

**Üsküdar University**

**Faculty of Communication**

**DIGITAL GAME DESIGN**

**DEPARTMENT**

**Course Contents**

## **FIRST TERM (1<sup>st</sup> Grade, Fall Term)**

### **İLET111 Introduction to Communication**

Development of communication sciences, basic concepts of communication, the role and importance of communication in human's and social life, types of communication, communication takes place in which levels, effective communication and body language.

### **SBU157 Political Sciences**

Development of political sciences, basic concepts, political systems, the emergence and development of democratic system, parliamentary systems and processes, development and process of democracy in Turkey. Institutions and politics of democratic systems, philosophers and administrators led political sciences.

### **İLET109 Introduction to Law**

Fundamental concepts of law. Basic principles and institutions of Turkish law. Law and democracy. Roman law and its effects on Turkish judicial system. The fundamental basis of constitutional law.

### **RPSI109 Positive Psychology and Communication Skills**

This is an approach that enable individuals realize their own resources and values to be happy, peaceful, successful and highly satisfied with their lives. Usage of these resources and values creatively and appropriately allow individual to exert their personal and cultural potential with a conscious choice. In this course, students will evaluate researches and concept studies on different subjects and theoretical approaches (meaningful life, feeling of thankfulness, happiness, hope, optimism, positive emotions, post-traumatic personal growth, endurance, self-perception, strength, time perception). Students will learn how to use methods such as brain mapping, signature strengths, gratitude journal, seven ways increase happiness (learned optimism, thankfulness).

### **İNG101 English I**

Basic concepts of English. Reading texts and exercises. Listening exercises. Translation exercises. Writing essay. Speaking exercises, conversations.

### **TURK101 Turkish Language and Literature - I**

The objective of this course is to examine the main movements in Turkish literature and bring a fresh perspective on the works of authors that a graduate of Faculty of Communications is expected to have an awareness of. The lessons will include case studies and practices.

## **ATA101 Principles of Atatürk and History of Revolution - I**

The events that have taken place in the recent Turkish history; especially the occurrences surrounding the collapse of the Ottoman Empire, War of Salvation, formation of Turkish Republic, the initial years of the Republic rule, the Second World War and the transformation from the single party period will be examined during this course. Lessons consist of lectures and seminars including those by guest speakers.

## **RKUL101 University Culture I**

In this course considering the agenda of society, country and university, the topics are discussed with the students by experts within or outside the university. Sharing knowledge and experiences of communication professionals working several parts of communication sector with the students.

## **SECOND TERM (1<sup>st</sup> Grade, Spring Term)**

### **DOT102 Basics of Digital Game Design**

Information on the basic design principles and rules of game and digital game. Basic applications of planning and implementation of design thinking. Creating the competence in the student to develop creative and design thinking by placing the human in the focus. Making trials to solve complex problems and issues based on design, in this sense, developing a solution-oriented vision by using design techniques.

### **SOS126 General Sociology**

Basic concepts of sociology. Development process of sociology as a scientific discipline. Concepts, theories and approaches ruling classical and modern sociology. Phases of sociological thought. The points where sociology and communication sciences cross and feed each other.

### **İLET106 Introduction to Economics**

Basic concepts of economics. Development phases of economical thought. Microeconomics and macroeconomics. Basic information concerning international economics. Economic policies and practices in Turkey. Liberal thought and economics. Open market and rivalry. Development and underdevelopment concepts. Capitalism and globalization.

### **FEL109 Basic Concepts in Philosophy**

Emergence and development of philosophy. Basic concepts, theories, approaches. Paradigms of philosophical thought. First Age philosophers. Philosophical thought in Medieval Age. Eastern and South Eastern philosophy. Philosophy and communication relation.

### **İNG102 English II**

Basic concepts of English. Reading texts and exercises. Listening exercises. Translation exercises. Writing essay. Speaking exercises, conversations.

## **TURK102 Turkish Language and Literature - II**

The objective of this course is to examine the main movements in Turkish literature and bring a fresh perspective on the works of authors that a graduate of Faculty of Communications is expected to have an awareness of. The lessons will include case studies and practices.

## **ATA102 Principles of Atatürk and History of Revolution - II**

The events that have taken place in the recent Turkish history; especially the occurrences surrounding the collapse of the Ottoman Empire, War of Salvation, formation of Turkish Republic, the initial years of the Republic rule, the Second World War and the transformation from the single party period will be examined during this course. Lessons consist of lectures and seminars including those by guest speakers.

