



**JINDAL GLOBAL
BUSINESS SCHOOL**
INDIA'S FIRST MULTI-DISCIPLINARY GLOBAL BUSINESS SCHOOL



O.P. Jindal Global University
A Private University Promoting Public Service
NAAC Accreditation - 'A' Grade

Jindal Global Business School
Course Outline

Course Title	Operations of Circular Economy
Core or Elective	Elective
Program and Batch	MBA-2025, IBM-2022, IBM-2023
Semester & Academic Year	Fall 2026
Credits	1.5
Discipline/Area	Operations Management & Supply Chain
Name of the Faculty Member/Course Instructor	Laxmi Pandit Vishwakarma
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Faculty Member's Open Office Day/s & Time	TBA

Introduction to the Course

Global industries are increasingly facing challenges related to:

- Resource scarcity
- Environmental degradation
- Waste generation
- Regulatory pressures on sustainability

Traditional linear production models are proving unsustainable. Organizations are therefore shifting toward circular economic systems that extend product life cycles, reduce waste, and improve resource efficiency. Governments and global institutions are also promoting circularity through policies such as:

- Extended Producer Responsibility (EPR)
- Circular economy action plans

As a result, there is a growing demand for professionals who understand how to design and manage circular operational systems. This course responds to this need by providing students with practical knowledge of circular operations, industry applications, and enabling technologies. Overall, the course “Operations of Circular Economy” equips students with the knowledge and analytical frameworks needed to understand and implement circular operational practices.

Course Learning Objectives

At the end of the course, students should be able to

1. **CLO1-** Understand what the circular economy is and how it has evolved over a period, locally and globally.

2. **CLO2-** Demonstrate an understanding of the applications, benefits, challenges, and principles of the circular economy.
3. **CLO3-** Apply the methods and advanced methods to the circular design guide.
4. **CLO4-** Analyse the role of technology as an enabler for the circular economy.
5. **CLO5-** Evaluate different policy approaches that are helping the circular economy. In addition, evaluate how these policies differ across industries—presenting the group projects by analysing how the circular economy is adopted across industries.

Programme Competency Goals

MBA Programme Competency Goals (PCGs)		MBA Programme Learning Objectives (PLOs)
		Students will be able to
1	Technological Agility: Ability to adopt relevant technologies for better business decision-making.	1. Understand relevant business technologies
		2. Understand future technologies in business domain
2	Responsible Global Citizenship: Ability to understand the interplay between local and global issues and to act with sensitivity towards ethical and social issues	3. Understand the interplay between local and global business issues
		4. Demonstrate sensitivity towards ethical issues
		5. Demonstrate sensitivity towards social issues
		6. Address societal issues
3	Effective communication: Ability to effectively exchange ideas and information	7. Present their ideas with clarity
		8. Prepare an organized and logical business document
		9. Use technology for effective communication
4	Critical Thinking: Ability to identify, analyze business problems and propose effective solutions	10. Identify main issues of business problems
		11. Examine information from different sources
		12. Draw inferences from analysis

		13. Evaluate alternatives
		14. Summarize and conclude
5	Leadership: Ability to take initiative, inspire and collaborate with others	15. Take initiative
		16. Contribute effectively in groups

PLO-PCG Assessments Mapping Matrix

Program Objectives (PLOs)	Learning Objectives (PCGs)	Competency Goals	Course Assessment Item
This course helps you to develop the following Program Learning Outcomes:	This course helps you to develop the following Program Competency Goals:		This learning outcome will be assessed in the following items
PLO1, PLO2		PCG 1	A2
PLO3, PLO4, PLO5, PLO6		PCG2	A2, A4
PLO7, PLO8		PCG3	A1, A2, A3
PLO10, PLO11 PLO12, PLO13, PLO14		PCG4	A1, A3

Evaluation Schema

The course grade will be determined based on:

Assessment Task	Weightage (Percentage)	Nature (Individual/Group)	Week of Assessment	PLOs to be Assessed
A1 Class Participation	10%	Individual	Continuous	PLO7, PLO12, PLO14, PLO15
A2 Quiz	30%	Individual	7	PLO1, PLO2, PLO3, PLO4, PLO5
A3 Presentation	30%	Group	12,13	PLO7, PLO8, PLO9, PLO10, PLO11, PLO12, PLO13, PLO14, PLO15, PLO16
A4 End term Examination	30%	Individual	In the JGU Examination period/week	PLO3, PLO4, PLO5, PLO6,

Description of Assessments:

A1- Class Participation (10%): The participation of the students in class discussions and guest lectures shall be evaluated **out of 10 marks**.

