

SYLLABI

Basic data of module	
Academic Unit:	Faculty of Management, Program: Entrepreneurship and Innovation Management
The name of the subject which you lecture	Circular Economy Entrepreneurship
Level :	Master
Status	Compulsory
Year:	I -th
Semester:	Second
Number of hours :	3
ECTS:	6
Time /location:	
Lecturer (title/name):	
Contact details (e mail/phone of the lecturer):	
Subject description	
Subject description	In the context of this course, students will be equipped with knowledge related to the circular economy, a economic system that is regenerative and restorative by design, enabled by renewable energy, minimizes flows to incineration and waste disposal, and maintains resources in the highest possible value at all times. Also, during the semester, students will be introduced to key concepts such as: The theory of the circular economy in general, business model design strategies for a circular economy, Innovation of products, services, and business processes for the circular economy, transitioning to socio-technical systems and processes, Network collaboration with multiple stakeholders supporting the circular economy, the role of existing industries and market closure and unlocking, etc.
The aim of the subject:	The aim of the course is to provide students with a deeper understanding of the competitive capabilities of circular economy businesses. Furthermore, to illuminate the innovative and entrepreneurial opportunities of businesses, through the development and marketing of circular models of products, services, and processes as a competitive strategy compared to the linear approach 'take-make-use-waste.' More specifically, in the circular economy – business model, we focus on how to implement the principles of the circular economy in businesses.
Expected of the learning outcomes:	After completing this course, students should be able to: <ol style="list-style-type: none"> 1. Evaluate the interaction between business management, sustainability, and stakeholder practices and integrate circular principles across all business areas. 2. Interpret and communicate circular results to a wide range of stakeholders. 3. Solve problems by integrating circular concepts into operational and financial applications. 4. Identify environmental and social dimensions for companies, investors, consumers, and the public sector to enable circular benefits.

	<p>5. Identify and analyze the relationships between business models, concepts, and reciprocal theories regarding business challenges in the circular economy.</p> <p>6. Identify and balance challenges and opportunities in the use of circular frameworks to advance sustainable business transitions.</p> <p>7. Critically assess the selected case using these models, concepts, and theories for the development of innovations and business strategies in the circular economy.</p>		
The segregated students overload (must correspond with the learning outcome)			
Activities	Hours	Days/weeks	Total
Lectures	3	15	45
Theoretical exercises / laboratory			
Internship			
Contacts with teacher / consultations	1	15	15
Field exercises			
Midterm, Test			
Homework	3	13	39
Studying (at the library or at home)	3	15	45
Final preparation for the exam	1	5	5
Time spent on evaluation (tests, quiz and final exam)			
Projects and presentations	1	1	1
Total			150
Teaching methodology and learning methodology	The realization of learning will be achieved through theoretical lectures, discussion of case studies, as well as interactive discussions with students during the lecture		
Evaluation method (criteria to pass exam)	<p>The assessment and grading structure for students will be based on the following three activities:</p> <ol style="list-style-type: none"> Activity and engagement in discussion during the teaching process, up to 10% of the grade: Students actively participate in discussions during the teaching process, contributing ideas related to solving problems raised during lectures. Research part related to the specified topics each week is evaluated up to a maximum of 40% of the grade: Each week, students are required to research the topic specified by the instructor and write a maximum of 1 to 2 pages on the given topic. Entrepreneurship project development integrating circular economy will be assessed up to a maximum of 40% of the grade: Students in group work (two students) are obliged to prepare an entrepreneurship project integrating circular economy by the end of the semester. Presentation and defense of the project before the instructor and their peers are evaluated up to 10% of the grade: Students are obliged to present and defend the developed project before the instructor and their peers on the exam day. Construction of the final grade: <ul style="list-style-type: none"> • max. 10 points - activity and engagement in learning, • max. 40 points - drafting and presentation of the task, 		

	<ul style="list-style-type: none"> • max. 40 points - project, work/research, • max. 10 points - presentation and defense of the project, <p>The student passes the exam if he collects 50 points from all evaluation criteria,</p>
The teaching/learning tools/ IT	Use of the board, computer, projector, PowerPoint, etc.
The distribution of the theoretical and practical part of the studies	60% Theory, 40% Practical instruction,
Literature	
Basic literature	<ol style="list-style-type: none"> 1. Stuchtey, M.R., Enkvist, P-A. and Zumwinkel, K. (2016). A Good Disruption – Redefining Growth in the Twenty-First Century, Bloomsbury Publishing Plc. 2. Webster, K. (2017). The circular economy – A wealth of flows, Ellen MacArthur Foundation Publishing, 2nd Edition.
Additional literature	<ul style="list-style-type: none"> • Growth within. A circular economy vision for a competitive Europe, (p. 12-92) https://www.ellenmacarthurfoundation.org/assets/downloads/publications/ElleMacArthurFoundation_Growth-Within_July15.pdf • Elkington, J. (1998). Partnerships from Cannibals with Forks: The Triple Bottom Line of 21st Century Business, Environmental quality management, pp. 37-51. • Braungart, M., McDonough, W. and Bollinger, A. (2007). Cradle-to-cradle design: creating healthy emissions – a strategy for eco-effective product and system design, Journal of Cleaner Production, Vol. 15, pp. 1337-1348. doi:10.1016/j.jclepro.2006.08.003 • Kirchherr, J., Reike, D. and Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions, Resources, Conservation & Recycling, Vol. 127, pp. 221-232. http://dx.doi.org/10.1016/j.resconrec.2017.09.005 • Environmental Economics: Pearce and Turner (1990), Chapter 2, The Circular Economy • Kirchherr et al. (2018). Barriers to the Circular Economy: Evidence From the European Union (EU), Ecological Economics, Vol. 150, pp. 264-272. https://doi.org/10.1016/j.ecolecon.2018.04.028 https://www.ellenmacarthurfoundation.org/ https://www.ellenmacarthurfoundation.org/circular-economy/concept/schools-of-thought • Lewandowski, M. (2015). Designing the Business Models for Circular Economy – Towards the Conceptual Framework, Sustainability, Vol. 8, Issue 43, pp. 1-28. doi:10.3390/su8010043 • Aabelkafi, N. and Täuscher, K. (2016). Business Models for Sustainability From a System Dynamics Perspective, Organization and Environment, Vol. 29, Issue 1, pp. 74-96. DOI: 10.1177/1086026615592930
The teaching/learning plan	
Week	Lecture units
	Presentation – informing students about the course syllabus, Introduction to the circular economy

