Specialization Courses

(ANIMATION)

Course Title: ICT-AN1 Information and Communication Technology

Learning Objectives:

- Understand the basic concepts of information and communication technology
- Learn how to use basic computer applications such as word processing, spreadsheets, and presentation software
- Gain knowledge of internet technologies, including email, search engines, and social media
- Develop skills in digital communication and collaboration
- Explore emerging trends in information and communication technology

Introduction:

Welcome to ICT-AN1 Information and Communication Technology. This course is designed to introduce you to the fundamental concepts and applications of information and communication technology. Through this course, you will learn how to use basic computer applications, gain knowledge of internet technologies, and develop skills in digital communication and collaboration.

Discussion:

Information and communication technology (ICT) refers to the use of digital technologies for communication, collaboration, and the processing of information. In today's digital age, ICT has become an essential part of daily life, both in personal and professional settings.

One of the key components of ICT is computer applications. Through this course, you will learn how to use basic computer applications such as word processing, spreadsheets, and presentation software. These tools are essential for tasks such as writing reports, creating budgets, and delivering presentations.

Another important aspect of ICT is internet technologies. In this course, you will gain knowledge of internet technologies such as email, search engines, and social media. These technologies are used for communication, research, and networking, and have become an essential part of daily life.

Digital communication and collaboration are also important skills that you will develop through this course. You will learn how to use digital tools for communication and collaboration, including email, instant messaging, and online collaboration platforms. These skills are essential for working in modern workplaces, where digital communication and collaboration are increasingly important.

Finally, we will explore emerging trends in information and communication technology. As technology continues to advance, new trends and tools are emerging that can have a significant impact on our lives and work. By staying up-to-date with emerging trends, you can remain competitive in the digital age.

Conclusion:

In conclusion, ICT-AN1 Information and Communication Technology provides an introduction to the fundamental concepts and applications of information and communication technology. By learning how to use basic computer applications, gaining knowledge of internet technologies, developing skills in digital communication and collaboration, and exploring emerging trends in ICT, you will be well-equipped to thrive in the digital age.

Course Title: AN2 Drawing 1

Learning Objectives:

- Understand the basic principles and techniques of drawing
- Learn how to use different drawing materials and tools
- Develop skills in observational drawing
- Explore the use of drawing for creative expression

Introduction:

Welcome to ICT-AN2 Drawing 1. This course is designed to introduce you to the basic principles and techniques of drawing. Through this course, you will learn how to use different drawing materials and tools, develop skills in observational drawing, and explore the use of drawing for creative expression.

Discussion:

Drawing is an essential skill for artists and designers. It is the foundation for many other art forms, such as painting, sculpture, and graphic design. In this course, you will learn the basic principles and techniques of drawing, including line, shape, form, texture, value, and composition.

You will also learn how to use different drawing materials and tools, including graphite pencils, charcoal, ink, and colored pencils. Each material has unique properties and can be used to achieve different effects in a drawing.

Observational drawing is an important skill that you will develop through this course. Observational drawing involves drawing from life, such as still life arrangements or live models. By observing and studying the subject, you will develop your skills in proportion, perspective, and shading.

Finally, we will explore the use of drawing for creative expression. Drawing can be used to communicate ideas, emotions, and concepts. By experimenting with different styles and techniques, you will learn how to use drawing as a tool for creative expression.

Conclusion:

In conclusion, ICT-AN2 Drawing 1 provides an introduction to the basic principles and techniques of drawing. By learning how to use different drawing materials and tools, developing skills in observational drawing, and exploring the use of drawing for creative expression, you will be well-equipped to pursue further studies in art and design.

Course Title: AN3 Drawing 2

Learning Objectives:

- Develop advanced skills in drawing
- Learn how to use different mediums and techniques for drawing
- Explore the use of drawing as a means of creative expression
- Apply principles of composition and design to drawing

Introduction:

Welcome to ICT-AN3 Drawing 2. This course is designed for students who have already gained basic skills in drawing and are ready to advance their techniques and explore the use of drawing as a means of creative expression. Through this course, you will learn how to use different mediums and techniques for drawing and apply principles of composition and design to your drawings.

