GRAPHICS
BACHELOR

2nd year, 4th semester

ZDW: DIGITAL PAINTINGS IV – project

OBJECTIVES OF THE SUBJECT

The aim of the course is to prepare the student theoretically and practically to carry out independent tasks in the field of digital graphics, taking into account the basic knowledge of classical drawing and painting. The course program focuses on teaching the student digital image processing techniques with particular emphasis on illustration.

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

3 ECTS

- Has knowledge of traditional and digital painting techniques (impasto, glaze, puentilism, etc.) and different styles of painting.
- Has knowledge of rendering and application of digital effects (like filters)
- Understands the issue of visual coding of the message, conscious use of color symbolism, color tensions, means of expression

In terms of abilities

- Fluently applies a wide variety of tools in the chosen program
- Can paint from his imagination a picture on any of the subjects: figure study, portrait, still life, landscape.

In terms of social competencies

- Is committed to creating own style and visual language
- Understands the need for a good portfolio as a tool to find a job
- Is aware that continuous development and constant exploration of one's own sensitivity and skills are not only a prerequisite for personal development, but also a factor that increases chances of finding a job

TEACHING METHODS

- Lecture
- Project-based method
- Workshop method
- Case study analysis

Method of verifying education: project, activity during classes

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TYPOGRAPHY II – project

OBJECTIVES OF THE SUBJECT

The purpose of the class is to prepare the student for exercises in graphic and typographic design. Students will learn about the use of typography in the design of visual communication, publishing design software. The aim of the course is to acquire the ability to develop a graphic design in Id and vector publishing graphics software, to deepen theoretical knowledge related to computer graphics (including color models, vector graphics, graphic file formats, compression methods and others), to acquire the ability to prepare long documents and prepare the design for use in various media, and to deepen the ability to work in vector graphics programs.

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

3 ECTS

In terms of knowledge

- Knows terms related to the construction of the book,
- Has basic knowledge relating to design notation for various media and printing
- Knows the functions of graphic programs of the Adobe package (llustrator, Indesign) to an advanced degree, distinguishes between profiles CMYK, RGB, Pantone color profiles.
- Has knowledge of related disciplines allowing to complete the tasks

In terms of abilities

- Uses modern technology (processing electronic and preparation o audiovisual material for multimedia projects, through the design of information architecture, 2D, 3D graphics and animation)
- Freely uses both traditional and contemporary forms of artistic expression

In terms of social competencies

- Is prepared to use effectively: imagination, intuition, emotionality, ability to think creatively, thinking and creative work in the course of solving problems, flexible thinking, adapting to new and changing circumstances
- Understands the need for lifelong learning; independently complements and expands knowledge in the field of modern processes and technologies, can inspire and organize the learning process of others.

TEACHING METHODS

- Lecture
- Project-based method
- Workshop method
- Case study analysis

Method of verifying education: project, activity during classes

MULTIMEDIA & DIGITAL TECHNICS II – tutorials

OBJECTIVES OF THE SUBJECT

The purpose of the class is to develop the knowledge area of After Effects, to introduce the basic knowledge of Adobe Premiere and the basic knowledge of film editing based on Adobe Premiere.

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Developing knowledge of the After Effects program, cooperation with Adobe Photoshop
- Presentation of tools in Adobe Premiere
- Familiarity with film editing

3 ECTS

In terms of abilities

- The student is skilled in the use of tools in the programs: After Effects and Adobe Premiere
- Consciously chooses appropriate artistic resources and effects to the realized project

In terms of social competencies

- Independently makes artistic decisions in the field of artistic activity - graphic design, demonstrates invention and high creativity

TEACHING METHODS

- Project-based method
- Workshop method
- Case study analysis

Method of verifying education: project, activity during classes

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VISUAL STRUCTURES IV – project

OBJECTIVES OF THE SUBJECT

The aim of the course is to teach students to practically relate to some of the basic concepts and problems concerning the construction of a visual work. Students will learn to independently discover and pose visual problems, formulate them, carry out visual analysis and synthesis ending with a conclusion that gives a starting point for further exploration and solutions.

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Knows most of the concepts of composition and issues related to the construction of the work visual. He is aware that this is part of the interdyscyplinary knowledge
- Has a deepened awareness of the influence of technique and technology on the form of visual statements
- Has a basic knowledge of fine arts and design. He is able to use this knowledge and enlarge this field with the history of art, aesthetics and philosophy

3 ECTS

In terms of abilities

- Consciously concretizes the visual form. Poses problems that relate to data issues as well as going beyond them
- He is the executor of his works. He exercises authorial supervision over realization of works in the event that they significantly exceed technically and technologically beyond the capabilities of the workshop university and at home
- Has the ability to present his work
- Has mastered basic workshop skills

In terms of social competencies

- Sees the need to improve own skills in visual structures

- Can analyze and interpret source materials, and present their own projects.
- Criticizes and is open to criticism of works of his own authorship
- Communicates with the environment, is open to cooperation.

