**Course: Circular economy and smart city Credits: 9**

**Main language of instruction:** Italian

**Other language of instruction:** English

**Head instructor**

**Professor Gabriella Arcese - gabriella.arcese@unicusano.it**

**Objectives**

1. Understand global sustainability issues related to circularity

2. Understand innovative systems for the development of the Circular Economy

3. Understand innovative systems for the development of Smart cities

4. Deepen the methodologies and technical tools for the implementation of the Circular Economy and Smart cities

**Course structure**

Students must study the materials provided by the teacher in the "Erasmus Materials" folder. To take the exam, you must prepare a Powerpoint presentation with a case study that explores the topics covered in the course.

**Competencies**

The aim of the course is to provide students with knowledge related to the new concepts of Circular Economy and Smart City models in order to acquire principles, concepts, tools and methodologies. The circular economy is a new paradigm of economic development that, both nationally and internationally, is finding wide diffusion, allowing the creation of sustainable development paths, programs and policies based on the recycling and reuse of materials and sharing of services. At a local level, moreover, many of the principles of sustainability and innovation, as well as the circular economy approach, are found in the new models of intelligent cities better known as Smart City.

The intelligent city is a set of urban planning strategies aimed at optimizing and innovating services thus connecting infrastructures with human, intellectual and social capital thanks to the large-scale use of new technologies, in order to improve the quality of life and meet the needs of stakeholders.

The course “Circular Economy and Smart City” will allow the student to understand the main organizational phenomena and to identify the critical contextual variables. The student will acquire the importance of managing environmental and technological variables related to the new paradigms of circular economy and technological development for “smart and sustainable cities”.

**Evaluation system and criteria**

The exam consists of an oral test aimed at ascertaining the ability to analyze and rework the concepts acquired. In addition, the student will present the case study analyzed.

**Bibliography and resources**

Materials provided by the teacher in the "Erasmus Materials" folder.