Discussion:

Drawing is an essential skill for artists and designers, and in this course, we will focus on developing advanced skills in drawing. You will learn how to use different mediums and techniques for drawing, including pen and ink, watercolor, and mixed media. Each medium has unique properties and can be used to achieve different effects in a drawing.

We will also explore the use of drawing as a means of creative expression. Drawing can be used to communicate ideas, emotions, and concepts. Through exercises and projects, you will learn how to use drawing to express your own ideas and explore your creativity.

In addition to exploring the use of drawing as a means of creative expression, we will also apply principles of composition and design to our drawings. We will learn about the use of negative space, balance, rhythm, and contrast in creating dynamic and engaging compositions.

Conclusion:

In conclusion, ICT-AN3 Drawing 2 provides students with the opportunity to develop advanced skills in drawing and explore the use of drawing as a means of creative expression. By learning how to use different mediums and techniques, applying principles of composition and design, and expressing your own ideas through drawing, you will be well-equipped to pursue further studies in art and design.

Course Title: AN4 Software Applications and Multimedia Arts

Learning Objectives:

- Develop skills in using software applications for multimedia arts
- Learn how to use multimedia elements such as graphics, audio, and video in creating digital art
- Explore the principles of multimedia design and apply them to digital art projects
- Create engaging and interactive multimedia art projects using software applications

Introduction:

Welcome to ICT-AN4 Software Applications and Multimedia Arts. This course is designed for students who are interested in creating digital art using software applications and multimedia elements such as graphics, audio, and video. Through this course, you will develop skills in using software applications for multimedia arts and learn how to apply multimedia design principles to create engaging and interactive digital art projects.

Discussion:

In this course, we will focus on developing skills in using software applications for multimedia arts. You will learn how to use software applications such as Adobe Photoshop, Illustrator, and Premiere Pro to create digital art projects that incorporate multimedia elements such as graphics, audio, and video. Each software application has unique features and can be used to achieve different effects in a digital art project.

We will also explore the principles of multimedia design and apply them to our digital art projects. We will learn about the use of color, typography, layout, and interactivity in creating engaging and interactive multimedia art projects. By applying these principles, you will learn how to create digital art that not only looks great but also engages the viewer.

In addition to learning how to use software applications and multimedia design principles, you will also have the opportunity to create your own engaging and interactive multimedia art projects. Through hands-on projects, you will apply the skills and principles learned in class to create digital art projects that demonstrate your creativity and technical skills.

Conclusion:

In conclusion, ICT-AN4 Software Applications and Multimedia Arts provides students with the opportunity to develop skills in using software applications for multimedia arts, learn how to use multimedia elements in creating digital art, explore the principles of multimedia design, and create engaging and interactive multimedia art projects. By the end of this course, you will have gained the technical and creative skills needed to pursue further studies or a career in multimedia arts.

Course Title: AN5 Principles of Animation

Learning Objectives:

- Understand the principles of animation
- Learn how to apply animation techniques to create engaging and effective animated content
- Develop skills in using animation software and tools
- Create high-quality animated content for various media platforms

Introduction:

Welcome to ICT-AN5 Principles of Animation. This course is designed to provide you with a solid foundation in the principles of animation and help you develop skills in using animation software and tools. Through this course, you will learn how to apply animation techniques to create engaging and effective animated content for various media platforms.

Discussion:

In this course, we will explore the principles of animation, including timing, spacing, squash and stretch, anticipation, and follow-through. We will also cover the technical aspects of animation, such as keyframe animation, tweening, rigging, and rendering. By the end of the course, you will have a good understanding of the principles of animation and the technical skills needed to create high-quality animated content.

We will also focus on developing skills in using animation software and tools. We will use industry-standard software such as Adobe Animate, Toon Boom, and Blender to create animated content. You will learn how to use these tools to create different types of animations, including 2D and 3D animations, motion graphics, and visual effects.

