

## MAVA 455 | DTES 555 | GLBH 513 DESIGN FOR HEALTH AND WELLBEING<sup>1</sup>

#### Fall 2024

### 1. COURSE INFORMATION

Instructor: Özge Subaşı (<u>ozsubasi@ku.edu.tr</u>)

KU Credits: 3
ECTS Credits: 6

Prerequisite(s): MAVA 319, ASIU 118, or Consent of the instructor is enough for Global Health Class

Location: SOSZ15
Class Hours: Thursday, TBA

Language of Instruction: English

Teaching Assistant(TA):

TA Office Hours:

Office Hours:

Sena Cucumak (scucumak21@ku.edu.tr)

TBA, twice weekly two hours block

Scheduled via e-mail requests

### 2. COURSE DESCRIPTION

Introduction to different facades of "design for health and wellbeing" domain, including: medical, social, and biopsychosocial approaches to design for user diversity; positive psychology approaches to design for happiness and flourishing; technical and engineering approaches to design healthcare products and systems. Review of the state-of-the- art case studies and design solutions for health and wellbeing. Application of user experience research methods in "design for health and wellbeing" domain both for insight generation and evaluation. Concept generation to enhance the health and wellbeing of identified user groups and needs.

## 3. COURSE OBJECTIVES

The take-off question for the course is "How can we intentionally design products, services, and/or systems that can support and increase the wellbeing of individuals, communities, and societies?" Accordingly, the course aims to help you broaden your perspective firstly from an object-focused approach to design towards a more comprehensive and experiential approach to the designed artefacts and systems; and secondly, from a problem-driven design approach to a possibility-driven positive design approach that would enhance the health and wellbeing of individuals, communities, and societies. It also aims to help you acquire first-hand experience in user experience research in design for health and wellbeing domain, as well as in design collaboration in healthcare projects. The course is expected to equip you with emerging requirements in this flourishing design area, in addition to raising awareness for those who want to pursue specialisation in diverse strands of this area in further/graduate level studies.

### 4. COURSE LEARNING OUTCOMES (CLOs)

At the end of the course, you will:

- Gain awareness and basic knowledge on diverse approaches and research strands in "design for health and wellbeing" domain
- Acquire basic knowledge on positive psychology and engineering grounded "design for health and wellbeing" terminologies and discussions in the literature
- Distinguish the concepts related to positive experience and "positive design" from conventional user experience
- Apply design thinking approach and user experience research methods to health and wellbeing domain
- Transfer user insights into actionable design directions for health and wellbeing

## 5. TEACHING METHODS

This is a practical, studio-based course. It requires students' hands-on involvement with the design tools and constant

<sup>&</sup>lt;sup>1</sup> This syllabus is adapted from Aslı Günay's version of the course.

engagement in collaborative work within the scope of a project.

The initial weeks of the course provides concepts and examples pertaining to different facades of how design discipline handles healthcare and wellbeing. There will be also short lectures distributed among different phases of the project to support research and design skills.

The project will progress by carrying out several assignments and workshops. It is crucial to bring all the deliverables on time to be able to progress to the next step within the scheduled curriculum and to be able to realise in-class reflections and discussions effectively and collectively.

### Notes on the use of online and digital tools:

- Students are required to follow the details about the course from <u>Blackboard</u> and KU-<u>e-mail</u>.
- Supportive online collaborative platforms and tools, such as 'Miro' (http://miro.com/) will be used during some of the class
  hours. Miro Boards are beneficial not only for collaborative work, but also for storing and presenting submissions. The live
  stream of Miro exercises will be projected on the studio wall when we are to use it in face-to- face class hours. Links for the
  Miro boards will be shared via Blackboard.
- A Miro tutorial video will be recorded and shared, which the students are required to watch if they have not used it before. An additional office hour for Miro will be also planned to provide support about problems and questions related to Miro.
- More tools can also be introduced as needed in diverse phases of the design research.

### 6. SUBMISSIONS

Due dates, submission format, and submission details of each assignment will be announced with each assignment brief. Submissions will be made through Blackboard no matter the assignment format (physical or digital). Certain submissions will be also uploaded to Miro, which will be announced in due course. All submissions should contain your name, ID number, and name of the work.

