

Course Description – Animation & Multimedia

201133 History and Theories of Art and Architecture in the Old Ages (3:3-0)

Prerequisite: ---

Study of Art in ancient Egypt, Near – East, Asia, Greece, Rome and other old Civilizations under the influence of the social, political and religious factors.

201134 History and Theories of Art and Architecture in the Medieval Ages (3:3-0)

Prerequisite: 201133

Study of art in the Early Christian, Byzantine, Renaissance, Gothic, Mannerism, Baroque and Rococo periods under the influence of social, political and religious factors.

201234 History and Theories of Art and Architecture in the Islamic Period (3:3-0)

Prerequisite: 201134

Study of Islamic Art in the Arabian Peninsula, Levantine Region, Turkey, North Africa and Andalusia from Early Islam until the Ottoman era under the influence of the geographic, political and social factors.

202103 Basic Design (3:1-2)

Prerequisite: ---

The creation and organization of formal elements (line, shape, value, color, texture, size, & direction) in a two – dimensional work of art characterized by balance, harmony, emphasis, unity and variety.

202213 Research Skills (3:3-0)

Prerequisite: ---

Methods of scientific research in the fields of architecture and the built environment and the visual environment, including technical writing and strategies for collecting and interpreting data.

203107 Free-Hand Drawing (3:1-2)

Prerequisite: ---

Principles and techniques of free-hand drawing of visual objects and scenes in natural and still – life settings by using different mediums.

203221 Aesthetics and Art Appreciation (3:3-0)

Prerequisite: ---

Study of the aesthetics of art in general focusing on theories of interpretation and appreciation through salient examples from different worldwide sources and eras.

201432 Vernacular & Regional Architecture (3:3-0)

Prerequisite: ---

Study of vernacular and regional architecture in Jordan and the Arab World focusing on the general influencing forces and the contemporary attempts to achieve identity.

201465 Documentation & Conservation of Architectural Heritage (3:2-1)

Prerequisite: ---

Action plans and techniques for documenting and conserving architectural sites and buildings of historic merit through selected case studies.

202208 Painting (3:1-2)

Prerequisite: ---

The usage and practice of oil, acrylic, water-colors and other mediums for painting different images of still – life type and natural settings.

202255 Technical Manual & Workshop (3:1-2)

Prerequisite: ---

Building materials and finishes (especially wood, iron, & steel) as they are executed and utilized in the industry including necessary tools and equipment.

203208 Design and Graphic Art (3:1-2)

Prerequisite: ---

Design of signs and logos that form a complement to the interiors and exteriors of buildings as desired and needed.

203422 Theory of Semiotics in Design (3:3-0)

Prerequisite: ---

The study of theories of signification and visual signs for the purpose of communication through focusing on meaning and representation.

205121 Anatomy Drawing (3:1-2)

Prerequisite: 203107

Students will gain knowledge and understanding of the anatomy of both humans and animals and will learn how to draw them with good proportions and to draw movement with force, balance and rhythm. Students will gain skills in perspective, composition and camera angles through classes in drawing with an emphasis on sketching life models.

203122 Colour Theory and Techniques (3:1-2)

Prerequisite: ---

This course explores the theories, the techniques and the dynamic interaction of color and its applications for designers and artists. It includes an introduction to the physics of color, color composition and the three dimensions of color, hue, value and saturation, as well as the color wheel.

203141 Computer Applications in Graphic Design (3:1-2)

Prerequisite: ---

This course is an introduction to computer programs particularly Adobe Photoshop and Adobe Illustrator through appointed exercises and assignments of graphic design.

205221 Image Processing (3:1-2)

Prerequisite: 203141

This course presents fundamental concepts of digital image processing to form the basis of patterned textiles and typography to lighting, sculptures, animation and films. Topics covered: Image formation, image resolution and image enhancement in spatial domain.

205222 Fundamentals of Animation & Multimedia (3:1-2)

Prerequisite: 205121

An introduction to the art and science of Animation & Multimedia from the original concept and research to the implementation of the work. This course teaches students traditional animation and multimedia techniques and terminology through simple exercises.