## **RKUL102 University Culture II**

In this course considering the agenda of society, country and university, the topics are discussed with the students by experts within or outside the university. Sharing knowledge and experiences of communication professionals working several parts of communication sector with the students.

### **THIRD TERM (2<sup>nd</sup>Grade, Fall Term)**

#### **İLET219 Communication Research Methods**

Emergence and development of epistemology. Developmental stages of methodology. Philosophical traditions that formed a basis for methodology. Relation between social sciences and methodology. Methods and technics used on social science studies. Empirical methodological tradition. Critical methodological tradition. Questionnaire technique, content analysis. Hermeneutic analysis technics

#### **İLET203 Communication Law**

Basic concepts of communications law. Development of communications law in several countries. Communications law in Turkey. Press freedom and first juristic practices. Censorship and law. Juridical regulation on press. Juridical regulation on radio and television. Cinema and law.

#### **DOT201 Game Design I**

Giving the basic information of game design. Applications for basic game design education. A focus on common elements that are essential for a game designer working in a variety of formats, from sports to board games, to computer and video games. The course focuses on digital and non-digital game concepts, and it is aimed that the students will reinforce the relationship between game, design, and gain practical competence.

#### **İLET205 History of Communication**

History of humanity and communication. Communication in first ages. Communication in ancient times. Development of communication technologies. Emergence and development of mass communication. Development of mass media in Turkey. Development of journalism. Development of radio. Emergence and development of agency journalism. Television era. Digital publishing and broadcasting. Internet media.

#### **İLET217 Professional English I**

Development of ability to use of English on communication. Ability to use of English on professional field of communication. Use of English on printed media journalism. Use of English on radio and television. Use of English on cinema.

#### **İLET209 Social Psychology**

Emergence and development of social psychology as a scientific discipline. Basic concepts and theories of social psychology. Individual and society relation. Group and group dynamics. Group and society relation. Family. Attitude and perception. Attitude scales. Balance theories. Social psychology and communication.

### **DOT203 Introduction to Game Engines**

The basic structure of game engines is emphasized within the scope of the course. Projects are carried out based on examples. Students know the structural elements in game engines and they gain application competence.

### **DOT205 Basic Programming**

This course covers the programming language and basic software rules used in video game production processes. Program software and simple program development techniques are covered in the course. Object oriented programming, software design tools and programming paradigms are also covered.

## **FOURTH TERM (2<sup>nd</sup> Grade, Spring Term)**

### **DOT202 Game Design II**

The content of the course consists of basic game mechanics, the relationship of mechanics with other game elements, the relationship of game and material, design and production processes. In the course, digital techniques and applications related to game design are given in detail, and the students gain practical competence in the field.

### **DOT204 2D Graphics and Animation**

The course focuses on basic animation knowledge. All stages of 2D Graphics and Animation production are emphasized. It is aimed to teach the necessary software and gain perspective. The course is based on developing characters and animations to be used in digital game designs.

### **İLET202 Turkish Media History**

Emergence and development of press in Turkey. Press in Ottoman period. First Turkish newspaper. Press in republican period. Juridical regulation on press. Emergence and development of radio in Turkey. Television broadcasting in Turkey. Expansion of Internet media. Media holdings.

### **İLET204 Political Communication**

Relation between politics and communication. Political systems and communication systems. Political structures and structuring of mass communication. Democracy and communication. Propaganda and persuasion techniques. Rhetoric. Political advertisement. Image and perception management.

### **İLET206 Photography**

Basic concepts of photography. Photography techniques, types of photography, art photography, photojournalism, documentary photography. Enframing at photography, depth of field, perspective and color settings.

### **İLET214 Professional English II**

Effective use of English on communication field. Development of ability to use of English on news writing. Ability to read media texts in English. Development of ability to prepare media content in English.

### **RGPK104 Entrepreneurship and Project Culture**

Students will gain for literature search, data collecting and analyzing ability in this course.

## **FIFTH TERM (3<sup>rd</sup> Grade, Fall Term)**

### **Core Courses**

#### **ILET303 Theories of Communication**

Emergence and development of communication sciences. Liberal and critical paradigms on communication sciences. Models theories and approaches within these two paradigms. The effects of mass media. Political economy of communication, cultural studies. Media and interactivity.

#### **DOT301 Game Development I**

Basic concepts in game development and introduction to unity game engine, learning interface and components, scripting, character controls, lighting, camera, physical options, animation integration, artificial intelligence and commands, user experience studies, systems, options, project termination.

