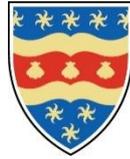


**Schumacher  
College**



**UNIVERSITY OF  
PLYMOUTH**

**Ecological Design Thinking: Catalysing  
Transformation  
Module SCH5448**

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**Ecological Design Thinking**

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Module Leader: **Mona Nasser**

Other Module Staff: **Roberto Fraquelli, Jonathan Dawson**

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## Welcome and Introduction

This module examines Ecological Design as an approach that works with ecological and human systems. It explores practices that consider circular resource use and echo nature. Participants will develop and enhance communication, facilitation and collaboration skills and explore co-creation as a full lifecycle approach. They will begin to develop their own theories and methodologies. Theoretical and empirical work in this module will be developed as part of a design response to a given problem in SCH5443.

## Teaching and Assessment Team

Programme Leader:	Roberto Fraquelli
Location:	Schumacher College
Email:	Roberto.Fraquelli@schumachercollege.org.uk
Phone number:	01803847232
Student meeting times:	By agreement

Module leader:	Mona Nasserri
Lecturer	Roberto Fraquelli, Mona Nasserri, Jonathan Dawson
Location:	Schumacher College

Email:	<a href="mailto:Roberto.Fraquelli@schumachercollege.org.uk">Roberto.Fraquelli@schumachercollege.org.uk</a> <a href="mailto:Mona.nasseri@schumachercollege.org.uk">Mona.nasseri@schumachercollege.org.uk</a>
Phone number:	
Student meeting times:	By Agreement
Module moderators:	Roberto Fraquelli

Personal Tutors:	Roberto Fraquelli and Mona Nasseri
Location:	Schumacher College
Email:	<a href="mailto:Roberto.Fraquelli@schumachercollege.org.uk">Roberto.Fraquelli@schumachercollege.org.uk</a> <a href="mailto:Mona.nasseri@schumachercollege.org.uk">Mona.nasseri@schumachercollege.org.uk</a>
Phone number:	01803847232 01803847233
Student meeting times:	By agreement

## Module Aims

- Critically assess the history and emergence of the practice of Design;
- Engage students in debate and discussion from different perspectives to gain knowledge and understanding of the key debates in design across selected themes;
- Introduce tools, methods and facilitation practices including co-production as a lifetime approach to project delivery;
- Develop and enhance communication and facilitation skills and in support of communities of place and interest;

## Module Assessed Learning Outcomes

- Explore and begin to develop new approaches to working within complex systems.
- Flexibly and creatively apply understanding of the theoretical frameworks and the main debates related to selected topics in design thinking and ecological design thinking to contemporary challenges, in innovative ways, and generate transformative solutions;
- Autonomously implement and evaluate improvements to practice drawing on theoretical and experiential understanding of models of change through multi-disciplinary frameworks, tools and methods;
- Experiment with, and analyse the efficacy of, participatory practices for new approaches to ecological design processes that include a range of stakeholders in the full lifecycle of projects, managing the

## Teaching and Learning Strategy

<b>SUMMARY OF TEACHING AND LEARNING [Use HESA KIS definitions]</b>		
<b>Scheduled Activities</b>	<b>Hours</b>	<b>Comments/Additional Information</b>
lecture	34	Presentations and workshops by faculty and visiting teachers provide students with knowledge, theories and methodologies from experts in the field.
Seminar	35	Students present their own work with the support of the group. Encourages active learning, peer-to-peer support and communication skills.
Tutorial	3	Each student will receive two tutorials over the course of the module, and one feedback session..
Research methods workshop	6	Students will be introduced to a range of research methods including Action Research, Learning Journals and Participative Enquiry.
fieldwork	10	In keeping with Schumacher College's holistic approach to learning field trips will include immersive experiences in nature to better understand natural systems and cycles.
Practical Classes	12	Encourages active pro-active learning through experience – emphasis will be placed on stimulations, exercises and role play.
Supervised in the studio	25	Design workshops will encourage students to visualise knowledge, theories and methodologies as part of their sense-making process
Project Supervision	10	Students will form learning groups to promote peer-to-peer learning and project development.
Guided independent study	65	Students will be expected to spend significant time during the module, and in the completion of their projects studying independently either individually

		or as part of a project group
<b>Total</b>	200	<b>(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc)</b>

Students are expected to take full responsibility for their learning, **attend all** scheduled sessions, read appropriate indicated readings, and work on set exercises (formative and summative assessment).