205223 Digital Photography (1:0-1)

Prerequisite: 205221

An Introduction to digital cameras and their use through focus on the composition and perspective, light and shadow and basic settings and modes. Student will use these skills to get results in shooting portraits, landscapes and short live-action scenes to be used in motion graphics and multimedia.

205231 Two Dimensional Animation (3:1-2)

Prerequisite: 205222-203141

This course is designed to focus on 2D animation through a series of technical exercises using pencil and computer. Students will animate simple shapes and create simple characters and produce animation clips that communicate emotions through body movements, lip-sync and facial expressions.

205241 Interface Design (3:1-2)

Prerequisite: 203141

This course is concerned with the development of user experience for Web, computer application, mobile and digital devices that people interact with, with a strong focus on user-centered design and usability principles. Students will be exposed to techniques that lead to better and effective designs to keep users in control.

203280 Typography (3:1-2)

Prerequisite: 203141

This course covers the theory and practice of letterforms and typesetting as they apply to various types of visual communication. It explains the art and technique of creating and arranging types to make written language legible, readable and appealing when displayed. It explores the anatomy and arrangement of letterforms including the selecting of typefaces, point size, line length, line-spacing (leading), letter-spacing (tracking), adjusting the space within letters pairs (kerning), typographic layouts and artistic treatments of type for creating images and textures. Assignments aim at creating useful designs for communication purposes through the use of appropriate digital programs.

203321 Design Psychology & Methodology (3:3-0)

Prerequisite: ---

This course discusses visual perception theories and concepts and their implementations in graphic design applications. The course also focuses on graphic design methods, processes, strategies, clients, target audiences, communication objectives and kinds of thinking including analyses of selected graphic design case studies.

205331 Scriptwriting & Production for Animation Cinema (3:1-2)

Prerequisite: 205222

This course is designed to teach students the principles of visual storytelling, from the inspiration, to writing a synopsis, an outline and storyboarding. Students will analyze animation storytelling and dialogue and learn the creative writing process and production management to make animation films for cinema, television and web. The end results of this course will form part of the pre-production material and pitching documentation for students' graduation projects.

205332 Characters & Backgrounds Design (3:1-2)

Prerequisite: 205222

This course focuses on designing, drawing and developing characters and backgrounds for animation using both cartoon and abstract styles. Students will also learn how to give objects human characteristic in order to develop their imagination and creativity.

205333 Three Dimensional CGI Modelling (3:1-2)

Prerequisite: 205231

This course focuses on producing and shaping three dimensional objects, characters and interior and exterior environments using digital software and understanding the different modeling techniques. Students will learn the tools to add colors, textures and lights to the models and to set the camera with depth in order to achieve a professional result.

205334 Three Dimensional Animation (3:1-2)

Prerequisite: 205333

Students will explore and exercise animation techniques of characters in 3D Computer Generated Imagery. In this course, students will build complete human and non-

human characters and rigs and focus on the physical actions of bodies and on acting, lip sync and emotions expressions.

205335 Storyboard Design (2:1-1)

Prerequisite: 205332

This course focuses on the principles, practice and techniques of storyboard design in order to convert scripts into visual language - one of the most important steps of the animation production process. Students will learn how to draw shots clearly, interpret and solve the visual flow of the story. This course also covers the art of cinematography for animation and introduces students to the principles of compositing shots, camera angles, depth of frame and moving camera shots for each scene.

205341 Motion Media Design (3:1-2)

Prerequisite: 205231

In this course, students will explore techniques to turn complex information into easy to understand animated information graphics for television and media for broad audiences. Students will learn how to animate text, symbols, icons, charts and other shapes by using a variety of digital software.

205342 Web Design (3:1-2)

Prerequisite: 205241

An introduction to the concepts and techniques of web design and creating graphic design projects that help enhance the public's taste and sense of beauty alongside the intended meaning, objective and uniqueness. This course explores producing modernized concepts and solutions.

205309 Field Training (6:6-0)

Prerequisite: After the completion of 80 credit hours

A professional internship in a registered studio or a company for 8 weeks full time training. The purpose of the supervised field training experiences is for students to synthesize the knowledge and skills developed during the academic portion of the program in a practical setting. Field training is both a learning experience for students and contributes to the work undertaken by the field training site.