### Late policy for submissions:

Students are responsible for making their submissions on time and be present for the presentation and discussion of the
works. This is also about respect to your friends' works and efforts, as well, since collaborative practice, motivation, reflection,
and discussions are very important for course learning outcomes.

### 7. ATTENDANCE

Attendance to class is mandatory. Students who miss more than three classes without eligible medical reports will be regarded as "Failed the class". Students should come to class and take a seat before its scheduled time. As per KU policies, students who arrive later than 15 minutes after the scheduled time will not be allowed in class. Provision of valid excuses is also necessary for joining late and leaving early. Please make empathy with your friends who are on time and whose work will be impacted adversely if you join in the middle of an exercise, needing extra explanation and causing loss of time and attention due to interrupting the class dynamics.

### 8. GRADING

FORMAL DOCUMENTATION (team): During the semester, you will be given several assignments and class workshops. Detailed documentation of the outputs of these materials is quite important for the assessment. You are required to digitise all the outcomes and upload them to the specific Blackboard assignment folder and Miro Board as specified by the instructor. INFORMAL DOCUMENTATION (individual): It is also important to document your learning insights throughout the project steps in a blog for public share. Each student will start and regularly update their project blog. For details, follow the instructions you will be provided during the course.

## Overall grading criteria:

Assignments and workshops 60%
 Attendance and participation 10%
 Blog documentation 10%
 Final presentation 20%

For detailed grading plan, please refer to the weekly course schedule in Section 9.

Final letter grades will be assigned according to the Koç University's grading scale: <a href="https://cssh.ku.edu.tr/en/about/faculty-resources/grading-scale/">https://cssh.ku.edu.tr/en/about/faculty-resources/grading-scale/</a>

## 9. WEEKLY COURSE SCHEDULE (TENTATIVE)

### MODULE WEEK

### **WEEKLY CONTENT**

## 1 Week:07 October

Introduction to the course content, procedures, and tools; Discussions on students' backgrounds, interests and motivations

## 2 Week:14 October

(L) From medical to biopsychosocial design approaches — Mismatched Interactions, Inclusive design, Design for Diversity

(W) Breaking down barriers

Readings (Weekly readings are mostly supportive; compulsory ones to be mentioned before class):

Barnes, C. (2011). Understanding Disability and The Importance of Design for All. *Journal of Accessibility and Design for All.* 1(1), 55-80.

Bianchin, M. and Heylighen, A. (2017). Fair by design. Addressing the paradox of inclusive design approaches. *The Design Journal*, 20(1).

Begnum, B.E.N. (2020). Universal Design of ICT: A Historical Journey from Specialized Adaptations Towards Designing for Diversity. In M. Antona and C. Stephanidis (Eds.), *Universal Access in Human-Computer Interaction. Design Approaches and Supporting Technologies*. Springer, Cham.

Haegele, J.A. and Hodge, S. (2016). Disability Discourse: Overview and Critiques of the Medical and Social Models, *Quest*, *68*(2), 193-206.

Oliver, M. (2013). The social model of disability: thirty years on, *Disability & Society*, 28(7), 1024-1026.

Hans Persson, Henrik Åhman, Alexander Arvei Yngling, and Jan Gulliksen. 2014. Universal design, inclusive design, accessible design, design for all: different concepts--one goal? On the concept of accessibility--historical, methodological and philosophical aspects. *Univers. Access Inf. Soc.* (14)4.

## 3 Week:21 October

(L) Positive psychology grounded approaches — Positive Design, Happiness, Wellbeing

### MODULE 1

Theoretical Background

Desmet, P.M.A., Pohlmeyer, A.E. (2013). Positive Design: An Introduction to Design for Subjective Well-Being, *International Journal of Design*, 7(3) 5-19.

Pavot, W., Diener, E. (2013). Happiness Experienced: The Science of Subjective Well-Being. In S. David, I. Boniwell, A.C. Ayers (Eds.), *The Oxford Handbook of Happiness* (pp. 134-151). Oxford University Press, Oxford

Pohlymeyer, A. (2012). Design for Happiness. *Interfaces*, 92(Autumn 2012), 8-11.

