



EC/IB/ES 347 CIRCULAR ECONOMY IN A GLOBAL AND EUROPEAN CONTEXT
IES Abroad Madrid

DESCRIPTION:

The world is now facing a severe environmental crisis. The rising consumption needs in advanced countries as well as in emerging and fast-growing economies, are harming the whole planet. The “take-make-dispose” model of production and consumption is no longer sustainable. Many natural resources are finite, and an environmentally and economically sustainable way of using them must be found. A global shift towards more sustainable production and consumption paradigms is urgently needed. This course focuses on the concept of the circular economy (CE) – which is defined as “an industrial economy that is restorative or regenerative by intention and design” and it is considered a possible path towards more sustainable consumption and production patterns. CE distinguishes itself from the traditional linear economy as it aims to narrow, slow, and close the resource loops. Further, it represents a systemic shift that builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits. Starting from defining the concept of CE and framing it within the EU Circular Economy Package, the course will then focus on sustainable/circular entrepreneurship, on circular business models and then on five specific thematic areas (agriculture, food, textile, plastics, cities). This course is particularly valuable for students of entrepreneurship and environmental studies with an interest in start-ups and EU policy affairs and covers the following subjects: Entrepreneurship; Business; Management; EU Policies.

CREDITS: 3 credits

CONTACT HOURS: 45 hours

LANGUAGE OF INSTRUCTION: English

PREREQUISITES: None

ADDITIONAL COST: None

METHOD OF PRESENTATION:

Lectures, cases, debates, class discussion of the required readings and videos. Lectures will be based on frontal lessons, stimulating discussions and teamwork to foster debates and encourage critical thinking. A field trip will allow the students to engage with the course material in a real-world context.

REQUIRED WORK AND FORM OF ASSESSMENT:

- Course participation and attendance – 10%
- Midterm Exam – 30%
- Assignments – 20%
- Final Exam – 40%

Course Element

A) COURSE PARTICIPATION:

A significant amount of class time will involve discussion of videos, papers, case studies, as well as individual and group exercises that introduce and reinforce key topics. Therefore, students’ participation in class is essential and will be assessed. Students are expected to have an active role in class, participating in class discussions and fulfilling the required work for each session. In order to successfully meet this requirement, students should be prepared to devote significant time outside of class to reading and critical



thinking. This course is fully integrated with Moodle, the IES online learning platform. Students will be required to actively access and interact with resources on this platform.

For a better understanding of course participation, please see the following grading rubric for student participation:

A – Excellent Participation

The student's contributions reflect an active reading of the assigned bibliography. Skillfully synthesizes the main ideas of the readings and raises questions about the applications and implications of the material. Demonstrates, through questions and comments, that he or she has been capable of relating the main ideas in the readings to the other information discussed in the course, and with his or her own life experience. The student makes informed judgments about the readings and other ideas discussed in class, providing evidence and reasons. The student respectfully states their reactions about other classmates' opinions, and is capable of contributing to the inquiry spiral with other questions. The student gets fully involved in the completion of the class activities.

B – Very Good Participation

The student's contributions show that the assigned materials are usually read. Most of the time the main ideas are identified, even though sometimes it seems that applications and implications of the information read were not properly reflected upon. The student is able to construct over others' contributions, but sometimes seems to interrupt the shared construction to go over tangents. They are respectful of others' ideas. Regularly involved in the activities but occasionally loses concentration or energy.

C – Regular Participation

The participant evidences a regular reading of the bibliography, but in a superficial way. He/she tries to construct over others' ideas, but commonly provides comments that indicate lack of preparation about the material. Frequently, contributions are shallow or unarticulated with the discussion in hand.

F – Insufficient Participation

Consistently, the participant reads in a shallow way or does not read at all. Does not participate in an informed way, and shows lack of interest in constructing over others' ideas.