Throughout the course, you will have the opportunity to create your own animated content. You will apply the skills and principles learned in class to create engaging and effective animated content for various media platforms, such as web, mobile, and television.

Conclusion:

In conclusion, ICT-AN5 Principles of Animation provides students with a comprehensive understanding of the principles of animation, as well as the technical skills needed to create high-quality animated content. By the end of the course, you will have developed skills in using animation software and tools and be able to create engaging and effective animated content for various

media platforms. Whether you are interested in pursuing a career in animation or simply want to develop your skills in this area, this course is an excellent starting point.

Course Title: AN6 Storyboarding and Scriptwriting

Learning Objectives:

- Understand the fundamentals of storyboarding and scriptwriting
- Learn how to create effective storyboards and scripts for various media platforms
- Develop skills in using storyboarding and scriptwriting software and tools
- Create high-quality storyboards and scripts for different types of media projects

Introduction:
Welcome to ICT-AN6 Storyboarding and Scriptwriting. This course is designed to provide you with a solid foundation in the fundamentals of storyboarding and scriptwriting, and help you develop skills in using storyboarding and scriptwriting software and tools. Through this course, you will learn how to create effective storyboards and scripts for various media platforms, such as animation, film, television, and video games.

Discussion:

In this course, we will explore the fundamentals of storyboarding and scriptwriting, including plot development, character development, dialogue, pacing, and structure. We will also cover the technical aspects of storyboarding and scriptwriting, such as shot composition, camera angles, shot lists, and formatting. By the end of the course, you will have a good understanding of the fundamentals of storyboarding and scriptwriting and the technical skills needed to create high-quality storyboards and scripts.

We will also focus on developing skills in using storyboarding and scriptwriting software and tools. We will use industry-standard software such as Storyboard Pro, Final Draft, and Celtx to create storyboards and scripts. You will learn how to use these tools to create effective storyboards and scripts for different types of media projects.

Throughout the course, you will have the opportunity to create your own storyboards and scripts. You will apply the skills and principles learned in class to create high-quality storyboards and scripts for various media platforms, such as animation, film, television, and video games.

Conclusion:

In conclusion, ICT-AN6 Storyboarding and Scriptwriting provides students with a comprehensive understanding of the fundamentals of storyboarding and scriptwriting, as well as the technical skills needed to create high-quality storyboards and scripts for different types of media projects. By the end of the course, you will have developed skills in using storyboarding and scriptwriting software and tools and be able to create effective storyboards and scripts for various media platforms. Whether you are interested in pursuing a career in animation, film, television, or video games or simply want to develop your skills in this area, this course is an excellent starting point.

Course Title: AN7 Character and Figure Modeling

Learning Objectives:

- To understand the basic principles and techniques of character and figure modeling
- To develop the skills necessary to create 3D models of characters and figures using industry-standard software
- To apply design principles and aesthetic sensibilities in character and figure modeling
- To demonstrate effective communication and collaboration skills in the development of character and figure models

Introduction:

Character and figure modeling is an essential skill for digital artists, animators, and game developers. This course focuses on the basic principles and techniques of character and figure modeling using 3D modeling software. The course will cover various aspects of character and figure design, including anatomy, proportion, movement, and personality.

Discussion:

I. Overview of Character and Figure Modeling

   A. Introduction to 3D modeling software

   B. Basic principles of character design

   C. Anatomy and proportion in character modeling

   D. Creating and manipulating 3D models

   E. Developing a sense of character personality

II. Creating Characters and Figures

   A. Creating and modifying character meshes

   B. Sculpting details and textures

   C. Rigging characters for animation

   D. Creating realistic movement and expressions

   E. Adding lighting and texture

III. Collaboration and Communication in Character and Figure Modeling

A. Working with clients and stakeholders

B. Collaboration with animators, designers, and programmers

C. Communicating design ideas and progress updates

D. Incorporating feedback and revisions

E. Developing and presenting final character models

Conclusion:

This course provides students with a foundation in character and figure modeling using 3D modeling software. By the end of the course, students will have the skills and knowledge necessary to create and manipulate 3D models of characters and figures, and to collaborate effectively with others in the development of digital media projects. The skills developed in this course will be valuable in a wide range of industries, including animation, game design, and digital media production.