Based on previous experience; students who failed to attend sessions are likely to be unsuccessful or show poor performance. Please ensure that you are engaging with the content and learning activities relating to this module.

## Scheme of Work

**This module will be assessed by: Mona Nasser**

- 1) Individual reflective commentary. This should be in an academic format (40% of the final mark).
- 2) A group project (60% of the final mark)

<b>Element of Assessment</b>	<b>Module Weighting</b>	<b>Component</b>	<b>Link to Assessed Learning Outcomes</b>
Academic reflective essay		100%	LO2
Group project presentation			LO1, LO3

Drafts/outlines (Reflective essay)	5.00pm on Friday, November 1, 2019
Assignment submission (Reflective essay)	5.00pm on Friday, November 15, 2019
Feedback and provisional marks	December 13, 2019
Group Project presentation	10am-1pm Friday, December 12, 2019
Feedback and provisional marks	January 17, 2020

## Assessment form

<b>Learning outcome 1:</b> Flexibly and creatively apply understanding of the theoretical frameworks and the main debates related to selected topics in design thinking and ecological design thinking to contemporary challenges, in innovative ways, and generate transformative solutions;			
Assessment criteria (marking rubric)			
Fail: 0 – 49%	Pass: 50 – 59%	Merit: 60 – 69%	Distinction: 70 – 100%
Does not demonstrate sufficient understanding of the design thinking and ecological design thinking and their application to the given problem	Demonstrates a partial understanding of the design thinking and ecological design thinking and their application to the given problem	Demonstrates a sound understanding of design thinking and ecological design thinking and their application to the given problem. It provides a good evaluation of challenges and generate innovative solutions	Demonstrates a critical understanding of design thinking and ecological design thinking and their application to the given problem. It provides an in-depth evaluation of the complex challenges and offers transformative solution in innovative ways.
Tutors assessment:			

**Learning outcome 2:** Autonomously implement and evaluate improvements to practice drawing on theoretical and experiential understanding of models of change through multi-disciplinary frameworks, tools and methods;

Assessment criteria (marking rubric)			
Fail: 0 – 49%	Pass: 50 – 59%	Merit: 60 – 69%	Distinction: 70 – 100%
Absence of any evidence demonstrating self-evaluation and understanding of relevant frameworks, tools and methods appropriate to the context of study.	Partially demonstrate evidence of self-evaluation and understanding relevant frameworks, tools and methods appropriate to the context of study.	Demonstrates in good measure the ability to self-evaluate and show evidence for understanding of relevant frameworks, tools and methods appropriate to the context of study.	Demonstrates a thorough and rigorous ability for self-evaluation and display evidence of understanding relevant frameworks, tools and methods appropriate to the context of study.
Tutors assessment:			

<b>Learning outcome 3:</b> Experiment with, and analyse the efficacy of, participatory practices for new approaches to ecological design processes that include a range of stakeholders in the full lifecycle of projects, managing the implications of ethical dilemmas and working proactively with others to formulate solutions.			
Assessment criteria (marking rubric)			
Fail: 0 – 49%	Pass: 50 – 59%	Merit: 60 – 69%	Distinction: 70 – 100%
Fails to demonstrate effective ways to approach participatory practices and engage with stakeholders	Demonstrate limited evidence of effective approaches to participatory practices and engagement with stakeholders	Provides robust evidence of effective approaches to participatory practices, engagement with stakeholders and navigation of the complex relationships.	Demonstrate extensive evidence of participatory approaches, engagement with stakeholders and navigation of the complex relationships and their ethical considerations.
Tutors assessment:			

Overall comments and mark: Tutor's name:
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Populate table as below to show all module sessions

Semester Week	Week Beginning	Provisional Activities
6	14/10/19	Design Thinking
7	21/10/19	Design as Dialogue
8	28/10/19	Design and action
9	4/11/19	Designing for social innovation
10	11/11/19	Study week

Please note that this schedule may be subject to alteration.

Students are requested to submit:

- **An academic reflective essay** - on line via the VLE on 15<sup>th</sup> November 2019. This process includes the use of Turnitin.
- **A Group project presentation** - exposition of the work presented to assessors on 12<sup>th</sup> December 2019. Specific timing will be set closer to the time.

