

DESCRIPTION OF CONCENTRATION COURSE

Name of the school: Haute Ecole de Gestion de Genève	Academic Year: 2023-2024
FIRST PART: DESCRIPTION OF THE MODULE	
1. Domain	Business and Services
2. Department	International Business Management
3. Course name	Design Thinking for Sustainability
4. Code	31001
5. Type of education	Bachelor ☐ Master ☐ MAS ☐ DAS / CAS / single days
6. Number of ECTS Credits	5
7. Prerequisites	None
8. Teaching language	☐ French ☐ German ☐ English ☐ Other:
9. Objectives	This class on design thinking will help students learn how to create innovative solutions to today's challenges, with a focus on sustainability and social inclusion. Design thinking is an iterative process for exploring and developing solutions, where empathy, creativity, and iterative prototyping play a central role. Design thinking has proven very valuable in a wide range of domains and industries, such as technology, healthcare and manufacturing.
	Given the social and environmental challenges that all industries face today, this class will cover the ethical aspects that need to be considered regarding externalities whenever one designs a new product or service, such as the pollution it creates, the resources and energy it uses, the impact it has on communities and societies, etc. To address these complex problems, design thinking is particularly well-tailored to transdisciplinarity. This class will also introduce some concepts in psychology, sociology, environmental studies and systems thinking.
	One strength of design thinking is that it relies on a wide range of tools that have been developed to support design teams (especially transdisciplinary ones) throughout the different phases of their projects. This class will present the main tools and provide space for hands-on practices of the tools. You will also be able to use these tools for the group projects, which will require you to solve a local environmental and social challenge using design thinking.

Design thinking requires a shift in one's approach towards investigating and Page 1 out of 4



solving problems. This class will equip you with the attitudes, skills and mindset that are required to approach problems in a more creative, human-centered and sustainable way. Therefore, this class will allow you to train and develop your imagination, empathy and critical thinking skills.

By the end of the semester, students can expect to be able to:

- Differentiate between the different schools and methods in design thinking as well as their principles (e.g., Stanford's d.school, IDEO, Google's 3E)
- Understand how environmental and social pressures impact design thinking
- Apply the principles for sustainable design (e.g., 6R's of zero-waste)
- Use a variety of techniques and tools for the five modes of design thinking:
 - empathizing with stakeholders (e.g., stakeholder mapping, interview for empathy, observation/shadowing, "What? How? Why?")
 - o defining and framing the challenge (e.g., personas/profiles, journey map, empathy map, reframing maps)
 - ideating different alternative solutions (e.g., causal layered analysis, 6-3-5 brainwriting, SCAMPER, constraints, future scenarios, mind mapping)
 - prototyping the alternatives (e.g., storyboarding, rapid prototyping, visualization techniques)
 - testing and refining the alternatives (e.g., user-driven test, MET matrix, Tarot Cards of Tech)
- Learn and embody the attitudes that are best suited for sustainable designers
- Develop strategic foresight through scenario building and futures thinking to build sustainable and resilient solutions
- Integrate design thinking into sister approaches (Business Model Canvas, design sprints, agile methods, etc.)



10. Contents (General themes and descriptions, the accurate content may change)	 Five modes of the d.school's approach to design thinking: empathize, define, ideate, prototype, test Sensemaking/strangemaking techniques and tools Human-centered design Creativity, innovation, imagination Interdisciplinarity concepts for sustainability (environmental studies, psychology, sociology, political science, complexity theory/systems thinking) Integration of design thinking with sister approaches
11. Evaluation	The grading of the class will be based on:
	Individual learning journal – 40%
	Mid-term group project – 30%
	End-term group project – 30%
12. Remediation/repetition (per module)	□ Compulsory remediation if the module grade is between 3.5 and 3.9 / 6. When subject to a remediation, only the grade of the remedial exam will be taken into account (maximum grade 4.0). A repeated module cannot benefit from a remedial exam.
	□ No remediation
13. Coordinator / main instructor	Hazbi Avdiji



SECOND PART: LOCATION OF THE MODULE IN THE STUDY PLAN		
14. Level	☐ Basic module ☐ Advanced module ☐ Specialized module ☐ Other:	
15. Characteristics	Module is mandatory for the BDS Minor (which could lead to final dismissal from the program, cf. art.15, al.1, « Statut des étudiant-e-s bachelor »)	
16. Type		
17. Time organization	 Modules over 1 semester ☐ Modules over 2 semesters ☐ Spring semester (module 2) ☐ Fall semester (module 1) ☐ Other 	