Course Information & Descriptions

(O2. An Academic Curriculum Design for Higher Education Institutions)

Major Project (Basic Design I) - ANIM101

The main aim of this course is to introduce students to the basic principles and elements of design. It is aimed to explore, discuss and interpret basic design issues based on basic design principles to give students a basic understanding of design language, how to distinguish successful and unsuccessful design, designer ways of thinking, design principles and practices.

History of Animation - ANIM103

This course is an introduction to the development and history of animation, including the origin of animation forms. The period from the invention of the movie to the present-day animation industry will be considered in a holistic way. While examining the history of animation, examples will be discussed by discussing methods, media, artists and cultures. Students are expected to complete this course with an in-depth understanding of both the technical characteristics of the film and the magic and depth of animation as an art form.

ColorTheoryandApplications - ANIM105

The content of this course includes historical and contemporary color systems. Starting with the color theorists and the color systems they have developed, how they shape the digital world today and the current systems and approaches related to color will be discussed. Theoretical information and practical approaches about color spaces and their transformation will be introduced. Students will develop original, creative designs that use relationships in color systems and develop practical solution approaches to color design related problems. In the second half of the semester, color theories such as warm-cold colors, complementary colors, simultaneous contrast law, color harmonies, etc. will be explained and students will be expected to develop a conceptual color model for digital environments as a project.

Drawing Objects andSpace - ANIM107

This course is an introductory level course that includes the theoretical knowledge and techniques necessary to express three-dimensional space by drawing in two-dimensional studies.It is a course that provides the basics for smooth transition to levels such as figure, animal, creature, hybrid or mechanical character drawings, which are the levels after simple geometric shapes. In addition to object drawings, the perspective drawing techniques required for space drawings are also given at the basic level. Students will experience various materials and techniques such as

pencil, charcoal, lavi, pastel, papers in various textures etc. as materials and media. Students will be encouraged to develop their own individual style as a form of expression.

IntroductiontoComputerArts - ANIM109

This course is a studio-based course that introduces students to digital art practices and theory. The focus will be on manipulating existing images and creating new original images using the possibilities of computer and computer-related equipment and software. The necessary approaches, techniques of drawing and painting design programs are aimed to gain basic competencies to the student. In addition, the effects of computer technology in the art world will be examined in the historical process and various avant-garde artists will be mentioned. In today's world art, students and designers are expected to reach their current approaches and develop their original projects by providing explanations and comments about the works they produce computer-centric.

Fundamentals of Animation - ANIM111

This course will introduce students to 12 principles, the basis of animation, as applied. Although the course includes presentations and discussions, it is a project-based course. In the lessons, historical processes related to the art of animation and the production of images in motion will be examined, and from time to time, leading approaches and applications of the directors will be included. In addition to the content of the course, which is based on animation cinema and 12 basic principles of animation, students are also expected to make products for their original projects at the basic level..

TurkishLanguage - ATDE101

In this course, Turkish grammar, language and culture relation, sounds and sound harmony, nouns, adjectives, and to make studies based on topics such as grammer rules, spelling mistakes and punctuation, abbreviations, word structure and work, dictionary, spelling work, book reviews, literary types, creative writing and travel writing. To inform students about the history and current situation of Turkish and to work on texts written in Turkish. Definition of language, feature of language, language and cognition, language and society, language and culture, language families, language structure and resources, the place of Turkish language among other languages, phonetic features of Turkish, phonetic rules, breaking in Turkish, twisting, word categories in Turkish, spelling rules , composition, elements of sentence and analysis examples will be examined.

ForeignLanguage - AYBD101

This course aims to improve students' grammar knowledge and linguistic skills in English language to basic and lower-intermediate level. The course encourages students to grasp everyday

conversations, capture key points of a conversation or news in the press, and express their individual thoughts and feelings in writing and verbally. The course consists of 14 units covering reading, writing, speaking and listening skills that will be covered each week. The units basically offer integrated skills for the development of English skills and the understanding of English culture.

History of TurkishRepublic - ATRH101

This course Revolution encompasses a form of National the Historic content Struggle Period, the Kemalist Thought, the Republic of Turkey was established under what conditions, and the death of Atatürk are planned to be discussed developments related to recent history until the 1980s.

Orientation - ANIM113

In this course, it is aimed to introduce the university to the newly acquired students, to ensure that they do not feel the foreigner you choose, and to make them fuse and become friends. Orientation: orientation; fitting or adapting to environmental conditions, getting used to; means a new environmental exercise program. In this context, the way the university works, its organs and socio-cultural facilities will be introduced to students.

1. YEAR SPRING SEMESTER (2nd)

Major Project (Basic Design II) - ANIM102

In this course, students who are beginning to master the basic design principles and elements are expected to start creating original and integrative designs within this framework. These unique design tasks may vary by the course coordinator optionally depending on the class situation. Students, who can deal with design principles and elements in an original and hybrid way, are expected to exhibit their individual search for animation design.

Mythology &Iconography - ANIM104

The main aim of this course is to examine the concepts that are subject to legends in the history of humanity by defining the attributes attributed to the stories and characters created from Ancient Greek and pre-Islamic Turkish mythologies and legends. It can be included in the course content in symbols and pictures that have left a mark in different cultures, beliefs and legends by the instructor.