Course Title: AN8 Animation 1

Learning Objectives:

- To understand the basics of animation
- To learn the principles of animation and their application in creating animated sequences
- To gain knowledge of the different types of animation and techniques used to create them
- To develop the skills to create simple animations using software tools

Introduction:

Animation is a fascinating field that involves creating sequences of images that simulate motion. It is used in various applications, including movies, video games, advertisements, and educational materials. This course is designed to provide an introduction to the principles of animation and techniques used in creating animated sequences. In this course, you will learn the basics of animation, the principles of animation, and different types of animation. You will also learn how to create simple animations using software tools.

Discussion:

1. Basics of Animation

- Definition of animation
- History of animation
- Types of animation
- The importance of timing and spacing
- The 12 principles of animation

2. Principles of Animation

- Squash and stretch
- Anticipation
- Staging
- Straight ahead and pose to pose action
- Follow through and overlapping action
- Slow in and slow out
- Arcs
- Secondary action
- Timing
- Exaggeration
- Solid drawing

- Appeal

3. Types of Animation

- 2D animation
- 3D animation
- Stop motion animation
- Motion graphics

4. Creating Simple Animations using Software Tools

- Introduction to software tools used in animation
- Basic animation techniques using software tools
- Creating simple animations using software tools

Conclusion:

In conclusion, this course has introduced you to the basics of animation, the principles of animation, and different types of animation. You have also learned how to create simple animations using software tools. Animation is an exciting field, and with the skills and knowledge you have gained from this course, you can pursue a career in animation or use your new skills to create your animated sequences.

Course Title: AN9 Animation 2

Learning Objectives:

- Understand the principles and techniques of advanced animation.
- Develop skills in creating complex animation sequences and character interactions.
- Apply animation concepts to produce high-quality animated content.

Introduction:

Welcome to ICT-AN9 Animation 2! In this course, we will explore the advanced principles and techniques of animation. Building on the foundation laid in Animation 1, we will delve deeper into creating complex animations, character interactions, and more. By the end of this course, you will have gained the skills and knowledge necessary to produce high-quality animated content.

Discussion:

1. Advanced animation principles

- Review of animation fundamentals
- Keyframes and animation curves
- Advanced timing and spacing techniques
- Animation layers and blending
- Special effects and particle systems

2. Complex character animations

- Character rigging and joint systems
- Facial animation and lip syncing
- Body mechanics and posing
- Animating hair and clothing

3. Interactions and storytelling

- Advanced camera techniques and shot composition
- Cinematic storytelling and visual language
- Complex character interactions and relationships
- Dynamic environments and backgrounds

4. Animation project

- Apply advanced animation concepts to create a complex animation sequence

- Use industry-standard animation software to produce high-quality animated content
- Receive feedback and critique from peers and instructor to refine your work

Conclusion:

Congratulations on completing ICT-AN9 Animation 2! By mastering advanced animation techniques and principles, you have gained the skills and knowledge necessary to produce high-quality animated content. Keep practicing and refining your craft, and you will be well on your way to becoming a successful animator. Best of luck in your future endeavors!

Course Title: AN10 Programming Languages

- To understand the basics of programming languages and their importance in software development.
- To learn the syntax and semantics of popular programming languages like Python and JavaScript.
- To understand the concepts of object-oriented programming and functional programming.
- To gain hands-on experience in writing code and solving programming problems.

Introduction:

Programming languages are essential tools for building software applications, websites, and other digital products. There are many programming languages to choose from, each with its own unique features and syntax. In this course, we will explore the basics of programming languages, with a focus on popular languages like Python and JavaScript. We will also delve into the concepts of object-oriented programming and functional programming, which are important paradigms in software development.

