

Essentials of Digital Health

University:	TalTech
Level:	BA3, BA4
Teaching mode:	completely online, not time-specific
Instructor(s):	Kadi Lubi, Priit Kruus, Janek Metsallik

Short description

The course gives an overview about the essentials of digital health, incl healthcare system, its stakeholders and the use of digitalization for healthcare innovation. The format of “reversed hackathon” is in use to allow practical exercises to understand the benefits and areas of improvements. The course is in an online format, learning process is supported by thematic self-control tests and in case needed, support and mentoring are available.

Full description

The course gives an overview about the essentials of digital health, including healthcare system and its stakeholders and how to use digitalization for healthcare innovation in this specific context. The course uses the format of “reversed hackathon” to enable students through practical exercises an understanding of which aspects to consider in the development of digital health solutions, which are the benefits and areas of improvements to consider. At the end of the course, all participants will act as a “jury member” of the hackathon and have to vote for one of the analyzed cases with reasoning of the decision. The course is in an online format, learning process is supported by thematic self-control tests and in case needed, support and mentoring are available.

During the course, the student has to analyze different parts of 2 predefined digital health case studies that use different technical solution, target different unmet medical needs and hence, involve different stakeholders, use different levels of individual participation etc. The first case will be analyzed individually on a weekly basis and in terms of the weekly topic (the detailed case is fully available all the time but analysis focuses each week on different aspects of the case). The examples of weekly analyses are for example which unmet medical need is targeted and how the solution would solve it, what are the existing problems of different stakeholders, what technology is used and what is the reliability/potential biases of it etc. Under each topic, the student has to provide feedback to the analyses of a minimum of 2 co-students as comments. Also, self-control tests to acquire the theoretical knowledge is required. Tests are mandatory to pass, students have the possibility to take each test up to 3 times and at least one of the results has to be 60%. However, numerical results will not be counted for the final results, tests have to be passed. For the analysis of the second case, students will form virtual teams and analyze similarly the second case within next 2 study weeks. Based on the team work, they have to form a unified team opinion. As a team, at minimum 1 team analysis for another team’s analysis has to be provided. At the end of the course, all participants have to vote for the “winner”

of the hackathon” and explaining the rationale for their opinion. Course feedback is mandatory for all participants.

Learning outcomes

At the end of the course, the learner will be able to:

1. understand the complexity of healthcare system and the implementation of the change in the area of digital health;
2. explain main factors related to digital health (stakeholders, healthcare system and its financing models, health-illness continuum, technology in healthcare);
3. distinguish between different stakeholders and target groups of healthcare systems, describes and analyses their role, needs, potential participation barriers;
4. present the ideas clearly and understandably, gives feedback to co-student’s analyses in an argued and polite manner.

Recommended in particular for students of the following study programmes

This is an interdisciplinary course that includes the fields of ICT and business/management.

General information

Contact hours per week:	Individual studying and group work, no specific contact hours.
Total workload:	78 (in student hours for the whole course)
ECTS credits:	3
Language:	English

Course start date:	06 March 2023
Course end date:	30 April 2023
Add. info about start date:	
Weekly teaching day/time:	
Time zone:	CET +1 (Estonia, Israel)
Further information:	

Prerequisites:	Initial interest in the field of (digital) health/healthcare.
Activities and methods:	Lectures, Group work, Self-study, Exercises
Presence on campus:	

Final examination

Form:	no examination
Date:	
Location/format:	No examination, final assessment is composed of different tasks taken during the course.
Re-sit possibility:	yes
Transcript available:	end of semester
Add. info/requirements:	

Registration

To register for this course, follow the registration requirements of your **home university** as specified here: www.euroteq.eu/courses-registration.

Administration

Number of places:	24
Minimum participants:	12
Internal course code:	IHT5000
Contact:	Kadi Lubi

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