PROGRAM CONTENT

- Texture versus spatial structure
- Spatial structure and solid in space
- Divisions and delineation of space under different assumptions.
- Divisions of a solid and creation of structures from elements resulting from these divisions under different assumptions
- Create multiplications in space under various assumptions

TEACHING METHODS
- project method
- individual case analysis
- workshop method
- didactic discussion

Method of verifying education: project, activity during classes

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PHOTOGRAPHY IV – project

OBJECTIVES OF THE SUBJECT

During the course, students will acquire the skills to consciously organize the shooting plan and control the selection of consistent with the program assumptions of the technical parameters of image recording both in traditional cameras with silver media and on digital media. Students will use computer programs (such as Photoshop and related).

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

3 ECTS

- Uses theoretical knowledge of art history and photography
- Implements a structured knowledge of the theory of photography and the history of art, philosophy and aesthetics to analyze the content of an image photographic images
- Creates a photographic image on the basis of interdisciplinary knowledge

In terms of abilities

- Operates the camera and the equipment required to create author's photography
- Sets the parameters of the camera as well as lighting equipment in

harmony with the needs of the photo shoot and takes the picture in the correct exposure.

In terms of social competencies

- Cooperates with the team and expresses his opinions constructively.
- Prepares and presents his own projects and achievements art in a direct manner as well as in the Internet

Program Content

1. Contemporary trends in global photography
2. The most interesting exhibitions and Polish photographers
3. Building photographic composition under different lighting conditions; practicing the resolution of technical problems
4. Improving photography skills: mastering correct framing of assigned subjects; correlating theoretical knowledge with practical application
5. Using Adobe programs and others to process photographic images for graphic needs
6. Utilizing photographic images in graphic design, animation, painting, film, performance arts, etc.; creating personal photographic statements
7. Exploring topics and personal forms of photographic expression, with particular attention to the technical aspects of image building, style, and graphic processing
8. Preparing an original presentation of photographic works supported by relevant literature with theoretical explanation

TEACHING METHODS

- Conversational lecture
- Project
- Exercises

Method of verifying education: project, activity during classes

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IT WORKSHOP IV- Exercices

OBJECTIVES OF THE SUBJECT

The purpose of the course is to familiarize students with the process of designing graphical interfaces in games, creating GUIs for their own game, drawing inspiration from well-known and niche games, forming an attitude open to personal development, cooperation and self-education.

3 ECTS

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Has mastered the skills of a 3D graphic designer at an advanced. When it comes to tools for modeling 3D space, he sees the need for familiarity with the latest software in this area.
- He is aware of the possibilities and technological implementation limitations resulting from calculation capabilities of modern hardware

In terms of abilities

- Independently selects methods of spatial modeling objects and realizes his own artistic concepts in the field of photo realistic visualization
- Applies advanced 3D modeling, rendering tools and creating light in a scene for photo realistic visualization of space.
- Able to independently search for new technological solutions in the field of 3D modeling.
- Has mastered photo realistic visualization techniques allowing for continuous development.

In terms of social competencies

- Sees the need to constantly improve its own professional qualifications in the field of creating three-dimensional space and consciously determines priorities.
- Can Analyze a project and evaluate it.

TEACHING METHODS

- Project-based method
- Case study analysis
- Educational discussion

Method of verifying education: project, activity during classes

CONSTRUCTIVE PROBLEM SOLVING– Workshops

OBJECTIVES OF THE SUBJECT

Students during the course will have the opportunity to learn about the nature of conflict in a group. They will improve the skills of recognizing a conflict situation, showing the influence of the group on the process of conflict formation and resolution. The subject will help them hone their skills to stop the process of conflict escalation at the earliest possible stage of its development, or to help resolve the conflict at any stage.

1 ECTS

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of abilities

- Makes observations and analyzes conflicts occurring in the group
- Recognizes own emotions and needs in a conflict situation
- Applies the principles and techniques of conflict resolution in a group.

In terms of social competencies

- Demonstrates responsibility for the process in the group.
- Takes care of constructive conflict resolution

- Constructive ways of resolving conflict in a group

Program Content

1. Definition of conflict and types of conflict
2. Phases of group conflict
3. The role of emotions in group conflict
4. Group processes and conflict situations
5. Conflict resolution styles
6. Constructive ways to resolve conflict within a group

Teaching Methods

- Didactic discussion
- Brainstorming
- Dramatic techniques
- Workshop method

Method of verifying education: activity during classes

LEVEL DESIGN II- tutorials 2ECTS
SPECIALIZATION 3D GAME ART

OBJECTIVES OF THE SUBJECT

The objective of this course is to create a 2D Action Adventure game.
Learning about the game engine (UE4) as a tool for creating levels.
Learning about the process of game level design GDD iteration of your own 2D game. Iteration of the concept and storyline of a 2D game. Developing a game, drawing inspiration from well-known and niche 2D games. Developing an attitude open to personal development, cooperation and self-education.

