1. OVERVIEW

Subject Area	Workshop II: Sustainable Design
Degree	Bachelor's Degree in Design
School/Faculty	Faculty of Architecture, Engineering and Design
Year	Second
ECTS	6 ECTS
Type	Compulsory
Language(s)	Spanish/English
Delivery Mode	On campus
Semester	Second semester
Academic Year	2024/2025
Coordinating professor	

2. INTRODUCTION

This workshop is part of the integration module where students develop in several subjects different projects with both design skills and other similar skills using the Project Based School method. From the most basic knowledge of materials which designers work with to the mastery of complex projects in which professionals from a range of fields can intervene.
Students will learn different strategies of sustainable design. This involves awareness of emotional and physical factors regarding groups of materials for harmonious and responsible choice together with taking suitable account of ecology, sustainability and the principles of the conservation of energy and environmental resources. They will also develop the ability to use techniques and strategies as well as knowledge of the available materials and systems. All this together with responsible criteria regarding consumption; sustainability in design manufacturing processes, useful life and recycling; cost reduction (consumption of materials, improvements to packaging, etc.). Integrating factors which determine whether design is sustainable: raw materials, manufacture of parts, packaging, distribution, sales, use, repair, reuse, waste, transport, etc.

3. SKILLS AND LEARNING OUTCOMES

Key skills (CB, by the acronym in Spanish):

- CB3: Students have the ability to gather and interpret relevant data (usually within their study area) to form opinions which include reflecting on relevant social, scientific or ethical matters.
- CB4: Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.
- CB5: Students have developed the learning skills necessary to undertake further study in a much more independent manner.

Transversal skills (CT, as per the Spanish acronym):

- CT1: Independent Learning: the ability to choose the most effective strategies, tools and opportunities for independent learning and implementation of what they have learnt.
- CT 3: Ability to adapt to new circumstances: being able to evaluate and understand different points of view, taking different approaches to suit the situation.
- CT4: Ability to analyse and synthesize: being able to break down complex problems into manageable blocks; also evaluating alternatives and perspectives to find the ideal solution. Synthesizing to reduce the complexity and better understand the situation and/or solve problems.

Specific skills (CE, as per the Spanish acronym):

- CE17. Ability to create and develop design projects which incorporate the ideas of universal accessibility and the removal of architectural barriers.
- CE18. Awareness of the principles of sustainability, preservation of energy, material and environmental resources and ability to apply them to the creation and development of product and interior design projects.

Learning outcomes (RA, as per the Spanish acronym):

- RA2: Identify strategies for passive cooling and sustainable design. Awareness of the emotional and physical properties of groups of materials so a harmonious and responsible choice can be made.
- RA11: Suitable awareness of ecology, sustainability and the principles of conservation of energy and environmental resources.

The following table shows how the skills developed in the subject area match up with the intended learning outcomes:

Skills	Learning outcomes
CB3, CB4, CB5 CT1, CT3, CT4 CE17, CE18	RA2: Identify strategies for passive cooling and sustainable design. Awareness of the emotional and physical properties of groups of materials so a harmonious and responsible choice can be made. • RA11: Suitable awareness of ecology, sustainability and the principles of conservation of energy and environmental resources.

4. CONTENTS

The subject matter is divided into four teaching units:

- Unit 1 - Introduction
- Unit 2 - Context
- Unit 3 - Research
- Unit 4 - Final project

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Master lecture
- Collaborative learning.
- Project-based studies (PBS)
- Learning based on workshop teaching

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

On-campus:

Learning activity	Number of hours
Attendance and participation in activities	6.25h (on-site)
Directed learning, practical exercises and problem-solving	25h (20% on-site)
Project presentation	12.5h (on-site)
Integrated group project	12.5h (40% on-site)
Research work and projects	62.5h (40% on-site)
Self-study	12.5h (off-site)
Tutorials, academic follow-up and assessment	18.75h (on-site)
TOTAL	150 h

7. ASSESSMENT

The assessment methods, plus their weighting in the final grade for the course, are as follows:

On-campus:

Assessment method	Weight
Projects	100%

On the Virtual Campus, when you open the course, you can see all the details of your assessment activities and the deadlines and assessment procedures for each activity.

