

Academic Year/course: 2022/23

## 69761 - Circular Economy management

### Syllabus Information

**Academic Year:** 2022/23

**Subject:** 69761 - Circular Economy management

**Faculty / School:** 100 - Facultad de Ciencias

**Degree:** 627 - Master's Degree in Circular Economy

**ECTS:** 6.0

**Year:** 01

**Semester:** Second semester

**Subject Type:** Optional

**Module:**

## 1. General information

### 1.1. Aims of the course

The Circular Economy Management course is designed to understand the tools for the economic management of the Circular Economy.

These approaches and objectives are aligned with Sustainable Development Goals (SDG) No. 9 (Industry, Innovation and Infrastructure) and No. 12 (Responsible Consumption and Production) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>), such that the acquisition of the learning results of the subject provides training and competence to contribute to a certain extent to its achievement.

### 1.2. Context and importance of this course in the degree

The subject of Circular Economy Management is taught in the second semester as an optional subject of the socioeconomic module. It is designed for students with Law and Social Sciences degrees. The subject is taught from the University of Zaragoza.

### 1.3. Recommendations to take this course

Regular use of the teaching platform and daily study of the concepts presented are recommended, with special emphasis on solving practical activities. Likewise, it is vital to consult the doubts and questions that pose difficulties in the teaching and learning process, for which personalised tutorials should be used.

## 2. Learning goals

### 2.1. Competences

#### **BASIC COMPETENCES**

CB6 - Have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context.

CB7 - Can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.

CB8 - Have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements.

CB9 - Can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and nonspecialist audiences clearly and unambiguously.

CB10 - Have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

#### **GENERAL COMPETENCES**

CG1 - Obtain information in Spanish and English using information technologies efficiently

CG2 - Manage, critically analyse and synthesise information

CG3 - Critically reflect in a systemic way and using causal relationships

CG4 - Formulate, analyse, evaluate and compare in a multidisciplinary way new or alternative solutions for different problems

CG5 - Work in interdisciplinary groups

CG6 - Transmit information efficiently through information and communication technologies

CG7 - Develop management skills (decision making, goal setting, problem definition, design, and evaluation)

CG8 - Properly manage available resources on time

### **SPECIFIC COMPETENCES**

CE6 - Apply the principles of Circular Economy management.

## **2.2. Learning goals**

The student, passing this subject, achieves the following results:

1. Be able to make decisions about resource management in circular economy models in terms of gas emissions into the atmosphere, energy losses, wastewater production and generation of waste from business and especially industrial activities.
2. Know the tools and applications of different Environmental Management Systems applied to companies, as well as environmental audits and cleaner production.
3. Be able to formulate new strategies and circular and sustainability business models.
4. Be able to discern about the application of the best available environmental technologies and apply it to the definition of investment projects in circular models.
5. Be able to evaluate the economic-financial impacts derived from investments in circular economy in companies and organisations.
6. Be able to analyse the risks of linear models.
7. Know the impact of sustainable models on financial risk management.
8. Be able to handle financial instruments for the development of the sustainable model.

## **2.3. Importance of learning goals**

The course "Management of the Circular Economy" provides the student with the appropriate tools to complete their specialisation in the field of knowledge of environmental management and financial management of the circular economy. These learning outcomes are key to manage Circular Economy.

# **3. Assessment (1st and 2nd call)**

## **3.1. Assessment tasks (description of tasks, marking system and assessment criteria)**

**The student must demonstrate that has achieved the expected learning outcomes through the following assessment activities:**

For the first call, students are offered the possibility of a continuous assessment process. For this, students will be evaluated in each of the two parts of the program by:

- 1) Active participation in sessions, forums and other activities scheduled throughout the semester and submitting different assignments proposed in class: 60 % of the final grade.
- 2) A final exam-type test including multiple choice questions, short, long and / or development of theoretical type and the resolution of problems and cases: 40 % of the final grade.

To pass the course through this system, it is necessary for students to deliver within the established deadlines all the work and reports planned throughout the course, active participation in both the classes and the activities carried out and that the weighted-average grade achieved taking into account the different tests (assignments and final exam) and its relative weight in the final assessment is higher than 5 points out of 10.