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Has knowledge of level design of computer games, console and mobile games
- Is familiar with the range of game engines and their impact on level design

In terms of abilities

- Can build a game level in Unreal Engine 4 (whitebox)

In terms of social competencies

- Is able to use his intuition in an effective way, imagination, individual creative potential, and acquired knowledge and experience in solving problems and in professional activities

PROGRAM CONTENT

- Discuss the advanced capabilities of the UE5 engine and its role in the 2D game level design process
- Creating game levels
- Development of a complete 2D game
- Design iterations
- Iterations of the game level based on consultation

TEACHING METHODS
- project
- individual corrections
- individual work
- exercises

Method of verifying education: project, activity during classes

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GRAPHIC DESIGN IN GAMES II - Tutorials 2ECTS
Specialization- 3D GAME ART

OBJECTIVES OF THE SUBJECT

The aim of the course is to learn the process of designing graphical interfaces in games.
Creating a GUI for your own game.
Drawing inspiration from well-known and niche games.
Forming an attitude open to personal development, cooperation and self-education.

Learning Outcomes

In terms of Knowledge:

- Understands graphic design (GUI) in computer, console, and mobile games.
- Has knowledge of using Adobe Photoshop and other tools for designing graphic interfaces.

In terms of Skills:

- Can prepare graphical user interface elements using Adobe Photoshop.

- Can design and create a game's main menu.
- Can design and implement various graphic interface elements such as buttons, sliders, text fields, and more.
- Can design game HUD and inventory.
- Can test and optimize graphic interfaces based on user feedback.

In terms of Social Competences:

- Effectively uses intuition, imagination, individual creative potential, and acquired knowledge and experience in solving creative problems and professional activities.
- Works professionally, respecting intellectual property and creating academic texts and simple information without infringing copyright.

Program Content

1. Designing the main menu.
2. Designing HUD (Heads-up Display).
3. Designing interfaces for multiplayer mode.
4. Review of popular and niche games with good graphic interfaces. Analysis of the graphic interface elements of these games and their implementation.
5. Designing a game's logo and icon.
6. Consultations (Logo and icon).

Teaching Methods

- Lectures
- Project-based learning
- Workshop method
- Case study

Method of Verifying Education: project, activity during classes

GAME DESIGN II- Tutorials 2ECTS
Specialization 3D GAME ART

OBJECTIVES OF THE SUBJECT

The aim of the course is to learning about the game design process. Creating design documents: OnePager and Game Design Document. Drawing inspiration from well-known and niche games. Forming an attitude open to personal development, cooperation and self-education

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Has knowledge of computer game design, console and mobile games and can independently analyze the game and the content of the game

In terms of abilities

- Is able to prepare design documents (One Pager, Game Pitch and Game Design Document), is able to research market trends and transform their ideas into a game

In terms of social competencies

- Is able to use the intuition in an effective way, imagination, individual creative potential, and acquired knowledge and experience in solving problems and in professional activities

Learning Outcomes

In terms of Knowledge:

- Understands how to create a Game Design Document (GDD), which is the most important design document for a game.
- Knows the principles of effective prototyping for game ideas.
- Understands the role of polish, consistency, testing, and quality control in computer games and their impact on the final product.

In terms of Skills:

- Can create the first iteration of their own GDD.
- Can iterate on their own GDD based on consultations.
- Can apply art direction principles in computer games.

In terms of Social Competences:

- Demonstrates the ability to effectively use feedback and consultations to improve their GDD.
- Can maintain consistency and perform quality control on game projects through iterations and testing.

Program Content

1. Creating a Game Design Document (GDD), the most important design document for a game.
2. Effective prototyping of game ideas.
3. Creating the first iteration of their own GDD.
4. Consultations (GDD).

Teaching Methods

- Lecture

- Project-based learning
- Market analysis

Method of Verifying Education

- Evaluation of the Game Design Document (GDD) through individual and group projects.
- Assessment of prototypes and iterations based on consultations.
- Analysis of final game products in terms of polish, consistency, and quality control.