B) MIDTERM EXAMN:

The midterm exam will be taken in-class and it will consist of open-ended questions (long and short answers required). Those topics and materials that have been covered before the midterm will make up this exam. The midterm exam provides practice and experience for the final exam, which will be in the same format.

C) ASSIGNMENTS:

PROJECT:

Students will carry out a group project based on a real case that they will develop throughout the course. During the course, they will have to develop the required points. There will be continuous feedback from the university lecturer each week. The students will have to produce a final report that must be presented at the end of the course.

LEARNING JOURNAL:

Students should develop a learning journal. The goal is for students to regularly reflect on what they have learned and share it with the class. Each week, one student will present and explain their learning to the rest of the students.

D) FINAL EXAM:

The midterm exam will be taken in-class and it will consist of open-ended questions (long and short answers required). Those topics and materials that have been covered during the course will make up this exam. The partial exam is not eliminatory. Students must study all of the material covered in the course



LEARNING OUTCOMES:

By the end of the course, students will be able to:

- Explain the difference between linear and circular economy and understand the environmental limits business and society are currently facing
- Describe the European Union's Circular Economy Action Plan and European Green Deal
- Understand the concept of circular economy and circular business models
- Acquire background and context knowledge about Sustainable Development
- Learn the basics of entrepreneurship and international entrepreneurship
- Understand what sustainable and circular entrepreneurship is and learn from some European case studies
- Learn about circular startups and get the chance to talk and discuss with a circular entrepreneur
- Learn the concept of sustainable/circular value proposition and how to concretely implement it
- Concretely develop a business plan for a circular start-up
- Demonstrate a deep knowledge of circular economy in different thematic areas, i.e., agriculture, textile, food, plastics, circular cities.

ATTENDANCE POLICY:

As a member of our class community, you are expected to be present and on time every day. Attending class has an impact on your learning and academic success. For this reason, attendance is **mandatory for all IES Madrid classes**, including course-related excursions. Absences will only be excused in cases of documented medical or family emergencies. Any assessed work, including exams, tests, and presentations, will be rescheduled if the absence is justified; otherwise, it will be graded as 0. You are allowed a maximum of 1 unexcused absence for once-a-week courses and 2 unexcused absences for twice-a-week courses. Each additional absence will deduct 5 points from your final grade. **Accumulating 7 or more absences in twice-a-week courses, or 4 or more in once-a-week courses, may lead to a failing grade.** Students arriving more than 11 minutes after the scheduled start time will be marked as 'late.' Three 'late' arrivals will be counted as 1 absence. Any student arriving 30 minutes or more after the scheduled start time will be marked as 'absent.' For more information, please refer to the full [Attendance and Punctuality Policy](#) document.

CONTENT:

Session	Content	Assignments
Session 1	Introduction to the Course I Why the circular economy? Professor's presentation of the course Expectations of students Learning Outcomes Introducing Circular Economy (CE)	Readings: Stahel, W.R., The circular economy (2016). Nature, 531, 435–438. Ellen MacArthur Foundation, Towards a circular economy: Economics and Business rationale for an accelerated transition. Chapter 1,2 and 3. https://www.ellenmacarthurfoundation.org/towards-a-circular-economy-business-rationale-for-an-accelerated-transition Optional: Zero waste life – TED Talk: https://www.youtube.com/watch?v=pF72px2R3Hg World Economic Forum: “Surprising Facts About the Circular Economy”
Session 2	SDGs, CSR, and the creation of shared value Agenda 2030 and its Sustainable Development Goals/SDGs The link between UN's Sustainable Development Goals and Circular Economy	Readings: Porter, M. E., & Kramer, M. R. (2011). Creating SharedValue: Harvard Business Review. From the Magazine(January–February 2011). Sustainable Development Goals Overview: https://www.undp.org/sustainable-development-goals The Sustainable Development Goals report 2022 (pages 1-25) Sustainable Development Goals: https://www.un.org/sustainabledevelopment/sustainable-development-goals/ https://www.un.org/sites/un2.un.org/files/circular_economy_14_march.pdf Optional: Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & De Colle, S. (2010). Stakeholder theory: The state of the art. Academy of Management Annals,4(1), 403-445. Schroeder, P., Anggraeni, K., & Weber, U. (2019). The relevance of circular economy practices to the sustainable development goals. Journal of Industrial Ecology, 23(1), 77-95.

