

COURSE OUTLINE

1. Data about the study programme

1.1 Higher education institution	Transilvania University of Braşov
1.2 Faculty	Food and Tourism
1.3 Department	Food and Tourism Engineering and Management
1.4 Field of study ¹⁾	Engineering and management
1.5 Study level ²⁾	Master
1.6 Study programme/ Qualification	Engineering and management in luxury hospitality (in english)

2. Data about the course

2.1 Name of course	Circular economy in gastronomy and hospitality							
2.2 Course convenor	Associate Professor dr. eng. Mirabela Ioana LUPU							
2.3 Seminar/ laboratory/ project convenor	Associate Professor dr. eng. Mirabela Ioana LUPU							
2.4 Study year	II	2.5 Semester	III	2.6 Evaluation type	C	2.7 Course status	Content ³⁾	DS
							Attendance type ⁴⁾	DS

3. Total estimated time (hours of teaching activities per semester)

3.1 Number of hours per week	4	out of which: 3.2 lecture	2	3.3 seminar/ laboratory/ project	0/0/2
3.4 Total number of hours in the curriculum	56	out of which: 3.5 lecture	28	3.6 seminar/ laboratory/ project	0/0/28
Time allocation					hours
Study of textbooks, course support, bibliography and notes					10
Additional documentation in libraries, specialized electronic platforms, and field research					3
Preparation of seminars/ laboratories/ projects, homework, papers, portfolios, and essays					2
Tutorial					2
Examinations					2
Other activities.....					0
3.7 Total number of hours of student activity					19
3.8 Total number per semester					75
3.9 Number of credits ⁵⁾					3

4. Prerequisites (if applicable)

4.1 curriculum-related	<ul style="list-style-type: none"> Technologies in the Food Industry, Hospitality in tourism
4.2 competences-related	<ul style="list-style-type: none"> Identification, description and appropriate use of food science specific notions; sustainability.

5. Conditions (if applicable)

5.1 for course development	<ul style="list-style-type: none"> Lecture room equipped with projection system; internet connection.
5.2 for seminar/ laboratory/ project development	<ul style="list-style-type: none"> Raw and auxiliary materials, technological schemes, gowns, specific equipment.

6. Specific competences

Professional competences	<p>Cp.1 Performs detailed food processing operations</p> <p>L.O. 1.1 The graduate performs precise food processing operations, paying particular attention to all stages to create a quality product.</p> <p>L.O. 1.2 The graduate monitors temperature throughout the food and beverage manufacturing process.</p> <p>L.O. 1.3 The graduate applies specific regulations related to food and beverage manufacturing.</p> <p>Cp.2. Check the quality of raw materials</p> <p>L.O. 2.1 The graduate evaluates the quality of a certain type of food or drink, depending on appearance, smell, taste, aroma and so on.</p> <p>L.O. 2.2 The graduate recommends possible improvements and comparisons with other products.</p> <p>L.O. 2.3 The graduate ensures the quality of all factors involved in the food production process.</p> <p>L.O. 2.4 The graduate applies and follows the national, international and domestic requirements mentioned in the standards, regulations and other specifications related to food and beverage manufacturing.</p> <p>L.O. 2.5 The graduate applies specific regulations related to food and beverage manufacturing</p>
Transversal competences	<p>Ct.1 Takes responsibility and shows determination</p> <p>L.O. 1.1 The graduate accepts responsibility and liability for his own decisions and professional actions, or for those delegated to others.</p> <p>L.O. 1.2 The graduate demonstrates a commitment of undertaking difficult and sustained actions.</p> <p>L.O. 1.3 The graduate demonstrates the ability to immediately assume the tasks resulting from the professional activities.</p> <p>Ct.2 Leads quality control, approaches challenges positively</p> <p>L.O. 2.1 The graduate adjusts the projects or the product parts so that they fulfill the requirements.</p> <p>L.O. 2.2 The graduate adopts a positive attitude and a constructive approach to challenges.</p> <p>L.O. 2.3 The graduate thinks analytically, using logic and reasoning to identify the strengths and weaknesses of alternative solutions.</p>

