

## **Digital Mental Health**

Center for European Studies

### **Digital Mental Health**

#### Full course description

In this course, students will explore the fascinating new field of digital mental health, which combines theories and methodologies from psychology and human-computer interaction science. The course will start with a general introduction on how technology has and can be used in the prevention, treatment, and support of common mental health problems (e.g., depression and anxiety). The comprehensive problem-based learning approach will allow students to develop a basic understanding of the causes and symptoms of common mental health problems, and explore the active ingredients of traditional (e.g., cognitive behaviour therapy) and digital interventions.

Alongside, students will learn about the different methods used across the two disciplines to design, develop, and evaluate digital mental health interventions and programs. There will be many opportunities for students to practice and get hands-on experience in applying cross-disciplinary methods. Students will take part in co-design workshops, introductory sessions on systematic literature reviews and will develop and pitch their own (non-digital) prototypes and intervention ideas.

Towards the end of the course, students are encouraged to think critically about current challenges in the field, including the ethical and moral implications of digital applications, and the future of digital mental health.

**Course objectives** 

Students will familiarise themselves with the evidence-base and scientific literature around digital mental health

Have a basic understanding of symptom presentation of common mental health problems Reflect and think critically about the implications of using technology to treat and prevent mental health problems

Learn and practice the application of co-design methods

Create their own logic model to inform their intervention prototype

Design, develop, test and pitch their own intervention prototype

#### Prerequisites

Some background in psychology or relevant field. Some knowledge in designing research studies is helpful.

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#### **Recommended reading**

The course will draw primarily on scientific literature around digital mental health published in peerreviewed journals.

Book:

Potenza, Marc N., Kyle A. Faust, and David Faust (eds), The Oxford Handbook of Digital Technologies and Mental Health (2020; online edn, Oxford Academic, 8 Oct. 2020), https://doi.org/10.1093/oxfordhb/9780190218058.001.0001

Example articles:

Grossard, C., Grynspan, O., Serret, S., Jouen, A. L., Bailly, K., & Cohen, D. (2017). Serious games to teach social interactions and emotions to individuals with autism spectrum disorders (ASD). Computers and Education, 113, 195–211. https://doi.org/10.1016/j.compedu.2017.05.002

Doherty, G., Coyle, D., & Sharry, J. (2012). Engagement with online mental health interventions: An exploratory clinical study of a treatment for depression. Conference on Human Factors in Computing Systems, 1421–1430. https://doi.org/10.1145/2207676.2208602

Orlowski, S. K., Lawn, S., Venning, A., Winsall, M., Jones, G. M., Wyld, K., Damarell, R. A., Antezana, G., Schrader, G., Smith, D., Collin, P., & Bidargaddi, N. (2015). Participatory Research as One Piece of the Puzzle: A Systematic Review of Consumer Involvement in Design of Technology-Based Youth Mental Health and Well-Being Interventions. JMIR Human Factors, 2(2), e12. https://doi.org/10.2196/humanfactors.4361

Grist, R., Croker, A., Denne, M., & Stallard, P. (2019). Technology Delivered Interventions for Depression and Anxiety in Children and Adolescents: A Systematic Review and Meta-analysis. Clinical Child and Family Psychology Review, 22(2), 147–171. https://doi.org/10.1007/s10567-018-0271-8

Vaidyam, A. N., Wisniewski, H., Halamka, J. D., Kashavan, M. S., & Torous, J. B. (2019). Chatbots and conversational agents in mental health: a review of the psychiatric landscape. The Canadian Journal of Psychiatry, 64(7), 456-464.

Larsen, M. E., Huckvale, K., Nicholas, J., Torous, J., Birrell, L., Li, E., & Reda, B. (2019). Using science to sell apps: evaluation of mental health app store quality claims. NPJ digital medicine, 2(1), 1-6.

# DMX2001

Period 6 15 Jul 2024 - 1 Aug 2024

ECTS credits:

6.0

Instruction language:

English

Coordinator:

S. van der Laan

Teaching methods: Lecture(s), PBL, Assignment(s), Presentation(s)

Assessment methods:

Assignment, Final paper, Participation, Presentation

Keywords:

Digital Mental Health, psychology, intervention techniques, Co-design, systematic review