The student who does not opt for continuous assessment or who does not pass the subject by this procedure or who wants to improve his grade, will have the right to take a global test, prevailing, in any case, the best of the grades obtained. Said global test will be carried out in accordance with the calendar that is set in due course in the Master and will consist of an exam in which the different topics of the subject taught will be addressed.

To pass the subject by this means, the grade achieved in the exam must be higher than 5 points out of 10. For the second call, the evaluation will be global and will consist of an exam that will address the different topics of the subject taught. To pass the subject by this means, the grade achieved in the exam must be higher than 5 points out of 10.

The weighting in the final grade of each of the two parts of the program for each of the forms of evaluation will always be 50 %. The number of official exam sessions to which enrollment entitles (2 per enrollment) as well as the consumption of these calls will be adjusted to the Rules of Permanence in Master's Studies and the Rules of Learning Assessment of the University of Zaragoza (<https://ciencias.unizar.es/normativas-asuntos-academicos>). To this last regulation, the general criteria for the design of the tests and the grading system will also be adjusted, and according to the same, the time, place and date on which the review will be held when publishing the qualifications will be made public.

NOTE: It is planned that these tests and evaluation activities will be carried out in person, but if health circumstances require it, they will be carried out blended or online. In the case of online evaluation, it is important to note that, in any test, the student may be recorded, being able to exercise their rights through the procedure indicated in:

[https://protecciondatos.unizar.es/sites/protecciondatos.unizar.es/files/users/lopd/gdocencia\\_reducida.pdf](https://protecciondatos.unizar.es/sites/protecciondatos.unizar.es/files/users/lopd/gdocencia_reducida.pdf). The necessary

software will be used to verify the originality of the activities carried out. The detection of plagiarism or Copying in an activity will imply a score of 0 points in it.

## 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

Learning in this subject is based on the combination of expository method and flipped classroom.

According to the expository method, the professor develops the presentation of the topics before the students present in the same classroom or other universities through videoconference. In addition, other teaching materials will be included in the Moodle platform that will allow dedicating some of the classes to interact with students, raising questions that allow relating concepts.

To solve exercises and problems, students will be assigned exercises and problems that they must solve individually.

All these training activities will be supported by tutorials from teachers via videoconference.

This guide's approach, methodology, and assessment are ready to be the same in any teaching scenario. They will be adjusted to the socio-sanitary conditions of each moment and the indications given by the competent authorities.

### 4.2. Learning tasks

This is a 6 ECTS credits course organised as follows:

- Lectures (1.6 ECTS credits: 16 hours). Whole group sessions of 100 minutes each one will be taken. Lecturers explain the theoretical contents and solve representative applied problems. Learning materials will be available on the virtual platform Moodle (<https://moodle.unizar.es/add/course/view.php?id=54400&lang=en>). Regular attendance is highly recommended.
- Practice sessions (4.4 ECTS credits: 44 hours, including 8 face-to-face hours). The preparation of several reports will be required.
- Autonomous work and study (8.4 ECTS credits: 84 hours). Students are expected to study theory.
- Assessment tasks (0.6 ECTS credits: 6 hours). A final written examination including short answer and problem-solving questions will be carried out.

### 4.3. Syllabus

#### **PART I**

1. Introduction to Circular Economy Management in Organisations
2. Operational Management of the Circular Economy in Organisations
3. Strategic Management of the Circular Economy in Organisations

#### **PART II**

4. Analysis of investments in responsible innovation and eco-innovation projects.
5. Financial tools and instruments for the development of the circular model.
6. Analysis and identification of financial risks linked to linear vs. circular models.

### 4.4. Course planning and calendar

Information on schedules, calendar, and exams is published on the Master's page on the website of the Faculty of Sciences of the University of Zaragoza (<https://ciencias.unizar.es/master-en-economia-circular>). The presentation of reports will be carried out according to the calendar that will be announced in due course through the Moodle page of the subject.

### 4.5. Bibliography and recommended resources

Available in: <http://psfunizar10.unizar.es/br13/egAsignaturas.php?id=14851>