Introductionto Visual Culture - ANIM106

It contains information from Da Vinci to Warhol, from the production of the first digital image to Facebook, in images and culture. Within the scope of the lesson, we will explore how visual discourses shape our perception of our world by looking at a wide array of images such as visual arts, advertisements, movies, games, popular culture, news, scientific studies, generics and more.

We will question how images, which are the main subjects of visual culture, circulate in the digital environment and how it affects our life. Finally, we will discuss the visual culture perception of the city we live in with its sociological and cultural dimensions and write research articles in this context.

Drawing Natural Forms andThe Human Figure - ANIM108

The content of this course is specially focused on forms from nature (tree, rock, etc.) and human figure drawing. The aim of this course is to examine natural forms by researching them and to have information about the details of forms from this way. Similarly, technical issues such as measurement, proportions, placement on the paper, line quality, light and shading, volume, scanning, and composition of the pattern drawing in posture, short drawings, porter and anatomical details for human figure drawing will be handled in practice. It is expected that the subjects learned in this course will be prepared for the lessons such as the drawing of animals, creatures, mechanics and their hybrid figures, which are the continuation of the lesson.

Perspectiveand Technical Drawing - ANIM110

The main content of this course is the drawing and pattern practices that can solve the space, material and mechanical requirements that may be needed in animation design, the deficiencies that may be encountered while visualizing, in terms of basic perspective and technical drawing competencies. It is expected that student projects will be produced in the course by creating spatial drawings, weapons, transportation vehicles, spaceships, etc. in animated films and computer games according to the different perspective (parallel and conical perspective etc.) types and rules. In addition to the tools and equipment, character drawings that are the subject of perspective drawing from different perspectives are also within the scope of course projects.

Image andTime - ANIM112

Students will learn about time-based computer image production and imaging techniques and context in a studio art practice. The course will focus on time perception, analysis of a video file, creation of still and animated digital images, use of still motion images and sound elements together. The course also examines the contemporary and experimental uses of digital media and the technical aspects of the software that make these uses possible. In the theoretical part of the course, the first examples of motion pictures, the motion phases of the motion, from the black and white cinema period to the PC revolution in the '90s, will be studied with the students with presentations, demonstrations, and discussions.

Turkish Language II - ATDE102

In this course, Turkish grammar, language and culture relation, sounds and sound harmony, nouns, adjectives, etc. grammer rules, spelling errors and punctuation marks, abbreviations, word

structure and study, dictionary, spelling study, book reviews, literary writing types, creative writing and to make studies based on topics such as travel writing. To inform students about the history and current situation of Turkish and to work on texts written in Turkish.

Foreign Language II - AYBD102

Students will study grammar subjects at the UpperIntermediate level such as Subjunctive, Inversion and NounClause. These topics will mostly cover the first half hour of the lesson and will focus on discussion and presentation techniques through the readings presented in the remaining time period. The method to be followed is CommunicativeBasedMethod (Communicative Based Approach) and GrammarTranslationMethod (Grammar Translation Approach) will be used on the basis of the subject studied during the course. The objective of the current course is based on the processing of eight grammar subjects at the Upper-Intermediate level. The next step will be to scan to find the main idea of any given text, to search for an expression in the simplified text using the browsing method, to make inferences and interpretations, to provide additional materials to improve the pronunciation, and to gain the reading, writing and pronunciation skills required by the upper-intermediate level. As a result, improving the English level of students for the level they can use in academic and business environments is among the goals of the current course.

History of TurkishRepublic II- ATRH102

Ataturk's Principles and History of Turkish Revolution purpose of the course is that the establishment of the Republic of Turkey to explain the circumstances under which university students, the Kemalist Thought and the philosophy it is based, is to adopt principles and modern values next to it.

2. YEAR AUTUMN SEMESTER (3rd)

Major Project (Animation Film Practice I) - ANIM201

This course is about examining concepts, characters and storyboards for basic animation production. It focuses on creating movement and expression by using traditional or electronically generated image sequences. As it is an introduction to traditional animation, it includes topics such as design, storyboard, stop-motion and character animation. Give information for students about animation techniques required to design animation sequences.

2D CharacterAnimation (CelAnimation) - ANIM203

This course is a studio-based course that aims to familiarize students with the classic Cel animation (onion skin animation) technique and 2D character animation. The scope of the course includes flipbook applications, hand drawings on the light table, transferring the drawings to the

computer environment, serializing, discussing the revisions on the movement and the presentation of the student projects. It is important to support students' visual aesthetic tastes and creativity.

Art of Stop Motion Animation - ANIM205

This course is a practical course focused on craft studies such as puppet making, armature design, space, stage design and production for stop-motion animation technique. Students will be involved in individual and group work in the project, as well as new materials such as 3D Printer, CNC, as well as physical material (wire, metal parts, aluminum foil, polymer clay, etc.) of a wide variety of tools (wires, metal parts, aluminum foil, polymer clay, etc.). You will have the chance to experience techniques and approaches from different fields such as and mold techniques. Within the scope of the course, advanced composition, character, costume and space will be produced and it can be said that students who want to improve themselves in this field will be useful in terms of material and technical development.

