

EXPERT IN ESSENTIAL OILS AND ENTREPRENEURSHIP

ACADEMIC SUPPORT GUIDE

2022-2023

LIÈGE UNIVERSITÉ - UNIVERSIDAD POLITÉCNICA DE MADRID

PROMOTERS

Co-funded by the
Erasmus+ Programme
of the European Union



POLITÉCNICA

UNIVERSIDAD
POLITÉCNICA
DE MADRID



EOHUB



COLLABORATOR UNIVERSITIES

COLLABORATOR COMPANIES AND RC



TABLE OF CONTENTS

GENERAL INFORMATION.....	4
PRESENTATION OF THE CERTIFICATE.....	5
MOTIVATION TO ORGANIZE THE TRAINING.....	5
PROGRAMME CONTENTS.....	6
COURSE CONTENT.....	6
COURSE TIME DISTRIBUTION.....	7
COURSE ORGANISATION- LEARNING PROCESS.....	7
EXPERT COURSE FACULTY BOARD.....	9
MODULE 1 (9 ECTS):.....	9
MODULE 2 (3 ECTS):.....	9
MODULE 3 (3 ECTS):.....	9
CHRONOGRAM - DRAFT.....	10
COURSE TIME PLAN - DRAFT.....	14
CONTACT PERSONS.....	15
FOR MORE INFORMATION:.....	16

GENERAL INFORMATION

ACADEMIC YEAR: 2022 -2023

FIRST EDITION: 2021 - 2022

NUMBER OF CREDITS (ECTS): 15

MODALITY: Online

ACCESS REQUIREMENTS: students with bachelor's degree related with the topics of the course or professionals that can accredit a similar level of knowledge

LEARNING ACTIVITIES AND TEACHING METHODS: The course consists of online learning modules, recommended readings, videos prepared by each professor, case studies on business and research, so as forums for students and professors, and individual projects. Webinars. Personal work.

REGISTRATION FEE: 630 €

START DATE: 25-10-2022

END DATE: 21-01-2023

PRESENTATION OF THE CERTIFICATE

The e-learning course will last around 3 months. It will have the following structure: E-learning/interactive: introductory modules on a wide range of topics on EOs: Introduction to Essential Oils-basic terms, Active principles, Applications Essential Oils-New Challenges, Cosmetic industry, Agri/Food industry and Medicinal uses, Entrepreneurship, and personal work (15 ECTS, 450 hours).

It will be available through the MOODLE e-learning platform uploaded in the EO-HUB alliance platform.

The e-learning training courses will include organization of presentations, work groups, webinars. Training will be delivered by partner HEIs with the assistance of business partners.

As a second stage, the practical training will run on the following specializing topic: New challenges and applications in Essential Oils Market – Entrepreneurship, finalizing with a Business Plan Proposal – Research work.

MOTIVATION TO ORGANIZE THE TRAINING

This Expert Course is issued within the framework of the ERASMUS+ project EOHUB (**European Hub on New Challenges in the Field of Essential Oils**) aiming at the dissemination and the promotion of entrepreneurship in this field.

Knowledge update: Essential oils are mainly produced in Southern countries but in in large amounts used in Northern countries where there is a real lack of knowledge by potential end-users in many sectors concerned (pharmaceuticals, cosmetics, food and beverages, phytopharmacy, etc.).

In response to the professional sector: There is a market niche to share the promotion of EO in different sectors as an opportunity of entrepreneurship.

The course is organized by the Universidad Politécnica de Madrid and the University of Liège, with the collaboration and the support of MATE University (HU), BUCKS University (UK), CSIC (ES), KIMITEC Gp (ES), ARMOSA (BE), AKOS M. (HU) and EYEBB (UK).

PROGRAMME CONTENTS

In the first module, participants will receive an overview of essential oils, while in the second module they will involve their knowledge in learning activities on entrepreneurship and market-oriented framework. The third module will be devoted to a personal work based on the obtained knowledge. All the modules begin with the descriptors of the unit, that specify the requirements, learning outcomes and guidelines to satisfactory complete the tasks.

COURSE CONTENT

MODULE 1. 9 ECTS

Unit 1. Introduction and definition of EOs

Unit 2. Source of EOs, plant cultivation and collection

Unit 3. Post-harvesting and processing techniques

Unit 4. Quality control and regulations

Unit 5. Biological activities in Eos

Unit 6. Food/Flavour and Cosmetic applications

MODULE 2. ENTREPRENEURSHIP. 3 ECTS

E-learning training: New Challenges and Applications in Essential Oils Market-Entrepreneurship.

Unit 1. Entrepreneurial and innovative ecosystem

Unit 2. Opportunity analysis

MODULE 3. PERSONAL WORK. 3 ECTS

Individual and personal work on a particular aspect of EO (subject to be validated by the professor): Business Plan Proposal or Research work.