Method of Verifying Education: project, activity during classes

AR/VR GRAPHIC PROGRAMMING II- TUTORIALS 2ECTS
SPECIALIZATION: AR I VR

OBJECTIVES OF THE SUBJECT

The goal of the course Is to learn the specifics of interaction in VR systems.
To get an extended understanding of the specifics of AR applications
Getting to know methods of optimizing 3D models for AR applications
Getting to know technological limitations of AR applications

Learning Outcomes

In terms of Knowledge:

- Understands methods and possibilities for implementing AR projects.
- Knows basic concepts related to XR (Extended Reality).

In terms of Skills:

- Can create simple AR projects using a programming environment.
- Can apply tricks and special effects used in VR.

In terms of Social Competences:

- Demonstrates the ability to work effectively in the field of AR and VR by integrating theoretical knowledge with practical applications.

Program Content

1. Overview of methods and possibilities for AR project implementation.
2. Understanding basic concepts related to XR.

3. Review of tricks and special effects used in VR.
4. Creating simple AR projects using a programming environment.

Teaching Methods

- Conversational lecture
- Project-based learning
- Case study analysis

Method of Verifying Education: project, activity during classes

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PHOTOGRAMMETRY AND SCANNING- tutorials 2 ECTS
Specialization: AR I VR

OBJECTIVES OF THE SUBJECT

The purpose of the subject is the premise of the subject is to learn about the possibilities of the scanning process as an optical carrier of information graphic information. To learn about the image processing processes of Adobe Photoshop and the use of these applications in graphic activities.

Learning Outcomes

In terms of Knowledge:

- Introduction to photogrammetry and scanning: understanding key concepts, definitions, and applications in various fields, as well as available technologies and tools such as drones, 3D scanners, and cameras.
- Overview of 3D scanning techniques including laser scanning, structured light scanning, and photogrammetry, with discussion of their advantages and disadvantages.
- Understanding practical applications of photogrammetry and 3D scanning.
- Methods for testing and assessing the quality of 3D models created using photogrammetry and scanning technologies.

In terms of Skills:

- Ability to use photogrammetry and scanning technologies to create 3D models.
- Proficiency in 3D scanning techniques and practical exercises with different technologies.
- Capability to design and create 3D models for specific applications.
- Practical experience in testing the quality of 3D models, including understanding factors affecting model quality such as image resolution and equipment quality.

In terms of Social Competences:

- Demonstrates the ability to apply photogrammetry and scanning techniques effectively in various practical contexts, showing competency in quality assessment and problem-solving in 3D modeling.

Program Content

1. Introduction to photogrammetry and scanning:
   - Concepts, definitions, and applications in various fields.
   - Overview of technologies and tools such as drones, 3D scanners, and cameras.
2. 3D Scanning:
   - Review of different 3D scanning techniques including laser scanning, structured light scanning, and photogrammetry.
   - Discussion of the pros and cons of each technique.
   - Practical exercises using various 3D scanning technologies.
3. Applications of photogrammetry and 3D scanning:
   - Examples of practical applications.
   - Hands-on exercises in designing and creating 3D models for specific uses.
4. Testing and Quality Assessment:
   - Methods for testing and evaluating the quality of 3D models created with photogrammetry and 3D scanning.
5. Practical exercises in quality assessment of 3D models:
   - Discussion of factors affecting model quality, such as image resolution and equipment quality.

Teaching Methods

- Conversational lecture
- Project-based learning

Method of Verifying Education: project, activity during classes

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DESIGNING A MULTIMEDIA AND INTERACTIVE GRAPHICS II- Exercices 2ECTS
Specialization: Visual communication and multimedia

Learning Outcomes

In terms of Knowledge:

- Understands the necessity of familiarizing oneself with the latest software for creating and editing graphic designs and appreciates the principles of user-friendly design.

- Knows the functions of graphic programs and can identify and define issues related to interactive graphics.

In terms of Skills:

- Applies theoretical knowledge to create graphic projects.
- Justifies the use of specific techniques and prepares projects for publication across selected media: the internet, mobile devices.
- Mastered workshop techniques that facilitate continuous development and can independently find necessary tools and information.

In terms of Social Competences:

- Evaluates graphic design projects created by oneself and peers, and can present arguments supporting the solutions used in the project.

Program Content

1. **Graphic Tools and Workspace Formats:**
   - Overview of graphic tools and different workspace formats.
2. **Adobe Suite Tools:**
   - Mastery of Adobe software tools.
   - Skill in working with grid systems (GRID) and project mockups.
3. **Mobile Application Project:**
   - Project development for a mobile application, including design and implementation.