Session	Content	Assignments
Session 3	Global Framework on CE A global gaze on CE COP26 Focus on the EU Closer look at the EU's Circular Economy Package	Readings: UN Climate Change Conferences: https://www.un.org/en/climatechange/un-climate-conferences Ellen MacArthur Foundation: https://www.ellenmacarthurfoundation.org/ Platform for accelerating the Circular Economy https://pacecircular.org/ Optional: COP26 in 10 minutes: https://www.youtube.com/watch?v=qmkJ8QqFIU4
Session 4	CE and European Union I - Policies Closer look at the EU's Resource efficiency and CE policy and at the European Green Deal. What is sustainable and circular entrepreneurship? Definitions.	Readings: EU resource efficiency and the circular economy: https://www.europarl.europa.eu/factsheets/en/sheet/76/resource-efficiency-and-the-circular-economy The European Deal Post Covid https://ellenmacarthurfoundation.org/articles/the-european-green-deal-and-a-post-covid-19-prosperity The European Green Deal: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en Optional: Video: How to be a sustainable entrepreneur (Part 1,2, 3 and 4) :https://www.youtube.com/watch?v=iBCxg-MeLI0
Session 5	Circular Entrepreneurship: frameworks and tools for designing opportunities	Readings: The value proposition canvas: https://www.youtube.com/watch?v=ReM1uqmVfP0 The business model canvas: https://www.youtube.com/watch?v=QoAOzMTLP5s Empathy Maps: https://www.youtube.com/watch?v=Qz7EwkprvFE Jobs to be done: https://www.youtube.com/watch?v=RQjBawcU_qg&t=208s

Session	Content	Assignments
Session 6	Sustainable and circular entrepreneurship Definitions How to design a sustainable/circular value proposition Case studies	Readings: Greco, A., & de Jong, G. (2017). Sustainable entrepreneurship: Definitions, themes and research gaps. University of Groningen. Working Paper series. «Let's help SMEs to go circular», KPMG and European Commission, https://ec.europa.eu/environment/sme/pdf/Training%20materials_English.pdf
Session 7	Midterm Recap Q&A Session before the exam	
Session 8 23rd October	Midterm Exam	
Session 9	International Entrepreneurship	Readings Zucchella, A., Magnani, G. (2016). International entrepreneurship. Theoretical foundations and practices. Second Edition. Palgrave Macmillan, ISBN: 9781137520012.
Session 10	Circular business models Circular business models: taxonomies Case studies	Readings: Geissdoerfer, M., Pieroni, M. P., Pigosso, D. C., & Soufani, K. (2020). Circular business models: A review. Journal of Cleaner Production, 277, 123741. Zucchella & Urban (2019), Circular Entrepreneurship, Chapter 3, pag. 75-86. Adidas for Parley: https://www.finchandbeak.com/1333/value-proposition-design-for-the-circular.htm Re, B., Magnani, G., & Andreozzi, C. (2021). The Communication of Circular Value Propositions: The Role of Digital Touchpoints in the Customer Decision Journey. Micro & Macro Marketing, 30(2), 279-304.

