



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Digital Health - 55783*

*Last update 07-09-2024*

*HU Credits:* 2

*Degree/Cycle:* 2nd degree (Master)

*Responsible Department:* Business Administration

*Academic year:* 0

*Semester:* 1st Semester

*Teaching Languages:* English

*Campus:* E. Safra

*Course/Module Coordinator:* Dr. Inbal Mozes

*Coordinator Email:* [inbal.mos@gmail.com](mailto:inbal.mos@gmail.com)

*Coordinator Office Hours:* Before class by appointment

*Teaching Staff:*

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Dr. Inbal Mozes

Course/Module description:

*This course provides an overview of the latest advancements in digital health technologies and their impact on healthcare systems. Students will learn about digital transformation in healthcare and implementation of emerging technologies in various healthcare settings. Real-world examples and case studies will be used to illustrate the application of these technologies*

Course/Module aims:

Learning outcomes - On successful completion of this module, students should be able to:

*Upon successful completion of this course, students will be able to:*  
*Understand the latest digital health technologies and their applications in healthcare.*  
*Analyze the benefits, risks, and ethical implications of using digital health technologies.*  
*Have experience in planning digital health transformation projects.*  
*Critically assess research studies and evidence related to digital health technologies.*  
*Apply knowledge of health technologies in solving real-world healthcare challenges.*  
*Communicate effectively about health technologies to different stakeholders*

Attendance requirements(%):

- *Attendance is required. Learning in multi-disciplinary fields like digital health is enhanced through interpersonal interaction*
- *Three classroom absences are permitted*

*Teaching arrangement and method of instruction: Lectures*

Course/Module Content:

- *Introduction to Digital Health Technologies*
- *Current trends and challenges in health technologies in Israel and global markets*
- *Evaluation of Health Technologies*

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- Patient Experience
  - Product management

### *Digital Transformation Framework*

#### *Case Studies and Real World Applications, successful implementation of health technologies*

- Impact of health technologies on patient care and outcomes
- Electronic health records (EHRs) and health information exchange
- Telemedicine and remote patient monitoring
- Wearable health devices and fitness trackers
- Artificial intelligence (AI) in healthcare
- Future Directions and Emerging Technologies
- Virtual reality (VR) and augmented reality (AR) in healthcare

#### *Required Reading:*

Abernethy A, Adams L, Barrett M, Bechtel C, Brennan P, Butte A, et al. The Promise of Digital Health: Then, Now, and the Future. *NAM Perspect [Internet]*. 2022 Jun 27 [cited 2022 Jul 14];6(22). Available from:

Bashshur RL, Howell JD, Krupinski EA, Harms KM, Bashshur N, Doarn CR. The Empirical Foundations of Telemedicine Interventions in Primary Care. *Telemed J E Health [Internet]*. 2016 May 1 [cited 2022 Jul 14];22(5):342–75. Available from: <https://pubmed.ncbi.nlm.nih.gov/27128779>

Eysenbach, G. (2001). What is e-health? *Journal of Medical Internet Research*, 3(2), e20.

HIMSS. (2020, May 5). AI in healthcare: How it's changing the industry. HIMSS Integrating digital health tools to help improve the whole consumer experience. <http://www2.deloitte.com/us/en/insights/industry/health-care/digital-health-always-on-care.html>

Gonçalves MR, Umpierre RN, D'Avila OP, et al. Expanding Primary Care Access: A Telehealth Success Story. *Ann Fam Med*. 2017;15(4):383. doi:10.1370/afm.2086

#### *Additional Reading Material:*

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Grading Scheme:

*Essay / Project / Final Assignment / Home Exam / Referat 60 %*

*Active Participation / Team Assignment 20 %*

*Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 10 %*

*Attendance / Participation in Field Excursion 10 %*

Additional information:

*Students are required to create a 10-15 page detailed digital health transformation plan for an organization, based upon the methodology learned in the course.*

*Students will be required to present a summary presentation of 15 minutes to class, judged by a panel of experts.*

*The assignment will be done in pairs.*

*Quizzes based on assigned readings*