



Aalto University
School of Arts, Design
and Architecture

Design Approaches to Sustainable Consumption

Session 2: Case work on food system sustainability

Tatu Marttila & Sanna Tiilikainen

12.1.2023 (9:15-12:00)

Agenda

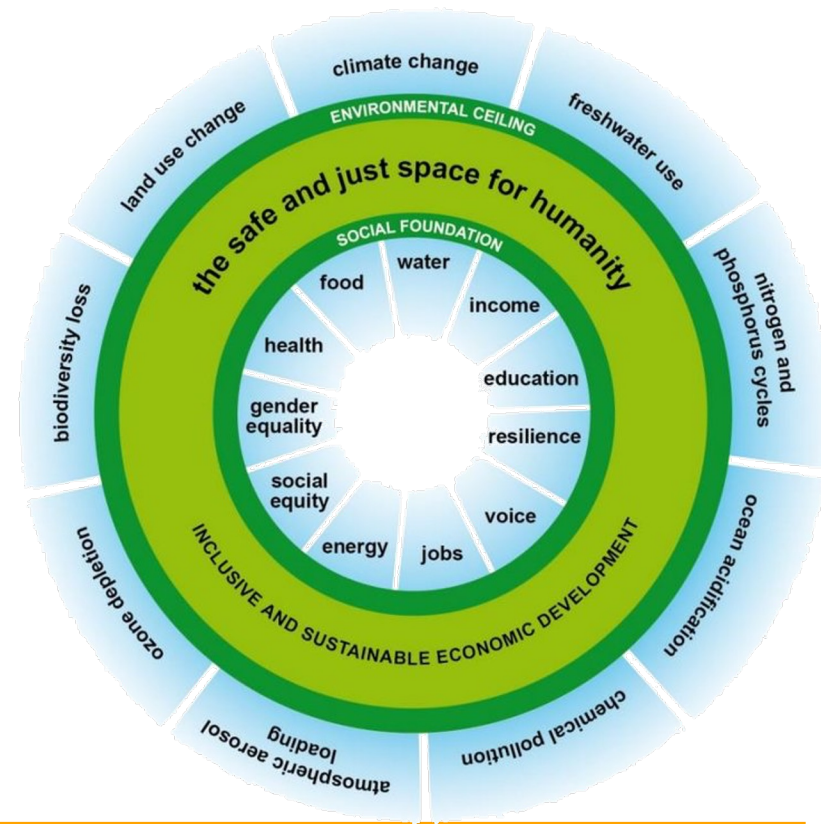
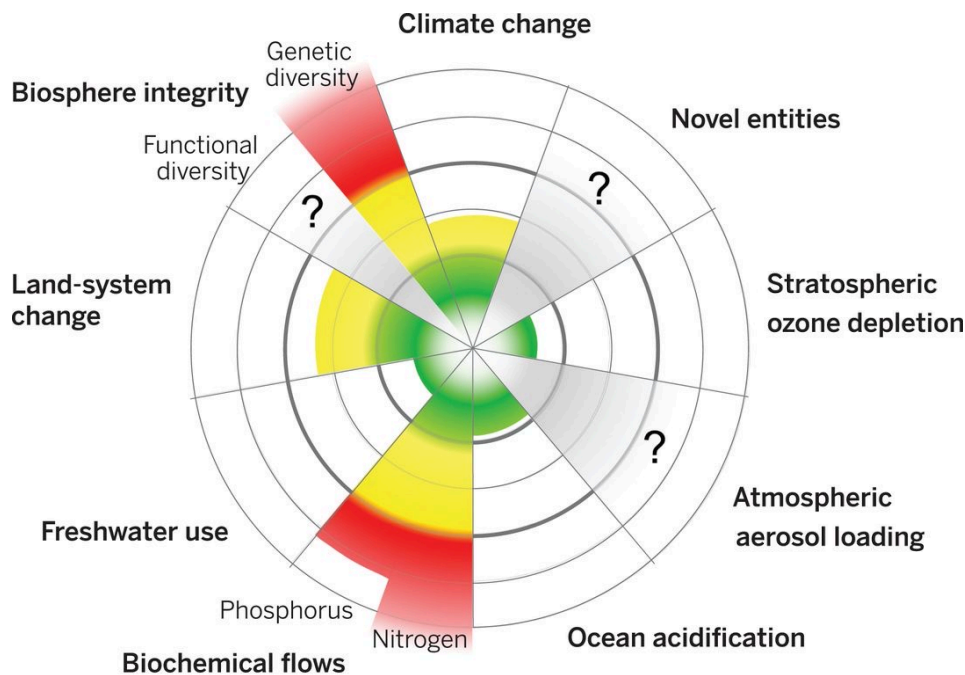
- 9:15–9:45** **Previous session recap**
- 9:45–10:45** **Case work: The ORSI project and food system sustainability**
- *Sanna Tiilikainen from ORSI project*
 - *Introduction to themes and tutors*
- 10:45–11:00** **Preparing for case work**
- *Student teams and selected themes*
 - *Interacting with client and your mentor*
- 11:15–11:45** **Meet in groups**
- *Agree on first steps*
 - *Contact your tutor for first meeting*
- 11:45–12:00** **Session conclusion**