Drawing Natural Forms andtheAnimalFigure – ANIM207

The content of this course is specially focused on nature forms (tree, rock etc.) and animal anatomy drawing. The aim of this course is to examine natural forms by researching them and to have information about the details of forms from this way. Similarly, for animal figure drawing, technical subjects such as animal moves, drawings from references, muscle and bone structure and measurement of pattern drawing in anatomical details, proportions, placement on the paper, line quality, light and shading, volume, texture, scanning, the composition will be handled. It is expected that the subjects learned in this course will be preparation for the lessons such as drawing of human, creature, mechanic and their hybrid figures, which are the continuation of the course.

StorytellingforDigitalArtists - ANIM209

This course focuses on digital storytelling tools. Students will use various open source development platforms (unity etc. game engines) and tools. Students will try ways of telling their interactive stories from the first-person perspective or alternative approaches, taking into account the principles of narration, audience, and design, and will use the unique features of these tools to create their unique style. A preliminary digital qualification is not required for the course, the course will mainly focus on the effective telling of the story. There is no standard way to transform data into visual and interactive forms, and each student is responsible for seeking out their own way.

IntroductiontoProductionTools - ANIM211.1 - (DIRECTOR Profile)

This course focuses on increasing awareness of the project workflow. They will learn how to make critical analysis for their animation project, how to facilitate its production, how to design project work steps and time management. He/she will have information about the professional project tracking and management tools used in the studios where he/she will design and follow up

and will be expected to use one of these tools. Students will need to take a lot of time outside the classroom to take responsibility for planning and completing their homework projects.

WaterColourTechniques - ANIM211.2 - (ART Profile)

This course aims to introduce students to classical and contemporary watercolor painting techniques through applications. The course aims to introduce animation character or concept artist candidates to the potential of watercolor material in these works. Lessons are planned as activities focused on application and painting techniques for specific goals. It is important to try different brushes, techniques and methods, discuss the effects in the group and encourage the student.

GestureDrawing - ANIM211.3 - (ART Profile)

Capturing the movement in the figure is one of the most important topics in the study of the living form within the discipline of fine arts. Figuration has a long history of art. In this course, which we will go through theoretically, we will experience how we express and see the motion in live form and how we can use it in the animation production process.

Stop-Motion StudioPractice - ANIM211.4 - (ANIMATION Profile)

In this course, the student will learn how to create motion illusion according to the possibilities of the material to be used, and how to create animation sequences with a digital camera and a tripod and capture the motion. By sharing the stages of the project with group friends, the student will also add their skills to collaborate in his personal development, and at the end of the process, he will be an individual who has experienced and presented stop motion animation production.

StoryboardandAnimatic - ANIM211.5 - (ANIMATION Profile)

This course is a studio based course focusing on the basic topics related to storyboard and animatics. Storyboards are drawing series that tell the story, which is also known as the visual version of the script, with fast and rough drawings. In the course, the students will be introduced to the perspectives related to storyboard, characterization, eye orientation throughout the drawings and assembly of the series. They can apply the skills they have acquired in this lesson in other areas, such as 3D animation lessons or film projects. In addition to the storyboard topic, the course will focus on animatic production.

3D LowPolyModeling (for Games) - ANIM211.6 - (MODEL Profile)

This course teaches the basics of 3D game content production from a broad perspective. Students will learn concepts related to polygon modeling, modeling tools for design and animation software such as 3D StudioMax, Maya, Blender, and to reinforce this information, corner point (vertex), edge (edge), face (polygon), element (They will make modeling applications with sub-objects such as element), border span (border) and commands (bevel, extrude, inset,...) that work

for these sub-objects. In addition to the structurally sound modeling approaches, they will master the optimization methods for leveling detail with the LOD (Level of Detail) and managing the polygon budget.

CharacterModelingandTextureMapping - ANIM211.7 - (MODEL Profile)

It is aimed that students have information about the types of characters used in three-dimensional computer games, drawing the charcoal sketch of the characters, creating two-dimensional vector blueprint drawings and three-dimensional models, and gaining knowledge and skills to make the model ready for the game. Lowpoly modeling using polygon modeling methods with 3D Max program, optimizing the model, applying coating coordinates, texture coating and preparing the textures with AdobePhotoshop and Corel Photo-Paint photo processing software are among the objectives of the course.

Fundamentals of RIGGING - ANIM211.8 - (RIG Profile)

It is a course focused on the processes, approaches and techniques of reinforcement (RIG) for all kinds of elements that need virtual skeletons and mechanisms for animation characters and animation on stage. Within the course, CAT (CharacterAnimation Toolkit) and CharacterStudio (BIPED) systems will be introduced, the character's bone / joint structure, axis constraints, vertex staining, weighting, comparative and applied introduction of Physique and Skin modifiers, creating controllers and associating skin, mimic, etc. with virtual armatures covers basic issues. The tools of 3D StudioMax and Maya software will mainly be used in the course. Students are expected to produce their Rig solutions at a basic level.

