

**ERASMUS + BLENDED  
INTENSIVE PROGRAMME**

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**AGROECOLOGY  
AND SUSTAINABLE  
FOOD SYSTEMS**


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**WISEU, PORTUGAL, 16 - 22 JUNE 2024**

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ERASMUS + BLENDED INTENSIVE PROGRAMME

## AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS

The themes to be addressed involve the main components and approaches of agroecology and sustainable food systems, from production to consumption, focused on people and their well-being, through perspectives of agronomy, health, social sciences, environment, and will be:

1. Being and doing agroecology (Evolution, concepts, components of agroecology);
2. Feeding life and health (Health and wellbeing through sustainable food diets and systems and communities);
3. Building sustainable food systems (Technical roadmaps and agroecological practices);
4. Be a farmer. Knowledge, vision and risks (social, health, economic, cultural);
5. Agriculture and environment (SFS and its effects on ecosystem services);
6. Resilience from sustainable food systems (climate change, depopulation, circular economy and SFS);
7. Civil society and political dynamics (Agriculture and the human right to food, adequate nutrition-DHANA, gender equality and the role of women in agriculture);
8. Communicate and advocate for agroecology and sustainable food systems (communication and knowledge, stakeholder involvement, community and participatory approach);
9. Design sustainable food systems projects (from production to consumption, from individuals to communities, from health to environment).

### EUROPEAN PARTNERS:

Universidade de Valladolid; University of Salento; Università della Calabria; Estonian University of Life Sciences; Universidad de Vigo; University of Bologna; Haute École Louvain en Hainaut (HELHa) en Belgique; Facultad de Ciencia y Tecnología (La Rioja); Instituto Superior de Agronomia (Universidade de Lisboa).

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**Accreditation:** 3 ECTS Accreditation

**Course Dates:**

- **Online:** From 20/05/2024 to 14/06/2024 and from 24/06/2024 to 28/06/2024
- **Onsite / face-to-face:** From 16/06/2024 to 22/06/2024

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### REGISTRATION: Open until **03 April**.

For more information about the application procedure please contact the International Office of your institution.

**For additional information please contact:**



**Prof. Cristina Amaro da Costa:** [amarocosta@esav.ipv.pt](mailto:amarocosta@esav.ipv.pt)

**Rita Castro Lopes:** [rlopes@sc.ipv.pt](mailto:rlopes@sc.ipv.pt)

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**ORGANISER:**



Politécnico  
de Viseu

**CO-ORGANISER:**



UNIVERSIDAD  
DE GRANADA



Università  
di Catania

**STUDY GUIDE | AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS**

<b>COURSE INFORMATION</b>	
<b>Course Format</b>	Blended Intensive Programme (BIP)
<b>Course Title</b>	<b>AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS</b>
<b>Admission Profile</b>	Bachelor's, master's or doctoral students in agronomy, social sciences, environment, health
<b>Prerequisites and co-requisites</b>	<ol style="list-style-type: none"> <li>1. To apply for this program, students must be regularly enrolled in the participating institutions;</li> <li>2. Participation in the program is open to students from any field of study related to BIP-related content;</li> <li>3. Students must demonstrate English language skills, at B2 level, according to the Common European Framework of Reference</li> </ol>
<b>Hosting Institution</b>	Polytechnic University of Viseu, Portugal
<b>Participant Institutions</b>	<p><b>Organiser Institution:</b> Polytechnic University of Viseu, Portugal</p> <p><b>Co-organiser:</b></p> <ul style="list-style-type: none"> <li>University of Granada, Spain</li> <li>University of Catania, Italy</li> </ul> <p><b>Partners Institutions:</b></p> <ul style="list-style-type: none"> <li>Universidade de Valladolid</li> <li>University of Salento</li> <li>Università della Calabria</li> <li>Estonian University of Life Sciences</li> <li>Universidad de Vigo</li> <li>University of Bologna</li> <li>Haute École Louvain en Hainaut (HELHa) en Belgique</li> <li>Facultad de Ciencia y Tecnología (La Rioja)</li> </ul>
<b>Total number of participants per institution</b>	Maximum of 10 participants per institution



