



OPTIONAL TEACHING METHODS FOR RA COURSE

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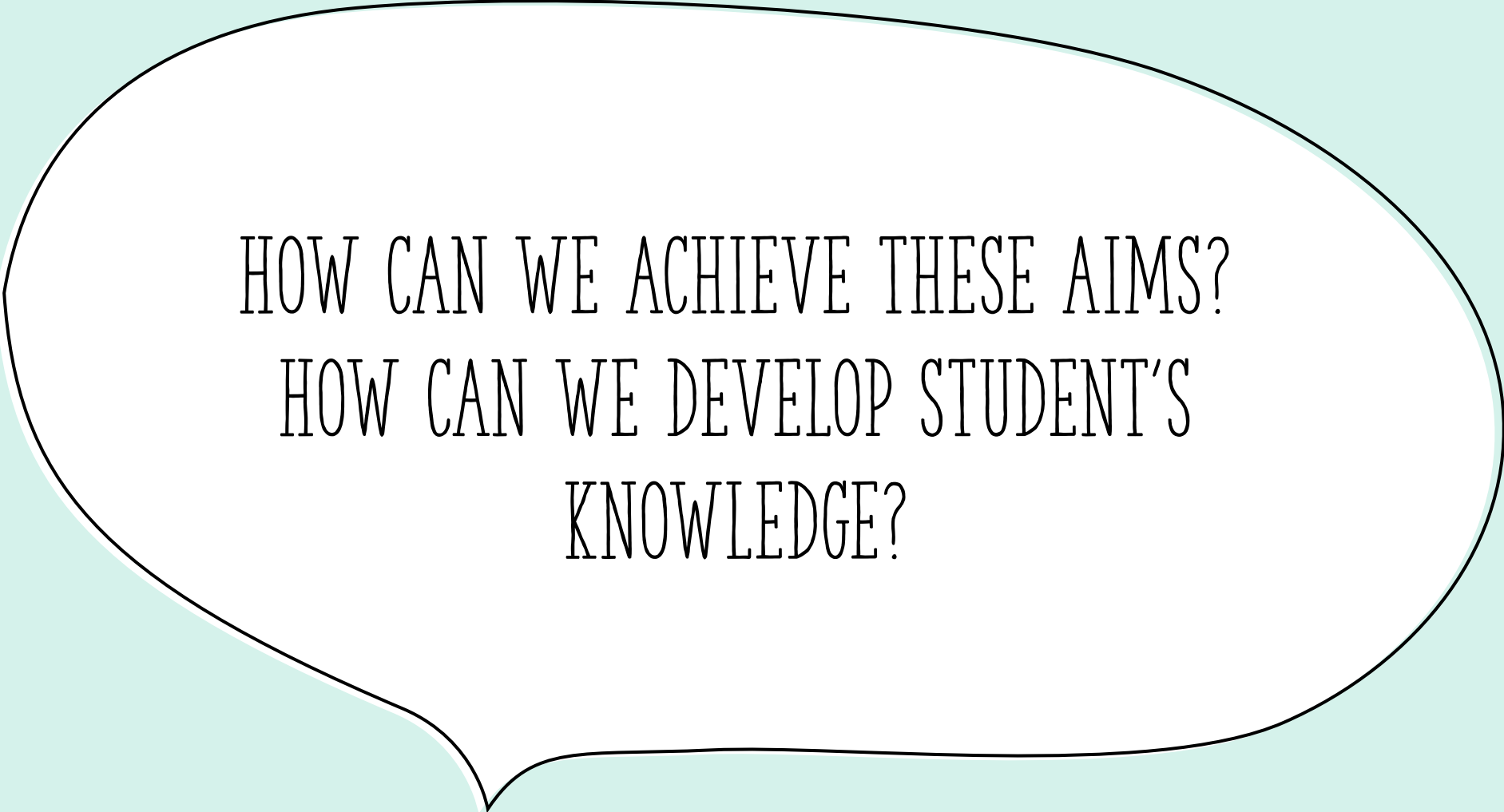
Department of Plant Sciences,

BY FULFIL REGINA COURSE STUDENTS WILL BE ABLE

- to understand and correctly apply the basic concepts related to regenerative agriculture, and can define RA.
- to understand the concepts of regenerative agriculture and can critically evaluate different soil management practices and methods. They are able to select the methods fitting into the RA approach.
- to plan the crop structure of a farm based on RA guidelines.

