Co-funded by the Erasmus+ Programme of the European Union

SUNRAISE

COURSES REVISED AND NEWLY CREATED BY PARTNER P12 (JAWAHARLAL NEHRU UNIVERSITY)

Work Package 2

QUALITY ASSESSMENT BY EU PARTNERS (PARTNER P2: UNIVERSITY OF SALZBURG)

New course 3: "Ecosystem Approach for Disaster Risk Reduction"

QUALITY ASSESSMENT
Quality criteria 1: Number of credit units for lectures, practical sessions and self-learning are appropriate to the contents

- *Evaluation*

Credit units for lectures, practical sessions and self-learning are furnished. Most of the credit units are allocated to lectures, whereas units for practical sessions and self-learning remain fairly residual. The introductory character of the course to the topic of ecosystem approaches in disaster reduction, makes the suggested share of credit units for lectures, practical sessions and self-learning appropriate to the contents. However, this is only the case if practice-oriented courses are offered during the master's programme on the topic. We assume that this is the case, but this should be further clarified in the syllabus. If this was not the case, the practice-oriented character of the contents of the course (management of disasters using ecological approaches) and the need to train professionals able to not only understand the theory but, most importantly, deal with real situations in practice, would require a change in the underlying structure of the course (in the way the contents are provided). More endeavour would need to be put on the provision of practical skills, so that students do not only know e.g. the ecosystem approaches that are available but gain some basic notions on how to put them into place in practice (see suggestions for improvement below). This becomes critical in a context of climate change, under which disasters might be more intense and frequent and new approaches (in the direction of ecosystem approaches) will be needed in order to better tackle them. Regardless of whether practical courses on the topic exist or not, theory and practice should be further integrated and interrelated in the course process.

- *Strategies for improvement*

We would basically suggest two lines of improvement: 1) the first line concerns increases in practice-oriented elements; and 2) the second line concerns increases in the dynamism/interactive character of the course. Regarding the first line (i.e. increases in practice-oriented elements), the conversion of (parts of) some of the lectures into practical sessions should be considered. This is particularly relevant for all those sessions addressing approaches and tools for disaster management, including the ecological approaches. Practical sessions should involve the provision of practical work to students in the form of small case studies, through which students have to make some calculations, work with a particular software, make some small designs, etc. Especially relevant when it comes to e.g. ecological approaches and the different approaches available to manage disasters (e.g. engineered solutions, etc.), is the engagement in the course of local stakeholders involved in disaster management. They could provide very enriching discussions on how the different approaches work in practice and the opportunities and hurdles that they have found. Conjointly working on the selected cases with them can, moreover, substantially increase the practical experience acquired by students. This will all help to train professionals able to better deal with real cases in practice. Regarding the second line (i.e. increases in the dynamism/interactive character of the course), the usage of in-class discussions, quizzes, etc. is recommended, rather than just presentations by the lecturer. Indeed, the latter (presentations) should be kept to the minimum possible. This will contribute to make the course more attractive for students, potentially increase their interest in the subject, as well as (in the case of in-class discussions) give the students a chance to express themselves and better integrate their already existent knowledge on the topic with the new contents taught. Although the syllabus states that quizzes and "interactive and self-reflective methods of teaching and learning" are used, the extent to which this is done is not clear through the provided descriptions. It is assumed that improvements are needed in this area, but further clarifications should be furnished in the syllabus, so that we can provide better targeted suggestions.

All these amendments should involve the formulation of more practical assignments additional to the one suggested in the syllabus. We propose that the suggested practical assignment in the syllabus becomes a "final practical project"

