



Course and Examination Fact Sheet: Autumn Semester 2021

5,138: Design Thinking

ECTS credits: 4

Overview examination/s

(binding regulations see below)

Decentral - Presentation (in groups - all given the same grades) (50%)

Examination time: term time

Decentral - examination paper written at home (individual) (50%)

Examination time: term time

Attached courses

Timetable -- Language -- Lecturer

[5.138.1.00 Design Thinking](#) -- Englisch -- [Hehn Jennifer](#) , [van Giffen Benjamin](#)

Course information

Course prerequisites

No special requirements - this course addresses students who are interested in new innovation methodologies and creativity techniques.

Learning objectives

- Students learn to describe and analyze real world problems and create human-centric and innovative solutions by applying selected Design Thinking tools
- Students understand the central role of Design Thinking for structured prototype development by conducting rapid prototyping and early user testing
- Students understand the basics of user research by applying interview and observation techniques
- Students learn to provide team feedback by collaborating with a designated team during all assigned activities
- Students understand the potential of Design Thinking for their own activities at university and at work by reflecting the applied methods and tools of Design Thinking

Course content

"Design Thinking" is an innovation philosophy that has its roots at Stanford University. It is a human-centered approach to innovation which focuses on feasibility, viability, and - even more importantly - on the desirability of new products and services. Large corporations (General Electric, Deutsche Bank, Procter & Gamble, SAP) increasingly adopt this way of innovation to ensure that customers and users really need the newly developed product and services. The course teaches this innovation philosophy, various methods, and tools that have been developed globally by different companies and organizations.

The primary objective of this course is to understand the value of the Design Thinking methodology and to raise awareness by applying a few of its tools in an interactive format. The lecture will show students how to empathize with humans, how to identify their needs, and how to provide them with innovative solutions. Basic knowledge about success factors in the adoption and implementation of Design Thinking will be gained through case discussions. The course will also show why human-centered design is important for data analytics and artificial intelligence.



Course structure and indications of the learning and teaching design

Quick facts:

- Course counts 4 credits; accordingly, the total average workload for students is 120 hours.
- 3 consecutive lecture days in an interactive format during the break in presence in St.Gallen
- Students work in teams (three to five students) to develop new ideas for a technology-driven challenge
- Each team will be provided with materials and equipment to prototype their ideas
- Each team presents their concepts and prototypes in a group presentation
- Design Thinking methods used: stakeholder analysis, observations and interviews, brainstorming, rapid (non-technical) prototyping, testing, screening of emerging technologies

Course literature

- Brown, T.: Design Thinking, Harvard Business Review, June 2008
- Kolko, J.: Design Thinking Comes of Age The approach, once used primarily in product design, is now infusing corporate culture, Harvard Business Review 2015
- Brenner et al. Design Thinking as Mindset, Process, and Toolbox, in: W. Brenner & F. Uebernickel (eds): Design Thinking for Innovation, Springer 2016

Additional course information

In case of another Corona-related lockdown this lecture will be held in a digital-only format: Lectures, group presentations, and team support by lecturers will take place via zoom. Teamwork will be supported by Design Thinking-appropriate IT tools like miro, google drive, and slack

Individual term papers will be written as planned.

Examination information

Examination sub part/s

1. Examination sub part (1/2)

Examination time and form

Decentral - Presentation (in groups - all given the same grades) (50%)

Examination time: term time

Remark

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Examination-aid rule

Presentations

In presentations, aids for visual presentation can be used. These aids can be specified or restricted by the lecturers.

Supplementary aids

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Examination languages

Question language: English

Answer language: English

2. Examination sub part (2/2)

Examination time and form

Decentral - examination paper written at home (individual) (50%)



Examination time: term time

Remark

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Examination-aid rule

Term papers

Written work must be written without outside help according to the known citation standards, and a declaration of authorship must be attached, which is available as a template on the StudentWeb.

Documentation (quotations, bibliography, etc.) must be carried out universally and consistently according to the requirements of the chosen/specified citation standard such as e.g. APA or MLA.

The legal standard is recommended for legal work (cf. by way of example: FORSTMOSER, P., OGOREK R., SCHINDLER B., Juristisches Arbeiten: Eine Anleitung für Studierende (the latest edition in each case), or according to the recommendations of the Law School).

The reference sources of information (paraphrases, quotations, etc.) that has been taken over literally or in the sense of the original text must be integrated into the text in accordance with the requirements of the citation standard used. Informative and bibliographical notes must be included as footnotes (recommendations and standards e.g. in METZGER, C., Lern- und Arbeitsstrategien (latest edition)).

For all written work at the University of St.Gallen, the indication of page numbers is mandatory, regardless of the standard chosen. Where page numbers are missing in sources, the precise designation must be made differently: chapter or section title, section number, article, etc.

Supplementary aids

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Examination languages

Question language: English

Answer language: English

Examination content

Group presentations: Students are required to present their teamwork in a group presentation at the end of the 3-day course. The presentation will be graded in regard to content, level of reflection of applied methods, and presentation style. Relevant evaluation criteria are the following:

- Novelty of presentation-style
- Compliance with Design Thinking methodology
- Explanatory power of the presentation with regards to content (including relevance of the prototype, derivation/deduction of Customer-insights, precision of explanations)
- Language (Colloquial vs adequately formal language) /Presentation-style

Individual term paper: Students are asked to hand in 3-4 text pages (excl. references), 1.5 line-spacing, 11 pt. Relevant evaluation criteria are based on the following categories:

- Describing the experience: Students provide a short description of the Design Thinking experience, activities, readings, etc. upon which they are reflecting
- Describing the response: Students provide a short description of their intellectual and emotional response to the Design Thinking experience
- General reflection: Students provide evidence that they have questioned or evaluated their prior perceptions, actions, or beliefs
- Using insights: The students' reflection leads to plans for future action (e.g. take-away from Design Thinking for future personal/work/university activities)
- Connections to reading/research: Students use coursework, reading, or independent research to advance reflection as appropriate
- Writing quality: Quality of writing indicates careful attention to reflective practice by providing clear topic, using concrete and precise language, organizing thoughts for the reader, and proofreading essay for grammar, punctuation, and spelling



Examination relevant literature

None.

Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW51) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 42 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 34 (Thursday, 26 August 2021);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 42 (Monday, 18 October 2021);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 42 (Monday, 18 October 2021);

Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before the end of the registration period in CW 45 (Monday, 8 November 2021).