A2- Quiz (20%): There will be one quiz during the semester, **the duration of the quiz will be 20 minutes** and carrying a **weightage of 20 marks**. Students will be notified of quiz dates at least one week in advance.

A3- Presentation (30%)- Student has to work in a group of five on a separate industry adopting circular economy practices to fulfil any of the 4 learning objectives. The workings and findings must be presented in front of the class via MS PowerPoint. A small report should be submitted, which must include Introduction, Problem Statement, Techniques, Findings, and Results. Each group must appear for an individual comprehensive viva for assessment on CLO 01, CLO 2, CLO 3, and CLO 05. This will also serve as a formative assessment.

A4- End Term Examination (30%) - The end term examination will be of **30 marks of 1.5 hours duration**. This will be an invigilated exam according to the mode, modalities and process as decided by CoE.

Rubrics for Assessments

Presentation

	Excellent (80-100%)	Satisfactory (50-79%)	Can be improved (0-49%)
Application	High relevance of the topic of circular economy practices	Medium relevance of the topic of the circular economy practices	Low relevance of the topic of the circular economy practices
	In-depth industry analysis, both descriptive and inferential.	Basic industry analysis, both descriptive and inferential	Inadequate industry analysis
	In-depth analysis of the findings	Basic analysis of the findings	Inadequate analysis of the findings
Presentation skills	Appropriate font size and background of the slides	Small font size or jarring backgrounds	Small or inconsistent font size or fonts and backgrounds that make reading difficult
	Logical linkage between the written and the spoken word	Some basic linkage between the content of the slide and what is being spoken	Very little or no logical link between what is on the slide and what is being spoken
	Adherence to time, up to 10 Minutes of presenting)	Up to 12 minutes of presenting	More than 12 minutes of presenting
Theoretical understanding (Judged through Q/A)	A proper understanding of the concepts and the ability to confidently answer the questions correctly	A basic understanding of the concepts and an inability to provide to-the-point answers to questions	Very nascent understanding of the concepts and tendency to avoid questions

Teaching Method

The course will have a judicious mix of lectures, multimedia demonstrations, storytelling, experiential exercises, and cases. Here the onus of learning will be with the student, and the instructor will be a facilitator. Instead of learning ‘what to do’, the cases will also be used as examples of real-world phenomena where issues arise, and good and bad practices are seen. The key to learning this way is to see many examples and situations and learn inductive as well as deductive ways from students’ and managers’ different experiences.

Textbook / Other Readings

- Articles from the Ellen McArthur Foundation website
- Article- Preston, F. (2012). A global redesign? Shaping the circular economy.
- Article- What is the circular economy and why does it matter? By UNDP, 2023.
- IKEA: Becoming a Circular Business- Ivey Publication
- Report- Ellen MacArthur Foundation, Universal Circular Economy Policy Goals (2021)

