

COURSE SYLLABUS

Course Title	Course Code	Semester	Course Hour/Week		Credit	ECTS
Psychology for Game Design	GAME402	Spring	Theory X	Practice -	3	5
Course Type	Compulsory Course	Department Elective	Faculty Elective	University Elective	CoHE (YÖK) Elective	Other
	X	-	-	-	-	-
Level of Course	Associate Degree (Short Cycle)		Undergraduate (First Cycle)		Graduate/ Doctoral (Second /Third Cycle)	
	-		X		-	

Language of Instruction	English
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Course Instructor	Dr. Kamil Bartu Feridun	E-mail: bartu.feridun@arucad.edu.tr	
Course Objectives	<p>This course introduces students to basic psychological concepts and their relevance in game design, emphasizing the impact of psychological theories on player behavior, motivation, and engagement. Students will investigate the cognitive, emotional, and social dynamics within gaming, examining how elements like cognitive load, flow, and social identity shape player experiences. Additionally, the course highlights ethical issues in game design, encouraging critical analysis of topics such as player manipulation and representation. Through both theoretical insights and hands-on activities, students will cultivate analytical skills necessary for evaluating and designing games from a psychological viewpoint.</p>		
Course Learning Outcomes	Students will able to:	Teaching Methods	Evaluation Methods
	<p>Explain key psychological concepts, theories, and terminology relevant to game design and player behavior (e.g., motivation, cognition, emotion, social psychology).</p>	<p>Lectures, guided discussion, reading-based instruction, in-class examples/game cases.</p>	<p>Midterm project and Final examination.</p>

	<p>Analyze player engagement, learning, and decision-making using psychological frameworks such as motivation theory, flow, cognitive load, and behavioral psychology.</p>	Lectures, guided discussion, reading-based instruction, in-class examples/game cases.	Midterm project and Final examination.
	<p>Evaluate the cognitive, emotional, and social impact of game design elements in both single-player and multiplayer contexts.</p>	Lectures, guided discussion, reading-based instruction, in-class examples/game cases.	Midterm project and Final examination.
	<p>Apply psychological principles to critique and propose improvements for game mechanics, feedback systems, progression loops, and player experience design.</p>	Lectures, guided discussion, reading-based instruction, in-class examples/game cases.	Midterm project and Final examination.
	<p>Critically assess ethical issues in games, including representation, stereotypes, manipulation, inclusion, and player wellbeing, using psychological perspectives.</p>	Lectures, guided discussion, reading-based instruction, in-class examples/game cases.	Midterm project and Final examination.
Course Content	<p>This course focuses on a multidisciplinary approach to understanding player behavior and gaming experiences. It integrates knowledge and research methods from psychology, game design, and communication studies to explore how psychological principles influence game development and player engagement. Topics such as motivation, cognitive load, social dynamics, emotional responses, and ethical considerations are examined to provide a comprehensive understanding of how games impact players. Rather than studying these disciplines separately, the course combines them to offer a holistic perspective on the psychology of gaming.</p>		

COURSE OUTLINE/SCHEDULE			
Week	Topic	Implementation (theory/practice)	Required Reading, Preliminary preparation
1	Syllabus review: course requirements, assignment and assessment policies, and reading list	T	
2	Introduction to Psychology	T	Feldman, R. S., (2009). <i>Understanding psychology</i> . New York: McGraw-Hill.