BY FULFIL REGINA COURSE STUDENTS WILL BE ABLE

- to critically evaluate the elements of a crop rotation and make improvements where necessary.
- to identify steps towards sustainable water management, to apply guidelines for soil cultivation and crop structure to conserve moisture.
- to know and understand the role of biodiversity growth.
- to understand the role of RA in reducing GHG emissions.
- to analyze and evaluate the role of different arable and horticultural crops, grassland and livestock in RA.

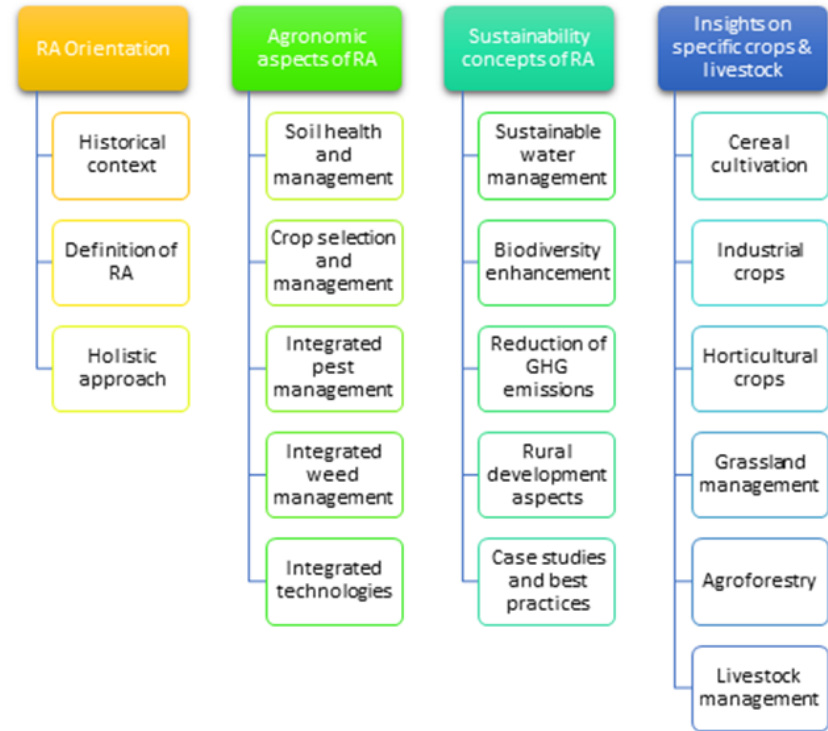


HOW CAN WE ACHIEVE THESE AIMS?
HOW CAN WE DEVELOP STUDENT'S
KNOWLEDGE?

SUGGESTED TEACHING METHODS FOR RA COURSE IN HE

- Frontal teaching
- Directed discussion
- Problem-based learning
- Project-based learning
- Cooperative group work
- Competition
- Jigsaw puzzle
- Project work
- Now - then – later
- Group brainstorming
- Work plan poster
- Presentation
- Mind map
- etc

EXAMPLES, SUGGESTIONS



MODULE 1: REGENERATIVE AGRICULTURE ORIENTATION

1. Frontal teaching: PowerPoint and/or video presentations are used to introduce the principles, definition, social and economic aspects of RA.
2. Group work: create a knowledge map, create their questions they want to ask from the practitioners actually working in RA, thus extending their knowledge map. As a result of the group work, a questionnaire or a set of questions will be created, which can also form the basis for an interview.
3. The answers given to the questions will be used to complete their knowledge map. The knowledge maps are presented and discussed by the groups.

MODULE 1: REGENERATIVE AGRICULTURE ORIENTATION

4. Guided discussion/debate to point out any essential elements missed out and the students may incorporate these elements into their work.
5. The result will be a knowledge map in the form of a poster, which summarises the students' knowledge and provides a good basis for understanding the topics covered in detail in the subsequent modules.
6. The completion of the module takes 2 weeks.
7. Each topic will end with a maximum 10-question quiz to be completed by the students by the end of the module. The completed knowledge map posters will be assessed at group level.