Fundamentals of Game Art - ANIM211.9 - (GAME Profile)

This course focuses on the creation of game worlds and the production of content through artistic techniques. Teaches the basics of art production for games from a wide perspective. Students will learn to work in the field of game art to develop a general understanding of game editing and related processes. In developing students' basic skills, compelling conceptual ideas and skills such as individual problem solving are given importance. Students will be expected to develop a project where they will work in groups to create a compelling game world.The course process will consist of demonstrations, classroom workshops and home projects. The final projects developed by the groups will be used as a platform in terms of later courses.

2.YEAR SPRING SEMESTER (4th)

Major Project (Animation Film Practice II) - ANIM202

This course is the main project course which is the continuation of the first course with the same name. Students who have successfully completed the Animation Practices 1 course are expected to have motivation and knowledge about the basics of animation. In this course, students are expected

to use a more detailed and advanced understanding of animation films while producing their own animation projects, as well as using digital technologies in their projects. The course is focused on the animation film creation process and there is no restriction in terms of digital or traditional techniques in film production.In this course, students will also be taught about the techniques used in today's animated films.

2D ComputerAnimation - ANIM204

This course provides the student to develop the basic skills required to produce digital character-based animation, motion graphics, generic, title and visual effects for film and video production using 2D animation tools. Students learn and experience the arts of storytelling, animation, and cinematography while developing a critical and creative eye for the use of these concepts in existing media venues. Students use various design tools such as ToonboomHarmony, AdobeAnimate CC, Krita, Photoshop, Illustrator and AfterEffects to develop the concepts mentioned after careful planning.

DrawingCreatureandMechanicFigure - ANIM206

This course combines the three-dimensional space, human and animal anatomy, natural forms, and the perspective of space and the perception of perspective and space, which have been processed based on drawing in the previous 3 semesters of pattern-based lesson content, and can create fantastic creatures, monsters, and mechanical characters. workspace. The "Mecha" robots in Japanese animals examine the beings depicted in the universes in fantastic fiction books and the characters in popular movies and direct students to make new productions in this field. Within the scope of the lesson; they are expected to create unique creatures and robots. The starting points of these characters may be inspiration from human-plant-animal-mechanical characters or mixed hybrid characters.

SketchingTechniquesforAnimation - ANIM208

This course focuses on developing the ability to interpret ideas and concepts with sketches. The course is a studio-based course and aims to support students to experience their drawing techniques and find their style in this way. It is aimed that students will have knowledge about different types such as fiction, technical or children's books or artistic drawings, and reach the competence to use traditional material and digital media drawing tools based on this information.

ProductionPipelineManagement - ANIM210.1 - (DIRECTOR Profile)

This course focuses on animation film project workflow management. The work flow steps from the beginning of a movie project and the optimization of managing these steps will be discussed. Students are expected to design the workflow of a movie project.

ScriptWritingforAnimatedFilm - ANIM210.2 - (DIRECTOR Profile)

This course is designed to shape creative processes by providing animation students with tools to develop narratives. Students will learn to write their comics and animation stories by scripting their ideas, writing stories to characters, studying scenarios from ancient legends to contemporary movies, books to computer games, and using various writing techniques, structures and themes. Students will develop story writing outlines using fictional biographies and character histories. They become absolute authorities in the story universes they create from their imagination world; movie, tv, game, animation, comics etc. they will produce scenarios for platforms. Students; They examine what the story and events cycle needs in animation, how to develop character types, how to determine themes and universes, along with their theoretical background.

Pre-visualizationforAnimation - ANIM210.3 - (ART Profile)

This course will focus on the pre-visualization (also referred to as computational pre-rendering, preview, (wireframe) of wireframe windows) of the film performed before finalizing the animated films. Pre-visualizations are a stortboard and then animatics produced with 3D software. In detail enough to be understood enough to evaluate the film and revision decisions, i.e. the result is a representation of the geometric details, textures, shadows, reflections, etc. of the film. Students will learn about which headings and how to make reductions, the Pre-visualization structure (PrevizStructure), restrictions, installation and workflow, camera theory, lighting and rendering, visual effects editing and timing.

DigitalPhotography - ANIM210.4 - (ART Profile)

Students will better understand the ability to achieve successful images with DSLR cameras in this course. They will learn practically about exposure, ISO/ASA concepts, aperture usage, net depth of field, frame, composition, light usage, angles, and shooting techniques, as well as the use of para flash and trigger equipment. The course, which will also be mentioned in basic photography concepts and further techniques, will, of course, include hands-on screenings and basic digital image editing techniques with the camera. To create fascinating images and to have an advanced understanding of composition, the work of photographers will be discussed in comparison with students' photos. The emphasis that the competencies to be acquired in this course will be necessary, especially in stop-motion scenes, along with many areas, is important for this course.

Fundamentals of FacialAnimation - ANIM210.5 - (ANIMATION Profile)

The face and mimic expressions, which can be examined under the heading of advanced studies in three-dimensional animation, are associated with the concept of "rig". This course is one of the areas of study that students will choose in their professional lives as a special area of expertise in

such subjects, to create facial and mimic expressions of characters, to determine their reactions by empathy with the character, and to do so. router to the rigging area.