<b>Total number of participants</b>	20
<b>ECTS</b>	3
<b>Language of the Programme</b>	English
<b>On-site component</b>	<b>[16/6/2024 a 22/6/2024]</b>
<b>Virtual component</b>	<b>[20/5/2024 a 14/6/2024 e 24/6/2024 a 28/6/2024]</b>
<b>Schedule</b>	On site component – 10 a.m. to 10 p.m. Virtual component – according to students' availability
<b>Link to Course Guide</b>	
<b>Course application</b>	Each IRO establishes their own internal call. IROs send IPV's IRO the nominations from their own institution

## INTRODUCTION

The transition to sustainable food systems is a challenge today, particularly in the face of alarming rates of food insecurity and malnutrition and "overnutrition" (obesity), together with increasing biodiversity loss and climate change. Agroecology as a driver of sustainable food systems (SFS) seeks to address these issues while promoting the role of women and gender equality, family farming, food sovereignty and justice.

Production systems based on agroecology are currently considered by researchers, farmers and civil society movements to be fundamental for the necessary transition. To this end, it is crucial and urgent to train future actors in the various components of agroecology and SFS, participating in and promoting initiatives that have been developed at the national level, such as bioregions or the promotion of sustainable food diets at the level of several municipalities.

The training plan for the International Summer School - Agroecology and sustainable food systems is proposed, divided between synchronous and asynchronous distance training sessions and participation in a field school, which will include cross-visits to agroecological farms in Portugal.

## COURSE CONTENT AND TEACHING METHODS

The themes to be addressed involve the main components and approaches of agroecology and sustainable food systems, from production to consumption, focused on people and their well-being, through perspectives of agronomy, health, social sciences, environment, and will be:

1. Being and doing agroecology (Evolution, concepts, components of agroecology)
2. Feeding life and health (Health and wellbeing through sustainable food diets and systems and communities)
3. Building sustainable food systems (Technical roadmaps and agroecological practices)

4. Be a farmer. Knowledge, vision and risks (social, health, economic, cultural)
5. Agriculture and environment (SFS and its effects on ecosystem services)
6. Resilience from sustainable food systems (climate change, depopulation, circular economy and SFS)
7. Civil society and political dynamics (Agriculture and the human right to food, adequate nutrition - DHANA, gender equality and the role of women in agriculture)
8. Communicate and advocate for agroecology and sustainable food systems (communication and knowledge, stakeholder involvement, community and participatory approach)
9. Design sustainable food systems projects (from production to consumption, from individuals to communities, from health to environment)

Throughout the distance- learning component, the aforementioned themes will be addressed and challenges related to the construction of agroecological production systems and sustainable food systems will be provided, which should be presented, discussed and agreed upon in the face-to-face component. In the face-to-face component, it is planned to hold a field school, where, together with local actors (farmers, technicians, decision-makers) the local food system is analysed and evaluated and intervention proposals are presented, built from the learning resulting from the online component.

#### **LEARNING RESOURCES AND TOOLS**

Moodle platform

#### **LEARNING OUTCOMES**

Provide an assessment of an agroecological or sustainable food system, including a comprehensive and critical explanation and evaluation of the different components

Participate and contribute to improve initiatives for the promotion of sustainable food diets

Present a personal and critical approach related to the impact of the food systems on health, environment, culture, rural territories

#### **OBJECTIVES**

To be able to understand the different components and linkages of agroecology and SFS,

To know and be able to support initiatives for the promotion of sustainable food diets,

To gain critical skills related to the impact of the food systems on health, environment, culture, rural territories.

#### **ASSESSMENT METHODS AND CRITERIA**

Completion of 75% of the platform tasks, participate in the presential week and the proposed activities, and oral presentation of final work.

## BIBLIOGRAPHY AND TEACHING MATERIALS

AVSF. 2020. *Training guide: Agroecology as a substitute for pesticides. Reducing the use and the risks of pesticides and veterinary products through viable alternative practices*. AVSF-AFD. 186p. Creative Commons license: CC BY-NC-SA.