Teaching Methods

- Workshop method
- Project-based learning
- Individual work

Method of Verifying Education: project, activity during classes

GRAPHIC DESIGN FOR THE PUBLISHING INDUSTRY II- EXERCICES 2ECTS
   Specialization: Specialization: Visual communication and multimedia

OBJECTIVES OF THE SUBJECT

The aim of the course is to Educate a designer with the skills of precise thinking, clear formulation of assumptions. Design in a form that is maximally communicative and consistent with technology Design of publishing series, albums Illustration.
This subject serves the purpose of the student's acquisition of practical skills and social competence, and is carried out:
- in conditions appropriate to the given field of professional activity,

- in a way that allows students to perform practical activities,
- by a person with professional experience gained outside the university

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Has knowledge of the history of type, printing, books, technology and printing terminologies.
- Has an expanded knowledge of the function of publishing in the social and cultural aspects. Has extended knowledge concerning the functions of publishing houses in the social and cultural aspect. He knows the different genres literary and their design (fiction, fantasy, science fiction, poetry)
- Knows the structure of a book, its introligarion and editing. Trends development in the relevant fields of arts and disciplines artistic disciplines relevant to the field of study.

In terms of abilities

- Prepares an effective visual message for companies,
- Consciously use the appropriate technique and technology in the course of realization of artistic works taking independently decisions on the design and implementation of their own works.
- freely uses both traditional and contemporary methods of artistic expression

In terms of social competencies

- Is prepared to use effectively: imagination, intuition, emotionality, flexible thinking, adapting to new and changing circumstances
- Has the ability of self-assessment, constructive criticism

PROGRAM CONTENT

- Designing a publishing series. Specifics of series publishing genre design: fantasy, harlequins, since fiction
- Typographic design of the layout of the main text of a special character (Album publishing, poetry, children's book)
- Preparation of publishing materials for the printing house

TEACHING METHODS

- individual case analysis
- didactic discussion
- workshop method
- project

Method of Verifying Education: project, activity during classes

DESIGNING VISUAL IDENTYFICATION SYSTEMS II- Exercices 2 ECTS

OBJECTIVES OF THE SUBJECT

The purpose of the project is to Create graphic designs in response to the client's problem. Creating branding for new or existing companies. Creation of consistent visual identity systems. Observation of the market - design trends, recent implementations, analysis of competitors' works.

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Has knowledge of identification graphic design, logos of companies
- Has knowledge in the field of related disciplines allowing to carry out tasks of an interdisciplinary

In terms of skills

- Prepares effective visual messages for companies
- Freely uses both traditional and contemporary means of artistic expression
- Understands the relationship between the form of a work of art and the message it carries,
- Cares about the relationship between form and function, plastic composition, and creatively search for graphic design solutions.

In terms of social competencies

- Is able to appropriately determine priorities for the implementation of specified by himself or others task
- Establishes relationships with people from the group, cares about his own autonomy in thinking and acting context of their emotional states.

Learning Outcomes

In terms of Knowledge:

- Understands the principles of designing a company's emblem, including its significance and application.
- Knows the methodology of logo design, including the use of grids, protective areas for the mark, and other elements included in a brand manual.

In terms of Skills:

- Can create a company's emblem and a complete logo design according to established guidelines.
- Can refine sketches and preliminary designs through corrections and discussions.

- Prepares print-ready files and collaborates with printing companies, ensuring print quality.
- Organizes and prepares graphic design exhibitions effectively.

In terms of Social Competences:

- Can critically evaluate and discuss design work, both their own and others', and apply constructive feedback.
- Demonstrates competence in preparing and managing exhibitions of graphic work, showcasing the ability to present and exhibit designs professionally.

Program Content

1. **Designing a Company Emblem:**
   - Focus on creating a distinctive and effective company emblem.
2. **Logo Design Methodology:**
   - Covers logo design techniques, including grid usage, protective areas, and other components of a brand manual.
3. **Corrections and Discussions on Sketches and Preliminary Designs:**
   - Review and discussion of initial sketches and drafts to refine designs.
4. **Corrections and Discussions on Finalizing Selected Projects:**
   - Detailed refinement of chosen projects through feedback and iterative corrections.
5. **Printing and Quality Check:**
   - Preparation for printing, collaboration with printing companies, and quality control of printed materials.
6. **Preparation of Graphic Design Exhibitions:**
   - Organizing and setting up exhibitions to showcase graphic design work.

Teaching Methods

- Project-based learning
- Didactic discussion
- Case study analysis

Method of Verifying Education: project, activity during classes

3rd year, 6th semester

1 ECTS

MULTIMEDIA & DIGITAL TECHNICS IV – tutorials

OBJECTIVES OF THE SUBJECT

The aim of the course is to expand knowledge of computer programs, work on the levels of various media, develop knowledge of film editing, animation and special effects.

DESCRIPTION OF THE EXPECTED LEARNING RESULTS

In terms of knowledge

- Has knowledge of special effects
- Possesses knowledge in 2D animation.
- Is familiar with film editing.