3D High PolyModelingforAnimation - ANIM210.6 - (MODEL Profile)

Modeling is the process of developing a mathematical representation of a three-dimensional object surface in 3D computer graphics and an important area of 3D computer animation production. This course is aimed at developing expertise in the construction of organic and inorganic high detail models with 3D software. The course will be examined by following various modeling techniques, workflows and geometry types such as parametric, NURBS, poly, etc. and in-class applications. More time will be spent on the individual development of the students in the course and presentation, discussion and criticism sessions will be held for the exchange of knowledge and experience.

ClayModeling - ANIM210.7 - (MODEL Profile)

This course focuses on modeling with clay material that will be the basis for 3D digital designs. Within the scope of the course, clay and character modeling studies will be carried out, including insertion and subtracting modeling, creating the form with light shadow tracking, and the use of basic modeling tools will focus on classical sculpture techniques. Students will be expected to take the molds of the statues they have modeled and cast at the end of the semester. This is intended to gain the traditional modeling skills required in digital sculpture and modeling software such as ZBrush, Autodesk Mudbox and OculusMedium in a virtual reality environment.

Scripting Basics forRIGGING - ANIM210.8 - (RIG Profile)

It is an entry-level course where basic coding topics are introduced for rigging, which covers basic topics such as anatomy, joints, skeletons, and weight, which will be used in animation.

Introductionto Game Programming - ANIM210.9 - (GAME Profile)

This course includes introduction topics related to game programming. The course will focus on 2D game objects and loops. Topics such as the management of inputs, collision detection algorithms, memory management will be discussed through various interfaces of a mouse, keyboard, touch screens, sensors, tactile controller. Students will be expected to make presentations on the specified subjects.

3. YEAR AUTUMN SEMESTER (5th)

Major Project (Animation Film Practice III) - ANIM301

This course is part of the 5th course of undergraduate education. includes advanced animation applications and projects that apply to the student. Students are expected to experiment with original project-based applications and different techniques. Advanced innovative approaches to theoretical infrastructure are examined concerning their projects. In this course, students are encouraged to use digital and new media applications, including CGI and VR.

3D ComputerAnimationI - ANIM303

The course, which focuses on promoting 3-D animation software and implementing 3dsmax and Mayan software, is an initial 3D computer animation course based on the 12 principles of animation. This course uses 3D modeling and animation software; animation tracking tools such as animation approaches, dope sheet, and graphic editors, automatic and manual keyframe creation, animation based on the video time base (time base) of the target environment, scale time scale, the management of the input and output speed acceleration through the dope sheet and graphic, as well as the techniques of reviving of parameters models and modifier parameters.

3D CharacterAnimation - ANIM305

This course contains concepts, tools, and techniques used in 3-D character animation. The movements that are expected to be created within the scope of the course will be treated as a means of emotions. The basic principles and animation possibilities of the 3D environment will focus more on the nature of the movement. Students are expected to have ready availability in subjects such as 2D character animation, 3D model topology, rig operations, the dominance of software, animation tools in the software.

Introductionto Film Video ProductionTechniques - ANIM307

The course covers film/video production theory and practice. Students are expected to know the rules of camera use, voice control, basic orientations, lighting, and editing. Also, it is another expectation that students learn video production/post-production terminology and use this terminology expertly. In this context, video editing, rough editing, video, and audio transition and use of effects, as well as the analysis of a video, video recording formats, compression formats, such as theoretical topics are covered by the course.

FreelanceAnimation - ANIM311.1 - (DIRECTOR Profile)

This course is what graduates can do freelance without being connected to a studio. And freelance is a course that focuses on managing relationships with studios, raising awareness on issues such as individual, independent or group work. Illuminating the positive-negative aspects and differences between studio circles and freelancers as an artist (as it should be just an artist, but also his agency, producer, accountant, supporter), to get a job and create what kind of network it needs to establish to continue, how communication skills should be, how to stay in communication with the industry, agreements will focus on issues such as contracts.

IntroductiontoMattePainting - ANIM311.2 - (ART Profile)

In this course, the concept of MattePainting will be conducted realistically by visualizing the backgrounds that are impossible or costly to photograph, or imaginary places that are not in reality. Mattepainting's history before computers will be shown when layer-by-layer with glass sheets is worked and is used in today's cinema industry with periods when it is fully hand-made. In addition to adobe photoshop and CorelPainter, free open source software such as Krita will also be introduced to students. In the course, the choice of software to focus on painting techniques, color theory, space lighting, lighting with lighting and creating ambiance will be left to the student.

DigitalPainting - ANIM311.3 - (ART Profile)

This course is a studio-based course where independent painting tools are introduced in digital media. Digital animation and the backgrounds of games, which center the processes for the production of digital images to be created for texture and all other surfaces, including digital illustration as an alternative workspace is one of the basic courses. In addition to adobe photoshop and CorelPainters, free open source software such as Krita will also be introduced to students. Students will be expected to present digital portraits at the end of the semester, and digital versions of fantasticism.

