

DI905-15 Systemic Design for Sustainability

26/27

Department

Design Studies

Level

Taught Postgraduate Level

Module leader

Adela Glyn-Davies

Credit value

15

Module duration

4 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module is designed to provide students with a comprehensive understanding of the principles, methodologies, and applications of practices found in Systemic and Strategic Design, formed through the critical underpinning of the three pillars of sustainability: Economy, Environment and Society. In today's rapidly changing and complex global landscape, businesses and organisations are increasingly recognising the importance of integrating sustainability into their strategic decision-making processes. This module aims to equip students with the knowledge and skills necessary to contribute effectively to sustainable design practices in organisations of various industries, by learning decision making processes based on systems thinking and complexity-based design. This module will support students in creating of their own positionality regarding sustainable transitions and regenerative mindsets.

Module aims

This module aims to develop students' capabilities in sustainable design theories and practices, whereby foundations of their methods are built on knowledge and the understanding of the interconnectedness of ecological, social, and economic factors in decision-making. Systemic Design in essence, captures the practice of systemic decision making which seeks to navigate,

understand and capture complex problems into tangible and actionable interventions for change. Throughout this module students will explore complex organisational issues by utilising methods of co-design, networked leadership and systems thinking. Principally, the Systemic Design for Sustainability module aims to challenge students to develop knowledge and skills to integrate sustainable principles into strategic decision-making processes, fostering their ability to contribute effectively to the sustainable development of complex organisations.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Throughout this module students will be reviewing a complex organisation and seeking out its areas of leverage for a design intervention in form of sustainable strategy. The design process of creating a sustainable strategy for the organisation's development will present students with challenges of system analysis, complexity-ridden research methodology, sustainable systems sense-making processes as well as the co-design through democratised, non-extractive approaches to the scoping of a strategy. The learning journey will culminate in a strategy proposal and implementation plan which will seek to enable sustainable transition for the organisation.

Learning outcomes

By the end of the module, students should be able to:

- Demonstrate understanding of the foundational theories, and practices of sustainable strategic design, recognising the interconnectedness of ecological, social, and economic factors.
- Demonstrate the application of systemic design framework to integrate sustainability into organisational decision-making.
- Develop capabilities in designing, delivering and implementing strategy for sustainable development.
- Systemically evaluate the impact of design choices and integrate systems mapping into sense-making and decision-making processes.
- Apply sustainable principles of strategic design towards promoting resource efficiency through innovative and circular design solutions.
- Demonstrate effective collaboration and co-design in interdisciplinary teams by engaging diverse stakeholders in the design process.
- Demonstrate strong communication skills and articulate sustainable strategy with clarity and precision.

Indicative reading list

[Reading lists can be found in Talis](#)

Interdisciplinary

This module will be delivered between two faculties which encourage inter-disciplinary and trans-

disciplinary learning environments. Students taking this PGT course will be from different disciplinary background and the rationale of this is reflecting the common practices in industry which requires adaptable and agile strategic designers.

Subject specific skills

Systemic Design
Strategic Design
Systems Thinking
Systems Mapping
Strategy Scoping and Realisation
Systemic Design Methods
Complexity Analysis via Sustainability Frameworks
Design Innovation Methods
Design Thinking
Co-Design
Strategy Implementation and Impact Tracking
Project Management and Networked Leadership
Design Ethics
Sustainability-based Problem Solving

Transferable skills

Critical Thinking
Systems Thinking
Morphological Analysis
Adaptability and Agility
Communication Skills
Co-Design Skills
Project Management
Sustainability-based Problem Solving
Presentation Skills

Study

Study time

Type	Required
Lectures	8 sessions of 1 hour (5%)
Seminars	8 sessions of 1 hour (5%)
Tutorials	8 sessions of 1 hour (5%)
Private study	36 hours (24%)
Total	150 hours

Type	Required
Assessment	90 hours (60%)
Total	150 hours

Private study description

Students will be undertaking practice-led research and design work to support the development of their coursework and portfolio of works.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A

Assessment component	Weighting	Study time	Eligible for self-certification
Systemic Design Review and Assessment	40%	35 hours	No
<p>This visual-textual coursework will entail the designerly evaluation of a complex organisation to establish an understanding of pain-points and areas of leverage in existing structures in the context of sustainable development. The coursework will culminate in a critical assessment of the organisation's strategy, mindset and values towards setting up a proposal for the design of a sustainable strategy which will be captured in the next coursework.</p>			
<p>Reassessment component is the same</p>			
Assessment component			
Systemic Design for Sustainable Development	40%	35 hours	No
<p>This is a design brief continuing on from the previous coursework on review and assessment of a complex organisation. This coursework will be derived from a full design process following a systemic design framework.</p>			

Weighting**Study time****Eligible for self-
certification**

The proposal will culminate in a form of a portfolio of work and final design pitch.

Reassessment component is the same

Assessment component

Professional Pitch

20%

20 hours

No

This coursework presents the professional pitch of the previous coursework and will entail an individual creative submission in video format.

Reassessment component is the same

Feedback on assessment

Written feedback and rubric.

Availability

There is currently no information about the courses for which this module is core or optional.