MODULE 2: AGRONOMIC ASPECTS OF REGENERATIVE AGRICULTURE

1. The teacher will introduce the topics using PowerPoint and/or video presentations.
2. Since RA has already been defined in the first module, the discussion method - as a complementary means to frontal teaching - can also be used. The instructor will use guided, thought provoking questions to encourage students to form opinions.
3. It is advisable to form as many groups as many major topics were covered in the theoretical sessions and to build the project tasks around these.

MODULE 2: AGRONOMIC ASPECTS OF REGENERATIVE AGRICULTURE

4. The student groups are given a problem (e.g. poor water management due to structural degradation of soil), the outline of which has already been discussed during the frontal teaching.
5. The groups will look for and develop solutions to this particular problem.
6. At the end of the presentation of each project, the groups will ask questions from the other students to get feedback on their understanding of what has been perceived from the presentation.

MODULE 2: AGRONOMIC ASPECTS OF REGENERATIVE AGRICULTURE

7. 10-question quiz
8. The finished projects will be evaluated by the teacher on the basis of the extent to which the answer/solution to the problem given in advance matches the RA guidelines.
9. The students may also be involved in the evaluation, for example if the teacher organises a competition between the groups.
10. The completion of the module takes about 3 weeks.

MODULE 3: SUSTAINABILITY CONCEPTS OF REGENERATIVE AGRICULTURE

1. Frontal teaching: The teacher will introduce the topics. (PPT presentations, videos)
2. The involvement of students in the learning process may be achieved by the teacher assigning them a literature research task related to the topics.
3. It is also useful to form small groups of students for this task. As for the literature research, it is advisable to give the groups a larger topic (e.g. soil water management) and to divide the given large topic into smaller parts as a first step.

MODULE 3: SUSTAINABILITY CONCEPTS OF REGENERATIVE AGRICULTURE

4. Dividing the topic, the students present it to the teacher. If necessary, the tutor refines and improves the division of the topic made by the students.
5. The next step in the learning process is to find the necessary literature, which also needs to be discussed with the teacher in order to eliminate the irrelevant literature.
6. Writing an essay is the most obvious form of processing literature.
7. The essay submitted will play the most pronounced part in the evaluation. The students will upload their essays into Moodle's REGINA platform and the teacher will evaluate them.
8. The completion of the module takes about 4 weeks.

MODULE 4: INSIGHTS ON SPECIFIC CROPS AND LIVESTOCK

1. Frontal work: lectures - introduce the topics of the module
2. As this module covers a very wide range of knowledge, the emphasis on frontal teaching is much higher than in the previous modules.
3. However, the students need to be given the opportunity to engage. Completing individual tasks in this module seems to be an efficient way of the students' engagement.

MODULE 4: INSIGHTS ON SPECIFIC CROPS AND LIVESTOCK

4. Randomly, a plant species is assigned to each student and the student works independently to develop a regenerative cultivation technology for that plant species. Alternatively, they can design an intrazonal forest community or a pasture for an animal species.
5. The main topics will end with a maximum 10-question quiz to be completed by the students by the end of the module.
6. The essay submitted will play the most pronounced part in the evaluation process. The students will upload their completed plans into Moodle's REGINA platform and the teacher will evaluate them.
7. The completion of the module takes about 4 weeks.

HORIZONTAL MODULE: FIELD VISITS & EXTERNAL ACTIVITIES

1. The students will get to know the farms having been introduced to them in the case studies. Besides having discussions with the experts working in the field, they can gain experience and start to build their professional network.
2. During their field trips and meetings with the representatives of the professional organisations, the students are required to make interviews and/or photo documentaries.
3. The interviews and photo-documentaries will be used to produce a publication (leaflet) promoting RA. The completed work is uploaded to the moodle's REGINA platform and evaluated by the teacher.
4. The completion of the module takes 1 week.



THANK YOU FOR YOUR ATTENTION!