**LIVING STONE INTERNATIONAL SCHOOL**

**Angeles City, Pampanga**

***J****esus first*. **O***thers second*. **Y***ourself third*.

**Curriculum Map in ICT 5**

A.Y 2023-2024

**Prepared By:**

**Ms. Joy B. Alinday**

*Subject Teacher*, ICT 5

**Noted By:**

**Mr. Michael John D. Cunanan**

*Head of the IT Department*

**Approved By:**

**Ms. Amelita B. Tumagoy**

Principal

## **COURSE DESCRIPTION**

The Graphic Design and Animation Fundamentals course is designed to provide students with a comprehensive introduction to the principles, techniques, and tools used in the field of graphic design and animation. This course is ideal for individuals who are interested in pursuing a career in visual communication, digital media, or entertainment industries.

Throughout this course, students will develop a strong foundation in both graphic design and animation, learning how to effectively convey messages and create visually compelling content. The course will cover essential topics such as typography, color theory, layout design, illustration, motion graphics, and 2D animation techniques.

By combining theoretical knowledge with practical hands-on projects, students will acquire the necessary skills to conceptualize, design, and animate graphics for various media platforms including print, web, mobile applications, and video. They will learn how to use industry-standard software tools like Adobe Photoshop, Illustrator, After Effects, and Animate, gaining proficiency in their application to create stunning visual designs and animations.

## **COURSE GOAL**

At the end of the course, learners will be able to:

1. Develop a strong foundation in design principles: The course aims to provide students with a solid understanding of fundamental design principles such as color theory, composition, typography, and layout. By mastering these principles, students will be able to create visually appealing and effective designs.

2. Enhance technical skills in graphic design software: The course focuses on developing proficiency in industry-standard graphic design software such as Adobe Photoshop, Illustrator, and InDesign. Students will learn various tools and techniques to manipulate images, create vector graphics, and design layouts for print and digital media.

3. Explore the principles of animation: The course introduces students to the principles of animation, including timing, spacing, squash and stretch, anticipation, and follow-through. Students will learn how to bring static designs to life through motion and create engaging animations.

## **COURSE ASSESSMENTS AND COURSE REQUIREMENTS FOR GRADE SCHOOL**

**COURSE ASSESSMENTS**

To attain the goal of the course, student's performance and outputs will be assessed in the following manner (see table below):

|  |  |
| --- | --- |
| **First Semester to Second Semester** | |
| Authentic Performance | 50% |
| Trimester Finals | 50% |
| **Total** | **100%** |

|  |  |
| --- | --- |
| **Third Semester** | |
| Authentic Performance | 40% |
| Trimester Finals | 60% |
| **Total** | **100%** |