Recap of first session



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Context of action: facing the planetary boundaries



■ Beyond zone of uncertainty (high risk)	■ Below boundary (safe)
■ In zone of uncertainty (increasing risk)	■ Boundary not yet quantified

un THE HAPPY PLANET INDEX 2.0

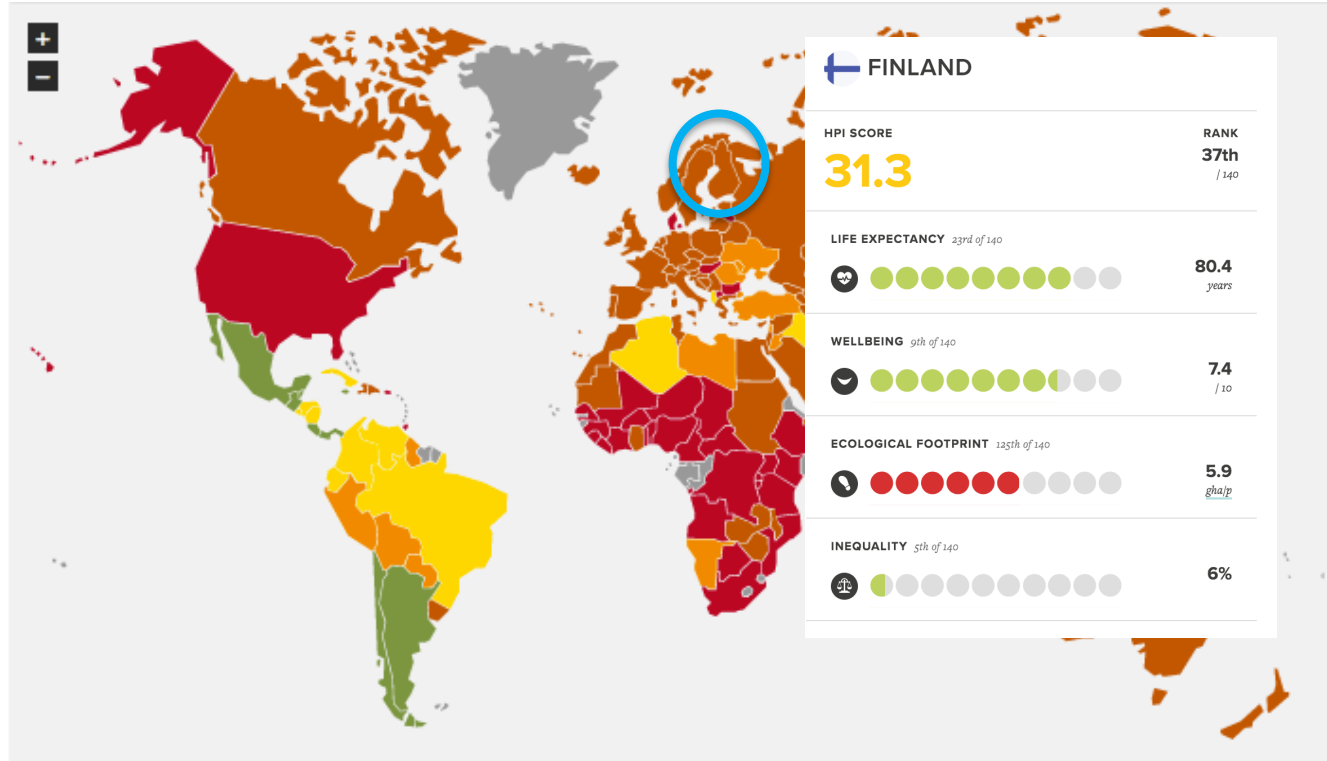
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Source: <http://www.happyplanetindex.org/>

