



## Advanced Course on C-Maps

# ERASMUS+ project ENEPLAN

## Developing skills in the field of integrated energy planning in Med Landscapes



**Camerino May-June 2019**

Palazzo Castelli - via Pontoni, 5

**Friday 24 May 2019 -10:00 -13:00**

### Day 1: Theoretical lesson

10:00 Introduction to the course **Prof. Andrea Catorci**

Introduction to the Concept Maps (C-Maps)

Teachers: **Dr. Federico Maria Tardella, Arch. Stefano Mugnoz**

10:15 Presentation of the Erasmus+ project "Eneplan" and other significant experiences on the use of CMaps for Higher Education.

11:00 Theoretical foundations: Aims of the concept maps and their use in scientific research and popularization. CMap structure: focus questions, concepts, and linking phrases.

12:30 Introduction to the CMapTools software: installation and explanation of the main functions, getting started with the basic concepts.

**Wednesday 29 May 2019 - 9:30-12:30; 14:00-18:00**

### Day 2: Practical approach to the construction of CMaps

#### Theoretical lesson

Model and practical approach to the construction of CMaps,

Teachers: **Dr. Federico Maria Tardella, Arch. Flavio Camerata**

9:30 Construction of a model and application of the methodologies of concept connection, application of focus questions and linking phrases to an agreed topic.

11:00 Use of C-MapTools software for the construction of a C-Map and of C-Map Cloud to share the C-Maps on the web.

#### Practical exercise

Getting familiar with the CmapTools: Concepts-Connections-Visualisations-Sharing

Teachers: **Dr. Federico Maria Tardella, Arch. Flavio Camerata, Arch. Stefano Mugnoz**

14:00 Students work individually, making a list of meaningful concepts concerning the focus question. They should be suggested to list around 15-20 concepts (1h)

15:00 Students work in small groups and make a map of the concepts they have listed, connecting them through meaningful linking phrases. Concepts can be removed/added/modified from the list (2h)

17:00 Illustration of the results by students and open discussion; identification of possible implementations or adjustments to those maps to be agreed by the students (homework) – 45min

17:30 Explanation of the next exercise focused on the construction of a CMap based on a scientific article. Selection of an article by the students.

**Friday 07 June 2019 - 14:00-18:00**

### Day 3: Practical approach to the construction of the CMaps Practical exercise

Development of a CMap aimed at the scientific popularization and illustration of the developed models

Teachers: **Prof. Andrea Catorci, Dr. Federico Maria Tardella, Arch. Stefano Mugnoz**

14:00 Illustration of the implementations carried out autonomously by the students.

14:30 Construction of CMaps based on scientific articles selected by the students among those proposed by the teachers. Students will split into small groups (3/5 students) and will describe the contents of an article through a concept map using the dedicated software.

17:00 Presentation and discussion of the concept maps produced by each group.