### **Electives**

#### **DOT351 Game History**

The course generally focuses on the history of games and then the history of video games. Game culture, social transformations and media issues after 1950 are covered. The prominent games, qualities and factors in the history of the game are discussed. Detailed analyzes are made on the playing field and methods transformed with digitalization.

#### **DOT353 Character Design**

In the course, students practice the process of designing and creating original characters for use in games. This contributes to students' exploration of approaches to styling and costume development in order to bring their design ideas to the completed product as a concept.

#### **DOT355 Level Design**

Creation and application of 2D and 3D digital game environments. Students will break down the components of specific commercial game levels and evaluate their designs in terms of effective and ineffective structures. Studio projects involve the creation of game levels that include top-down, platform builder, horizontal / vertical sliders, and first / third person formats. The levels created by the students will be tested in the classroom and the success of the design goals will be evaluated.

#### **DOT357 Advanced Video Games Programming**

It is a course built on the basis of the techniques and practices that students have learned in the applied courses they have taken in the previous semesters. Students' general computational problem solving skills and abstract programming knowledge will be improved along with their skills in C # and Unity3D Game Engine.

## **DOT359 Digital Game and Narrative**

This course examines the role of the author in the game development process and how storytelling rules such as character, conflict, and plot are used to improve the game. Emphasis is placed on developing an understanding of game narratives, interaction, and working with design teams. Students will develop a design document that highlights characters, locations, dialogue scenarios, and overall gameplay for an original video game idea.

## **SIXTH TERM (3<sup>rd</sup> Grade, Spring Term )**

### **Core Courses**

#### **DOT302 Game Development II**

The course can be described as an extension of the game development I course. Throughout the course, students will learn about the design and production processes as well as code knowledge, which is one of the basic requirements in the field of game development. This course provides students with theoretical and practical game production processes and aims to improve their game development and design skills.

#### **DOT304 3D Graphics and Animation**

Perception and form knowledge. Modeling examples. Giving motion to modeling. Animation examples. Modeling and animation work. Three dimensional modeling and animation techniques and methods. The third dimension in the vector system. Texture, light, camera and motion.

### **Electives**

#### **DOT352 Advanced Visual Design Applications for Video Games**

This course will examine the technical and aesthetic qualities, competencies and limitations of several important graphic operations used in games today. Students will be encouraged to discover new software and even consider developing their own tools while dealing with class assignments. Two weeks will be given for each task, followed by a presentation of the work and a constructive group review. Additionally, this course will provide students with a time and place to pose specific visual design problems in their thesis project for criticism and discussion.

#### **DOT354 Gamification**

The term gamification, its history and theory are emphasized in the course. The prior topics of the course include basic models, priority concepts, and components of gamification. The effects of gamification and basic models in the digital game design process. Designing the use of applications in different disciplines based on creating an interactive environment by integrating game dynamics into a brand, business or a specific product.

### **DOT356 Virtual Reality and Game Design**

The basic principles of creating game content using 3DS Max form the content of the course. Game creation software overview. Introduction to Unity 3D, game asset production line for unity, planning levels, gameplay mechanics. VR hardware requirements, including first-person perspective scene, scene, motion tracking and stereo view HMDs. Software scripting, materials and textures, texturing, using C # and VR toolkits for VR Unity 3D. In Unity 3D, material creation and applications such as Photoshop constitute the basic content of the course.

### **DOT358 Game Audio Design**

Overview of game sound, history of sound design for game, working with sound effects libraries, and sound design in interactive environments, styles, sound and composition in game concept, game based voiceover, functional software, sound integration in game engines, sound in mobile game design, project termination.

### **DOT360 Art Direction in Game Design**

Art direction for games, visual thinking and literacy are the main topics of this course. The course focuses on the fundamentals of 2D design, bringing together these skills to create a coherent, holistic visual design for games. It is aimed to develop the game idea and to gain the competence of planning design.

## **SEVENTH TERM (4<sup>th</sup> Grade, Fall Term)**

### **Core Courses**

#### **DOT491 Graduation Project I**

In consideration of four years, realization of a research design on communication field. Determination of research subject. Determination of research methods and techniques. Data gathering and analyzing.

#### **İLET401 Communication and Ethics**

The roots and thought of ethics. The importance of the fields of communication. The ethics of communication in Turkey. Ethical approaches to press, television and Internet broadcasting.

### **Electives**

#### **DOT451 Cinematography for Games**

The aim of this practical course is to introduce game designers to the tools and techniques of filmmaking. The course provides a comprehensive overview of camera operation, sound and lighting techniques, as well as the storyboard creation process, in addition to pre-production basics. Each student writes a cinematic treatment and creates a storyboard for a movie trailer.