Strategies for Design for Sustainability

Sustainability as a concept is very broad – there also exists a multitude of DfS strategies, orientations, & methods

A question of context, framing, aim and focus, and so on...

***Design for Sustainability* by Ceschin & Gaziulusoy (2020) lists the following:**

- Green design & product ecodesign
- Emotionally durable design
- Design for sustainable behaviour
- Cradle-to-cradle design
- Biomimicry design
- Product-service system design for sustainability
- Design for the base of the pyramid
- Design for social innovation
- Systemic design

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- **Strategies that connect with materials, technologies, infrastructures etc.** ➤ **Strategies that focus on socio-technical, socio-cultural, and socio-ecological systems**

Sustainable production

Efficient transformation of natural resources into goods and services

Reorganization of supply chains and changing consumption patterns

Policies, regulation; Standards and best practice

'Eco-efficiency', 'Decoupling'



Sustainable consumption

Reducing consumption, the economy and the scale of environmental flows

Countering the capitalist push to consume more

Redistributing consumption opportunities globally

Consumer guidance & policies

'Degrowth', 'Scale', 'Abundance', 'Needs'

A?

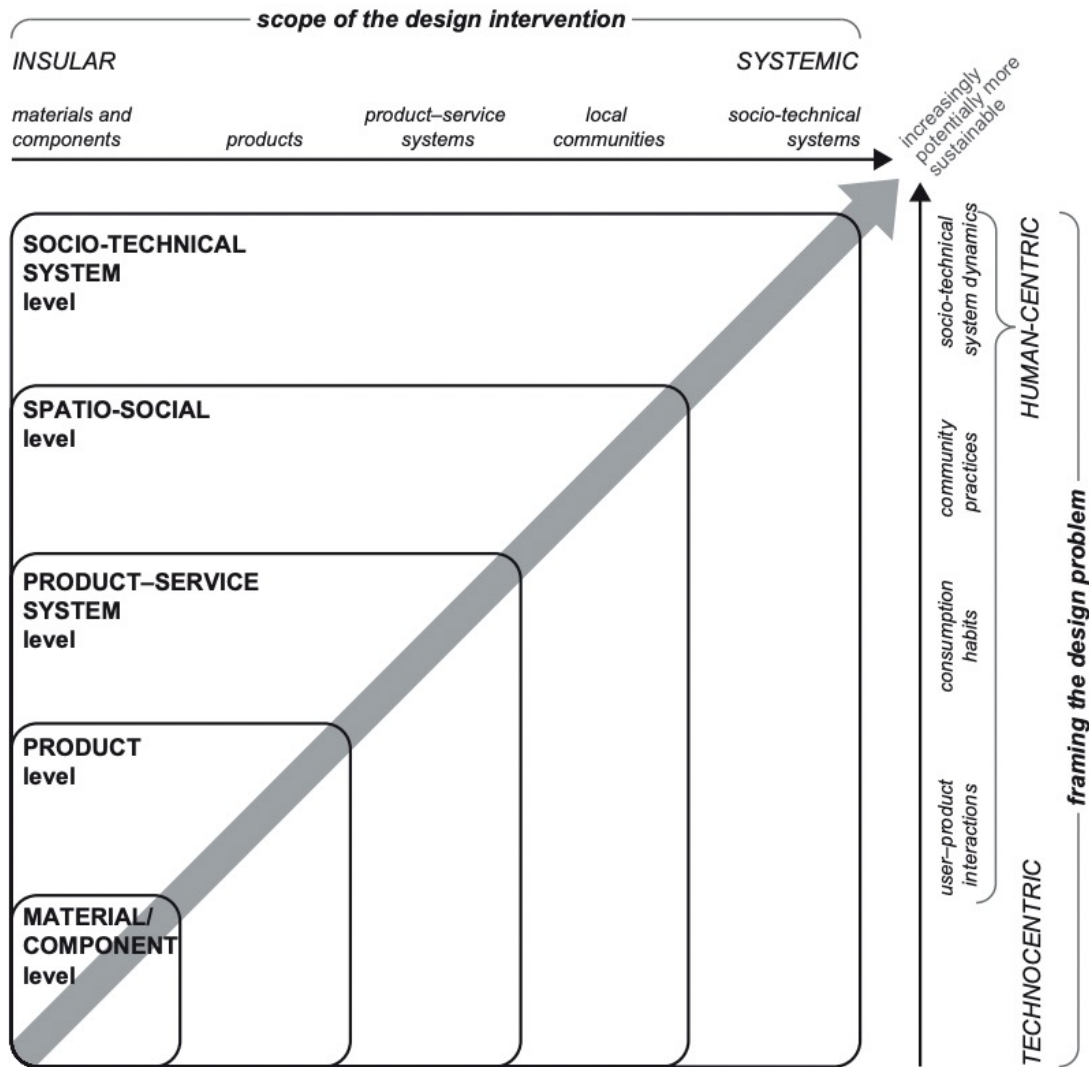
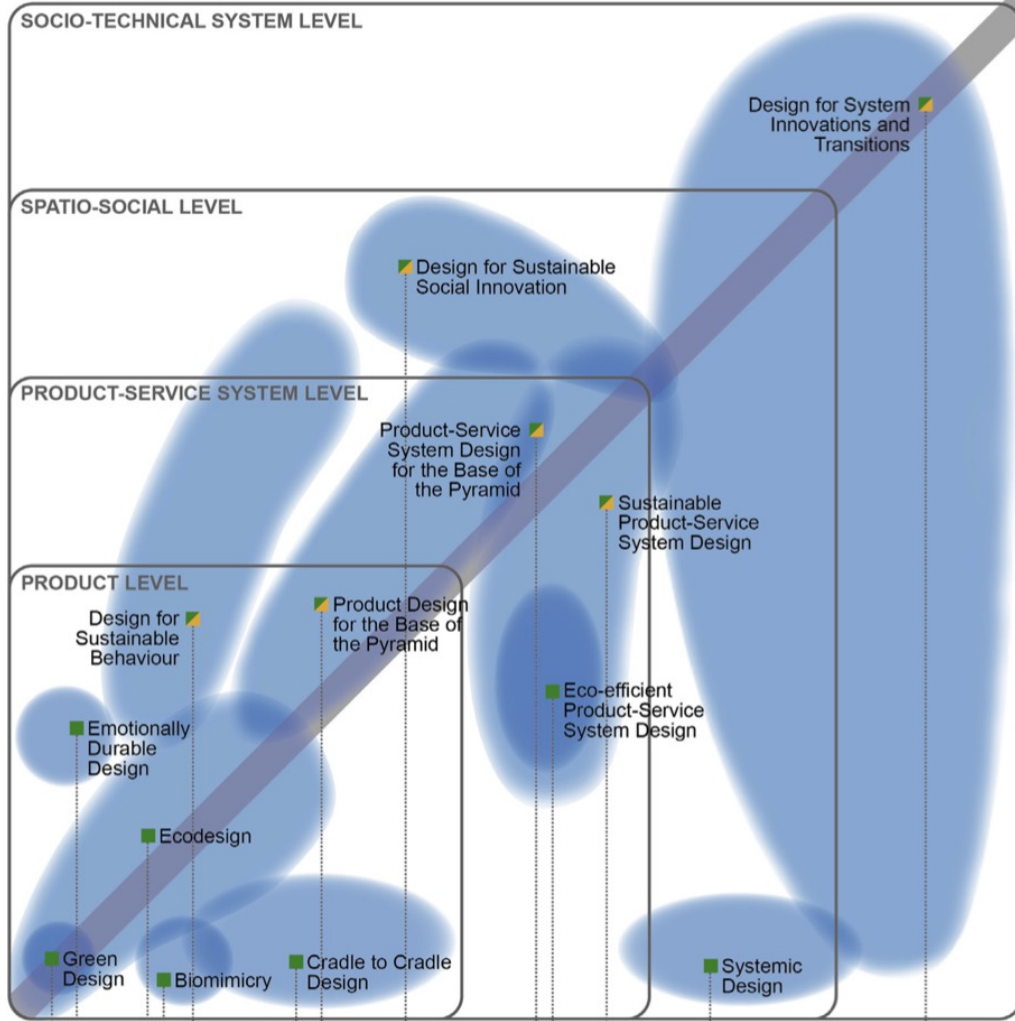