In terms of skills

- Uses tools and effects in graphics programs
- Consciously chooses appropriate artistic means and effects to the project
- Selects sound effects to the film image

In terms of social competencies

- Independently makes artistic decisions in the field of artistic activity demonstrates creative invention

Program Content

1. Production of a Short Film Trailer – Based on Existing Film Materials.
2. Production of a Short Film on Any Topic – Emphasis on Special Effects and Editing.
3. Production of a Soundtrack for the Student's Film.
4. Expansion of Knowledge in Computer Animation (2D Animation) Using After Effects Software.

Teaching Methods:

- Project
- Individual Work
- Brainstorming

Method of Verifying Education: project

1 ECTS

PHOTOGRAPHY VI- tutorials

OBJECTIVES OF THE SUBJECT
The purpose of the course is to improve the knowledge and experience of the use of the photographic technique in accordance with the interpretive requirements and to seek their own creative possibilities. During the course, students will have the opportunity to deepen their ability to consciously organize the shooting plan and master the selection of consistent with the assumptions of the settings of the technical parameters of photographic image recording. The didactic process is designed to stimulate imagination, creativity, authorial responsibility, deepen artistic sensitivity and the ability to observe combined with making

quick decisions of action. During the course, students will consciously use computer programs (Photoshop and related).

Learning Outcomes

In Terms of Knowledge

- Applies theoretical knowledge of art history and photography in the practice of photographing.
- Implements structured knowledge of photography theory, art history, philosophy, and aesthetics in photographic expression.
- Creates photographic images based on interdisciplinary knowledge.
- Utilizes theoretical and technical knowledge of photography to create original photographic works.
- Uses the photographic knowledge acquired during the educational process for artistic and academic development.

In Terms of Skills

- Operates a camera and equipment necessary to create original photography.
- Uses known photographic processes, enriched by interdisciplinary skills, in the creation of visual works.
- Adjusts camera and lighting equipment settings according to the needs of the photo session, ensuring correct exposure.
- Takes photographs based on skills acquired from other disciplines.
- Creates original photography sets based on independent thinking, utilizing skills from other art fields.

1 ECTS

In Terms of Social Competencies

- Collaborates effectively in a team and expresses opinions constructively.
- Shares knowledge within an interdisciplinary environment.
- Prepares and presents personal projects and artistic achievements both directly and online.

Program Content

1. Master of Photography and My Artistic Work.
2. The Most Interesting Exhibitions and Polish Photographers in the Context of a Future Career as a Photographer and Graphic Designer.
3. Building Photographic Composition. Working with a Camera.
4. Improving Photography Skills: Correct Framing of a Given Subject. Correlating Theoretical Knowledge with Practical Application.
5. Using Adobe Suite and Other Programs to Process Photographic Images for Graphic Purposes.
6. Photographic Self-Expression, Searching for a Subject to Realize.
7. Technical Aspects of Self-Expression: Building an Image, Stylistics, and Graphic Editing.
8. Preparation of an Original Set of Works Supported by Relevant Literature with

a Theoretical Explanation.

Teaching Methods (Full-time / Part-time Studies):

- Conversational Lecture
- Project
- Exercises

Method of Verifying Education: project

IT WORKSHOP VI

1 ECTS

OBJECTIVES OF THE SUBJECT
The purpose of the course is to prepare the student to use graphic programs for editing expanded multimedia three-dimensional space. Animation of characters in 3D Max.

Learning Outcomes

In Terms of Knowledge

- Has mastered advanced 3D graphic design skills. Understands the necessity of knowing the latest software in character animation. Is aware of the technological possibilities and limitations, including keying and motion capture capabilities.

In Terms of Skills

- Independently selects methods for character animation and realizes personal artistic concepts.
- Applies both manual character animation techniques and MOCAP sequences. Can independently seek new technological solutions in the fields of design and modeling.
- Independently designs and implements character motion sequences.

In Terms of Social Competencies

- Recognizes the need for continuous professional development in creating four-dimensional spaces and consciously sets priorities. Analyzes and critically evaluates works.

Program Content

1. Definition of Character Animation and Its Place in the World of Film and

Video Game Animation.
2. Advanced Tools for Character Animation.
3. Physical Fundamentals of Biped Skeleton Systems Animation.
4. Character Animation Using MOCAP Motion Sequences.

Teaching Methods

- Lecture
- Project
- Individual Review of Independently Realized Semester Projects

Method of Verifying Education: project

3 ECTS

PROJECT OF OWN ENTERPRISE- project

OBJECTIVES OF THE SUBJECT
The purpose of the course is to stimulate an economic attitude in students.
To inspire job creation for themselves and others.
Developing the ability to independently plan a career path to realize one's own intentions and passions.