7. Course objectives (resulting from the specific competences to be acquired)

7.1 General course objective	<ul style="list-style-type: none"> • To provide students with fundamental knowledge about the principles of the circular economy and their applicability in the gastronomic and hospitality sectors. • To develop skills for adopting sustainable practices in supply chains and operations within the gastronomic and hospitality fields. • To promote innovation and efficient resource management to minimize waste. • To encourage the use of modern technologies to optimize processes and reduce environmental impact.
7.2 Specific objectives	<ul style="list-style-type: none"> • Identifying strategies for reducing food waste within hospitality establishments. • Integrating circular economy principles into menus, culinary preparations, and services. • Analyzing and implementing recycling and resource reuse systems in professional kitchens. • Evaluating the impact of operational decisions on the environment and the economic sustainability of businesses. • Developing innovative business models based on the circular economy in the

8. Content

8.1 Course	Teaching methods	Number of hours	Remarks
1. Introduction to the Circular Economy: Concepts and Principles	Lecture, presentation, dialogue, debate	2	
2. The Circular Economy in the Context of Gastronomy and Hospitality	Lecture, presentation, dialogue, debate	2	
3. Life Cycle Analysis of Food and Products Used in Gastronomy	Lecture, presentation, dialogue, debate	2	
4. Strategies for Reducing Food Waste in Restaurants and Hotels	Lecture, presentation, dialogue, debate	2	
5. Circular Menu Design: Optimizing Ingredients and Utilizing Surplus	Lecture, presentation, dialogue, debate	2	
6. Identifying Opportunities for Food Byproduct Utilization	Lecture, presentation, dialogue, debate	4	
7. Waste Management in Gastronomy and Hospitality Units	Lecture, presentation, dialogue, debate	2	
8. Recycling and Resource Reuse in Professional Kitchens	Lecture, presentation, dialogue, debate	2	
9. Implementing Green Technologies in the HORECA Industry	Lecture, presentation, dialogue, debate	2	
10. Alternative Energy Sources for Restaurants and Hotels	Lecture, presentation, dialogue, debate	2	
11. Circular Economy and Social Impact: Engaging Local Communities	Lecture, presentation, dialogue, debate	2	
12. Impact of Regulations and Public Policies on the Circular Economy	Lecture, presentation, dialogue, debate	2	
13. The Future of the Circular Economy in Hospitality: Trends and Challenges	Lecture, presentation, dialogue, debate	2	
Bibliography			
1. Ellen MacArthur Foundation. (2019). Cities and Circular Economy for Food. Ellen MacArthur Foundation. ISBN: 978-0-9572494-9-1.			
2. Blanco, E., & Cotrim, J. (2020). Circular Economy in the Hospitality Industry: A Practical Guide. Routledge. ISBN: 978-0-367-42345-6.			
3. Sustainable Restaurant Association. (2018). The Sustainable Restaurant Handbook: How to Run a Restaurant That's Good for the Planet. Sustainable Restaurant Association. ISBN: 978-1-9997171-0-3.			
4. Jones, P., Hillier, D., & Comfort, D. (2016). Sustainability in the Global Hotel Industry. International Journal of Contemporary Hospitality Management, 28(1), 36-67. 5. Baldassarre, B., Calabretta, G., Bocken, N. M. P., & Jaskiewicz, T. (2019). Bridging Sustainable Business Model Innovation and User-Driven Innovation: A Process for Sustainable Value Proposition Design. Journal of Cleaner Production, 215, 149-162.			
8.2 Seminar/ laboratory/ project	Teaching-learning methods	Number of hours	Remarks
1. Assessment of Food Waste Flows in a Gastronomic Unit	Lecture, Practical Applications, Teamwork	2	
2. Measuring Resource Losses (Energy, Water, Food)	Lecture, Practical Applications, Teamwork	2	