Figure 12.1 The DfS innovation framework

INSULAR

SYSTEMIC

Increasingly
potentially
sustainable



PEOPLE

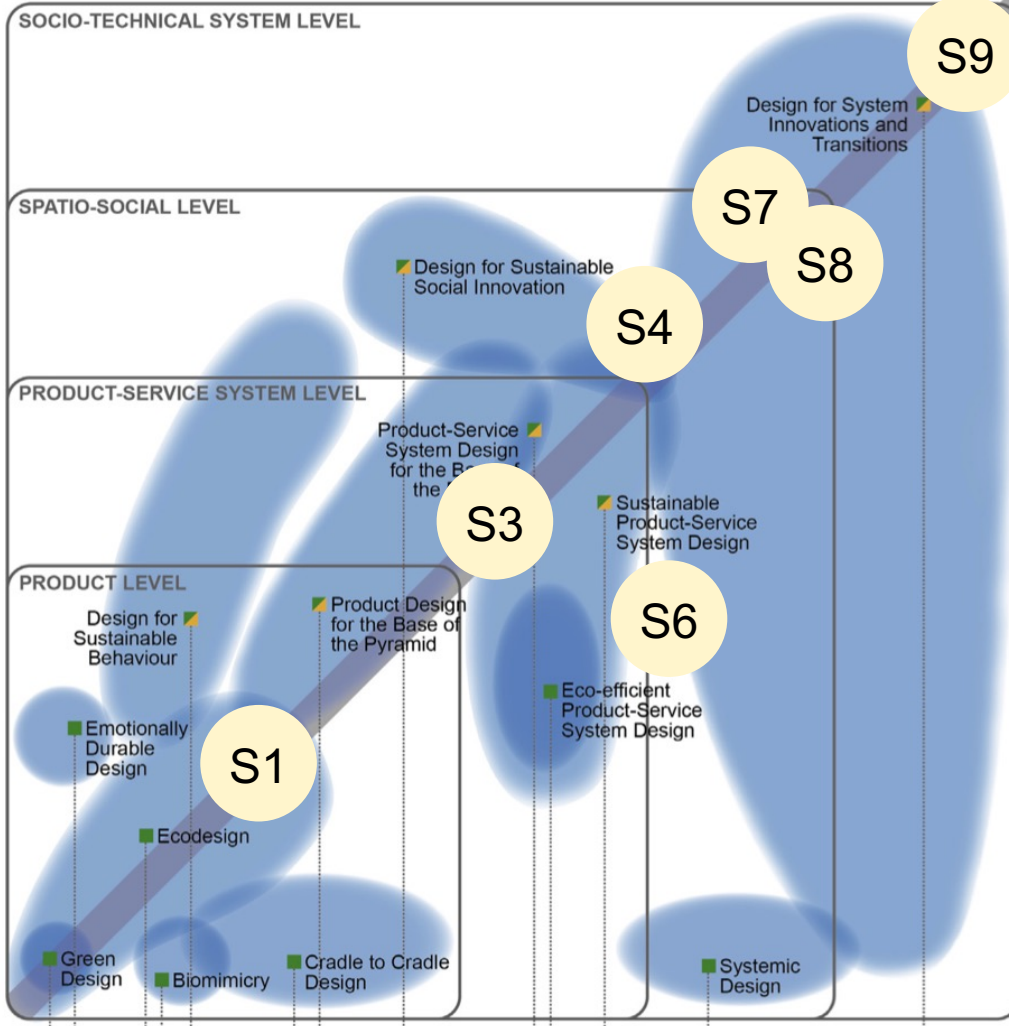
TECHNOLOGY

- Approach addressing the environmental and economic dimensions of sustainability
- Approach addressing the environmental, socio-ethical and economic dimensions of sustainability

A?

INSULAR

SYSTEMIC



Increasingly potentially more sustainable

Lectures and sessions:

- S1. Introduction to DfS
- S2. Case work intro**
- S3. PSS design
- S4. Design for sufficiency
- S5. Idea presentations**
- S6. Sustainability assessment
- S7. Scaling-up
- S8. Changing consumption
- S9. One-planet game
- S10. Shared tutoring**
- S11. Final presentations**
- S12. Summary session

■ Approach addressing the environmental and economic dimensions of sustainability

■ Approach addressing the environmental, socio-ethical and economic dimensions of sustainability

Case work: The ORSI project and food system sustainability

Sanna Tiilikainen, Aalto University

Preparing for case work



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Case work – ways of working...

- **Groups have been formed according to primary or secondary preference of theme**
- 2 groups per each theme, however groups can reorient their design during work
- Groups work independently: You are responsible of the progress of your work, so keep us teachers informed if there are issues
- You can assign a project leader who takes lead in meetings and inb organizing work, or then share this responsibility
- Each group has an assigned tutor, and will keep in contact in data gathering and between presentations
- ***Contact your tutor immediately after today's session to arrange the first meeting!***

Themes & topics

Food system sustainability – How to develop design solutions to improve sustainability in food production, consumption and retail?

- 1 Rules** – Rules (laws, regulations, recommendations, commitments) can govern citizens', producers', and retailers' activities
