

Undergraduate University Module in Permaculture

Creating new synergies between higher education and professionals to promote sustainable systems



Bringing Permaculture to Universities

Permaculture is a set of **principles** that integrates land, resources, people and the environment through mutually beneficial synergies. It aims to **imitate and recreate natural ecosystems through the use of closed-loop and no waste techniques**.

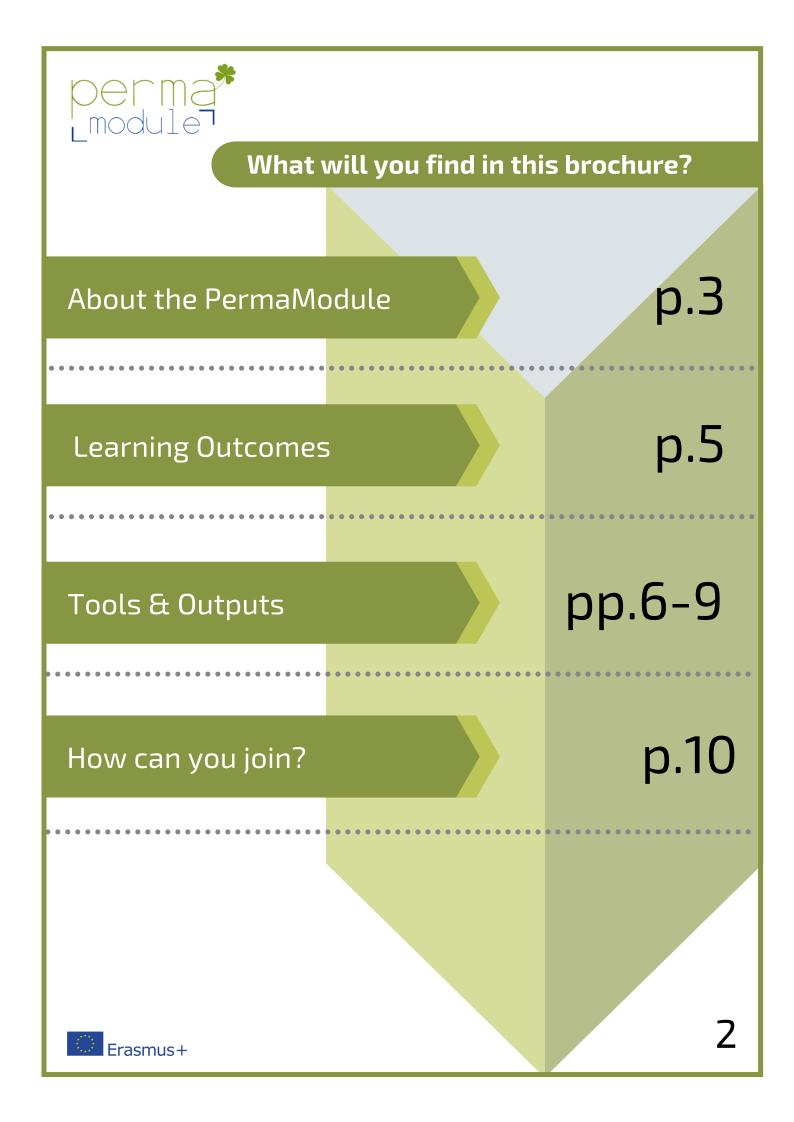
It has gained increased visibility in light of a growing environmental threat and deterioration of ecosystems. Permaculture is indeed a good alternative to intensive conventional agriculture, which generally results in high productivity at the expense of biodiversity.

Fostering the implementation of permaculture principles at a wider level would thus have significant environmental benefits as it would participate in a more sustainable management of land, therefore addressing societal and environmental needs. There is, however, a **gap in higher education** concerning modules exclusively dedicated to permaculture.

Through innovative pedagogies, our project proposes to **train undergraduate university students in permaculture** with specific skills in environmentally-sustainable design, such as designing objects, building environments and services compliant with the principles of ecological sustainability.