DigitalFacialAnimation - ANIM311.4 - (ANIMATION Profile)

This lesson will focus on face animation in the 2D digital environment. The lesson is how to set up face animation settings with Toonboomharmony and AdobeAnimate software, how to create controls. Topics such as how to optimize settings according to project requirements will be discussed. They will be expected to transfer the techniques they have learned in traditional methods related to all mimics, such as eyes, Eyebrows, Lips, etc. to the 2-d computer environment. Students are expected to set up face rigs for their own characters and produce demo reel video from this installation. In addition, the report of student projects in the format specified in the course information package is also requested.

AcquisitionandProcessing of 3D Geometry - ANIM311.5 - (MODEL Profile)

This course is a project-based course that focuses on the rebuilding of real objects, living things, and the geometry of assets such as spaces, and the photogrammetry method of color information in a computer environment. Point clouds of object geometries using various algorithms (mapping point discovery, back roof, etc.) of trapping photos taken from the real world using the StructureFrom Motion (SFM) method of photogrammetry in the course, and polygon models production. In addition, the issues of coating tissue production and manual revision of this tissue will be processed for texture and color properties from a photographic survey. Shooting from students for projects designated at the beginning of the semester, rebuilding in numerical media, transferring to other programs, reknitting topology(retopology), reconstructing coating coordinates (UV mapping) and texturing (texturing) will be expected.

Advanced RIGGING Techniques - ANIM311.6 - (MODEL Profile)

This course is a studio-based course where advanced Rig techniques are given in practice. The course will cover advanced topics such as joint restrictions, forward and reverse movement (ForwardKinematic (FK), InverseKinematic (IK), reverse foot, arm twists (arm-twist), FK for finger, blendshapes for the face. During the semester, students must complete two different characters fully equipped (rigged) at the above level. The peer evaluation method will be used for testing characters.

Animationfor Video Games - ANIM311.7 - (MODEL Profile)

This course is a studio-based course with concepts and approaches to creating animations that can be applied to video games. Students are expected to perform their animations based on the limitations of a real-time video game rather than an animated movie. In addition to animation subjects, there are also partial studies on the production of game assets. The limitations of real-time gaming engines in the course, seamless content (geometry, material, animation, bake animation, light, camera, etc.) between its rig systems, 3D design software and development platform, problem-solving skills, file formats (mainly fbx and options)

YEAR 3: SPRING SEMESTER (6th)

Major Project (Animation_Practice– IV) - ANIM302

The scenes and actions to be determined under the guidance of the course walker will focus on the story and character-oriented animation film project that students will produce originally and individually. Students have the experience of creating their own characters and stories. This period of projects will be produced by targeting animation festivals. Thus, students will have the chance to showcase their work and see the work of other directors.

3D ComputerAnimation – ANIM304

This course is a continuation of the course of the same name in the previous period and is intended to gain a higher level for undergraduate students studying animation, games or interactive digital media. Designed to provide students with opportunities to develop a strong skill base that will enable them to specialize in 3D digital art, animation and visual effects. It is important to encourage the student to develop his own style in this course. The course is the traditional and technical aspect of animation, physical modeling drawing (3D sculptures), the Basic Principles of animation, and developing artistic abilities such as creating convincing movements, as well as using 3D animation techniques to date creative and experimental works allow us to produce.

Cinematography Visual Design - ANIM306

Cinema technical, methods and possibilities can be provided in different areas in terms of visual design how to use it. For this reason, students are asked to be guided in the light of these unique approaches by addressing the different approaches, applications, and works of artists that exist today. Within the scope of this course, which will also analyze successful samples, students are expected to make applications and theoretical presentations.

Creative ResearchMethodsand Professional Ethics - ANIM308

This course focuses on creative research and professional ethics. Creative research is a new area that wants to develop new ways to understand, position, and restructure information. The other focus of the course focuses on science philosophy, hypothesis development, problem identification, evaluation of scientific literature, project editing/application preparation, method selection, experiment design, data collection and analysis, presentation and publication of research results, and academic ethics.

Sound forAnimation - ANIM310.1 – (DIRECTOR Profile)

This course aims to promote audio design in a wide range of ways and in a variety of ways for video and multimedia productions. Throughout the course, it will focus on how sound design means and how sound works with the visual. Examples of a wide range of audio usage, ranging from animation to art, performance, web interfaces, moving graphics to video games, will be examined. How the audio is used in formats, such as strengthening the effects of moving images and adding depth to visual format and sound, or giving clues about what will occur visually in the application.

Fantasy FigureDrawing - ANIM310.2 - (ART Profile)

This course is a studio-based course focused on fantasy figure drawing. Students who take the course are expected to be above the basic level in figure drawing and digital painting tools. Naturally, more general topics such as creating more advanced visual language rather than basic drawing subjects and digital painting tools, anatomical proportions, figure construction, composition, sketch, fantasy types, light, value, color and visualization, and character's personality, race (human, robot, etc.), hybrid, elf, dark elf, mermaid, alien, orc, troll, giant, appearance (body shape, clothing, weapons, equipment, face, etc.) character development topics will be handled in practice, and also skin tones, clothes, metal for digital painting Additional topics such as palettes, atmospheric perspective, exposure of the character for all kinds of textures and materials will be discussed in the course, etc. Students will be expected to submit an original project file consisting of sketches, character building, digital painting stages respectively, starting from the character development question list.