Discussion:

1. Introduction to Programming Languages

- What are programming languages?
- Why are they important in software development?
- Overview of popular programming languages

2. Syntax and Semantics of Programming Languages

- What is syntax?
- What is semantics?
- Examples of syntax and semantics in programming languages
- Common programming language constructs like loops, conditionals, and functions

3. Object-Oriented Programming

- What is object-oriented programming?
- Key concepts like classes, objects, inheritance, and polymorphism
- Examples of object-oriented programming in Python and JavaScript

4. Functional Programming

- What is functional programming?

- Key concepts like pure functions, higher-order functions, and lambda expressions
- Examples of functional programming in Python and JavaScript

5. Hands-On Programming Exercises

- Writing simple programs in Python and JavaScript
- Solving programming problems using object-oriented and functional programming concepts

Conclusion:

Programming languages are powerful tools for creating software applications and solving complex problems. In this course, we have learned the basics of programming languages, including syntax and semantics, as well as the concepts of object-oriented and functional programming. By gaining hands-on experience with popular languages like Python and JavaScript, students are better equipped to tackle programming challenges in their future endeavors.

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Course Title: ICT AN11 Graphic Design

Learning Objectives:

- Define graphic design and its applications in various fields.
- Familiarize students with graphic design tools and software.
- Develop basic design skills such as color theory, composition, typography, and layout.
- Create visual designs for different mediums such as print, digital, and social media.
- Analyze and critique the effectiveness of visual designs.

Introduction:

Welcome to ICT-AN11 Graphic Design. In this course, we will explore the world of graphic design, its applications, and tools. Graphic design is a creative process that involves combining typography, visual arts, and layout techniques to create visual communication. It plays a vital role in various industries such as advertising, marketing, media, and entertainment. Through this course, students will learn to create designs for different mediums and develop essential design skills.

Discussion:

I. Understanding Graphic Design

- Definition of Graphic Design
- Brief History of Graphic Design
- Applications of Graphic Design

II. Elements of Graphic Design

- Color Theory
- Typography
- Layout and Composition
- Visual Hierarchy

III. Design Tools and Software

- Adobe Creative Suite (Photoshop, Illustrator, InDesign)
- CorelDRAW
- Sketch
- Figma

IV. Designing for Print

- Designing for Business Cards, Brochures, Posters, and Flyers

V. Designing for Digital

- Designing for Websites, Social Media, and Mobile Applications
- Creating Graphics for Animation and Motion Graphics

VI. Critiquing Visual Design

- Principles of Visual Critique
- Critiquing Visual Design with Examples

Conclusion:

In conclusion, ICT-AN11 Graphic Design is an essential course for students interested in pursuing careers in design-related fields. The course provides an understanding of graphic design, design tools and software, and essential design skills. Students will learn to create visual designs for different mediums and critique designs effectively. By the end of this course, students will have developed a strong foundation in graphic design, allowing them to create compelling designs and contribute to the field of design.

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Course title: ICT AN12 Web Design and Development

Learning Objectives:

- Understand the principles of web design and development
- Learn how to create and publish a basic website using HTML, CSS, and JavaScript
- Explore various web design and development tools and techniques

Introduction:

Web design and development is a constantly evolving field, and the demand for skilled web developers and designers is on the rise. This course is designed to teach you the fundamental concepts and techniques of web design and development, including HTML, CSS, JavaScript, and more. By the end of this course, you will have the skills and knowledge needed to create and publish a basic website.

Discussion:

1. Introduction to Web Design and Development

- Definition and scope of web design and development
- Brief history and evolution of web design and development
- Current trends and best practices

2. HTML and CSS

- Introduction to HTML and CSS
- HTML tags and syntax
- Basic CSS styling and layout
- Advanced CSS techniques

3. JavaScript

- Introduction to JavaScript
- JavaScript syntax and variables
- Functions, loops, and conditional statements
- Event handling and DOM manipulation

4. Web Design and Development Tools

- Introduction to web design and development tools
- Web development environments (e.g., Dreamweaver, Visual Studio Code)
- Content management systems (e.g., WordPress, Joomla)

- Collaboration and version control tools (e.g., GitHub, Bitbucket)

5. Website Publishing and Maintenance

- Website hosting and domain registration
- Website testing and optimization
- Website maintenance and updates - Website security and backup strategies

Conclusion:

Web design and development is an essential skill in today's digital age. This course provides a comprehensive introduction to web design and development, from the basics of HTML and CSS to more advanced concepts such as JavaScript and web development tools. By the end of this course, you will have the skills and knowledge needed to create and publish a basic website, and you will be prepared to continue your learning journey in this exciting and constantly evolving field.

