

Dentistry (English)			
Bachelor	TR-NQF-HE: Level 6	QF-EHEA: First Cycle	EQF-LLL: Level 6

Course Introduction and Application Information

Course Code:	UNI151		
Course Name:	Introduction to Serious Gaming		
Semester:	Spring Fall		
Course Credits:	<div>ECTS</div> <div>5</div>		
Language of instruction:	English		
Course Condition:			
Does the Course Require Work Experience?:	No		
Type of course:	University Elective		
Course Level:	<div> <div>Bachelor</div> <div>TR-NQF-HE:6. Master`s Degree</div> <div>QF-EHEA:First Cycle</div> <div>EQF-LLL:6. Master`s Degree</div> </div>		
Mode of Delivery:	E-Learning		
Course Coordinator:	Dr. Öğr. Üy. IŞIK ATEŞ KIRAL		
Course Lecturer(s):	Asst. Prof. Dr. Işık Ateş KIRAL		
Course Assistants:			

Course Objective and Content

Course Objectives:	The main aim of this course is to nurture discussions on what computer games are about, how games can be used in teaching / learning, and how games affect players. This course will help students build a solid foundation that will help them understand the basic problems of computer games and simulations.

Course Content:	Bu ders, ciddi oyun oynamanın temel kavramlarına ve tanımına kapsamlı bir giriş sağlar. Şu konular işlenir: oyunlaştırma, oyunlaştırma ve davranış, ciddi oyunlar ve oyunlaştırma yoluyla davranışı geliştirme, ciddi oyun tasarım belgesi geliştirme, öğrenme teorilerini ciddi oyunlara entegre etme.
-----------------	---

Learning Outcomes

The students who have succeeded in this course;

- 1) Learning the definition of serious gaming, differences from gamification
- 2) Learning basic definitions, concepts and theories surrounding gamification.
- 3) Learning how the behavior can be influenced by gamification.
- 4) Learning how to develop a serious game design
- 5) Learning how to implement learning theories into the serious game design

Course Flow Plan

Week	Subject	Related Preparation
1)	Orientation, Introduction	
2)	Introduction to Gamification Foundation and Underlying Theories - Part 1	
3)	Introduction to Gamification Foundation and Underlying Theories - Part 2	
4)	Introduction to Gamification Foundation and Underlying Theories - Part 3	
5)	Introduction to Gamification Foundation and Underlying Theories - Part 4, Gamification and Behavior - Part 1	
6)	Gamification and Behavior - Part 2	
7)	Serious Game Design Document – Requirements Specification - Part 3, System Design	
8)	Serious Game Design Document – Requirements Specification	
9)	Serious Game Design Document – Technical Architecture	
10)	Serious Game Design Document – Game Design Part 1	
11)	Serious Game Design Document – Game Design Part 2	
12)	Serious Game Design Document – Programming, Asset Acquisition and Development	
13)	Integrating Learning Theories Part 1	

14)	Integrating Learning Theories Part 2	
15)	Integrating Learning Theories Part 3	

Sources

Course Notes / Textbooks:	<ul style="list-style-type: none"> • Bergeron, B. (2005). Developing serious games (game development series). Charles River Media, Inc. • Brockmann, T., Zarnekow, R., Robra-Bissantz, S., Lattemann, C., Stieglitz, S. (2017). Gamification: Using Game Elements in Serious Contexts. In Progress (pp. 19-29). IS Springer. • Dörner, R., Göbel, S., Effelsberg, W., Wiemeyer, J. (2016). Serious Games. Springer International Publishing. • Michael, D. R., Chen, S. L. (2005). Serious games: Games that educate, train, and inform. Muska & Lipman/Premier-Trade. • Loh, C. S., Sheng, Y., Ifenthaler, D. (2015). Serious games analytics. Edited by Christian Sebastian Loh, Yanyan Sheng, and Dirk Ifenthaler. Cham: Springer International Publishing. doi, 10, 978-3.
References:	-lecturer's notes