3. Designing a Sustainable Menu Based on Circular Economy Principles	Lecture, Practical Applications, Teamwork	2	
4. Monitoring and Reducing Food Waste in a Restaurant Kitchen	Lecture, Practical Applications, Teamwork	2	
5. Testing Composting Processes for Food Waste	Lecture, Practical Applications, Teamwork	6	
6. Identifying Opportunities for Food Byproduct Utilization	Elaboration, Presentation, Discussions	2	
7. Case Study: Sustainability Analysis of a HoReCa Chain	Lecture, Practical Applications, Teamwork	2	
8. Applying Circular Design Concepts in Kitchen Layouts	Lecture, Practical Applications, Teamwork	2	
9. Cost-Benefit Analysis for Implementing Circular Solutions	Lecture, Practical Applications, Teamwork	2	
10. Case Study: Impact of Suppliers on Sustainability	Lecture, Practical Applications, Teamwork	2	
11. Digital Technologies for the Circular Economy	Lecture, Practical Applications, Teamwork	2	
12. Designing a Circular Model for a Hospitality Unit	Elaboration, Presentation, Discussions	2	
Bibliography			
1. Ellen MacArthur Foundation. (2019). Cities and Circular Economy for Food. Ellen MacArthur Foundation. ISBN: 978-0-9572494-9-1.			
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4. Jones, P., Hillier, D., & Comfort, D. (2016). Sustainability in the Global Hotel Industry. International Journal of Contemporary Hospitality Management, 28(1), 36-67. 5. Baldassarre, B., Calabretta, G., Bocken, N. M. P., & Jaskiewicz, T. (2019). Bridging Sustainable Business Model Innovation and User-Driven Innovation: A Process for Sustainable Value Proposition Design. Journal of Cleaner Production, 215, 149-162.			

9. Correlation of course content with the demands of the labor market (epistemic communities, professional associations, potential employers in the field of study)

The content of the discipline is consistent with the demands of the specific national professional associations.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of the final grade
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10.4 Course	<ul style="list-style-type: none"> • Students demonstrate a correct understanding of concepts and theories. • Ability to explain and make connections between concepts. • Building logical responses and supporting them with evidence. • Ability to propose effective solutions for complex situations. • Meeting requirements and providing accurate answers. 	Oral evaluation	70%
10.5 Seminar/ laboratory/ project	<ul style="list-style-type: none"> • Ability to apply theoretical concepts to solve practical problems. • Effective use of tools and technologies specific to the field. • Active participation in interactive activities, including questions and comments. • Initiative to contribute to projects, assignments, or discussions. 	Colloquium	30%
10.6 Minimal performance standard			
<ul style="list-style-type: none"> • Completion of a project: Designing a Circular Model for a Hospitality Unit. • Understanding of the fundamental concepts covered in the course. • Passing the laboratory colloquium. • Ability to express ideas coherently and logically. • Addressing each subtopic in the exam and passing with a minimum grade. 			

This course outline was certified in the Department Board meeting on 12.09.2024 and approved in the Faculty Board meeting on 12.09.2024

Note:

- 1) Field of study – select one of the following options: Bachelor / Master / Doctorat (to be filled in according to the forceful classification list for study programmes);
- 2) Study level – choose from among: Bachelor / Master / Doctorat;

- 3) Course status (content) – for the Bachelor level, select one of the following options: **FC** (fundamental course) / **DC** (course in the study domain)/ **SC** (speciality course)/ **CC** (complementary course); for the Master level, select one of the following options: **PC** (proficiency course)/ **SC** (synthesis course)/ **AC** (advanced course);
- 4) Course status (attendance type) – select one of the following options: **CPC** (compulsory course)/ **EC** (elective course)/ **NCPC** (non-compulsory course);
- 5) One credit is the equivalent of 25 study hours (teaching activities and individual study).