Read more in this brochure





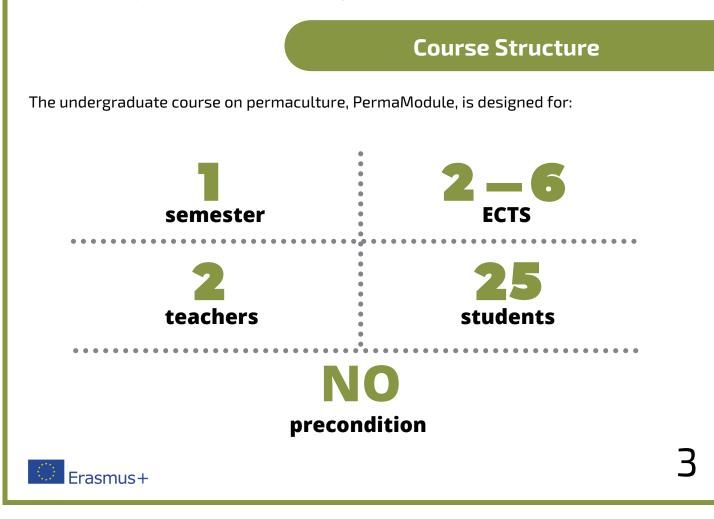


What is the PermaModule?

The "Undergraduate University Module in Permaculture - Creating new synergies between higher education and professionals to promote sustainable systems" Erasmus+ project began in September 2019. Its ambitious objective is to design and implement an **undergraduate study programme in permaculture**, which will be automatically recognised through ECTS credits by partner universities.

This module is meant to be taught in various faculties such as agriculture, horticulture, bioscience engineering, and agronomic sciences. The primary target group of the "Perma Module" is composed of University students at an undergraduate level.

The essence of Permaculture is rooted in its underlying ethics of *Earth care, People care* and *Fair share*, and as such, was probably among the forerunners towards sustainable development that embraced the triple bottom line, which attempted to balance environmental, social and economic considerations. In other words, Permaculture education equips students with both theoretical and practical design skills for **applying the Sustainable Development Goals** (SDGs) of the United Nations in their careers or life work as change-makers towards sustainable development. Such a theaching methodology is guaranteed in the module by the combined considerate teaching efforts of both **Permaculture praticionners** and **University teachers**.





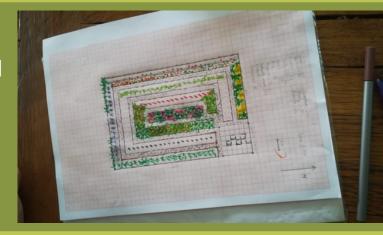
The PermaModule in practice...



Collaborative, practical field work guided by professionals

University of Malta - Centre of Environmental Education and Research, 2021

Experimentation of design methods and application strategies



University of Agronomy and Veterinary Medicine of Bucharest, 2021



Consistent scientific exploration of the principles of Permaculture

University of Liège - Gembloux AgroBioTech, 2021



By the end of this study programme, students of the Perma Module are expected to have acquired a set of skills, as well as a good understanding and knowledge of some key principles of Permaculture.

Knowledge and Understanding

By the end of the study-unit the student will be able to:

1. **Recall** the main scientific principles pertaining to climate, soil, landscape forms, water management, vegetables systems, animal systems, and designing for disaster.

2.Describe the **philosophy and ethics** behind permaculture.

3.Describe the main permaculture **design tools, techniques and methods**.

4.Explain the permaculture **design process**.



Skills (incl. transferable skills)

By the end of the study-unit the student will be able to:

1. Compare and contrast **different consumption choices** and propose responsible choices.

2. Appraise possible design actions and justify design choices

3. Integrate design thinking in their studies and their lives.

4. Solve specific innovations challenges and apply their knowledge into action that creates value for others.



Teaching and learning methods

In order to acquire such skills and knowledge, the module is supported by the following intellectual outputs:

- 1. Teacher's coursebook
- 2. Student's handbook
- 3. Digital Platform



Coursebook for teachers / Body of knowledge

The content of the teacher's coursebook is intended to provide support and knowledge to teachers willing to conduct a Permaculture module at University level.

The teachers' coursebook consists in a detailed undergraduate curriculum containing all the relevant information to deliver a Permaculture course to undergraduate students at university level.

It is divided in 3 distinct parts:

- 1. Part I Introduction of the project & goals
- 2. Part II Teaching methodologies
- 3. Part III The PermaModule
 - a. Chapter 1 Introduction
 - b. Chapter 2 Ethics and Principles of Permaculture
 - c. Chapter 3 Pattern Understanding
 - d. Chapter 4 Science and Natural Laws
 - e. Chapter 5 Methods of design
 - f. Chapter 6 Regenerative Strategies and Urban Agriculture
 - g. Chapter 7 Soil, Water and biogeographical regions
 - h. Chapter 8 Solution: Climate change, appropriate design and techniques

Part I describes the overall objectives of the module, its learning outcomes, the role of Universities in upscaling Permaculture and the reason Permaculture ought to be taught in universities. It also provides provisonal suggested assement criteria.