Learning Outcomes

In Terms of Skills

- Defines personal objectives to be achieved during the design of their own project.
- Designs their own project.
- Critically evaluates their own project and the projects of others in the group.

In Terms of Social Competencies

- Open to change.
- Demonstrates personal benefit resulting from the implementation of the project.
- Takes responsibility for their own project.

Program Content

1. Planning Your Own Project.
2. Action Plan Schedule.
3. Characteristics of an Entrepreneurial Attitude.
4. Identifying Strengths and Weaknesses of the Project.
5. Evaluation of Change.

Teaching Methods:

- Didactic Discussion
- Brainstorming
- Project Method

Method of Verifying Education: project

LEVEL DESIGN IV – Tutorials

OBJECTIVES OF THE SUBJECT

The aim of the course is to create a 3D Action Adventure game - combining elements (Level I, Level II, Level III, Menu).

Learning about the game engine (UE5) as a tool for creating levels.

Learning about the process of game level design.   2 ECTS

GDD iteration of a 3D game, playing with a third person controller.

Creating level 2 and 3 of the game (Level II and Level III). Drawing inspiration from well-known and niche 3D games.

Developing an attitude open to personal development, cooperation and self-education.

Learning Outcomes

In Terms of Knowledge

- Has knowledge in the field of designing levels for computer, console, and mobile games.
- Has knowledge of creating interactions in UE5, effects, animations, and 3D game elements.

In Terms of Skills

- Can implement basic interactions on levels in UE5. Can create menus and animated elements for 3D games.

In Terms of Social Competencies

- Effectively uses intuition, imagination, individual creative potential, and acquired knowledge and experience to solve creative problems and in professional activities.

Program Content

1. 3D Action Adventure Game – Iteration of GDD and Concept.
2. Iteration of Level 1 and Menu Based on Consultations.
3. Working with Assets and Animations in the UE5 Engine – Iteration.
4. Lighting, Post-Processing, and VFX in UE5 – Iteration.

5. Creating Game Levels (Level I, Level II, and Level III).
6. Developing a Complete 3D Game (3 Levels + Menu).
7. Integrating the Level Created in the First Semester into the Game. Project Iterations.

Teaching Methods:

- Project
- Individual Corrections
- Individual Work
- Exercises

Method of Verifying Education: project

GAME DESING IV- Tutorials

OBJECTIVES OF THE SUBJECT
The aim of the course is to learning about the game design process and creating design documents:

2 ECTS

Learning Outcomes

In Terms of Knowledge

- Has knowledge of designing computer, console, and mobile games, and can independently analyze a game and its content.

In Terms of Skills

- Can prepare project documents (One Pager, Game Pitch, and Game Design Document), research market trends, and transform ideas into a game.

In Terms of Social Competencies

- Effectively uses intuition, imagination, individual creative potential, and acquired knowledge and experience to solve creative problems and in professional activities.

Program Content

1. Polish, Consistency Maintenance, Testing, and Quality Control in Video Games – Their Role in the Final Product.
2. Iterating Your Own GDD Based on Consultations.

Teaching Methods (Full-time / Part-time Studies):

- Lecture
- Project
- Market Analysis

Method of Verifying Education: project

AR/VR Graphic Programming IV- TUTORIALS

The purpose of the course is an expanded understanding of the specifics of AR applications.
To gain an extended understanding of methods of optimizing 3D models for AR applications.
To learn about possible interactions in XR applications.   2 ECTS

Learning Outcomes

In Terms of Knowledge

- Has knowledge about designing and programming interactions in AR applications.
- Has knowledge of advanced methods for building interactions in AR applications.
- Has knowledge of possible methods and limitations of user interaction with AR systems.

In Terms of Skills

- Can create and optimize complex 3D models for interaction in AR applications.
- Can manage the performance of advanced AR systems at a detailed level.

In Terms of Social Competencies

- Actively participates in classes and discussions.

Program Content

1. Overview of Advanced Interaction Methods in AR Applications.
2. In-depth Exploration of Advanced Concepts Related to XR.
3. Review of Tricks and Effects Used in AR Interfaces.
4. Creating Advanced AR Projects Using Interaction with Models and Development Environments.

Teaching Methods (Full-time / Part-time Studies):

- Seminar
- Project
- Case Analysis

Method of Verifying Education: project, activity during classes

<div align="center">DESIGN THINKING – PROJECT</div>

OBJECTIVES OF THE SUBJECT
To familiarize the student with the Design Thinking methodology based on teamwork carried out in groups of several people groups

2 ECTS

Learning Outcomes

In terms of knowledge

- Identifies and defines problems, analyzes target audiences and their requirements within the scope of the developed issue, using appropriately selected tools and knowledge.
- Applies knowledge acquired during the process to identify the issue.