203425 Marketing & Consumer Psychology (3:3-0)

Prerequisite: 203321

This course explores the psychology of how consumers think, feel, reason and select between different alternatives, such as products, services, etc... It discusses individuals, groups and organizations and the processes they use to satisfy needs and the impact that these processes have on the consumer and society, including how marketers can improve their marketing campaigns and marketing strategies to more effectively reach the consumer.

203440 Design History & Theories (3:3-0)

Prerequisite: ---

This course explores the influential design theories and movements in graphic design, architecture, industrial, multimedia and fashion design from ancient to modern and contemporary era. Also, the course focuses on the impact of cultural and social conditions and economical change on design movements.

205441 Visual & Sound Effect Art (3:1-2)

Prerequisite: 205334

Students will learn how to design special visual effects through digital software and the latest technology. Students will learn how to adjust colors, how to use the green-screen, about editing and motion graphics and about recording and adding sounds.

205442 Digital Game Design (3:1-2)

Prerequisite: 205241

Students will learn the basic principles and techniques of digital game making and development. They will learn the rules, the story and the elements of video games,

simple programming and interface design and learn about the platforms that provide space to promote digital games regionally and internationally.

205498 Graduation Project Thesis (2:2-0)

Prerequisite: 205309

Collecting and interpreting the data necessary for working on a significant animation and multimedia design project of the student's or the Department Council's choice. The final report should be comprehensive and well-presented with clear results and conclusions.

205499 Graduation Project (6:0-6)

Prerequisite: 205498

This project asks students to design, execute and present the complete project in animation and multimedia design based on the graduation research. The project should be documented on a digital format.

203222 Visual Communication Theories (3:3-0)

Prerequisite: ---

This course focuses on the visual communication theories and their principles. It explains in depth the sensual and perceptual theories specifically gestalt, constructivism, ecological, semiotics and cognitive theories. It also explores types of signs and images including indexes, icons and symbols in various graphic design applications. Students will learn the principles of creating effective visual images and designs that can inform, educate or persuade the target audience.

203233 History & Theory of Modern & Contemporary Art (3:3-0)

Prerequisite: 201134

This course focuses on the major artists and movements of the history of art from Impressionism to the present (mid-19th Century to present). Students will gain an appreciation of the aesthetic values behind the art of international cultures, as well as an understanding of the historical, social, political and scientific context in which art work was produced. The course also develops key concepts of the discipline of art history and build formal analysis skills appropriate to the media of painting, sculpture, architecture, photography, film and digital artifacts. In addition, the influence of art movements on graphic design trends will be discussed.

203316 Design of Permanent & Mobile Exhibitions (3:1-2)

Prerequisite: 205341

This course explains principles, techniques, methods, components and materials of creating and producing mobile and permanent graphic design exhibitions that are used for promotion and advertisement purposes. Students learn to use advanced digital programs to design and execute exhibitions

205337 Stop Motion Animation (3:1-2)

Prerequisite: 205336

This course is designed to show students the process of stop-motion animation by creating simple and professional armatures, building sets and simple interiors and using lights and cameras in order to create unique-looking styles for animation.

205431 Advanced Three Dimensional Animation (3:1-2)

Prerequisite: 205334

Students will continue to explore and exercise an advanced level of skill in animation and focuses on acting shots such as 1- and 2-person dialogues and pantomimes. This course shows various ways to approach acting for animation and how to try and find meaningful and heartfelt performances for 3D characters.

9600102 Computer Skills (3:3-0)

Prerequisite: 9601099/P.T

This course provides an overview of the Internet, Internet Protocols and www. topics covered: Overview of Internet Technology including the different services such as Email, File Transfer (FTP), Telnet and chatting. Study of principles of web browsers,

search engines and portals, design Websites using Hyper Text Markup Language (HTML) including: Insert images, hyperlinks, lists, tables, forms and frames into web pages, Cascading Style Sheets (CSS) and JavaScript.

602104 Information Technology Fundamentals (3:3-0)

Prerequisite: ---

This course gives the basic concepts of computer and information technology both hardware and software. Topics covered: Introduction to computers hardware and software, numbering system, data coding and representation, process of software development, systems and application software, problem-solving techniques (Flowchart, Pseudo-code), introduction to programming language "C++" including: Program structure, primitive data types, mathematical and logical operations and basic control structures, compilation and testing.