Session	Content	Assignments
Session 11	Thematic Area 1: Circular Economy & Agriculture how agriculture can innovate to be more sustainable and to secure food supply for the future. Case studies: Acqua & Sole, Smartisland	Readings: https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-105-circular-agriculture-for-sustainable-rural-development/ Zucchella, A., & Previtali, P. (2019). Circular business models for sustainable development: A “waste is food” restorative ecosystem. Business Strategy and the Environment, 28(2), 274-285. Smartisland case study Agro-food and circular economy: https://www.youtube.com/watch?v=CzR_ArBQXi0 Optional: Urban Farming: https://www.veolia.com/en/solution/urban-farming-solution-helping-feed-cities https://www.smartgreenpost.com/2020/07/02/urban-farming-poty-the-vertical-vegetable-garden-that-you-can-grow-on-your-home-balcony/
Session 12	Thematic Area 2: Circular economy and the food industry Case study: TooGoodToGo	Readings: https://archive.ellenmacarthurfoundation.org/explore/food-cities-the-circular-economy View: https://toogoodtogo.org/en Optional: https://food.ec.europa.eu/system/files/2021-05/fs_eu-actions_action_platform_key-rcmnd_en.pdf The role of insects in a circular economy for food: https://www.youtube.com/watch?v=s9CgE12QMKQ

Session	Content	Assignments
Session 13	Thematic Area 3: Circular economy and the textile industry Case studies: Rifò and Petit Pli Readings:	Readings: https://archive.ellenmacarthurfoundation.org/explore/fashion-and-the-circular-economy Napier, Elizabeth and Sanguineti, Francesca, Fashion Merchandisers' Slash and Burn Dilemma: A Consequence of Over Production and Excessive Waste? (November 1, 2018). https://ssrn.com/abstract=3289411 View View these websites: https://rifo-lab.com/en https://shop.petitpli.com Videos: https://www.youtube.com/watch?v=EDYHvFycA7Y https://www.youtube.com/watch?v=hVbzzGsh6jI https://www.youtube.com/watch?v=hQ4czgXyPC4 Optional: https://pacecircular.org/action-agenda/textiles https://fashionforgood.com https://www.youtube.com/watch?v=3eEC8yVb1bo
Session 14	Thematic Area 4: Redesigning Plastics What happens to our waste plastic? Is recycling plastics really that effective? Case study: Projectcircleg	Readings: New Plastics Economy: https://ellenmacarthurfoundation.org/topics/plastics/overview A European strategy for plastics in the circular economy: https://www.europarc.org/wp-content/uploads/2018/01/Eu-plastics-strategy-brochure.pdf Video: https://www.youtube.com/watch?v=p3T5WWvJgcw Website: https://projectcircleg.com Optional: EU restrictions on certain single-use plastics: https://environment.ec.europa.eu/topics/plastics/single-use-plastics/eu-restrictions-certain-single-use-plastics_en

Session	Content	Assignments
Session 15	Thematic Area 5: Circular economy and cities Major innovations and trends in modern cities Case study: city of Milan	Readings: Bolger, K., & Doyon, A. (2019). Circular cities: exploring local government strategies to facilitate a circular economy. <i>European planning studies</i> , 27(11), 2184-2205. Milan Circular Economy Strategy: https://www.iuc-asia.eu/wp-content/uploads/2020/08/Milan-Circular-economy.pdf Video: https://www.youtube.com/watch?v=zpj7C3H8lmw Optional: https://ellenmacarthurfoundation.org/circular-economy-in-cities https://ellenmacarthurfoundation.org/topics/cities/overview https://www.circularcityfundingguide.eu/case-studies/making-milan-circular-from-food-to-fashion/
Session 16	Course Related Trip	
Session 17	Projects Presentation	
Session 18	Projects Presentation	
Session 19	Final exam review Q&A session	
Session 20	Final Exam	

COURSE-RELATED TRIPS:

REQUIRED READINGS:

- Stahel, W.R., *The circular economy* (2016). Available: <https://www.nature.com/news/the-circular-economy-1.19594>
Nature 531, 435–438 (4 pages).
- EllenMacArthurFoundation, *Towards the Circular Economy. Economic and business rationale for an accelerated transition.*
<https://ellenmacarthurfoundation.org/towards-the-circular-economy-vol-1-an-economic-and-business-rationale-for-an>