I	Understanding the limitations of our current linear economy and what Stuchtey et al. (2016) refer to as the 'growth dilemma.' We will discuss the risks of continuing on the current trajectory and begin to explore what an alternative, a circular economy, might look like. Expected Outcome No. 1"
II	Principles of the Circular Economy During this lecture, we will cover the basic framework of the circular economy as commonly explained and consider the differences between a linear and circular mindset. In particular, we will explore the common (mis)perception that recycling is sufficient to effectively manage our non-biological material resources. Expected Outcome No. 1
III	Growth and Sustainability This lecture will take a look at the overall economy, including the crucial link between our monetary system and resource consumption. We will also discuss how the circular economy relates to sustainability and review various perspectives on the concept of degrowth. Expected Outcome No. 6, 7
IV	Business Model Design Strategies for a Circular Economy During this lecture, we will discuss product design strategies and business model strategies for decision-makers to facilitate the transition to a circular economy. Expected Outcome No. 6, 7
V	Innovation of Products, Services, and Business Processes for the Circular Economy The lecture will discuss the innovation of products and services based on the circular economy. Transitioning to the 'technical' non-biological components, materials, and product design for a circular economy, including the concept of biomimicry. Expected Outcome No. 2, 4
VI	Supply Chains Technical cycles include reusing, repairing, and recycling products, parts, and materials. This lecture will explore how these cycles can sometimes be more challenging than initial product production and shipping, discussing the difference between closed and open material flows. Expected Outcome No. 4
VII	Business Models in the Circular Economy The philosophy of the circular economy promotes a reconsideration of business models, including offering products 'as a service' instead of selling products and transferring ownership to consumers. We will explore some of the possibilities and challenges of these circular business models. Expected Outcome No. 7
VIII	Policies Related to the Circular Economy During this lecture, policies related to the interest of governments worldwide in the possible economic, social, and environmental benefits of a circular economy will be elaborated. We will examine existing and potential policy changes to encourage larger circular flows, including the idea of taxing material resource consumption instead of labor. Expected Outcome No. 4, 2

IX	<p>Consumers Consumers are a key factor in the circular economy; therefore, in this lecture, we will look at the role of the consumer in the circular economy. We will also address how the sharing economy can help activate the circular economy for certain types of products. Expected Outcome No. 4</p>
X	<p>Technology Recent technological developments have increased the potential to bring about a circular economy. This class will explore various technologies that can enhance circulation, such as the Internet of Things (IoT) and additive manufacturing (3D printing). Expected Outcome No. 1</p>
XI	<p>Circular Financing Transitioning to a circular economy requires investment. We will discuss the financing requirements for change and some of the innovative financing models offered to expedite this transition. Expected Outcome No. 3, 6</p>
XII	<p>Circular Measurement During this lecture, we will familiarize ourselves with key circular measurement methodologies, including life cycle assessment of the product, material, and 'circular washing'. Expected Outcome No. 6</p>
XIII	<p>Circular Economy at the City and Regional Level Based on expert predictions, cities will contain the overwhelming majority of the world's population by 2050. Therefore, in this lecture, attention will be devoted to elements such as how circular economies can be created in cities and regions, including the idea of industrial symbiosis, where 'waste' materials from one industry become input materials for a completely different industry. Expected Outcome No. 2, 6</p>
XIV	<p>Future Perspectives The lecture will address the study of concepts presented in previous sessions in light of possible future developments, applying existing rules to the current business reality and vice versa. Additionally, what market realities would require further legislative intervention? Expected Outcome No. 7, 4, 6</p>
XV	<p>Summary and Conclusions Regarding the Course</p>
Academic policy and the code of conduct:	
<p>The student is obliged to follow the lectures regularly and to have correct behavior towards his colleagues and University staff, keeping calm and actively engaging in lectures and exercises is mandatory. During the hours of lectures and exercises, eating, whispering that interferes with class work and the use of mobile phones are PROHIBITED. At the same time, cell phones must be turned off or put on silent and not used during lectures or exercises. Lack of academic integrity (including plagiarism, copying another person's work, use of unauthorized exam aids, cheating, etc.) will not be tolerated. If there are doubts about the authenticity of the submitted work, the teacher has the right to ask the student to verify his/her work. This can be done through: repetition of work, written or oral testing, unexpected quiz or any other action deemed necessary by the lecturer.</p>	