3	The role of psychology in understanding the impact of computer	T	Boyle, E., Connolly, T. M., & Hainey, T. (2011). The role of psychology in understanding the impact of computer games. <i>Entertainment computing</i> , 2(2), 69-74.
4	Research in Psychology	T	Giles, D. (2010). Psychology of the Media. McLuhan, M. (1964). Understanding Media: The Extensions of Man.
5	Motivation & Engagement Intrinsic vs. Extrinsic Motivation Self-Determination Theory	T	Bostan, B. (2009). Player motivations: A psychological perspective. <i>Computers in Entertainment (CIE)</i> , 7(2), 1-26. Erol, O., & Çırak, N. S. (2020). What are the factors that affect the motivation of digital gamers?. <i>Participatory Educational Research</i> , 7(1), 184-200. Kang, B., & Tan, S. H. (2014). Interactive games: Intrinsic and extrinsic motivation, achievement, and satisfaction. <i>Journal of Management and Strategy</i> , 5(4), 110-116. Mills, D. J., & Allen, J. J. (2020). Self-determination theory, internet gaming disorder, and the mediating role of self-control. <i>Computers in Human Behavior</i> , 105, 106209. Ryan, R. M., Rigby, C. S., & Przybylski, A. (2006). The motivational pull of video games: A self-determination theory approach. <i>Motivation and emotion</i> , 30, 344-360.
6	Cognitive Load & Learning Flow Theory Cognitive Load Theory	T	Chang, C. C., Warden, C. A., Liang, C., & Lin, G. Y. (2018). Effects of digital game-based learning on achievement, flow and overall cognitive load. <i>Australasian Journal of Educational Technology</i> , 34(4). Cowley, B., Charles, D., Black, M., & Hickey, R. (2008). Toward an understanding of flow in video games. <i>Computers in Entertainment (CIE)</i> , 6(2), 1-27. Stiller, K. D., & Schworm, S. (2019, March). Game-based learning of the structure and functioning of body cells in a foreign language: Effects on motivation, cognitive load, and performance. In <i>Frontiers in Education</i> (Vol. 4, p. 18). Frontiers Media SA.
7	Revision		
8	Mid-Term Exams		
9	Psychological Foundations of Stereotypes and Gender Definition of stereotypes Distinction between biological sex and gender	T	Beasley, B., & Standley, T. C. (2002). Shirts vs. skirts: Clothing as an indicator of gender role stereotyping in video games. <i>Mass Communication & Society</i> , 5(3), 279-293. https://doi.org/10.1207/S15327825MCS0503_3

	<p>Psychological formation of gender roles Social learning theory and gender schemas Media and digital games as agents of stereotype production Gender representation in game characters Common stereotypes of “male” and “female” gamers Avatar choice and identity construction Psychological mechanisms behind player behavior and identification</p>		<p>Dietz, T. L. (1998). An examination of violence and gender role portrayals in video games: Implications for gender socialization and aggressive behavior. <i>Sex Roles</i>, 38(5–6), 425–442.</p> <p>Liu, C.-C. (2016). Understanding player behavior in online games: The role of gender. <i>Technological Forecasting and Social Change</i>, 111, 265–274. https://doi.org/10.1016/j.techfore.2016.07.018</p> <p>Quintana, G. R., & Pfaus, J. G. (2024). Do sex and gender have separate identities? <i>Archives of Sexual Behavior</i>, 53, 2957–2975. https://doi.org/10.1007/s10508-024-02933-2</p> <p>Pfaus, J. G., Zakreski, E., & Quintana, G. R. (2025). Yes, sex and gender have separate identities! <i>Archives of Sexual Behavior</i>, 54, 3883–3886. https://doi.org/10.1007/s10508-025-03164-9</p> <p>Wang, Y., Yang, F., Deng, K., & Wang, M. (2024). The effect of prosocial video games on individual altruism: The role of avatar appearance and gender. <i>Current Psychology</i>, 43, 34187–34198. https://doi.org/10.1007/s12144-024-06905-6</p>
10	<p>Industry Roles, Power Structures, and Representation in Games Professional roles in the game industry (designer, developer, artist, etc.)</p> <p>Gendered division of labor in creative industries</p> <p>Glass ceiling, invisible labor, and representation issues</p> <p>Gendered narratives and mechanics in games</p> <p>Inclusive and diversity-oriented game design approaches</p> <p>Game Psychology Perspective</p> <p>Effects of representation on player identification and self-concept</p> <p>Psychological impact of exclusion and visibility</p> <p>Gendered behavior patterns in gaming communities</p>	T	<p>Campbell, C. A. (2020). “Shit is hard, yo”: Precarious work and emotional labour in the video game industry. <i>International Journal of Cultural Policy</i>, 26(4), 524–543. https://doi.org/10.1080/10286632.2018.1479246</p> <p>Dele-Ajayi, O., Emembolu, I., Peers, M., Shimwell, J., & Strachan, R. (2018). Exploring digital careers, stereotypes and diversity with young people through game design and implementation. In <i>2018 IEEE Global Engineering Education Conference (EDUCON)</i> (pp. 712–717). IEEE.</p> <p>Wang, P., & Lee, A. (2025). Engagement as capital: Unionization in the video game industry. <i>International Journal of Employment Studies</i>, 33(1), 57–63.</p> <p>Yessler, J., & Craig, A. (2024). Dungeons and Dragons: Gender, race, and power in the fantasy and storytelling space. <i>GeoHumanities</i>, 10(2), 463–471. https://doi.org/10.1080/2373566X.2024.2360254</p>

