

Glasgow School of Art Course Specification

Course Title: Circular Economy Design

Please note that this course specification is correct on the date of publication but may be subject to amendment prior to the start of the 2023-24 Academic Year.

Course Code:	HECOS Code:	Academic Session:
PDIN204		2023-24

1. Course Title:
Circular Economy Design

2. Date of Approval:	3. Lead School:	4. Other Schools:
PACAAG April 2022	School of Innovation and Technology	This course is available to students on PGT programmes which include a Stage 2 elective.

5. Credits:	6. SCQF Level:	7. Course Leader:
20	11	Dr Paul Smith

8. Associated Programmes:
This course is available to students on PGT programmes which include a Stage 2 elective.

9. When Taught:
Stage 2, Taught online only

10. Course Aims:
<p>Circular Economy Design is a 20 credit elective course.</p> <p>The circular economy has become synonymous with a more sustainable and equitable society. One that eliminates waste while creating social, economic and ecological value. Achieving circularity requires working collaboratively and recognising the roles governments, industry and citizens can play in a more environmentally conscious future. This course focusses on the exploration of the key schools of thought for a circular economy, how they are applied today, and how they could be applied in a future society.</p> <p>In keeping with all Stage 2 electives, it broadly aims to:</p> <ul style="list-style-type: none"> • Encourage interdisciplinary, critical reflexivity from within an open set of choices; • Foster deep investigative approaches to new or unfamiliar areas of practice and theory; • Cultivate self-directed leadership and initiative-taking in both applied and abstract modes of practice/ study not necessarily associated with a student's particular creative specialism; • Enable flexible, ethical exploration and connection of diverse knowledge and understanding within a specialist programme of study.

In specific terms it aims to:

- Develop a critical understanding of the theories, the practices, political and social issues surrounding the circular economy;
- Develop a critical understanding of the theory and practice of design innovation as an approach to contemporary design problems and issues;
- Develop competency to conceive, manage, and deliver a response to a domain specific issue in the Circular Economy.

11. Intended Learning Outcomes of Course:

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

- Demonstrate a critical understanding of the main theoretical, practical, and political perspectives surrounding the circular economy in context of design practice;
- Critically apply circular economic theory and approaches in the context of a design project;
- Clearly communicate design responses using high quality design communication techniques
- Demonstrate critical ethical assessment in the context of a design project

12. Indicative Content:

This course focuses on the study of the Circular Economy and applicable theories and practices within the domain of design. It covers the appropriate selection and application of Design and Circular Economy tools and methods. It emphasises the approach of cross disciplinarity within a design context. In general, via lectures and seminars the course will cover topics such as:

- the circular economy as a set of theoretical approaches to design;
- relationship of circular economic theories to design practice as a tool for innovation;
- project management and delivery;

Particular focus will be given to the key school schools of thought surrounding the circular economy. This will be supported by an exploration of appropriate philosophical and ethical concerns.

13. Description of Summative Assessment Methods:

On this course, students will be assessed on:

- Their level of critical understanding of the main theoretical, practical, and political perspectives surrounding the circular economy in context of design innovation practice.
- Their ability to critically apply circular economic theory and approaches in the context of a design innovation project
- Their ability to clearly communicate design responses using high quality design communication techniques
- Their ability to demonstrate critical ethical assessment in the context of the circular economy

Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments)
Essay	A 3500 word written essay (this should include visual material, e.g., diagrams and mappings, as well as a bibliography).	100	Week 11, Stage 2

Or			
Portfolio	An annotated portfolio of practice-based material, including a 1000 word contextualising statement.	100	Week 11, Stage 2
13.1 Please describe the Summative Assessment arrangements:			
Attendance at all weekly online sessions is mandatory.			
For this course, assessment of student work will consist of either:			
<ul style="list-style-type: none"> • A 3500 word essay, which presents the personal account of the outcome of a design project. The text may include such aspects as the student’s motivations, theoretical perspective, method(s) applied, decision-making, findings along with a reflection on the value of their project and its outcome. The document should contain visual material such as photographs, diagrams and mappings. It should also be appropriately designed, with consideration being given to the overall layout and aesthetic. • A portfolio of design work— submitted digitally —which contains the personal outcome of a circular economy design project along with a 1000 word contextualising statement outlining the student’s motivations, theoretical perspective, method(s), decision-making, findings along with a reflection on the value of their project and its outcome. The portfolio should be appropriately designed, with consideration being given to the layout and overall aesthetic. 			