**COURSE REQUIREMENTS**

* Laptop/Desktop
* Piskel App Offline

**ICT / ROBOTICS SYLLABUS SCHOOL YEAR 2023 – 2024**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Subject Matter (Content)** | **Content & Performance Standards** | **Learning Competency** | **Activity & Topic/Session** | **Assessment** | **Resources** | **Institutional CORE Values** |
| 5th Grade   (First Term) | Introduction in Piskel | **Content Standard:**  The learners demonstrate an understanding of the Piskel app fundamentals by analyzing sequences, iterations, conditionals, variables, and data structures.  **Performance Standard:**  The learners should be able to manipulate Piskel app toolset. | **The learners:**  1. Distinguish the fundamentals of Piskel app.  2. Discuss facts about the development of the Piskel applicaton. | Week 1:  The teacher will briefly introduce the fundamentals of Piskelapp.  A1. What is Piskel?  B1. Piskel: Fact or Bluff  **Activity:**  1. The teacher will demonstrate the step-by-step methods on how to access Piskel app. The students will follow along. |  | Piskel App offline | * Manifest humility and responsibility in all tasks and apply a fundamental understanding of ethical access and use of technology. * Exhibit curiosity and interest in learning the Piskel application to share interactive media such as animated objects or GIF. * Manifest creativity, originality, and truthfulness in planning, designing, and creating Piskel projects in a fun way. |
| Piskel User Interface | **Content Standard:**  The learners demonstrate an understanding of the Piskel Environment.  **Performance Standard:**  The learners should be able to identify the basic functions of the Piskel environment. | **The learners:**  1. Navigate the Piskel Environment.  2. Recognize the core design principles of Piskel. | Week 2:  The teacher will demonstrate the topic in Piskel app.  A1. Major Panes  B1. Frames Per Seconds *(fps)*  **Activity:**  1. Ask the learners to locate and describe the three major panes of Piskel.  2. Demonstrate the parts of the Piskel interface. |  | Piskel App offline |
| Paint Editor | **Content Standard:**  The learners demonstrate an understanding of the Piskel Paint Editor.  **Performance Standard:**  The learners should be able to apply the basic functions of the Pisklel Paint Editor. | **The learners:**  1. Map the Piskel Paint Editor.  2. Differentiate the Piskel Paint Editor from other paint editors. | Week 3:  The teacher will briefly discuss the topics:  A1. Vector Vs. Bitmap  B1. Paint Editor Tools  **Activity:** Perform the following.  1. Navigate the costumes tab.  2. Character-making  2.1 Create your own sprite using the shape tool. | Assessment 1:  Using the drawing tools in the Piskel editor, create an alternate costume for your sprite. Use the different paint tools to show visual effects in your sprite. | Piskel App offline |
| Layering and frames per second | **Content Standard:**  The learners demonstrate an understanding on the basics of Pixel Animation.  **Performance Standard:**  The learners should be able to identify the use of sprite editor. | **The learners:**  1. Define Animation.  2. Discuss how layering animation works.  3. Demonstrate deep understanding of sprite editing tool. | Week 4:  **A.** The teacher will discuss the topic using google slides for multimedia presentation.  **A.1.** Piskel Animation  **B.** The teacher will discuss and demonstrate how to establish layering.  **B.1** Piskel Tools  **Activity:**  Using an online sprite editor create draw an outline background scenes. Then, create an animated background element. |  | Piskel App offline |
| Vertical Mirroring | **Content Standard:**  The learners can demonstrate an understanding of the color pick tool.  **Performance Standard:**  The learners shall be able to experiment with the hexadecimal colors to tweak the hues and saturations of an object. | **The learners:**  1. Collect and organize the colors.  2. Select and appraise the hexadecimal colors.  3. Choose and compare the gradient hues and saturations. | Week 5:  **A.** The teacher will discuss and introduce the topic through a multimedia presentation.  **A.1.** Color Picker  **B.** The teacher will discuss and demonstrate how to change the color saturations.  **B.1** Primary and Secondary color box  **Activity:**  Using an online sprite editor change the color settings of color box. | Assessment 2:  Create a background and element with transition to new scene | Piskel App offline |
| Frame Manipulation | **Content Standard:**  The learners can demonstrate an understanding of frame per second  **Performance Standard:**  The learners shall be able to modify the frames to create movements | **The learners:**  1. Select and justify the different background clusters of frames.  2. Compare and interpret the speed of frames.  3. Review and justify layers and frames. | Week 6:  **A.** The teacher will discuss and disseminate the multimedia presentation.  **A.1.** Frame manipulation  **B.** The teacher will discuss and demonstrate how to integrate the frame to main layers.  **B.1** Frames Per Seconds  **Activity:**  Practice the tools in adjusting the fps of your frames. |  | Piskel App offline |
