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

**Work Package 2**

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

## Revised course 1: "Ecosystem Processes"

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

- *Evaluation*

Credit units are almost only allocated to lectures. The number of units devoted to practical sessions and self-learning activities is very limited. Even if this is not ideal, this can be justified by the introductory character of the course to ecosystem processes and the development of its practical side in other courses. The latter (i.e. whether the topic is addressed or not from a practical perspective in other courses) remains, however, unclear through the provided descriptions in the syllabus. This should be clearly stated, which is not the case. If no practical courses on the subject exist, the ratio of credit units for lectures, practical sessions and self-learning of the course would be considered inappropriate and strategies should be adopted to increase the share of units for practical sessions and self-learning (see suggestions below). This is especially relevant so as to training professionals not only knowledgeable of the key concepts and approaches in the field, but, most importantly, able to put these concepts/approaches in practice in a real case. The focus on approaches/measures for ecosystem/landscape assessment particularly asks for a practice-oriented perspective. In any case, regardless of whether practical courses on the topic exist or not, it is detected that theory and practice should be further integrated and interrelated in the course process. This also comprises the integration of self-learning activities, which appear to remain very limited (see suggestions below).

- *Strategies for improvement*

The suggested strategies for improvement involve increases in practice-oriented elements, dynamism and the self-learning components of the course. First of all, we would strongly recommend to convert part of some of the lectures into practical sessions. This might embrace those parts dedicated to: 1) the exploration of methodologies for the assessment of certain parameters, or 2) management measures or programmes constituting best management practices in the field of ecosystem management. Examples in the syllabus are the course sections about e.g. ecological restoration or the measurement of primary production. Practical sessions should be conceived as small case studies, when possible. Local professionals might be engaged in some of them, not least in those addressing ecological restoration and programmes on ecosystem processes. The practical experience of these stakeholders might give rise to very enriching discussions and widen the practical perspective of students, as professionals are knowledgeable of the opportunities and hurdles that can be faced in practice.

Second, the usage of in-class discussions, quizzes, games, etc. during the theoretical sessions should be considered, as a way to provide further dynamism to the course and make its contents more attractive for students. In the case of in-class discussions, they additionally give students a chance to express themselves and better integrate their already existent knowledge on the topic with the new contents taught. Providing short readings and quizzes for continuous self-evaluation after each lecture/section of the course also becomes advisable. Students would be given a chance to self-assess the level of understanding of the contents and identify those areas on which they should concentrate more intensively. Although it appears that some of these methods are already used during the course, the extent to which this is true and the purpose for which these methods are used remains unclear through the descriptions in the syllabus. The syllabus only states that quizzes and "interactive and self-reflective methods of teaching and learning" are utilised without any additional specifications. This should be clarified, so that we are able to pinpoint better targeted strategies for improvement.

All these amendments should involve the formulation of more practical assignments. According to the syllabus, almost no assignment is planned for this course or they are not considered in the evaluation of students. We propose the creation of small practical assignments (one for each of the subject areas covered in the course) and 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 |
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| • *Evaluation*<br>The total number of credits awarded is too high if a workload of 30 hours is estimated.<br>• *Strategies for improvement*<br>One ECTS equates to approximately 28 hours. Thus, there is a need to either reduce the number of ECTS awarded to 1 or increase the workload for students to circa 60 hours. We would particularly advice to increase the workload for students, if possible. This is due to the low number of ECTS units devoted to practice-oriented activities and the accordingly too high ratio allocated to lectures. |
| Quality criteria 3: Positioning of the courses in Curricula is appropriate based on the progressive level of difficulty |
| • *Evaluation*<br>The positioning of the course in the first semester of M.Phil. studies in Environmental Sciences is considered correct. The course constitutes an introduction to the topic of ecosystem processes. It provides basic knowledge that is further developed in other courses taking place in the following semesters, such as the course "Himalayan Ecology", newly developed under the frame of the project SUNRAISE. Its positioning in the first semester of the master's programme becomes, thus, essential.<br>• *Strategies for improvement*<br>None. Everything is deemed correct. |
| Quality criteria 4: Tests are suitable and appropriate to support transferable skills |
| • *Evaluation*<br>The grade of students is mostly only determined through the use of written exams. Eighty percent of the grade is obtained through the quality of the answers provided to a mid-term and a final written examination. The usage of this approach is reasonable if only the level of understanding of theoretical concepts and approaches wants to be evaluated. Nevertheless, it becomes inappropriate to support transferable skills. The ability of students to use the learnt concepts/approaches for the resolution of real problems/situations in practice can be hardly assessed by using only exams. Therefore, the approach used becomes undesirable, not least if no other courses addressing the same topic from a practical perspective exist in the master's programme (see the suggestions for improvement below), which remains unclear.<br>• *Strategies for improvement*<br>Suggestions for improvement are pinpointed under "quality criteria 1", where the creation of practical assignments is advised. Practical assignments should be used for the evaluation of students. This might include the assignment that you suggest in the syllabus, the objective, positioning, etc. of which remain unclear and should be further cleared up in the syllabus. Indeed, most part of the grade should be obtained through the assessment of the quality of practical assignments. Practical assignments should include individual tasks but also teamwork, and involve short written assignments, oral presentations, field work, mathematical exercises, etc. They should be conceived as case studies. An example might be the design of measures for the ecological restoration of a particular area. In addition, the active participation in quizzes, in-class discussions, etc. should be taken into account for the computation of the attributed grade. While a final examination might also be undertaken, its weight in the final grade should not be significant.<br>As pointed out while assessing other courses, not only the provision of practical assignments but also their positioning in the timeline is of high relevance. Ideally, theoretical and practical sessions (and the corresponding practical assignments) should be mixed in the timeline, in such a way that each practical session is positioned right after the theoretical session of relevance. Students' memory is limited. Thus, using this approach might enable them to better interrelate the theoretical concepts/approaches learnt with their practical implementation. Ultimately, this might potentially improve the skills transferability. |
| 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*<br>No prerequisites have been defined for attending this course. This is explained by its introductory character, which also justifies its location in the first semester of the master's degree. It is assumed that the prerequisites that have |

to be fulfilled to study the master's programme apply. Therefore, it is resolved that the absence of specific prerequisites for attendance for the course is reasonable and suitable. Regarding the lecture materials, no precise evaluation can be made from our side, given the fact that we do not have access to them.

- *Strategies for improvement*

Since we have no access to the e-learning materials, we are not sure whether the suggestions that we make here can be relevant. It may be the case that some of the suggestions pointed out have already been adopted. First of all, we would strongly recommend making the slides and videos of the theoretical sessions available to students on the e-learning platform. This would make it possible that students have access to them anytime and can revise any parts or concepts that they might have not clearly understood. It might also be a way to encourage self-working at home. Second, it is very advisable to create an online chat, in order to foster a better communication and a space for discussion among students and between the students and the professor. A list of recommended literature, some additional pieces of reading or additional voluntary practical exercises might also be furnished. They would be targeted at all those students really interested on the topic and that are willing to learn more. The inclusion of additional interactive exercises might 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".