Pohlmeyer, A.E., Desmet, P.M.A. (2017). From Good to the Greater Good. In J. Chapman (Ed.), Routledge Handbook of Sustainable Product Design (pp. 469-486). Routledge, London.

Seligman, M.E.P. (2012). Flourish: A Visionary New Understanding of Happiness and Well-being (Paperback Edition). Free Press, New York.

### 4 Week:28 October

# (L) Technical issues and engineering approaches — Medical device development, Designing and improving healthcare systems (system of systems)

+ Guest Speaker

Clarkson, J., Bogle, D., Dean, J., Tooley, M., Trewby, J., Vaughan, L, Adams, E., Dudgeon, P., Platt, N. and Shelton, P. (2017). *Engineering Better Care, a systems approach to health and care design and continuous improvement*. Royal Academy of Engineering, London, UK.

Clarkson, J., Dean, J., Ward, J., Komashie, A. and Bashford, T. (2018). A systems approach to healthcare: from thinking to practice. *Future Healthcare Journal*, *5*(3), 151–155.

Medina, L. A., Kremer, G. E. O., & Wysk, R. A. (2013). Supporting medical device development: a standard product design process model. *Journal of Engineering Design*, 24(2), 83–119.

## 5 Week:04 November

# (L) User experience (UX) research for design for health and wellbeing, Example case studies and design solutions/opportunities

(W) Mindmapping personal experiences and observations with healthcare products/ services/systems

(A) Review of products/services/systems on an assigned health and wellbeing theme (10%)

## 6 Week:11 November

Presentations of products/services/systems on the assigned health and wellbeing theme
(A) Identifying project themes and methods (10%)

## 7 Week:18 November

Presentation of the identified themes and methods

(A) Research plan for the selected theme and user groups

### MODULE 2

Empathy & Problem Reframing

## 8 Week:25 November

Presentations of the research protocols

## 9 Week:02 December

- (L) Analysis and communication of user research data
- (W) Delivering & analysis of user research data (preparation for the next step of the assignment)
- (A) Identification of design directions and requirements (5%)

## 10 Week:09 December

- (W) Idea generation with brainstorming & other ideation techniques (10%)
- (L) Design ideation

## MODULE 3

Ideation & Iteration

## 11 <u>Week:16 December</u> (L) Detailing & communicating designs

(A) Finishing detailing & preparing materials and tools for user feedback (10%)

### 12 Week:23 December

Presentations of design ideas and materials for the evaluative user research

# **MODULE 4** Finalisation

### 13 Week:30 December

Presentations of user feedbacks & ideas for design revisions Finalisation

## 14 Week:06 January

Presentations of user feedbacks & ideas for design revisions Finalisation

**TBA** FINAL SUBMISSION & JURY (20%)

### 10. READING RESOURCES

There is no required textbook for the course. The resources in the theoretical part of the weekly course schedul

(i.e. Module 1) are required and/or supportive readings. The compulsory ones will be mentioned before each week and the copy of the required ones will be supplied by the instructor. Further readings can be provided considering the project needs and discussions of the semester. Also, supportive and inspirational materials will be shared via "Supportive/Inspirational Resources" tab in Blackboard.

### 11. STUDENT CODE OF CONDUCT AND ACADEMIC GRIEVANCE PROCEDURE

https://apdd.ku.edu.tr/en/academic-policies/student-code-of-conduct/ https://apdd.ku.edu.tr/en/academic-policies/academic-grievance-procedure/

## 12. USE OF STUDIO ENVIRONMENT

The face-to-face lectures, workshop and feedback sessions will be done in MAVA design studio (SOSZ15). As this studio is open to the use of all MAVA students, it is essential to keep it neat. Because the studio has limited space, do not use it for storing your personal belongings. The studio will be cleaned by the cleaning staff biweekly. So, be aware that if you leave anything in the studio, they will be thrown away. Return the equipment you used to their original location so that others can use as well (e.g. tools and materials to be used in certain exercises). Make sure that you clean your desk and its surroundings when you are leaving the studio. Please use recycle bins for disposing paper, glass, and plastics.