that builds on all previous practical assignments. Both individual assignments and group assignments should be offered to the students.
Quality criteria 2: Total number of credit units in the course is correct and appropriate
• *Evaluation* The total number of credits awarded is too high if a workload of 56 hours is estimated. • *Strategies for improvement* Since 1 ECTS is equal to circa 28 hours, either the number of ECTS awarded should be reduced to 2 or the workload increased to approximately 120 hours. We would particularly recommend increasing the workload for students, if possible. The reason for that is the need for workload increases in the form of practice-oriented activities that complement and enable to reduce the excessively high ratio of hours devoted to lectures.
Quality criteria 3: Positioning of the courses in Curricula is appropriate based on the progressive level of difficulty
• *Evaluation* The positioning of the course in the third semester of MA studies in Disaster Studies does not seem optimal. The subject area on which the course is focused is a fairly general area. Thus, it is relevant to learn and gain knowledge on it before going more in-depth into other aspects in the following semesters. • *Strategies for improvement* The course should be scheduled at an earlier point of the master's programme (in the second semester). The course provides basic knowledge on disaster risk reduction, which might be pivotal for students in order to better follow the contents of the following courses in the master's degree (assumingly more specialised courses in the third and fourth semester).
Quality criteria 4: Tests are suitable and appropriate to support transferable skills
• *Evaluation* Mostly only exams are used in order to mark the students. Eighty percent of the grade is derived through the successful completion of a mid-term and a final written examination. This is a reasonable way to proceed in an introductory theoretical course. However, it is argued that this approach is not suitable to support transferable skills. The skills gained regarding the implementation of the learned concepts in practice can be hardly evaluated through the mostly exclusive usage of exams. This is not a problem if the course is complemented by other practice-oriented courses during the master's programme and these complementary course utilise another evaluation approach (more practice-oriented). If this was not the case (i.e. no practical courses on the topic exist), the evaluation system used in the course should be rethought (see suggestions below). • *Strategies for improvement* Strategies for improvement are highlighted under "quality criteria 1", where the provision of more practical assignments is advised. Practical assignments should be in the form of teamwork and individual assignments and might embrace written tasks, work with a particular software, field work, oral presentations, etc. Most part of the grade should be derived through the evaluation of their quality. The quality of the answers to the questions of a final examination can be added to that, but this should not represent a very significant part of the grade. As suggested in other cases, as important as the provision of more practical assignments is their location and that of the corresponding practical sessions in the timeline. Theoretical and practical sessions should be mixed in the timeline, so that practical sessions on each of the subjects addressed is located right after the corresponding theoretical session. This might potentially improve the skills transferability. One of the reasons for that is the possibility offered to students to better interrelate the theoretical knowledge gained with its practical implementation. The limited students' memory further supports using this approach.
Quality criteria 5: TLM and assessment strategy support students in undertaking the course i.e. prerequisites are helpful and relevant, assessments helps gauge students understanding etc.
• *Evaluation* Prerequisites should be set up for attending this course, which has not been done. Previous knowledge in the fields of ecology and disaster management appears to be needed in order to be able to follow the contents of the course smoothly. This should be reflected in the provided list of prerequisite courses. The fact that there is a need to revisit some basic concepts in one of the sessions (concepts of hazard, risk, etc.) further illustrates the need to define

prerequisites for attendance. Additionally, it is highly recommended that the lecture materials are not limited to a listing of recommended publications and some scientific papers.

- *Strategies for improvement*

Courses offering basic knowledge about disaster management and ecology should be included in the list of prerequisites for attendance. In the field of disaster management, this should encompass the course "Risk, Vulnerability and Resilience: Concepts and Understanding", which has been newly created under the framework of the SUNRAISE project.

Since we do not have access to the e-learning materials, we are not sure whether the suggestions that we include on this matter are or not of relevance. It may be the case that some of the suggestions made have already been adopted. As with other courses, first of all, we would strongly recommend providing the slides and videos of each of the theoretical sessions in the e-learning platform. The objective should be that students can always have access to them, so that they can revisit any concepts or parts that they might have not clearly understood and as a way to foster self-working at home. Second, the provision of an online chat and additional online practical exercises should be considered. The first (online chat) might allow a more fluent and easy interaction among students and between students and professors, in order to solve the doubts encountered, etc. The second (additional practical exercises) might enable all interested students to further learn on the topic and make the learning experience more attractive.

Quality criteria 6: Theory/Practice-oriented components are sufficient to cater the learning outcomes and skills development

- *Evaluation*

Theory-oriented components are sufficient to cater the learning outcomes and knowledge development, but this is not the case with practice-oriented components. The practice-oriented components should be further developed in the course planning and evaluation process to value the student work. This is especially required if the course contents are not further worked in other more practice-oriented courses during the master's programme.

- *Strategies for improvement*

The strategies suggested are pointed out under "quality criteria 1 and 4".