- 2 Money** – Monetary incentives (both carrots and sticks) can be used for governing choices
- 3 Information** – Information can help citizens in making sustainable choices
- 4 Selection** – Innovations in the production, availability, and retail can lower co2 emissions
- 5 Nudging** – Nudging is about fostering a voluntary change: making the preferred choices easier and the non-preferred more difficult with design solutions

Case work process & deliverables

Teams produce design concepts communicated in presentations and a project report.

Presentation days:

- Idea presentations on Tuesday 24.1. (short <10 min pitches with few slides)
- Final presentations on Tuesday 14.2. (<15 min presentation, 20 min per team including feedback)

Concept poster:

- Should include your theme, ideas in background, and your design concept with visualizations
- See more detailed guidelines in ORSI-project case description (with same session date)

Project report:

- Should revisit your theme and challenge, background research, design ideation, interaction with stakeholders and the development of the final concept
- Can be an expanded version of the final presentation or then a separate document
- More detailed guidelines TBA

Interacting with your tutor

Contact your tutor after (or during?) today's session to arrange the first meeting; Tutors are prepared to meet already this week (online?) if you can find a good slot for Friday...

Main topics to discuss when meeting your tutor:

1. Discuss your theme together with your tutor: What type of perceptions you have and how do they differ?
2. Discuss constraints to your design work (e.g., resources, target group): What can be done and what is impossible?
3. What is needed to get the work going? Do you need access to people, actors, or materials? Can your tutor help in this?
4. Together with your tutor, agree also on follow-up session after the idea presentations (on Tue 24.1.), to discuss your ideas further...