14. Description of Formative Assessment Methods:	
Engagement with formative assessment is a mandatory requirement.	
Project work is formatively reviewed in project online crits throughout the life of the course. Individual written work is formatively reviewed by submission of draft text.	
14.1 Please describe the Formative Assessment arrangements:	
Formative review is provided through weekly online tutorials, an interim presentation, and seminars, wherein students receive feedback on work in progress. During interim presentations, it will be recommended that students partner up and take notes while their partner(s) is/are presenting for peer review.	

15. Learning and Teaching Methods:	
Formal Contact Hours	Notional Learning Hours
20	200
15.1 Description of Teaching and Learning Methods:	
The course will be based on teaching sessions focusing on:	
<ul style="list-style-type: none"> • Theory (lectures); • Project definition (seminars, brief writing and tutorials); • Project enactment (Interim presentations and tutorials); • Production (tutorials). 	

16. Pre-requisites:
Successful completion of PGT Stage 1.

17. Can this course be taken by Exchange/Study Abroad students?	Yes
18. Are all the students on the course taught wholly by distance learning?	Yes
19. Does this course represent a work placement or a year of study abroad?	No
20. Is this course collaborative with any other institutions?	No
20.1 If yes, then please enter the names of the other teaching institutions:	
N/A	

21. Additional Relevant Information:

This course focusses on the technical, social and political landscape of the circular economy, and the synthesis of circular economic theories and practices into contemporary design innovation practice, as a method of developing environmental and socially sustainable design. The course emphasises place-based innovation and natural assets through socially engaged practice. It enhances the established competencies of MDes Design Innovation students and introduces the practical and theoretical landscape of the Circular Economy.

Students will be encouraged to identify areas of exploration within the theme and identify external experts relevant to their projects.

22. Indicative Bibliography:

Design strategies for the circular economy

- Benson, E. (2017), *Design to Re-Nourish*, CRC Press
- Braungart, M., & McDonough, W., (2009), *Cradle to Cradle. Remaking the Way We Make Things*, London, Vintage
- Braungart, M., & McDonough, W., (2013), *The Upcycle: Beyond sustainability – designing for abundance*, Tantor Media Inc
- Brocken, N. M. P., (2016) *Product design and business model strategies for a circular economy*, Journal of Industrial and Production Engineering. Available at: <https://doi.org/10.1080/21681015.2016.1172124>
- Chapman, J. (2021), *Meaningful Stuff*, MIT Press
- Thakara, J. (2017), *How to Thrive in the Next Economy: Designing Tomorrow's World Today*, London, Thames and Hudson

Circular economy theory

- Ghiselline, P., et al., (2015) A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems *Journal of Cleaner Production* [online]. Available at: <https://www.sciencedirect.com/science/article/pii/S0959652615012287?via%3Dihub> [Accessed: 21st February 2018]
- Kalmykova, Y., Sadagopan, M., and Rosado, L. (2017), Circular economy – From review of theories and practices to development of implementation tools, *Resources, Conservation & Recycling* [online]. Available at: <https://doi.org/10.1016/j.resconrec.2017.10.034> [Accessed: 21st February 2018]
- Kirchherr, J., Reike, D., and Hekkert, M. (2017) Conceptualizing the circular economy: An analysis of 114 definitions, *Resources, Conservation & Recycling* 127 (2017) 221–232
- Stahel, W, J. (2019) *The Circular Economy: A User's Guide*, Routledge

- Webster, K. (2016), *The Circular Economy: A Wealth of Flows*, Ellen MacArthur Foundation Publishing

Social context

- Boylston, S. (2019), *Designing with Society*, Oxford, Routledge
- Rowarth, K. (2018), *Doughnut Economics*, Random House
- Russel, M. (2019), *Capitalism & Disability*, Haymarket Books
- Karl-Henrik, R. (2000), *Tools and concepts for sustainable development, how do they relate to a general framework for sustainable development, and to each other?*, Journal of Cleaner Production, Elsevier
- Gold, S., & Mies, A. (2021), *Mapping the social dimension of the circular economy*, Journal of Cleaner Production, Elsevier
- Walker, A., M. (2021), *Assessing the social sustainability of circular economy practices: Industry perspectives from Italy and the Netherlands*, Sustainable Production and Consumption, Elsevier

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