- Template with a research or business plan proposal.
- Freestyle video describing the research or business plan proposal (max. 5 minutes) or 5 minutes power point with registered comments: Exhibition of idea. The following shall be evaluated:
 - Originality
 - Problem-Solution Definition
 - Successful Solution Definition
 - Leads - target
 - Idea Innovation
 - Exposition and defence [Originality]
 - Exposure and defence [Concretion]

- Other highlights - DELIVERY of PESTEL, DAFO and CANVAS, RESEARCH METHODS, etc.

COURSE TIME DISTRIBUTION

TEACHING UNIT	HOURLY BREAKDOWN		
	Online	Personal work	Total
MODULE 1 (9 ECTS)			
Unit 1	20 h	25 h	45h
Unit 2	20 h	25 h	45h
Unit 3	20 h	25 h	45h
Unit 4	20 h	25 h	45h
Unit 5	20 h	25 h	45h
Unit 6	20 h	25 h	45h
MODULE 2 (3 ECTS)	40 h	50 h	90h
MODULE 3 (3 ECTS)		90 h	90 h
Total	160 h	290 h	450h

COURSE ORGANISATION- LEARNING PROCESS

1. PRESENTATION VIDEO OF THE UNIT BY THE PROFESSOR
Before the beginning of the unit, the students will receive from the professor in charge an introductory video explaining the main features of each unit.
2. THEORETICAL AND PRACTICAL UNIT CONTENT
Learning unit content, suggested links to videos or recommended readings, suggested practical exercises. Interactive chats between students and professors. Professor in charge of each unit:
 - 2.1. will set one hour discussion session during the week with the students, to solve questions, comments, remarks, etc.
 - 2.2. will set one webinar with an expert (EOHUB business partners, or external experts)
3. EVALUATION CRITERIA
 - 3.1. MODULE 1:
 - 3.1.1. A final test after each unit of 10 questions related to the theoretical and practical content of the whole subject (True-False, multiple choice).
 - 3.1.2. A practical exercise (no more than 750 words) after each unit of "indicate 2-3 innovative initiatives within the framework of the subject of the Unit" indicating why are they innovative? how they affect the market?
 - 3.2. MODULE 2: A final test after each unit of 10 questions related to the theoretical and practical content of the whole subject (True-False, multiple choice).
 - 3.3. MODULE 3 – FINAL EVALUATION: Personal interview to evaluate the personal work.

4. MOBILITY

A 5-day “summer school” at MATE University in Hungary will give to the students a more enriching experience and a comprehensive package of knowledge, expertise and networking, with some of the most qualified and well-known researchers and professors in Europe working in Essential Oils & Aromatics Plants, and also with students from other European regions during five days.

If the student pass 80% of the activities can move on to the next evaluation process to achieve Mobility. Each university will select one student to award with a mobility, according to his/her marks and personal work during EOHUB course.

5-DAY “SUMMER SCHOOL” AGENDA-HUNGARY

- DAY 1: Reception Day at MATE (PSC+Students): Visiting facilities, campus, laboratories, review of Agenda, etc.
- DAY 2 and 3: A two-day summer school at MATE: These two days to be delivered by EOHUB staff members+ MATE personnel.
- DAY 4: EOHUB hub launch event (workshop)
- DAY 5: field trip

EXPERT COURSE FACULTY BOARD

MODULE 1 (9 ECTS):

Coordinator:

ML Fauconnier - marie-laure.fauconnier@uliege.be

Professors:

- Gosztola Beata - gosztola.beata@uni-mate.hu
- Akos Mathé - acatius2005@gmail.com
- Carlos Calderón Guerrero - carlos.calderon@upm.es
- Eva Zamborine - Zamborine.Nemeth.Eva@uni-mate.hu
- ML Fauconnier - marie-laure.fauconnier@uliege.be
- Peter Radacsi - Radacsi.Peter@uni-mate.hu
- Azucena Gonzalez Coloma - Azu@ica.csic.es
- André Henriques - andrehenriques@kimatec.com
- Justine Peeters - justine.peeters@arrosa.tech

MODULE 2 (3 ECTS):

Coordinator:

Carlos Calderón Guerrero - carlos.calderon@upm.es

Professors:

- Carmen Avilés - carmen.aviles@upm.es
- Carlos Calderón Guerrero - carlos.calderon@upm.es
- Florin Ioras - Florin.loras@bucks.ac.uk
- José Luis García - josel.garcia@upm.es
- Clara Cordon Trujillo - clara.cordon@upm.es
- Martín Giménez - martin.gimenez@upm.es
- Indrachapa Bandara - Info@eyebb.co.uk

MODULE 3 (3 ECTS):

Coordinator:

Carlos Calderón Guerrero - carlos.calderon@upm.es

Professors

- ML Fauconnier - marie-laure.fauconnier@uliege.be
- Eva Zamborine - Zamborine.Nemeth.Eva@uni-mate.hu
- Peter Radacsi - Radacsi.Peter@uni-mate.hu
- Gosztola Beata - gosztola.beata@uni-mate.hu
- Carlos Calderón Guerrero - carlos.calderon@upm.es
- Carmen Avilés - carmen.aviles@upm.es
- Florin Ioras - Florin.loras@bucks.ac.uk
- Azucena Gonzalez Coloma - Azu@ica.csic.es