Groups and themes

Rules

(Tutor: Tatu Marttila)

<p>Group 1: Vida Zinia Putri Hardjono Sofia Suomalainen Anna Vienamo Jisoo Kim Satu Lähdeoja</p>	<p>Group 2: Callisté Mastrandreas Adela Navratilova Mina Rostami Ida Krook Sarah Aura</p>
<p>Group 3: Leo Lukas Weißer Fang-Yu Lin Janina Laine Roosa-Maria Laakso Hanna Säll Tianyi Yu</p>	<p>Group 4: Julia Laihinen Vera Saavalainen Paul Wong Poonam Chawda* Mötus Lōmaš Kama Tiina Raasakka</p>
<p>Group 5: Mikaela Kumlin Nathan Pottier Annika Viitala Pauliina Pesonen Bambi Vihavainen</p>	<p>Group 6: Chiaki Shiga Sara Rynefors Scott Gingrich Andrzej Tarasiuk Suvi Onne</p>

Money

(Tutor: Mikko Jalas)

Information

(Tutor: Michael Lettenmeier)

Selection

(Tutor: Sanna Tiilikainen)

Nudging

(Tutor: Sanna Tiilikainen)

<p>Group 7: Elli Jaakola Jean Muncck Regina Gensinger Ruusu Lamminmäki Didier van Overveld</p>	<p>Group 8: Greta Cappellini Angelina Arial Topias Sorsa Vera Väänänen Gabriela Farias</p>
<p>Group 9: Uyanga Baasankhuu Frederikke Ellemose Vad lines Toivanen Madison Bickel Giorgia Morandi</p>	<p>Group 10: Elena Seip Eveliina Lehtisalo Mea Pousar Kristen Barretto Pragati Singhal</p>

- **Groups according to 1st or 2nd priority**
- **Students still to be added to groups?**

Meet with your group

- *Get introduced to each other and start discussing your initial expectations*
- *Plan meetings with tutor and initiate contact*
- *Agree on next steps and schedule your work*

Next session & tasks



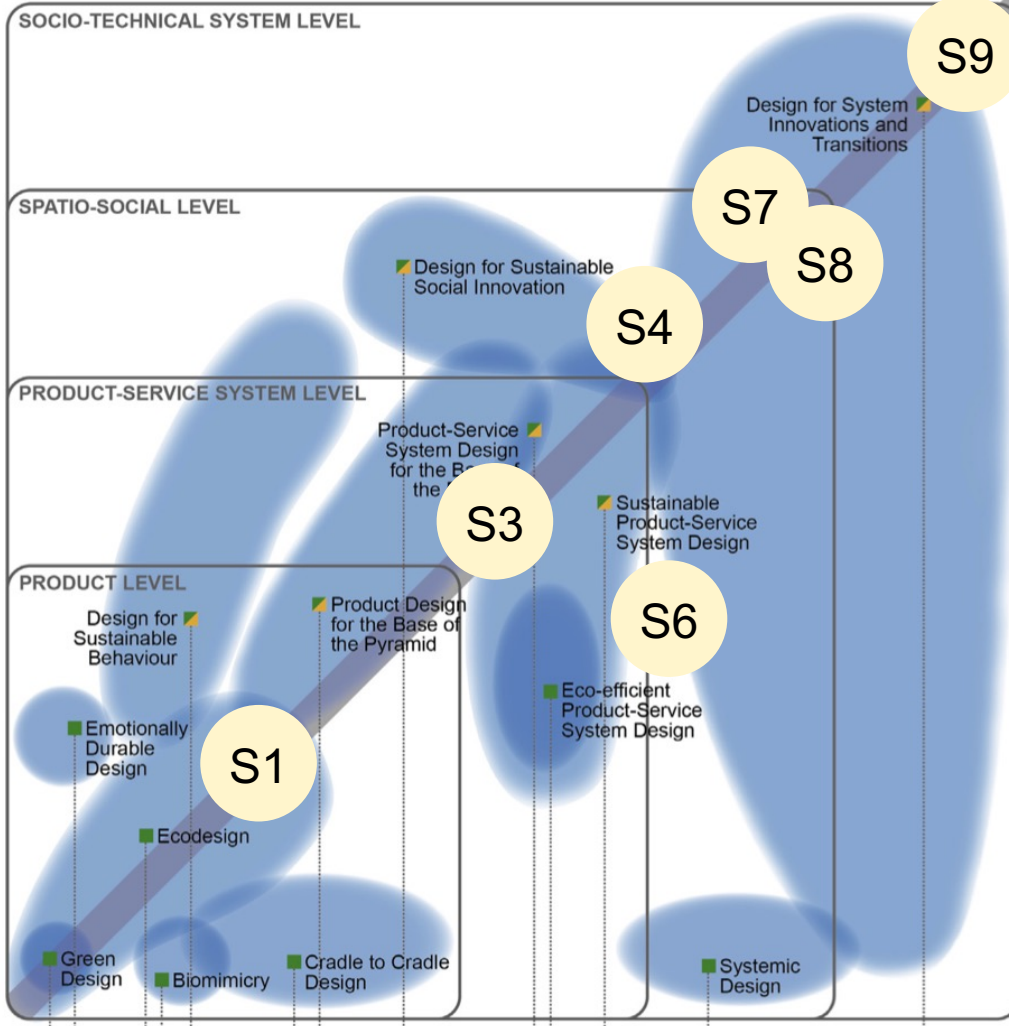
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Course and case work schedule

