Research – Development – Innovation Syllabus

<table>
<tr><td rowspan="5">1. General Informations</td><td colspan="5">Course title: Designing effective positive technology tools: history, applications and future trends. Interdisciplinary course</td></tr>
<tr><td colspan="5">Course coordinator(s) / lecturer(s): Ágnes Karolina Bakk, Borbála Tölgyesi, Sam Chovanec
Contact details: bakk&mome.hu</td></tr>
<tr><td>Level and Code:
M-KF-301-IK-242501-02</td><td>Position in the Curriculum:
BA 2, 3 MA 1,2</td><td>Recommended semester:</td><td>Credits:
5</td><td>Teaching hours:
Student workload: 144</td></tr>
<tr><td>Related codes:
M-KF-E-101-IK-242501-02</td><td>Type: lecture/ seminar/practice /<u>combined</u></td><td>Is it open to sign-up as an elective?</td><td colspan="2">Specific pre-conditions to sign-up as an elective:</td></tr>
<tr><td colspan="5">Interlinkages / prerequisites, parallel units:
Interaction design</td></tr>
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<tr><td rowspan="2">2. Targeting</td><td>Aims and principles of the course:
(in accordance with the subject description)
This course focuses on the principles of positive technology, which utilizes technology to enhance mental health and overall well-being (Gaggioli et al., 2017). It offers an interdisciplinary exploration of the historical roots, current trends, and future possibilities within this field. Starting from foundational works like ELIZA (Weizenbaum, 1966) to contemporary innovations such as meditation apps like Tripp VR, students will trace the evolution of technology-assisted interventions for mental health.

Throughout the course we aim to encourage students to cultivate critical thinking skills, particularly in discerning the key attributes of positive technologies. Through theoretical discussions, case studies, and hands-on prototyping exercises, they will delve into the mechanics and functions of these applications, understanding how they can support mental health and well-being.

Our goal is that at the end of the course, students will develop a deeper understanding of ethical considerations and potential risks associated with technology use in this context. They will apply this knowledge by creating paper or Figma prototypes of their proposed well-being-oriented positive technology applications.</td></tr>
<tr><td>Intended learning outcomes / professional and transitive competencies:
(in accordance with the subject description)

Knowledge:
    - understanding of the basic concepts and requirements of positive psychology
    - overview of existing trends in mental health-related apps
    - overview of general research methods with basic concepts that necessary for background research

Skills: - paper prototyping
    - introductory of psychology measurements and experimentation
    - possible tangible media coding (intro level)

Attitudes/attributes:
    - proactive</td></tr>
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	- ethical - inclusive Autonomy and Responsibility: - responsiblity in ethical decision making - autonomous in decision making - responsability for making decision in inclusive design
3. Itinerary	Course content (topics and themes): 1. History 2. Current applications aiming to offer better mental health states 3. UX test: general testing 4. Psychological testing means: introduction and guidelines 5. Guest talks: Erdős Sándor (ONCO VR) + András Szabó (Code and Soda) TBC 6. Guest3: Patrícia Lajkó (Rókus Hospital - Semmelweiss University) TBC 7. Guest4: Máté Szondy (Pázmány University and Mazsihisz Hospital) TBC 8. Tech introductory for prototyping I. (possible to choose from VR or Microcontrollers or Unreal) 9. Tech+prototype development II. 10. Tech+ prototype development III. 11. Ideas +final pitch development 12. Final presentation
	RDI methods and tools used in the course: - Exploring mental health supporting prototype processes - Interdisciplinary research method - User-Centered design of AI-Powered mental health application
	Specificity of the learning process: ☐ Teaching method: presentations, guest speakers from the industry and health care, consultation, paper prototype development, final presentation Schedule: every Friday: 10.00-13.00 Tasks and assignments (with student notional workload): background research, presentation preparation, prototype development Learning environment: classroom
4. Evaluation	Assessment: - Class activity - Prototype development -Presentation Assignments:1. Creating a Figma or paper prototype of a mental-health-supporting application and presenting it. 2. Creating a concept, how would they test or validate its beneficial effects on the users (presented together with the prototype). 3. Writing a short (one-page) theoretical background (well-being focused) of the app. Assessment method: Presentation and assignment writing. Assessment criteria:

	Being present at 70% of the class, participating at the consultation classes, proactivity
	Calculation of grade: Prototype development 50%, Presentation 30%, Writing assignment 10%, Class activity 10% (weights of the achievements, assignments; ranges of rates or points)

	Prior learning recognition (based on application):
	- Familiarity with basic HCI or basic animation, media design tools
	    - Basic understanding of technology development
	    - Basic understanding of research

	Recommended readings: Jacinthe Flore: *The Artefacts of Digital Mental Health*. Palgrave Macmillan, 2023. Further readings, documents, sources: Gaggioli, Andrea, Giuseppe Riva, Dorian Peters, and Rafael A. Calvo. 2017. "Positive technology, computing, and design: shaping a future in which technology promotes psychological well-being." In *Emotions and affect in human factors and human-computer interaction, pp. 477-502. Academic Press.* Joseph Weizenbaum. 1966. ELIZA—a computer program for the study of natural language communication between man and machine. Commun. ACM 9, 1 (Jan. 1966), 36–45. https://doi.org/10.1145/365153.365168 Turkle, Sherry. (1997). *Life on the screen : identity in the age of the Internet*. New York
	Additional information:
	Schedule and venue for personal consultation: To be defined