

## Stewardship for Responsible Innovation in Food and Living Environment

Wageningen UR (University and Research Centre) is internationally recognized as one of the leading EU research institutions in the field of Life Sciences. Wageningen University (WU) is part of Wageningen University and Research Centre (WUR), which is a leading international knowledge institute in the fields of nutritional health, sustainable agricultural systems and environmental quality. WUR consists of Wageningen University, eight research institutes, two applied research institutes and a training and advisory centre. WU has 6,500 employees and over 10,000 students. The research institutes carry out strategic, applied and practical research for businesses, governments and stakeholder groups. The domain of Wageningen University & Research consists of three related core areas: Food and food production, Living environment and Health, lifestyle and livelihood.

The department of Social Sciences is one of the five departments within WU and Education and Learning Sciences (ELS) is one of the Study groups within this department through which this case study is realized. The Education and Learning Sciences Group provides academic education and conducts scientific research on the identification of competence needs within the agrio-food complex and the societal context of that, the design of innovative education to prepare students/other participants (e.g. teachers, entrepreneurs) for their (future) professional life, and the analysis of effects of regional, social, sustainable and/or transdisciplinary learning for pupils, students, citizens, consumers, workers, managers, entrepreneurs, organizations and the agro-food complex as a whole.



### Training in stewardship and responsible innovation

This academic master course, which is offered twice per academic year, aims to foster an understanding about what responsible innovation entails and to support the cultivation of appropriate stewardship competencies. January 2017 this course was offered for the first time and so far approximately 40 students successfully completed this course.

The core of this course is to design and implement a process that solves a self-chosen challenge in the context of food and living environment in a team of 2 to 4 students while receiving peer and coaching support. We expect students to be creative in coming up with a challenge that touches them, develops their stewardship skills, and a process that can contribute, even in a small way, to sustainable development. Through this exercise students learn from their peers and in action about stewardship for responsible innovation.

The central topic of this course is Responsible Innovation (RI). And we use the RI framework and the RI dimensions (responsiveness, inclusiveness, reflexivity and anticipation) to guide the students in designing their innovative projects and discovering their competencies strengths and weaknesses and their opportunities for personal development. The students are challenged to look at themselves with honest and courageous eyes to figure out how they could contribute to the small and

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large changes society needs in times of turbulence. We are using a dynamic and participatory learning set-up in this course. In the first week the students make the project teams and discuss their initial project ideas. In the second week they are asked to present their project ideas in a 2-minute pitch. The purpose of presenting then, is to get feedback (how it looks, feels and connect to other ideas) in order to refine their project design. In the same session they are asked to consider the four Responsible Innovation (RI) process dimensions (Anticipation, Reflexivity, Inclusiveness and Responsiveness) to design their project further. For this we use the world café is a learning method. It is a requirement to include at least one stakeholder in their project design and implementation. After the refinements they are going to implement their RI project or at least part of it. The students should take the timeframe into consideration while selecting and designing their project.

Student performance will be assessed by a final presentation of the project and an individual reflection in the form that best fits their preference (paper/poster/movie etc.). In the final exam presentations the students showcase their project by offering an introduction, reflecting back on how they are tackling the four RI dimensions, why their project can be called a responsible innovation project and they are asked to reflect on the role of (steward) leadership in their project.

## To assess their learning we use the following three criteria:

- Depth of understanding of concepts and aspects shared in the course  
To what extent they are able to explain the concepts and aspects shared in the course borrowing insights from literature, discussions held in class and their own RI project.
- Application and critical assessment of the concepts and aspects shared in the course  
To what extent they are able to design and develop a project that is responsible and that incorporates RI dimensions and features. To what extent they are able to critically reflect on their RI project and the RI framework.
- Application of skills and learning  
To what extent they are able to reflect on personal (steward) leadership abilities

## Learners and trainers profiles

This course is intended for students who are passionate about understanding dilemmas in responsible innovation and wish to contribute to sustainable development. In this course students are encouraged to think about the people, planet and prosperity aspects of potential innovations. These three features are describing our target group:

- Societal conscious - Ability to understand the dilemmas in and necessity of responsible innovation
- Materialisation spirit - Willingness to make a difference. Being open minded with a flexible and proactive attitude
- Reflective attitude - Keen to grow on a personal level in order to contribute to sustainable development

The trainers role is to support the learners with appropriate resources and tools and an open ear for their learning process.

## Capacity building

After successful completion of this course students are expected to:

- be able to understand stewardship and responsible innovation concepts and features;
- be able to understand and have practiced stewardship and responsible innovation competencies;
- have initiated, implemented and evaluated a process of responsible innovation of their own choosing.

## Conclusions and Future actions

The students enrolled in the course were satisfied about the course content and they mentioned that they appreciated the dynamic and participatory set-up of the course. Students also stated that the RRI approach trains them to carefully create sustainable innovations considering stakeholders involvement and considering/designing various future scenarios.

Further thinking and experimenting is needed about how to integrate the development of RRI in a more comprehensive way, and how to possibly upscale the efforts for integrating RRI learning beyond this course taking into account the challenge of accommodating different learning needs of a big number of students in the context of very diverse study programmes.

### Colophon / Contact

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#### Disclaimer:

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