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Course Title: ICT AN13 Digital Illustration and Desktop Publishing

Learning Objectives:

- Understand the basic concepts and principles of digital illustration and desktop publishing.
- Develop skills in using software tools for digital illustration and desktop publishing.
- Apply design principles in creating digital illustrations and printed materials.
- Create visually appealing and professional digital illustrations and printed materials.

Introduction:

Digital illustration and desktop publishing have revolutionized the world of graphic design. They provide an efficient and effective way of creating visually appealing and professional-looking illustrations and printed materials. This course will introduce students to the basic concepts and principles of digital illustration and desktop publishing, as well as provide them with the necessary skills to create high-quality designs.

Discussion:

I. Basic Concepts and Principles of Digital Illustration

- Definition of digital illustration
- Different types of digital illustration
- Basic elements of design
- Principles of design

II. Software Tools for Digital Illustration and Desktop Publishing

- Adobe Photoshop

- Adobe Illustrator

- CorelDRAW

- Inkscape

- GIMP

III. Design Principles in Creating Digital Illustrations and Printed Materials

- Color theory

- Typography
- Layout and composition
- Image resolution and file formats

IV. Creating Digital Illustrations and Printed Materials

- Digital illustrations
- Brochures and flyers
- Posters
- Business cards
- Newsletters

Conclusion:

This course has provided an overview of the basic concepts and principles of digital illustration and desktop publishing, as well as introduced students to various software tools for creating high-quality designs. With this knowledge and skills, students can now create visually appealing and professional-looking digital illustrations and printed materials. By applying the design principles learned in this course, students can produce effective and aesthetically pleasing designs that communicate their intended message.

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Course Title: ICT AN14 Animation Rendering and Production

Learning Objectives:

- To introduce the students to the principles and techniques of animation rendering and production
- To enable students to understand the role of rendering in the animation production process
- To provide students with the knowledge and skills to produce high-quality rendered animations
- To familiarize students with the tools and software used in rendering and production

Introduction:

Animation rendering and production are important aspects of the animation industry. Rendering refers to the process of generating photorealistic or nonphotorealistic images from a 3D or 2D model, and production refers to the process of creating the final output of an animation project. This course will provide students with an understanding of the rendering and production process, as well as the tools and software used to create high-quality animations.

Discussion:

1. Principles and techniques of animation rendering

- Understanding the rendering process
- Different types of rendering: photorealistic, non-photorealistic, and stylized
- Importance of lighting and shading in rendering
- Use of textures and materials in rendering

2. Role of rendering in the animation production process

- Understanding the workflow of an animation production
- Importance of rendering in creating high-quality animations
- Integration of rendering with other aspects of animation production

3. Tools and software used in rendering and production

- Introduction to rendering software such as Autodesk Maya, Blender, and Cinema 4D

- Understanding the use of plugins in rendering
- Introduction to production software such as Adobe After Effects, Nuke, and Toon Boom Harmony

4. Techniques for producing high-quality animations

- Use of rendering techniques such as ray tracing, global illumination, and ambient occlusion
- Creating realistic lighting and shading
- Texturing and material creation
- Use of compositing in post-production

Conclusion:

In conclusion, ICT-AN14 Animation Rendering and Production is a course designed to provide students with the knowledge and skills needed to create high-quality rendered animations. Through this course, students will learn the principles and techniques of animation rendering, the role of rendering in animation production, and the tools and software used in rendering and production. The techniques learned in this course will enable students to produce high-quality animations.