The work will be marked using assessment form (see above). Feedback will be discussed and delivered to students no later than 17<sup>th</sup> January 2020.

Students will receive a module briefing document confirming the module aims, schedule, learning outcomes and core reading list. Students will also be able to access all teaching material (powerpoint and support documentation), and reading list via the VLE. With agreement with students taught session will be audio recorded and made available to students via the VLE.

Teaching materials, Assignment submission areas and student feedback forms are available on the VLE here:

<https://open.schumachercollege.org.uk/course/view.php?id=193>

## Late Work/Extenuating Circumstances

If your participation in an examination or assessment has been affected by an extenuating circumstance, then you can ask the University to take this into consideration. You can submit a claim for extenuating circumstances to cover late submission of work, non-submission of work or non-attendance at a time specific

assessment, such as an examination, test presentation or performance, or field class.

Information regarding the Extenuating Circumstances policy and how and where to submit Extenuating Circumstance Claims are available here:

<https://www.plymouth.ac.uk/student-life/your-studies/essential-information/exams/exam-rules-and-regulations/extenuating-circumstances>

Where there are no valid extenuating circumstances, the following regulations will automatically apply:

- Work submitted after the deadline date/time but within 24 hours of it, will be capped at the 50% pass mark.
- Work submitted 24 hours after the deadline will receive a mark of zero.

Students will be informed and reminded about the process relating to extenuating circumstances during the module briefing/introduction session.

## Sources of Guidance and Support

Students and academic staff will work closely together to make best use of Seminars, personal tutorials, DAS and LD to modify any assessment modes and/or provisions required.

Students are encouraged to make use of the wider Schumacher opportunities including but not limited to sister programmes including MA Economics for Transition, short-courses and vocational programmes; and the broad level of facilities available on the Dartington estate including cinema, social entrepreneur programmes and many other resources and services available.

## Referencing Protocols and Academic Offences

When writing a report or an essay you are expected to fully reference the materials you have used. The report or essay should be your own work, in your own words.

Plagiarism is an offence under the University regulations on examination and assessment offences. It is important that you familiarise yourself with what constitutes plagiarism, and academic offences. Further information can be found:

<https://www.plymouth.ac.uk/student-life/your-studies/essential-information/regulations/plagiarism>

And <https://www.plymouth.ac.uk/student-life/your-studies/essential-information/exams/exam-rules-and-regulations/examination-offences>

## Reading List; Recommended Texts/Support Materials

- Brown, T., (2009) Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation. Harper Business, New York.
- Brown, V-A., Harris, J-A. and Russell, J-Y. (2010) Tackling Wicked Problems through the Trans-disciplinary Imagination. London: Earthscan Publications Ltd.
- Cowperthwaite, W (2007) A Handmade Life: in Search of Simplicity. Chelsea Green Publishing, Vermont
- Cross, N., (2011) Design thinking: understanding how designers think and work. Berg, Oxford; New York.
- Fry, T., (2009) Design Futuring: Sustainability, Ethics, and New Practice. Berg, Oxford; New York.
- Gauntlett, D., (2011) Making Is Connecting: The Social Meaning Of Creativity From DIY And Knitting To Youtube And Web 2.0. Polity Press, Cambridge UK ; Malden MA.
- Koskinen, I.K. et al., (2011). Design Research Through Practice from The Lab, Field, And Showroom, Waltham, MA: Morgan Kaufmann.
- Manzini, E., Coad, R., (2015) Design, When Everybody Design (An Introduction To Design For Social Innovation). Cambridge, Massachusetts, London, MIT Press.
- Martin, R.L., (2009) The Design Of Business: Why Design Thinking Is The Next Competitive Advantage. Harvard Business Press, Boston, Mass.
- Schön, D., (1983) The Reflective Practitioner: How Professionals Think In Action. Basic Books, New York.
- Schrage, M-D. (1999) Serious Play: How The World's Best Companies Simulate To Innovate. Boston: Harvard Business School Press.
- Valentine, L. (ed.), Prototype: Design And Craft In The 21st Century, London: Bloomsbury.
- Warfel, T-Z. (2009) Prototyping: A Practitioner's Guide. New York: Rosenfeld Media

## Module Feedback

We value what our students say: you share your feedback we act upon it. Part of the feedback process includes Module Evaluation. A link to the form and details of where to submit can be found here:

<https://open.schumachercollege.org.uk/course/view.php?id=193>