COURSE DESCRIPTION AND COURSE REQUIREMENTS
ACADEMIC YEAR 2021/2022 SEMESTER 2

Course name	***Introduction to the Circular Economy***
Course Code	**SZE074AN**
Hours/Week	**2 seminars**
Credits	**2**
Degree Programme	**All**
Study Mode	**Full time**
Evaluation	**Final course grade**
Teaching Period	**Spring**
Prerequisites	**Placement test**
Department	**Department of Civil Engineering**
Teaching Staff	**Marcus Juby**

AIMS AND OBJECTIVES

At present we live in a world where the take – make – dispose linear model is dominant. However, with decreasing resources and increasing population, this model is not sustainable in the long term, and we need to move towards a circular economy, where resources are carefully minimalised, put in use for as long as possible and designed and manufactured so they can re-enter the resource chain easily. Concepts of the circular economy which move towards reducing waste and closing the loop of resources are especially important for engineers if we are to leave resources for future generations. This course is useful to all students who are interested in concepts of sustainability and the circular economy how they can introduce these concepts into their studies and future professional work.

Watch this video for more information about the Circular Economy: https://youtu.be/zCRKvDyyHmI

CONTENT

Overview:

The course will focus on:

- reading and understanding a range of authentic texts and videos
- listening to lectures and presentations about different aspects of the circular economy
- practical exercises where students get the chance to put into practice what they have learned

Students need a reasonable level of English to take this course.

The course is primarily a classroom-based course although there may be the opportunity for a fieldtrip to see examples of the circular economy.

Syllabus:

1. The existing linear economy and what is wrong with it
2. Principles of the circular economy
3. Circular economy in the built environment
4. Urban and regional flows of materials
5. Business models for the circular economy
6. Building longer lasting products
7. Remanufacturing
8. Recycling
9. Biomimicry and design inspired by nature
10. Thinking in systems

Attendance:

Attendance is required for all classes and will impact the grade. Unexcused absences will adversely affect the grade, and absences from more than 30% of the total number of lessons will be grounds for failing the class. Punctual attendance for the whole lesson is required and arriving more than 20 minutes late will be counted as an absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

Minimum Course Requirements, Assessment and Grading Policy:

Students will be assess through practical assignments in class, homework assignments and a final test.

Week 4 - Test your knowledge quiz 5%

Week 6 - Longer lasting products assignment 25%

Week 9 - Test your knowledge quiz 5%

Week 12 - Flow of resources report/presentation 25%

Week 15 – Final test 40%

Students need to satisfactorily submit assignments on time and pass the final test to pass the course.

Students can retake missed or failed tests only once. They can also re-sit the test if they want to improve their mark. In the latter case the result of the re-sit will be taken into consideration when the final course grade is calculated.

Grading Scale:

85 – 100% 5 (Excellent)
76 – 84% 4 (Good)
61 – 75% 3 (Average)
50 – 60% 2 (Poor)
0 – 49% 1 (Fail)

COURSEBOOKS AND RECOMMENDED READING

[1st] Course material will be uploaded to Teams
[2nd] Recommended website: https://ellenmacarthurfoundation.org/

SCHEDULE

		SEMESTER														RE-SIT				
YEAR 2021/2022 SEMESTER 2		**1.**	**2.**	**3.**	**4.**	**5.**	**6.**	**7.**	**8.**	**9.**	**10.**	**11.**	**12.**	**13.**	**14.**	**15.**	**1.**	**2.**	**3.**	**4.**	**5.**
Schedule		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.		11.	12.	13.	14.					
Midterm/Final test																X					
Home assignment	**Announcement**					X															
	Deadline						X														
Presentation	**PPT submission deadline**													X							
	delivery													X							
Final course grade																					

2022. ……

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