Working days	Tuesdays (13-17)	Thursdays (9:15-12)
Week 1 (10. & 12.1.)	Introduction to course; DfS introduction (F101)	Case introduction: Food system sustainability (Q201)
Week 2 (17. & 19.1.)	Systemic (PSS) design and circular economy (Q201)	Design for sufficiency (Q201)
Week 3 (24. & 26.1.)	Presenting case work ideas (F101)	Assessing and communicating sustainability impacts (Q201)
Week 4 (31.1. & 2.2.)	Scaling-up: socio-technical experimentation (Q201)	Changing consumption and production patterns (Q201)
Week 5 (7. & 9.2.)	One planet game session (L1–241, Puunjalostustekniikka 1)	Case work tutoring (Q101) <i>Concept poster by Friday!</i>
Week 6 (14. & 16.2.)	Final presentations (F101)	Summary discussion (Q101)

INSULAR

SYSTEMIC



Increasingly potentially more sustainable

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Case work – next steps...

- **Structure your schedule and group meetings beforehand; Agree on next steps and divide work**
- **Get familiar with material package in MyCourses**
- **Perform rapid ideation next week**, to come up with some initial ideas for the idea presentation session
- **Contact your tutor to arrange the first meeting; Tutors are prepared to meet already this week (online?) if you can find a good slot for Friday...**

Next week sessions: Topics & readings

Tuesday (17.1.):
Systemic (PSS) design and circular economy

Lecture reading:

- Ceschin & Gaziulusoy (2020) Design for Sustainability, Chapter 7: Product-service system design for sustainability (in MyCourses)
- Supplementary reading (if you feel like it): Chapter 10: Systemic design; Joore & Brezet (2014) Multilevel perspective in design (in MyCourses)

Remember to begin to reflect on weekly topics and progress in your learning diary!

Thursday (19.1.):
Design for sufficiency

Guest: Mikko Jalas

Lecture reading:

- Ceschin & Gaziulusoy (2020) Design for Sustainability, Chapter 9: Social innovation
- Supplementary readings: Jungell-Michelsson, J., & Heikkurinen, P. (2022). Sufficiency: A systematic literature review. Ecological Economics, 195, 107380. (please note that, unless specifically interested, you can skip the methodology section of the systematic literature review)

Thank you!



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