- <https://ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview>
- Porter, M. E., & Kramer, M. R. (2011). Creating Shared Value: Harvard Business Review. From the Magazine (January– February 2011).
- Sustainable Development Goals Overview: <https://www.undp.org/sustainable-development-goals>
- The Sustainable Development Goals report 2022: <https://unstats.un.org/sdgs/report/2022/>
- COP26, the Glasgow climate pact: <https://ukcop26.org/the-glasgow-climate-pact/>
- The Circularity Gap Report (2022): <https://www.circularity-gap.world/2022>
- European Circular Economy Action Plan: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN>
- EU resource efficiency and the circular economy: <https://www.europarl.europa.eu/factsheets/en/sheet/76/resource-efficiency-and-the-circular-economy>
- The European Deal Post Covid: <https://ellenmacarthurfoundation.org/articles/the-european-green-deal-and-a-post-covid-19-prosperity>
- The European Green Deal: https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
- Greco, A., & de Jong, G. (2017). Sustainable entrepreneurship: Definitions, themes and research gaps. University of Groningen. Working Paper series.
- Geissdoerfer, M., Pieroni, M. P., Pigosso, D. C., & Soufani, K. (2020). Circular business models: A review. Journal of Cleaner Production, 277, 123741.
- <https://www.finchandbeak.com/1333/value-proposition-design-for-the-circular.htm>
- <https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-105-circular-agriculture-f-or-sustainable-rural-development/>
- Zucchella, A., & Previtali, P. (2019). Circular business models for sustainable development: A “waste is food” restorative ecosystem. Business Strategy and the Environment, 28(2), 274-285.
- Smartisland case study: https://f.hubspotusercontent10.net/hubfs/4374869/Case%20Studies%20-%20User%20Stories%20Page/Case%20Study_smartisland_EN.pdf
- <https://archive.ellenmacarthurfoundation.org/explore/food-cities-the-circular-economy>
- <https://archive.ellenmacarthurfoundation.org/explore/fashion-and-the-circular-economy>
- Napier, Elizabeth and Sanguinetti, Francesca, Fashion Merchandisers’ Slash and Burn Dilemma: A Consequence of Over Production and Excessive Waste? (November 1, 2018). <https://ssrn.com/abstract=3289411>
- New Plastics Economy: <https://ellenmacarthurfoundation.org/topics/plastics/overview>
- A European strategy for plastics in the circular economy: <https://www.europarc.org/wp-content/uploads/2018/01/Eu-plastics-strategy-brochure.pdf>
- Bolger, K., & Doyon, A. (2019). Circular cities: exploring local government strategies to facilitate a circular economy. European planning studies, 27(11), 2184-2205.
- Milan Circular Economy Strategy: <https://www.iuc-asia.eu/wp-content/uploads/2020/08/Milan-Circular-economy.pdf>
- <https://www.bcorporation.net/en-us/certification>
- <https://hbr.org/2016/06/why-companies-are-becoming-b-corporations>
- Battilana, J., & Lee, M. (2014). Advancing research on hybrid organizing-Insights from the study of social enterprises. Academy of Management Annals, 8(1), 397-441.

RECOMMENDED READINGS:

- De Angelis, R. (2018). Business models in the circular economy: Concepts, examples and theory. Springer.
- Lacy, P., & Rutqvist, J. (2015). Waste to wealth: The circular economy advantage (pp. 3-18). London: Palgrave Macmillan.
- Re, B., Magnani, G., & Andreozzi, C. (2021). The Communication of Circular Value Propositions: The Role of Digital Touchpoints in the Customer Decision Journey. Micro & Macro Marketing, 30(2), 279-304.



- Zucchella, A., Magnani, G. (2016). International entrepreneurship. Theoretical foundations and practices. Second Edition. Palgrave Macmillan, ISBN: 9781137520012.