11	Behavioral Psychology Operant Conditioning Variable Reward Schedules	T	Siang, A. C., & Rao, R. K. (2003, December). Theories of learning: a computer game perspective. In <i>Fifth International Symposium on Multimedia Software Engineering, 2003. Proceedings.</i> (pp. 239-245). IEEE.
12	Emotional & Narrative Impact Empathy & Identification Catharsis & Emotional Processing	T	Bachen, C. M., Hernández-Ramos, P., Raphael, C., & Waldron, A. (2016). How do presence, flow, and character identification affect players' empathy and interest in learning from a serious computer game?. <i>Computers in Human Behavior, 64</i> , 77-87.
13	Film Screening & Discussion	P	eXistenZ: https://www.imdb.com/video/vi27656473/?playlistId=tt0120907&ref_=tt_ov_pr_ov_vi
14	Social Psychology in Multiplayer Games Social Identity & Group Dynamics & Conformity	T	Tu, C. H., Yen, C. J., Sujo-Montes, L., & Roberts, G. A. (2015). Gaming personality and game dynamics in online discussion instructions. <i>Educational Media International, 52</i> (3), 155-172. Tychsen, A., Hitchens, M., Brolund, T., McIlwain, D., & Kavakli, M. (2014). Group play: determining factors on the gaming experience in multiplayer playing games. <i>Computers in Entertainment (CIE), 5</i> (4), 1-29. Weger, U. W., Loughnan, S., Sharma, D., & Gonidis, L. (2015). Virtually compliant: Immersive video gaming increases conformity to false computer judgments. <i>Psychonomic bulletin & review, 22</i> , 1111-1116.
15	Ethical Considerations in Gaming		Earp, J., Persico, D., Dagnino, F. M., Passarelli, M., Manganello, F., & Pozzi, F. (2018, October). Ethical issues in gaming: A literature review. In <i>Proceedings of the 12th European Conference on Game-Based Learning, Sophia Antipolis, France-ECGBL</i> (Vol. 2018, pp. 54-61).
16	Final Exams		

Required Course Material(s) / Reading(s) / Text Book(s)	Fox, J. (2014). <i>The game changer: How to use science of motivation with the power of game design to shift behaviour, shape culture and make clever happen.</i> Milton, Qld.: John Wiley & Sons Australia. HF5549.5.I5.F69 2014
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Recommended Course Material(s)/ Reading(s) /Other	Sundar, S. S. (Ed.). (2015). The handbook of the psychology of communication technology. Malden, MA: Wiley Blackwell. P96.T42 .H366 2015
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ASSESSMENT		
Learning Activities	NUMBER	WEIGHT in %
Mid-Term	1	40
Quiz	-	-
Assignment	-	-
Project	-	-
Field Study	-	-
Presentation / Seminar	-	-
Studio Practice	-	-
Other	-	-
Contribution of Final Examination/Final Project/ Dissertation to the Final Grade	1	60
TOTAL		100

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME LEARNING OUTCOMES						
No	PROGRAMME LEARNING OUTCOMES	Level of Contribution (1- lowest/ 5- highest)				
		1	2	3	4	5
1	Knows the historical development of the field of communication, basic concepts, theories.					
2	Knows the basic concepts and terminology related to the field of game design.					
3	Has knowledge about the history of computer and video games and developments in this field.					