Course - Program Learning Outcome Relationship

Course Learning Outcomes	1	2	3	4	5
Program Outcomes					
1) Has basic and up-to-date knowledge in the field of dentistry, follows scientific publications, and applies evidence-based data to his/her professional practice.					
2) Knows well and effectively uses devices, tools, and materials specific to diagnosis and treatment in the field of dentistry.					
3) Evaluates the knowledge in the field of dentistry critically, integrates it with the knowledge of disciplines in the field of health, uses it by analyzing and synthesizing it.					
4) Produces projects related to the field of dentistry, can work with other health disciplines, takes part as a member of the research team and evaluates and reports the results obtained at a scientific level.					
5) Uses information that will contribute to the dentistry profession during practice, takes responsibility, and produces solutions in unforeseen situations.					
6) Shares, compares, and exchanges dental knowledge with professional colleagues in social and scientific environments in written, verbal, and visual forms.					
7) Within the framework of social, scientific, and ethical values including patient					

privacy, communicates with patients and their relatives, knows all the characteristics of the patient, and recommends the most appropriate treatment with a patient-centered approach.	1	2	3	4	5
8) Follows technological developments, participates in national and international studies, and shares and presents own observations, experiences, and research to further advance dental practices.					
9) By adopting the principle of lifelong learning throughout the dentistry profession, follows current evidence-based dental knowledge and uses it during his professional practice.					
10) During dental practice, in cases such as abuse and addiction, performs the treatment by exhibiting the behaviors required by social ethics and legal rules, and collects and records the relevant data.					
11) Uses basic and current knowledge in the field of dentistry during professional practice for the benefit of society within the framework of national values and country realities.					
12) In natural disasters and emergency cases, takes the protective measures required by the dentistry profession; performs professional practices that benefit patients and society					
13) Generates ideas regarding health policy in dentistry, prioritizes individual and public health, and carries out preventive and therapeutic medical practices within the framework of scientific, ethical, and quality processes.					
14) Differentiates the signs and symptoms commonly encountered in the dentistry profession, makes a treatment plan and refers when necessary, and manages diseases and clinical situations regarding their urgency and patient priority.					
15) Can assume the leadership responsibility of the team he/she works for, manage it following scientific criteria, and support the professional development of the team.					

Course - Learning Outcome Relationship

No Effect	1 Lowest	2 Average	3 Highest

	Program Outcomes	Level of Contribution
1)	Has basic and up-to-date knowledge in the field of dentistry, follows scientific publications, and applies evidence-based data to his/her professional practice.	

2)	Knows well and effectively uses devices, tools, and materials specific to diagnosis and treatment in the field of dentistry.	
3)	Evaluates the knowledge in the field of dentistry critically, integrates it with the knowledge of disciplines in the field of health, uses it by analyzing and synthesizing it.	
4)	Produces projects related to the field of dentistry, can work with other health disciplines, takes part as a member of the research team and evaluates and reports the results obtained at a scientific level.	
5)	Uses information that will contribute to the dentistry profession during practice, takes responsibility, and produces solutions in unforeseen situations.	
6)	Shares, compares, and exchanges dental knowledge with professional colleagues in social and scientific environments in written, verbal, and visual forms.	
7)	Within the framework of social, scientific, and ethical values including patient privacy, communicates with patients and their relatives, knows all the characteristics of the patient, and recommends the most appropriate treatment with a patient-centered approach.	
8)	Follows technological developments, participates in national and international studies, and shares and presents own observations, experiences, and research to further advance dental practices.	
9)	By adopting the principle of lifelong learning throughout the dentistry profession, follows current evidence-based dental knowledge and uses it during his professional practice.	
10)	During dental practice, in cases such as abuse and addiction, performs the treatment by exhibiting the behaviors required by social ethics and legal rules, and collects and records the relevant data.	
11)	Uses basic and current knowledge in the field of dentistry during professional practice for the benefit of society within the framework of national values and country realities.	
12)	In natural disasters and emergency cases, takes the protective measures required by the dentistry profession; performs professional practices that benefit patients and society	
13)	Generates ideas regarding health policy in dentistry, prioritizes individual and public health, and carries out preventive and therapeutic medical practices within the framework of scientific, ethical, and quality processes.	
14)	Differentiates the signs and symptoms commonly encountered in the dentistry profession, makes a treatment plan and refers when necessary, and manages diseases and clinical situations regarding their urgency and patient priority.	
15)	Can assume the leadership responsibility of the team he/she works for, manage it following scientific criteria, and support the professional development of the team.	

Assessment & Grading

Semester Requirements	Number of Activities	Level of Contribution
Homework Assignments	4	% 50
Final	1	% 50
total		% 100
PERCENTAGE OF SEMESTER WORK		% 50
PERCENTAGE OF FINAL WORK		% 50
total		% 100

Workload and ECTS Credit Calculation

Activities	Number of Activities	Preparation for the Activity	Spent for the Activity Itself	Completing the Activity Requirements	Workload
Course Hours	15	0	2		30
Project	1	0	50		50
Homework Assignments	7	0	6		42
Total Workload					122