Animation in VR - ANIM310.3 - (ANIMATION Profile)

This course focuses on using Virtual Reality (VR) technologies for animation creation. Within the scope of existing 3D design software such as Maya, the use of VR tools are covered. However, new trending VR software such as ANIMVR and QUILL will be emphasized. The course will highlight how traditional hand drawing methods based on 12 principles of animation will be realized in the VR environment, how traditional and digital possibilities will be combined with VR technologies. The purposes of using animations produced in the VR environment and how to transfer them to other animation software will be introduced. At the end of the term, students will be expected to present a short animated film produced in the VR environment.

HybridAnimation - ANIM310.4 - (ANIMATION Profile)

This is a course based on experimental projects, which deals with the use of different genres together in animation production and the new effects they will create interactively. This course will focus on combining traditional methods, using digital methods in-house or combining digital and traditional methods to discover new animation production methods. Students will be encouraged to be free and creative in using all kinds of new-old techniques together, from Cut-out to 3D CGI or VR-based techniques.

3D Modeling in VR - ANIM310.5 - (MODEL Profile)

This course focuses on using Virtual Reality (VR) technologies for 3D model creation. The course will focus on MEDIUM, a new generation of design tools, known as finishing software. VR's innovative user immersive modeling possibilities will be introduced through the MEDIUM software. The production of the digital sculpture will be covered from a VR perspective, and additional topics will be covered in retouching 3D geometries produced by other techniques such as painting and photogrammetry in the VR environment. VR modeling tools, which are a combination of traditional sculpture modeling tools and computer-aided 3D modeling tools, will discuss their strengths,

weaknesses, and innovations, as well as the problems and solutions that arise when transferring VR-produced content to other software used in the industry.

DigitalSculpting - ANIM310.6 - (MODEL Profile)

This course focuses on sculpture creation in digital environments. The course is a project-based course and will be studied with digital organic modeling tools such as Zbrush and Mudbox during the course. The more innovative VR modeling tools will also be introduced briefly in the course but will be carried out on non-immersive two-dimensional screens using mainly graphic tablets. Within the scope of the course, students are expected to produce at least two digital sculptures, bust, and fantastic figure, and to color/texture at a basic level.

Advanced Scripting forRIG - ANIM310.7 - (RIG Profile)

This course is a project-based course in which advanced rig applications will be introduced. Students will learn how to plan a rigging strategy based on scenario and storyboard. Students will build skeletal arrays and connections for their characters, apply skin deformations and aches for ideal flexibility, adjust axis constraints, and customize controls for arc-based forward motion (arc-based FK) and target-oriented reversal (HR), controlling additional performance. will do their work. In this course, testing of motion capture data with the rig produced and its integration into game engines will also be examined. At the end of the semester, a demo reel video containing all the movements of the characters that are rigged and a course application report in PDF format will be delivered.

Advanced Game Programming - ANIM310.8 - (GAME Profile)

This course focuses on the practical and conceptual aspects of digital game creation. This course aims to develop the basic coding skills required to program games while basing these skills on the broad theoretical framework of game-based interaction. Students will have the opportunity to learn various game development tools and approaches while exploring the various theoretical, social and other aspects of modern game culture and will learn the following topics during the semester; Developing game mechanisms on the Unity game development platform, integrating ready-made asset and code libraries into their projects, transferring digital content such as 3dsmax and Maya to their own created objects, models, animations, etc. to these platforms, and solving workflow problems between the software, games they develop, desktop and mobile (IOS and Android) platforms. Students will be expected to realize a 3-dimensional game project within the scope of this course.

4. YEAR 1: AUTUMN SEMESTER (7th)

Major Project (AnimationFilm Practice V) - ANIM401

This course is a studio-based course that will be carried out in coordination with the completed project course, where the student can produce original works under the guidance of the instructor. In this course, the student can work individually as well as do group work on the condition that they produce larger-scale works. The student projects will focus on the narrative quality of the story and improving the aesthetic and technical quality of the animated film.

Research Project Preparation – ANIM403

This course is for students to gain familiarity with the project culture. The course aims to provide students with the necessary knowledge and practice to prepare and run research projects such as project logic, types, project preparation, application, project management, collaborative work, healthy communication with project partners, project management/tracking software. Students are expected to prepare a project application in a given format for a selected fund.

GraduationProject - I – ANIM405

This course is a graduation project that students will produce under the guidance of the course advisor. The project to be produced in the course is a two-term project, and the evaluation of this period will be done in the form of a process evaluation, taking into account the work done and the point reached. Students are expected to produce an animation film with a completely original subject and approach as a graduation project. The student is expected to participate in festivals or competitions with this film, and also to be screened to faculty members and students.

OilPainting – ANIM407.1

This course is designed to introduce the basics of oil painting in the technical skills and perception focus. It will focus on oil painting techniques, method, composition, and color theory. Pictures will be made from still life, landscape, and live model. Besides, concepts such as figure/ground relationship, linear perspective, composition, space, the visual perception will be given. Developing students' styles and encouraging their creativity are among the priorities of the course.