Davis M, Cornwell D. 2013. *Introduction to Environmental Engineering*, 6th Edition, New York McGraw-Hill International Editions, 2023. ISBN10: 1260241092 | ISBN13: 9781260241099

FAO. 2019. *TAPE Tool for Agroecology Performance Evaluation 2019 – Process of development and guidelines for application*. Rome

Kaza S et al. 2018. *What a Waste 2.0 – A Global Snapshot of Solid Waste Management to 2050*. The World Bank Group 2018. <https://openknowledge.worldbank.org/handle/10986/30317>.

Levard L, Mathieu B, Masse P (Coordination). 2019. *Handbook for the evaluation of agroecology, A method to evaluate its effects and the conditions for its development*, GTAE-AgroParisTech-CIRAD-IRD.

Nicholls, C. I., Henao, A., & Altieri, M. A. (2015). Agroecología y el diseño de sistemas agrícolas resilientes al cambio climático. *Agroecología*, 10(1), 7-31.

Rosset P, Altieri MA. 2018. *Agroecología: ciencia y política* (pp. 206-206). Ciudad de México: Icaria.

## CONTACT DETAILS

<b>Responsible Lecturer</b>	Cristina Amaro da Costa, Polytechnic University of Viseu
<b>E-mail</b>	amarocosta@esav.ipv.pt
<b>Other Lecturers</b>	See program
<b>Hosting Institution IRO</b>	Ms. Rita Lopes internationaloffice@sc.ipv.pt

## OTHER RELEVANT INFORMATION

*Food and accommodation costs are the responsibility of the student. However, the IPV does offer some logistical options once the admission process has been completed.*

*During the presential week, students will visit agroecological experiences (lunch will be included), so it is advised to wear comfortable clothes and shoes, hat, solar protection and to bring water.*

Theme	Topic	Professors	Partner
1. Being and doing agroecology	Introduction. Building a common understanding of agroecology and food sustainable systems	All	All
	Agroecological strategies and tactics to design and implement sustainable farming systems	Umberto Anastasi	University of Catania
	Organic farming and agroecology contribution to mitigate food insecurity, climate change and biodiversity loss	Paolo Guarnaccia	University of Catania
2. Feeding life and health	Why Food and Nutrition becomes essential in Health? The role of sustainable diets in health	Maria João Lima	Polytechnic University of Viseu
	Insects as important food resources	Elisabete Figueiredo	Lisbon University
	Jme'tik Balumil: Zapatista stories for hope	Beatriz Cerqueira	Wageningen University
3. Building sustainable food systems	Cover crops: an alternative management practice in sustainable agriculture	Paula Pérez Rodríguez	Universidad de Vigo
	Plant diseases: their sustainable control strategies and future perspectives	Giorgio Gusella	University of Catania
	Antagonistic interactions in insects and role of entomophagous in biological control	Gaetano Siscaro	University of Catania
	Food webs in biological pest control	Lucia Zappalà	University of Catania
	Agroecological strategies for weed control. Allelopathy as a sustainable and resilient option	Adela M. Sánchez Moreiras	Universidad de Vigo
	Agroecological practices and the quality of agricultural products from production to postharvest	Daniela Costa	Polytechnic University of Viseu
4. Be a farmer. Knowledge, vision and risks	Farming, farmers and health risks.	Cláudia Chaves	Polytechnic University of Viseu
	Family farming and mental health	Artur Morais	Polytechnic University of Viseu
5. Agriculture and environment	Environmental and agricultural implications of nanoagrochemicals: new challenges towards a sustainable food production	Daniel Arenas Lago	Universidad de Vigo
	The impact of climate change on agriculture. Control alternatives for the resilience of agricultural crops.	Sara González Orenga	Universidad de Vigo
	The role of beekeeping in the sustainability of the ecosystem	M. Shantal Rodríguez and Ana Dieguez Antón	Universidad de Vigo
	Microbial resistance to antibiotics, counteraction strategies, One Health	Julia Carballo Rodriguez	Universidad de Vigo
	Impact of microplastics on soils: what is our real perception?	Andrés Rodríguez Seijo	Universidad de Vigo
	Bees and pesticides: threats and possibilities for co-existing	Reet Karise	Estonian University of Life Sciences
6. Resilience from sustainable food systems	Agri-food chain of the future. By-products of the wine industry into active ingredients for the cosmetic industry	Saussez Charlotte, Sergent Coraline, Jerkovic Vana	HELHa – Haute Ecole Louvain en Hainaut
	Recovery of bioactive compounds from food by-products and their application in the food industry	Miriam Ortega Heras	Universidad de Burgos
	Honey bees, wild bees and pesticides in the environment	Reet Karise	Estonian University of Life Sciences
	Agro-waste management and circular economy	Isabel Brás and Elisabete Silva	Polytechnic University of Viseu
	Transition Pathways towards Circular Economy Models in Agri-food Systems	Daniela Spina	University of Catania
	Innovative and Sustainable Resources Valuation	Raquel Guiné	Polytechnic University of Viseu
7. Civil society and political dynamics	Gender equality and agroecology. Preventing and combating violence against women in multicultural contexts	Emilia Coutinho	Polytechnic University of Viseu
	Human rights and gender equality today - a behavioral view	Ana Branca Carvalho	Polytechnic University of Viseu
	Driver factors of new ruralities	Carlotta Ebreo	Università della Calabria
8. Communicate and advocate for agroecology and sustainable food systems	Analysis, development and management of sustainable food systems: actors, models and practices	Teresa Graziano	University of Catania
	Final assessment presentations	All	All

