

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
COM448	Digital Game Design	8	3	0	0	3	3

Prerequisites

Admission Requirements

Language of Instruction English

Course Type Elective

Course Level Bachelor Degree

Objective In this course, where the concept of game and player experience will be examined in detail, students will gain knowledge in the field of game experience and basic game design concepts. In addition, the usability principles in games that the students can benefit from in the design processes will also be taught and applied.

Content The course will provide students with an introductory knowledge of the field by bringing a fundamental approach to the existing playground. In addition, beyond the basic concepts, the field of player psychology will be mentioned, and how games create experiences will be analyzed theoretically and practically. This course teaches students the fundamentals of game psychology and fundamental concepts such as cognitive abilities, memory, and attention. It also includes game-oriented topics such as attachment theories, entertainment, user experience, game experience, game heuristic effects, gamification, and flow theory.

Caillois, R., (1961). *Man, Play, and Games*. University of Illinois press.

Costikyan, G, (2002). *I Have No Words & I Must Design: Toward a Critical Vocabulary for Games*. CGCD Conf.

Csikszentmihalyi, M., (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper Perennial.

Hodent, C. (2017). *The Gamer's Brain: How Neuroscience and UX Can Impact Video Game Design*. Boca Raton, FL: CRC Press.

References Madigan, J. (2015). *Getting gamers: the psychology of video games and their impact in the people who play them*. Ebook.

Gonzalez-Holland, E., Whitmer, D., Moralez, L., & Mouloua, M. (2017). Examination of the Use of Nielsen's 10 Usability Heuristics & Outlooks for the Future. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 61(1), 1472–1475.

Bernhaupt, R. (2010). *Evaluating User Experience in Games*.

Aker, Ç., Rızvanoğlu, K., & Bostan, B. (2017). Methodological Review Of Playability Heuristics. *Proc. Eurasia Graphics, Istanbul, Turkey, Nov*, 405.

Theory Topics

Week	Weekly Contents
1	Introductory Course – Introduction to the course materials
2	Inspecting the play
3	Inspecting the game
4	Game elements and mechanics
5	Psychology and Games I (Perception)
6	Psychology and Games II (Memory)
7	Psychology and Games III (Attention)
8	Psychology and Games IV (Motivation)
9	Psychology and Games V (Emotion)
10	Presentation Week
11	Hero's Journey and Player Journey
12	The field of HCI, User Experience & Usability
13	Player Experience (PX)
14	Final Project