4	Knows game design processes and related applications.							
5	Has the ability to utilize various disciplines such as communication, art, music, psychology, mythology, cinema, etc. in the game design process.							
6	Has the ability to analyse analog and digital game genres.							
7	Has the ability to use contemporary game engines and problem solving skills.							
8	Has the knowledge of questioning the game designs with an analytic and critical perspective.							
9	Has knowledge about media literacy.							
10	Has the competence to prepare projects based on ethical principles in game development processes.							
11	Has the competence to evaluate games as an art form.							
12	Has the competence to use game design concepts and methods in related fields such as design, software development and media.							
13	Has the competence to take part and responsibility in game development teams.							
14	Has the competence to collect, analyze and interpret analytical data about games and players.							
15	Has the competence to develop and present a digital game project by using game design practices effectively.							
16	Evaluates artificial intelligence applications in their studies with a critical approach in terms of aesthetics and originality, and uses them in accordance with ethical rules.							

ECTS / STUDENT WORKLOAD				
ACTIVITIES	NUMBER	UNIT	HOUR	TOTAL (WORKLOAD)
Course Teaching Hour (X weeks * total course hours)	15		3	45
Preliminary Preparation and self- study	14		3	42
Mid-Term	1		20	20
Quiz	-		-	-
Assignment	-		-	-
Project	-		-	-
Field Study	-		-	-

Presentation / Seminar	-		-	-
Studio Practice	-		-	-
Final Examination/ Final Project/ Dissertation	1		20	20
Other	-		-	-
TOTAL WORKLOAD	-		-	127
TOTAL WORKLOAD / 25				5.08
ECTS				5







ETHICAL RULES WITH REGARD TO THE COURSE

Plagiarism Disclaimer

Detected and undetected plagiarism is a serious offence at any time and it could have devastating effects on your degree result and future professional lives.

Plagiarism is easy to avoid if you make sure to identify and acknowledge your sources thoroughly and do not copy directly from visual examples, designs, or notes that have in turn been taken word for word from your sources.

	SDG 1: No Poverty	
	SDG 2: Zero Hunger	
	SDG 3: Good Health and Well-Being	
	SDG 4: Quality Education	X
	SDG 5: Gender Equality	X
	SDG 6: Clean Water and Sanitation	
	SDG 7: Affordable and Clean Energy	
	SDG 8: Decent Work and Economic Growth	X
	SDG 9: Industry, Innovation and Infrastructure	
	SDG 10: Reduced Inequalities	X
	SDG 11: Sustainable Cities and Communities	

	SDG 12: Responsible Consumption and Production	X
	SDG 13: Climate Action	
	SDG 14: Life Below Water	
	SDG 15: Life on Land	
	SDG 16: Peace, Justice and Strong Institutions	X
	SDG 17: Partnership for the Goals	

ASSESSMENT DETAILS AND EVALUATION CRITERIA:

Final Grades will be determined according to the Course Learning Activities and Final Examination/ Project/ Dissertation Assessment Details as below, and comply by the Education and Examination Regulation set forth by the University.

Throughout the course, students will learn theoretical base of the topic and they will be able to equip themselves with the practical know-how skills of Advertisement production. Also, students are expected to design a creative advertisement piece with the knowledge they have gained in the course.

During the class sessions, participation is very important input for learning process for the students. It is also vital to understand the effect of creativity input for the production process of advertisement.

PREPARED BY	Dr. Kamil Bartu Feridun
UPDATED	05.03.2026
APPROVED	