Part II describes the role of a teacher in such a module, the specific requirements for effective adult education, and provides so sample lessons to provide teaching materials to university educators.

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Tools & Outputs

Finally, **Part III** provides a body of knowledge on various topics, to be used as a vast pool of knowledge or theoretical/practical toolbox from which to build a class around a specific project. It is therefore **strongly advised that university appoint a teacher as well as a practionner** to encompass both theoretical and practical aspects of the module (see Memorandum of Understanding, p.10).

The module supported by this coursebook is intended to be taught over the course of one semester and will grant students 2 to 6 ECTS (depending on the University).

This Module is intended to be taught to an average of **25 students per class**, supported by **2 teachers**. It requires no precondition or previous experience in permaculture or agroecology from students.





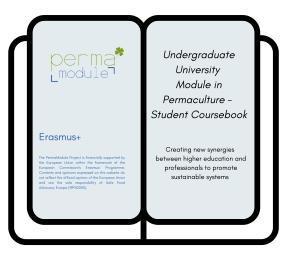


The student handbook is an interactive PDF document available through the online learning platform.

In order to support the module amongst such a diversity of student profiles, the student handbook can be used as a learning support for students taking the course. The student handbook is tightly connected to both the teacher's coursebook and the online platform, seeing as it reflects the content of the teacher's coursebook and be made available to students through the course's online platform.

The Handbook comprises 6 volumes reflecting the body of knowledge: Volume 1. Introduction to Permaculture - Ethics and Principles Volume 2. Methods of Design Volume 3. Permaculture and the Climate Change challenge Volume 4. Soil, Water and biogeographical regions Volume 5. Science and natural laws Volume 6. Pattern understanding

The hanbook provides the main themes and theoretical points covered in the course of the module. It also suggests readings and provides detailed bibliography, as well as guiding questions and problems for the module; some group or individual assignments; some case studies.



Available in English, French, Romanian and Italian.





What the Project provides?



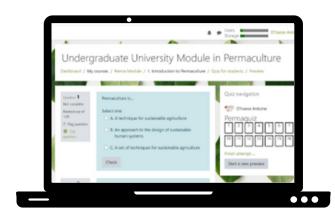
Onlne learning platform

The online platform makes materials of the Module and existing high-quality research easily accessible to students and teachers.

The interactive platform allows participants to communicate amongst each other, whether they're from the same Member State or not.

The platform includes:

- 1. Presentation of the module
- 2. Introduction to permaculture
- 3. Reading list and useful links
- 4. Quizes, exercises and assessments
- 5. Fora of discussion
- 6. Video and written case studies
- 7. Student handbook and Teachers coursebook
- 8. Online portfolio of student's work (WIP)



Visit us at

https://permamodule.moodlecloud.com



Are you a University or a teacher/lecturer?

Do you wish to bring sustainability and Permaculture at the heart of your University?

Do you wish to join the project as an Associate partner, or to implement the module?

Sign our Memorandum of Understanding & Participate to our Quality Assessment survey

We are looking for **associate partners** to:

- Help guarantee free-access to the following intellectual outputs to teachers and students: the curriculum content (Teachers' coursebook), the interactive PDF file (Students' handbook), the e-learning Moodle platform
- Develop lesson plans inspired from the education materials
- Create information sessions to promote Permaculture inside university walls
- Request access to the teachers' room on the project's e-learning platform
- Share new learning content and methodologies in the teachers' room
- Disseminate the training to other universities
- **Translate the content of the education materials** in their own language (*if applicable*)
- Share the experience of the course on their own social media pages

Contact us at

communications@safefoodadvocacy.eu

Erasmus+

Project Consortium



Safe Food Advocacy Europe (Belgium)



Italian Permaculture Academy (Italy)



Permaculture Research Institute of Romania (Romania)



University of Malta (Malta)



University of Liège -Gembloux Agro-Bio Tech (Belgium)



University of Catania (Italy)



University of Agronomic Sciences and Veterinary Medicine Bucharest (Romania)

Contact us

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