Session Plan

Session Details	Topics	PLOs Covered
Session 1	Understanding Circular Economy	PLO3, PLO4, PLO5, PLO6
Objective of the session	Introduction to Circular Economy	
Subtopics to be covered	To understand the difference between the linear and the circular economy, the need for the circular economy, and to outline the scope of this course. Also, discuss case studies across different nations, such as Asia, China, or Europe.	
Readings	Circular Economy Introduction- Ellen McArthur Foundation website.	
Case Title & Number	N/A	
Pedagogy	Lectures, multimedia demonstrations, and discussions	
Session 2	What made organizations adopt the Circular Economy? Benefits and Challenges of adopting the Circular Economy	PLO3, PLO4, PLO5, PLO6
Objective of the session	To understand the advantages, benefits, and challenges of adopting the circular economy.	
Subtopics to be covered	Advantages, Benefits, and Challenges for adopting the circular economy.	
Readings	Article: Preston, F. (2012). A global redesign? Shaping the circular economy. Article: What is the circular economy and why does it matter? By UNDP, 2023.	
Case Title & Number	N/A	
Pedagogy	Lectures, discussions, and applications	
Session 3	Ellen McArthur Foundation’s Definition Of Circular	PLO3, PLO4,

	Economy	PLO5, PLO6
Objective of the session	Introduction to the Butterfly Diagram under the Ellen McArthur Foundation's Definition Of Circular Economy	
Subtopics to be covered	<ul style="list-style-type: none"> • To understand the Power of the inner circle • Power of circling longer • Power of cascaded use • Power of pure inputs 	
Readings	The butterfly diagram- Ellen McArthur Foundation website.	
Case Title & Number	N/A	
Pedagogy	Lectures, multimedia demonstrations, and discussions	
Session 4		
	Principles of Circular Economy	PLO3, PLO4, PLO5, PLO6
Objective of the session	Understanding the circular economy principles and discussing the case studies of Apeel, thredUP, and NaturaBrazil	
Subtopics to be covered	Principles of Circular Economy- Eliminate waste and pollution, circulate products and materials, and regenerate nature.	
Readings	Principles of Circular Economy- Ellen McArthur Foundation website.	
Case Title & Number	N/A	
Pedagogy	Lectures, multimedia demonstrations, and discussions	
Session 5		
	Methods for circular design guides- I	PLO7, PLO8, PLO10, PLO11, PLO12, PLO13, PLO14
Objective of the session	To examine several toolkits and activities that will help to understand, define, make, and release circular innovations.	
Subtopics to be covered	Understand, define, make, and release circular innovations.	
Readings	Circular Design Guide- Ellen McArthur Foundation website.	
Case Title & Number	N/A	
Pedagogy	Lectures, discussions, and applications	
Session 6		
	Advanced Methods for circular design guides	PLO7, PLO8, PLO10, PLO11, PLO12, PLO13, PLO14
Objective of the session	To examine several advanced toolkits and activities that will help to understand, define, make, and release circular innovations.	
Subtopics to be covered	Material journey mapping, product redesign workshop, material section, moving forward with material.	
Readings	Advanced Circular Design Guide- Ellen McArthur Foundation website.	
Case Title & Number	IKEA: Becoming a Circular Business- Ivey Publication	
Pedagogy	Case method, group discussion, and critical analysis	
Session 7		
	Guest Lecture I- Harish Babu, Deputy Manager, Coal India Limited	PLO3, PLO4, PLO5, PLO6

Objective of the session	To introduce the students to the requirements of the circular economy and prepare them on how to apply circular economy business models and provide them with examples on how industries are applying these models, helping students gain additional industrial knowledge.	
Subtopics to be covered	Industry applications of concepts of CE in the business.	
Readings	N/A	
Case Title & Number	N/A	
Pedagogy	Online Guest Lecture & Discussion	
Session 8	Technology as an enabler for the Circular Economy- I	PLO1, PLO2
Objective of the session	To introduce the students to technologies such as the Internet of Things and blockchain technology, in order to create a circular economy.	
Subtopics to be covered	Internet of Things and blockchain technology as an enabler for the circular economy.	
Readings	Success in managing complexity: the role of the Internet of Things in creating a circular economy- Ellen McArthur Foundation website.	
Case Title & Number	N/A	
Pedagogy	Lectures, discussions, and applications	
Session 9	Technology as an enabler for the Circular Economy- II	PLO1, PLO2
Objective of the session	To introduce the students to technologies such as Extended Reality and Artificial Intelligence in creating a circular economy.	
Subtopics to be covered	Extended Reality and Artificial Intelligence as an enabler for the circular economy.	
Readings	<ul style="list-style-type: none"> Blockchain can facilitate the transition to a circular economy – but scaling its use is a work in progress- Ellen McArthur Foundation website More than just a big idea – how extended reality tech can enable a circular economy- Ellen McArthur Foundation website 	
Case Title & Number	N/A	
Pedagogy	Lectures, discussions, and applications	
Session 10	Government Circular Policies and Measuring Circular Performances	PLO7, PLO8, PLO9, PLO10, PLO11, PLO12, PLO13, PLO14, PLO15, PLO16
Objective of the session	To understand the government's universal circular policies and how different policy approaches are helping the circular economy.	
Subtopics to be covered	Universal circular policies, a wide variety of public instruments for circular products, services, and systems.	