Motion Captureand Editing – ANIM407.1

In this course, motion capture systems (optical mechanics, inertial, etc.) will be introduced to the students. Calibration to systems, recording, and editing motion data will be examined. The course is project-based, and students are expected to produce animations or motion pictures and short animations for motion capture technologies

Music and Sound Effect in Animated Film – ANIM407.1

This course will focus on the selection, creation, editing, processing, and integration of sound and music for animation films and computer games. The course will be partly theoretical and studio-

based. Students can work individually or in groups on their project creations to explore the relationships between image and music in the film. Students will be explored the relationship between sound effects, dialogue, and music, and are also expected to explore digital sound techniques and basic concepts of MIDI and learn basic skills with synthesizers.

Advanced Film / Video ProductionTechniques – ANIM407.1

This course aims to provide students with knowledge and practice on working with moving images (video editing, video effects/transitions, audio editing, sound effects/transitions, etc.). At the end of this course, students are expected to gain the ability to apply from the beginning to the end, especially in the fields of film/video graphics, editing, video editing, video effects, and to reach the level of competence and knowledge that can work in any film/video project.

Advanced DigitalCharacterCreation – ANIM407.1

This course is a project-based course that focuses on character creation by focusing on character profiles for movies and games. The process, which starts with the examination of objects that can refer to character design in the course, will cover all processes from the production of a detailed model with a high number of polygons to the colored/textured visual presentation of the character. Organic parts of the model and weapons, etc. modeling, painting and texturing of hard-surface objects, clothing, and other accessories of equipment, adding effects such as filters, light highlights, lighting for the presentation scene, adding shadows and final visualization.

Facial RIGGING Techniques – ANIM407.1

The course will focus on industry-standard character face rigging methods. Students who will be introduced with Joints and BlendShape methods will be expected to make facial rigging (reinforcements) of their characters including meaningful facial-poses, creating controls for eyebrows, pupils, mouth, etc. The course is project-based, and students will be evaluated on their face settings. They are expected to submit a demo video and a project report in PDF format, in which all the moves their characters can display.

Visual EffectsforAnimation – ANIM407.1

It is a course that focuses on the visual effects (VFX) concepts that senior students met in the previous years and their awareness started to occur. In the course, the applications and types related to the visual effects field are examined with the basic examples and applications in the production. In the course, video editing and visual effects applications such as AdobeAfterEffects, as well as tools in 3D design and animation software such as 3dsMax will be examined. A wide range of effects and construction techniques will be introduced (Green / Blue Box switching, particle flow effects (snow, spray, etc.), lens effects (glov, lens flare, etc.), explosion, etc.)

AugmentedReality Applications – ANIM407.1

New emerging systems such as virtual reality (VR), augmented reality (AR), mixed reality (MR) can provide users with incredibly different experiences. Augmented reality offers augmented content created by overlaying computer-generated content on the real-world image. Based on this main idea, the course focuses on developing AR-based applications and presenting the computer-generated content to the bill on smartphones, tablets and computer screens by associating it with the real world. Methods that use and do not use markers to align digital content with the real world, development environments (Unity, etc.), AR plugins (Vuforia, etc.), media types that can be used in AR (video, 3d model, animated model, casual images, visual effects, etc.) will be introduced. Students will be expected to develop and present an AR application.

YEAR 4: SPRING SEMESTER (8th)

Major Project (AnimationFilm Practice VI) – ANIM402

This course is a studio-based course that will be carried out in coordination with the completed project course, where the student can produce original works under the guidance of the instructor. In this course, the student can work individually as well as do group work on the condition that they produce larger-scale works. In student projects, the focus will be on improving the narrative quality of the story and improving the aesthetic and technical quality of the animated film.

Creative Enterprise &Employment Portfolio – ANIM404

My students, who are preparing to graduate, are the courses in which they create personal processes and portfolio files. Deviantart, Behance, Artstation, Linkedin, Vimeo, Youtube platforms will also be introduced to individuals who will learn the tricks of making their artistic productions portfolio for digital and print environments. They are expected to categorize their jobs, turn them into post-graduate job application files and create their online web-based portfolios.

Game Project – ANIM406

The game project course is a course that requires interdisciplinary teamwork. The course will be discussed from two perspectives as game content design and game programming. Students can create groups to develop joint game projects or work individually according to their preferences. Game projects; game content designs, interfaces, formal game elements, game mechanics and dynamics, design process, playable prototype development, nonlinear storytelling, etc. criteria will be evaluated.

Advanced Simulation– ANIM408

This course focuses mainly on physics-based simulation methods used to manage motion and form. These methods include fluids (liquid, smoke), particle systems, deformable models, collisions, gravity simulations. Besides, topics such as animating virtual characters as crowds and data-based animation methods will be introduced.

Graduation Project – ANIM410

This course is a graduation project that students will produce under the guidance of a course advisor. The project to be produced in the course is a two-term project, and the evaluation of the second term will be carried out taking into account the technical and aesthetic quality of the work done and the point reached and the result. Students are expected to produce an animation film with a completely original subject and approach as a graduation project. The student is expected to participate in festivals or competitions with this film, and also to be screened to faculty members and students.