CHRONOGRAM - DRAFT

OCTOBER, 2021

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	22	23	24
25	26	27	28	29	30	31

	MODULE 1 - UNIT 1: Introduction and definition of EOs
--	---

NOVEMBER, 2021

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

	MODULE 1 - UNIT 1: Introduction and definition of EOs
	MODULE 1 - UNIT 2: Source of EOs, plant cultivation and collection
	MODULE 1 - UNIT 3: Post-harvesting and processing techniques
	MODULE 1 - UNIT 4: Quality control and regulations
	MODULE 1 - UNIT 5: Biological activities in Eos
	MODULE 1 - UNIT 6: Food/Flavour and Cosmetic applications

DECEMBER, 2021

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

	MODULE 1 - UNIT 5: Biological activities in Eos
	MODULE 1 - UNIT 6: Food/Flavour and Cosmetic applications
	MODULE 2 - UNIT 1: Entrepreneurial and innovative ecosystem
	MODULE 2 - UNIT 2: Opportunity analysis
	MODULE 3: Personal work

JANUARY, 2021

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

	MODULE 3: Personal work
--	-------------------------

COURSE TIME PLAN - DRAFT

DATE	MODULE - UNIT	PROFESSORS	MODULE COORDINATOR
WEEK 1 Start date: 25/10/2022	MODULE 1 - UNIT 1 Introduction and definition of EOs	Carlos Calderón	Marie-Laure Fauconnier
WEEK 2 Start date: 01/11/2022	MODULE 1 - UNIT 2 Source of EOs, plant cultivation and collection	Éva Zámборiné Németh Péter Radácsi Gosztola Beata	
WEEK 3 Start date: 08/11/2022	MODULE 1 - UNIT 3 Post-harvesting and processing techniques	Marie-Laure Fauconnier	
WEEK 4 Start date: 15/11/2022	MODULE 1 - UNIT 4 Quality control and regulations	Marie-Laure Fauconnier	
WEEK 5 Start date: 22/11/2022	MODULE 1 - UNIT 5 Biological activities in Eos	Dr. MÁTHÉ Ákos	
WEEK 6 Start date: 29/11/2022	MODULE 1 - UNIT 6 Food/Flavour and Cosmetic applications	Carlos Calderón	
WEEK 7 Start date: 06/12/2021	MODULE 2 - UNIT 1 Entrepreneurial and innovative ecosystem	Carmen Avilés Carlos Calderón José Luis García	Carlos Calderón
WEEK 8 Start date: 13/12/2022	MODULE 2 - UNIT 2 Opportunity analysis	Florin Ioras	
WEEK 9-10-11 Start date: 20/12/2022	MODULE 3 PERSONAL WORK	Carlos Calderón Marie-Laure Fauconnier Éva Zámборiné Németh Carmen Avilés Péter Radácsi Gosztola Beata	Carlos Calderón
END OF THE COURSE: 21/01/2023			

CONTACT PERSONS

ACADEMIC MANAGER AT LIÈGE UNIVERSITÉ

Contact person: Marie-Laure Fauconnier

Email: marie-laure.fauconnier@uliege.be - Tel 081/62 22 89

ACADEMIC MANAGER AT UNIVERSIDAD POLITECNICA DE MADRID

Contact person: Carlos Calderón-Guerrero

School of Forest Engineering and Natural Resources (ETSIMFMN)

E-mail: carlos.calderon@upm.es - Tel. +34 910671590

ADMINISTRATIVE MANAGER OF PLATFORM & TECHNICAL QUESTIONS

Contact person 1: Martín Cruz Giménez

E-Mail martin.gimenez@upm.es - Tel 910671617

Contact person 2: Clara Cordon

E-Mail clara.cordon@upm.es - Tel 910671617

LIFELONG LEARNING ADMINISTRATIVE MANAGER

Contact person: BEN LAMINE Boutheina

E-Mail: b.benlamine@uliege.be - Tel/GSM 32 (0) 4 366 2054 - 32 (0) 497 70 45 30

SCIENTIFIC COMMITTEE

- Marie-Laure Fauconnier (U-Liege, Belgium)
- Carlos Calderón-Guerrero (UPM, Spain)
- Éva Zámoriné Németh (MATE, Hungary)
- Florin Ioras (Buckinghamshire new University, UK)
- Carmen Avilés (UPM, Spain)
- Azucena González Coloma (CSIC, Spain)
- Akos Mathé (MATE, Hungary)

STEERING COMMITTEE

- Marie-Laure Fauconnier (U-Liege, Belgium)
- Carlos Calderón-Guerrero (UPM, Spain)
- Péter Radácsi (MATE, Hungary)
- Florin Ioras (Buckinghamshire New University, UK)
- Annick Lejeune (U-Liege, Belgium)
- José Luis García (UPM, Spain)

FOR MORE INFORMATION:

www.eohubbio.eu

eohub.project@gmail.com