#### **DOT453 Psychology for Game Design**

The course deals with the psychological dynamics of game-oriented topics such as attachment theories, entertainment, user experience, and game experience. In this course, game-oriented projects are made in groups with user tests, behavioral scientific analysis techniques and usability tests, so that the students can comprehend the phenomenon of the game with a psychological background.

#### **DOT455 Content Analysis of Digital Game**

In this course, the contents of video games are examined. Content analysis of video games is based on the topics and themes the games contain on the one hand. On the other hand, it is carried out in terms of the socio-cultural environment in which the designers of the games are located. In addition, various reception analyzes are made on video game players and associative determinations are made between the content of the game and production conditions, producers and consumers.

#### **DOT457 Lighting Design and Game Development**

In this course, students learn the principles and techniques of creating virtual 3D lighting and textures for real-time gaming and creating dynamic environments. Students gain competence in using different

lighting types and styles, material properties, types of textures, cameras, shadows and effects in articulating spaces, narratives and play.

### **DOT459 Mobile Game Design**

Mobile game design is a rapidly rising sector of the digital game industry. Moving a game from rich platforms to mobile devices has proven to be risky, but the adaptation of simple "time wasters" attracts the masses. This course explores the various areas used by wireless and handheld gaming devices such as tablet games and tries to define the requirements for a successful game. One of the aims of the course is that the students gain the competence of designing a wireless game concept.

## **EIGHTH TERM (4<sup>th</sup> Grade, Spring Term)**

### **Core Courses**

#### **DOT492 Graduation Project II**

After completing research design phase, the transformation of the findings, conclusion and proposal turn into thesis.

#### **DOT402 Internship**

It is purpose that the students have experience to improve their employment opportunities according to their interests. For this, students are provided with compulsory internships for 20-25 days in related sectoral fields.

#### **ISG490 Occupational Health and Safety in Communications**

Aim and importance of occupational health and safety in the field of communication, its historical development; basic concepts in occupational health and safety, practices and legislative measures based on examples in Turkey. In the case of stress, discrimination and oppression in film sets, natural disaster situations, war correspondence, filming and making news in terrorism zones, and in busy working hours in advertising agencies; risks in computer, laboratory and studio use and employer responsibilities. International conventions on occupational health and safety for communications employees, joint decisions of the European Union.

### **Electives**

#### **DOT452 Scriptwriting for Game Design**

Students learn about the various challenges faced by video game writers and how the craft of game writing differs from traditional storytelling to create its own dynamic art form. Information is provided on how to use the medium to create rich, engaging and ultimately powerful narrative experiences for the player. Additionally, this course provides students with insight into the new opportunities available for writers in the gaming industry.

#### **DOT454 Business of Digital Games**

In this course, it is aimed to give information about the interactive entertainment industry. Information is provided on how to use aesthetic applications in the development, distribution and marketing of video games of business strategies. Thus, students are supported in the process of establishing relations with these sectors more easily after graduation and obtaining a job there. Within the scope of the course, professionals from the relevant sector are also invited to share their experiences and knowledge with students.

### **DOT456 Experience Design Research**

The course covers the evaluation and analysis of the game and game users by using the SPSS program. Topics covered in the course include analyzing player profiles in SPSS, performing statistical tests for the playing field, measuring subjective experiences, testing tools, collecting player data and analyzing digital games.

### **DOT458 Artificial Intelligence for Game Design**

First of all, detailed information about artificial intelligence is given in the course. Students gain competence and skills about how to design, program and analyze artificial intelligence methods suitable for the design of a game.

### **DOT460 Digital Portfolio Design**

Portfolio design is important for digital game design students. First of all, it is possible to reveal their knowledge, experience and competencies clearly with a good portfolio design. In this course, it is aimed to give the student competence in this direction. Within the scope of the course, portfolio design and presentation logic, portfolio examples, exhibition and promotion, digital presentation formats, etc. subjects are taught.

### **Foreign Language Elective Courses**

İSP123	Spanish I	3	0	3	5	İSP124	Spanish II	3	0	3	5
ARA123	Arabic I	3	0	3	5	ARA124	Arabic II	3	0	3	5
ÇİN123	Chinese I	3	0	3	5	ÇİN124	Chinese II	3	0	3	5
RUS123	Russian I	3	0	3	5	RUS124	Russian II	3	0	3	5