Readings	<ul style="list-style-type: none"> Report- Ellen MacArthur Foundation, Universal Circular Economy Policy Goals (2021) Article: Leading the circular economy transition: lessons from governments- Ellen McArthur Foundation website 	
Case Title & Number	N/A	
Pedagogy	Lectures, discussions, and applications	
Session 11	Circular Economy across Industries	PLO7, PLO8, PLO9, PLO10, PLO11, PLO12, PLO13, PLO14, PLO15, PLO16
Objective of the session	Applications of circular economy across industries: Fashion and Textile; Plastics and Packaging.	
Subtopics to be covered	Applications of circular economy across industries: the pathway, challenges and strategies.	
Readings	Case studies from the Ellen McArthur Foundation website on the circular economy across industries.	
Case Title & Number	N/A	
Pedagogy	Lectures, multimedia demonstrations, and discussions	
Session 12	Group Presentations	PLO7, PLO8, PLO9, PLO10, PLO11, PLO12, PLO13, PLO14, PLO15, PLO16
Objective of the session	Presentation of the project and doubt clarification before the end of the term	
Subtopics to be covered	Topics covered in previous sessions	
Readings	N/A	
Case Title & Number	N/A	
Pedagogy	Lecture and in-class exercise	
Session 13	Group Presentations	PLO7, PLO8, PLO9, PLO10, PLO11, PLO12, PLO13, PLO14, PLO15, PLO16
Objective of the session	Presentation of the project and doubt clarification before the end of the term	
Subtopics to be covered	Topics covered in previous sessions	
Readings	N/A	
Case Title & Number	N/A	
Pedagogy	Lecture and in-class exercise	
Session 14	Reading & Revision Week/ Examination Week*	
Objective of the session	NA	
Subtopics to be covered	NA	
Readings	NA	
Case Title & Number	NA	
Pedagogy	NA	
Session 15	Reading & Revision Week/ Examination Week*	
Objective of the session	NA	
Subtopics to be covered	NA	

Readings	NA
Case Title & Number	NA
Pedagogy	NA

*Elective Endterm Examinations may take place in the last week of classes.

Disability Support

JGU endeavours to make all its courses accessible to students. The Disability Support Committee (DSC) has identified conditions that could hinder a student's overall wellbeing. These include physical and mobility-related difficulties, visual impairment, hearing impairment, mental health conditions, and intellectual/learning difficulties, e.g., dyslexia and dyscalculia. Students with any known disability needing academic and other support are required to register with the Disability Support Committee (DSC) by following the procedure specified at <https://jgu.edu.in/disability-support-committee/>

Students who need support may register any time during the semester up until a month before the end semester exam begins. Those students who wish to continue receiving support from the previous semester, must re-register within the first month of a semester. Last-minute registrations and support might not be possible as sufficient time is required to make the arrangements for support.

The DSC maintains strict confidentiality about the identity of the student and the nature of their disability and the same is requested from faculty members and staff as well. The DSC takes a strong stance against in-class and out-of-class references made about a student's disability without their consent and disrespectful comments referring to a student's disability.

All general queries are to be addressed to disabilitysupportcommittee@jgu.edu.in

Disclaimer: This course outline including assessments, mode, nature and weightage of assessments, sessions, sequence of sessions and/or readings may be revised during the semester if such need arises.