When		Where	Topic	Professors
16th june	18 hours	Fontelo park	Students and professors reception. Building a agroecology community	All
17th june	13.30 to 21.30 hours	School of agriculture. Agroecology night brunch (Viseu)	Introduction. Building a common understanding of agroecology and food sustainable systems	All
			Agroecology, food and health. An equation to discuss	Edite Lemos
			Why Food and Nutrition becomes essential in Health? The role of sustainable diets in health	María João Lima
			Mindfulness, happiness and wellbeing with agroecology	Cátia Magalhães
			Figs, Thistles and Cardoons for Cheese...since Collumella	Paulo Barracosa
			Vineyards and juices of paradise	Anónio Jordão
18th june	13.30 to 21.30 hours	Origens Project (Orgens, Viseu)	Jme'tik Balumil: Zapatista stories for hope	Beatriz Cerqueira
			Agroecological strategies for weed control. Allelopathy as a sustainable and resilient option.	Adela M. Sánchez Moreiras
			Co-designing a technical roadmap and list of agroecological practices	All
				Reet Karise
			A project addressed to build a sustainable community	Humberto e Susana Mendes
			Agro-waste management and circular economy	Isabel Brás and Elisabete Silva
19th june	13.30 to 21.30 hours	Nelas animal farm	The sides of animal production. Pro's and Con's	
			Animal production and the environment	Catarina Coelho
		Vizinho Vinhateiro (Farminhão)	Farming, farmers and health risks.	Cláudia Chaves
			Mindfulness and farming with animals	Cátia Magalhães
			Old and new farmers with tradition, experience and innovation	Paul and Charlotte Hubel
			Family farming and agroecology. Merits and constraints	Inês Pereira
			Women farmers as a network node towards agroecology	Diana Gomes
			From Chiapas to the world: how agroecology can save us	Beatriz Cerqueira
			20th june	13.30 to 21.30 hours
Human rights and gender equality today - a behavioral view	Ana Branca Carvalho			
Ervital (Mezio)	Recovering our mindfulness with plants	Cátia Magalhães		
	Family tradition in the wine sector	Carla Costa		
	How aromatic and medicinal plants change your life	Joaquim Morgado		
21th june	13.30 to 21.30 hours	Viseu tour	Visit Viseu. The history and the food links in the city	All
		School of Education	The happiness and wellbeing with agroecology	Cátia Magalhães
			Gender equality and agroecology. Preventing and combating violence against women in multicultural contexts	Emília Coutinho
			Political Agroecologies as a tool for societal transformation	Antonio Ortega
			How emotions affect communicating, thinking, and feeling	María José de Dios Duarte
			Solstice cultural event	José Pereira
22th june	9.00 to 11.00 hours	Fontelo park	Agroecology and food sustainable systems farewell. Building a final message together	All