set up of lecturers (social sciences and linguistics) and teacher in a PBL manner letting the students apply their new knowledge on a use case that they present in the end. Facilitation used blended learning, in-class-tasks and discussions.

1.6 Organization of the project (group formation, timeline, milestones)

Lessons 1–5 focused on course content, methods, and group formation via Moodle. Lessons 6 and 7 were extended and delivered in a workshop format, allowing students to work on their presentations and ask questions to the lecturers.

1.7 Deliverables requested from students (type, format, deadlines)

Students were required to complete several deliverables throughout the course, including notes from the workshop sessions, mini-quizzes available on Moodle, and the submission of their selected topics. They were also expected to submit the raw data used in their work, together with their final poster, which presented the results of their project.

1.8 External collaborators involved (mentors, companies, experts...) and their role

No external collaborators were involved in this implementation.

2. Project Evaluation

2.1 Assessment criteria and methods used

Student assessment was based on attendance, active participation in discussions and peer feedback, completion of short quizzes on Moodle, and the development and presentation of a final poster. The final poster accounted for the largest proportion of the overall grade (75%), followed by active participation (15%) and quizzes (10%). Attendance at a minimum of 60% of lecture units was mandatory. The figures below present the assessment criteria (Figure 1) and the grading scheme used to evaluate the final posters (Figure 2).

Content		Weighting
	Presence at min. 60% of lecture units	Mandatory
	Active discussion during lecture units including active peer feedback to other poster presenter	15%
	Short quizzes and one-minute-tests on Moodle	10%
	Development, Presentation and Discussion of final poster (A0 or A1, printed version for Poster Fair!)	75%

Figure 1. *Assessment criteria and weightings for student evaluation, including attendance requirements, active participation, Moodle quizzes, and the final poster.*



Figure 2*. Grading scheme for the final poster, outlining the criteria used to assess its content, design, presentation, and group contributions.*

2.2 Evidence of student learning (examples, outputs, results)

Evidence of student learning was reflected in the quality of the posters produced and their presentations during the final session. These outputs served as the main indicators of students' learning achievements and their ability to communicate the results of their work.

3. Reflections and Recommendations

3.1 Main achievements and strengths of the project

The main achievements and strengths of the project included its interdisciplinary approach, interactive classroom teaching methods, and the active involvement of students throughout the learning process. Another key strength was the final poster presentation session, which provided students with the opportunity to present and share the results of their work.

3.2 Challenges faced and how they were addressed

One of the main challenges was encouraging students to work and learn across two different disciplines, integrating knowledge and perspectives from both

fields. To support this interdisciplinary approach, teaching was not limited to separate sessions or alternating lecturers, as workshop sessions were jointly conducted by the lecturers. Another challenge was related to blended learning and the need for students to manage their own learning process. This was addressed through dedicated help sessions, providing students with opportunities to seek guidance and support whenever needed

3.3 Lessons learned for future implementations

Students need sufficient time and guidance to understand and adapt to blended learning and project-based learning (PBL) approaches. As many students have limited prior experience with courses structured in this way, explicit guidance is essential to help them understand the learning process and their expected roles. Nevertheless, the overall impression was that students appreciated the PBL approach and valued their active involvement in acquiring knowledge and developing their own learning process.

4. Supporting Material

4.1 Lecturers' materials and project documentation

Lecturers' materials and project documentation are available in the following link:

https://drive.google.com/drive/folders/1Rgr05F1WYXu1izqyraKT4KLw9rVBR_no?usp=drive_link

4.2 Deliverables produced by students, final presentations or pitch materials

Students' final presentations are available in the following link:

https://drive.google.com/drive/folders/1uRVruLtOxwrQGnL0qUcD5rG50Jhc2MuW?usp=drive_link

4.3 Images/videos (with consent)

No photographs or videos of the students were taken during the course.

4.4 Any other relevant material

All the materials, including this report, are available in the following link: https://drive.google.com/drive/folders/1dUEcAWwjEA0ujkxqpOJmz8SYBZvCOzSV?usp=drive_link