In terms of skills

- Can prototype and test solutions developed through the successive steps of the Design Thinking methodology.

In terms of social competencies

- Effectively engages in teamwork to achieve intended outcomes.

Program Content

1. Definitions. Introduction to Design Thinking methodology.
2. Essence of the design challenge. Gaining crucial knowledge about the user, their situation, and problems; defining the design challenge.
3. Defining the client's perspective and identifying their real needs.
4. Familiarization with various heuristic techniques that facilitate creative problem-solving.
5. Project execution in groups of 4-5 people: students work in different groups (alternating as leaders or team members) to solve a given problem using Design Thinking methods and tools.
6. Prototyping and testing solutions: solving assigned problems through group work to find a solution that meets the end user's needs.
7. Execution of team projects: defining the problem and gathering information to

determine the optimal solution.
8. Identifying the target group and end user.
9. Prototyping and testing.
10. Presenting ideas using business techniques.

Teaching Methods (for full-time and part-time studies):

- Problem-based learning
- Project work
- Heuristic techniques: brainstorming, analogies, metaphors, RWC (Reverse Working Concept), IPW (Inverted Problem Solving)
- Group work
- Individual work

Method of Verifying Education: project, activity during classes

DESIGNING A MULTIMEDIA AND INTERACTIVE GRAPHICS IV- EXERCICES
Visual Communications and Multimedia

Learning Outcomes

2 ECTS

In terms of knowledge

- Understands the necessity of mastering the latest software for creating and processing user graphics.
- Knows the functions of graphic software and can identify and define issues related to interactive graphics.
- Is familiar with animation techniques.

In terms of skills

- Applies theoretical knowledge to create a graphic project.
- Justifies the use of specific techniques and prepares the project for publication in selected media: Internet, mobile devices.
- Mastered techniques for continuous skill development and can independently find necessary tools and information.
- Is prepared to undertake independent professional practice as well as collaborate with other professionals; capable of working in creative teams in advertising agencies, collaborating with other designers, as well as with art directors, strategists, project managers, media planners, and copywriters.

In terms of social competencies

- Evaluates publication projects prepared by oneself and by peers. Recognizes the need for continuous professional development in the field of graphic

design.

Course Content

1. Various environments for application design.
2. Adobe suite tools. Skills in working with GRID layouts. Prototyping.
3. Mobile application design including a working prototype.

Teaching Methods (for full-time and part-time studies):

- Workshop method
- Project work
- Individual work

Method of Verifying Education: project, activity during classes

GRAPHIC DESIGN FOR THE PUBLISHING INDUSTRY II

OBJECTIVES OF THE SUBJECT
Educate a designer with the ability to think with precision, clearly formulate assumptions. 2 ECTS
Design in a form that is maximally communicative and consistent with technology
Design of publishing series, albums Illustration.
This subject serves the purpose of the student's acquisition of practical skills and social competence, and is carried out: - in conditions appropriate to the given field of professional activity, - in a way that allows students to perform practical activities, - by a person with professional experience gained outside the university,

Learning Outcomes

In terms of knowledge

- Understands the history of writing, printing, books, printing technologies, and terminology.
- Has in-depth knowledge of the functions of publications in social and cultural aspects.
- Has advanced knowledge of the functions of publications in social and cultural contexts, and understands various literary genres and their design (fiction, fantasy, science fiction, poetry).
- Knows the structure of a book, its binding, and editorial processes. Understands trends in relevant fields of art and artistic disciplines related to the study program.
- Has learned the connections and dependencies between theoretical and practical elements of the curriculum, as well as concepts and principles of copyright law. Possesses knowledge of financial, marketing, and legal aspects of the artist's profession.

In terms of skills

- Creates effective visual communication for companies, products, socio-cultural

and commercial ventures using contemporary media.

- Uses appropriate techniques and technologies in artistic work, making independent decisions regarding the design and execution of their artistic projects.
- Proficiently uses both traditional and contemporary means of artistic expression.
- Can present their artistic works and employs public presentation techniques.

In terms of social competencies

- Demonstrates self-assessment and constructive criticism skills. Is prepared for effective use of these skills.
- Possesses imagination, intuition, emotional sensitivity, creative thinking, and adaptability in problem-solving, and is able to adapt to new and changing circumstances.

Program Content

1. **Designing specialized publishing genres:** scientific publications, encyclopedias, dictionaries.
2. **Designing textbooks and textbook series for different grades:** style guides for textbooks.
3. **Typographic design of main text layout for specialized publications:** scientific, album, textbooks, dictionaries, encyclopedias.
4. **Preparing publishing materials for printing.**

Teaching Methods (for full-time and part-time studies):

- Workshop method
- Didactic discussion
- Analysis of individual cases
- Project work

Method of Verifying Education: project