7.1. Ordinary examination period

To pass the course in the ordinary examination period you must obtain a grade of 5.0 or more out of 10.0 in the final grade (weighted average) for the subject.

7.2. Extraordinary examination period

To pass the course in the extraordinary examination period you must obtain a grade of 5.0 or more out of 10.0 in the final grade (weighted average) for the subject.

Activities not passed in the ordinary examination period, or those not delivered, must now be delivered after having received the relevant corrections to them by the lecturer.

8. SCHEDULE

The schedule with delivery dates of assessable activities in the course is indicated in this section:

Assessable activities	Date
Activity 1. Introduction (word cloud, review, graphics, Apps testing)	Week 1-4
Activity 2. Context (workshop 1: tactical design)	Week 2-9
Activity 3. Research (workshop 2: circularity, upcycling, identification of own brief)	Week 5-9
Activity 4. Final project (individual)	Week 10-19

The schedule may be subject to modifications for logistical reasons of the activities. Students will be informed of any changes in due time and course.

9. BIBLIOGRAPHY

The recommended bibliography is indicated below:

Books:
• EDWARDS, Brian (ed. 2005) Guía Básica de la Sostenibilidad G. Gili, Barcelona BROWNELL, (ed. 2006).

• BRAUNGHART; Michael MCDONOUGH, (ed. 2005) De la cuna a la cuna. Rediseñando la forma en que hacemos las cosas William McGraw-Hill, Madrid.
Versión en inglés: McDonough, William. Braungart, Michael. (2003) Libro: Cradle to Cradle. Remaking the Way We Make Things. Macmillan USA; Edición: 1. ISBN 0-86547-587-3
• McDonough, William. Braungart, Michael. (2013) Libro: The Upcycle: Beyond Sustainability - Designing for Abundance. Editorial North Point Princeton, USA.
• Rawsthorn, A. (2013). Libro: Hello World: Where Design Meets Life. Hamish Hamilton, UK.
• Roberts, L. (2006). Libro: Good: An Introduction to Ethics in Graphic Design. AVA Publishing, UK.
• Catálogo: Beazley Designs of the Year Catalogue 2019. The Design Museum. ISBN-10: 1872005411. 2019.

Webs

• Cradle to Cradle Products Innovation Institute http://www.c2ccertified.org/
• Ellen MacArthur Foundation was established in 2010 with the aim of accelerating the transition to the circular economy. https://www.ellenmacarthurfoundation.org
• Sustainable Futures at the Design Museum, 2010 on five themes: Cities, Energy and Economics, Food, Materiality and Creative Citizens. 31 March 2010 – 05 September.

Podcast

• Sustainable Futures at the Design Museum
http://designmuseum.org/media/item/76345/2654/Dezeen_podcast_-_Sustainable_Futures_at_the_Design_Museum.mp3

Documentaries

• Before the flood, 2016. Documentary film about climate change directed by Fisher Stevens. http://www.imdb.com/title/tt5929776/ retrieved 29 november 2016.
• Cradle to cradle design, William McDonough: http://www.ted.com/talks/william_mcdonough_on_cradle_to_cradle_design.html
• 15 Ways to Avert a Climate Crisis, Al Gore: http://www.ted.com/talks/al_gore_on_averting_climate_crisis.html

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

The Educational Guidance and Diversity Unit offers support throughout your time at university to help you with your academic achievement. One of the main pillars of our educational policy is the inclusion of students with special educational needs, universal accessibility to the different university campuses and equal opportunities.
This unit offers students:

1. Support and monitoring through personalised counselling and programmes for students who need to improve their academic performance.
2. Promotion of diversity, with curricular changes possible in terms of methodology or assessment for those students with special educational needs in order to provide equal opportunities for all our students.
3. We also offer students a range of educational extracurricular resources for developing a variety of skills to enhance their personal and professional development.
4. Career guidance by offering tools and advice to students with doubts regarding their professional careers or those who believe they have chosen the wrong line of study.

Students who need educational support can contact us at:
orientacioneducativa@universidadeuropea.es

11. SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to complete our satisfaction surveys to identify strengths and areas for improvement for staff, degree courses and the learning process.

These surveys will be available in the surveys area of your virtual campus or by email.

Your opinion is essential to improve the quality of the course.

Many thanks for taking part.