| 32 bit pixel art | **Content Standard:**  The learners can demonstrate an understanding of manipulating the layers.  **Performance Standard:**  The learners shall be able to manipulate the angles of layers. | **The learners:**  1. Select and compare the different transform tools.  2. Integrate and manage layering to transform tool.  3. Assess and interpret the different transform tool content. | Week 7:  **A.** The teacher will discuss and demonstrate the topic through a multimedia presentation.  **A.1.** Transform tools  **B.** The teacher will discuss and demonstrate how to configure the internet protocol from devices.  **B.1** Layer Manipulation  **Activity:**  Using the online sprite editor, replicate the layers and change the angle. | Assessment 3:  Create a 32-bit digital art representation of nature and use it to create different sets of frames to form a graphics interchange format using a sprite editor. To create an outstanding masterpiece, employ various techniques such as line art, dithering, and anti-aliasing. | Piskel App offline |
| Sprite sheet guide | **Content Standard:**  The learners can demonstrate an understanding of tampering layers  **Performance Standard:**  The learners shall be able to organize the layers | **The learners:**  1. Select and compare the different layer cloning.  2. Build and construct a light or dark shade frames.  3. Review and assess brightness level of pixel. | Week 8:  **A.** The teacher will discuss and spread supplementary notes through a multimedia presentation.  **A.1.** Onion skin  **B.** The teacher will discuss and demonstrate how to establish a brightness.  **B.1** Grid view lines  **Activity:**  Create a draft sprite sheet |  | Piskel App offline |
| Dimensional Bit Mapping | **Content Standard:**  The learners can demonstrate an understanding of 8 bit, 16 bit, and 32 bit.  **Performance Standard:**  The learners shall be able to resize the pixel ratio | **The learners:**  1. Assess and maintain the aspect ratio of canvass content.  2. Build and construct an anchor to canvass.  3. Review and set the default piskel size | Week 9:  **A.** The teacher will discuss and spread supplementary notes through a multimedia presentation.  **A.1.** Resizing canvass content  **B.** The teacher will discuss and demonstrate how to picture elements.  **B.1** Aspect ratio  **Activity:**  Create a sprite animation movement | Assessment 4:  Create and organize thumbnail sketch to blend the sprite character and background. | Piskel App offline |
| Thumbnail sketching | **Content Standard:**  The learners can demonstrate an understanding of image mirroring  **Performance Standard:**  The learners shall be able to replicate the sprite and combine through mirroring | **The learners:**  1. Assess and differentiate the pixel mirroring.  2. Build and construct a sprite using vertical mirroring tool.  3. Choose and justify the mirroring axis | Week 10:  **A.** The teacher will discuss and spread supplementary notes through a multimedia presentation.  **A.1.** Vertical mirroring  **B.** The teacher will discuss and demonstrate how to combine replicated mirror layer.  **B.1** Mirroring Axis  **Activity:**  Create an onion skin sketch for character and background |  | Piskel App offline |
| Shape selection tool | **Content Standard:**  The learners can demonstrate an understanding of selecting shapes  **Performance Standard:**  The learners shall be able to replicate the shape | **The learners:**  1. Review and compare the types of shapes.  2. Build and establish a digital pixel art. | Week 11:  **A.** The teacher will discuss and distribute the multimedia presentation to the student.  **A.1.** Shape selection  **B.** The teacher will discuss and demonstrate how to the shapes within the frames.  **B.1** Dithering tool  **Activity:**  Create a shape scenery for the background sprites |  | Piskel App offline |
| 32ndBinary Digit pixel animation | **Content Standard:**  The learners can demonstrate an understanding of binary digits.  **Performance Standard:**  The learners will create and design a 32-bit digital scenery that manipulates the entire scene and blend the sprite character and background using sprite editor. | **The learners:**  1. Review and compare the types of topology.  2. Interpret and justify the code of ethics in networking.  3. Choose and compare the pros and cons of being a network engineer. | Week 12:  The teacher will disseminate the instructions and other details for the final examination. Before the examination commences, students will encourage to chance to ask questions and clarifications. | **1st Trimester: Finals**  Creating a 32-bit digital scenery and design a frame storyboard based on the sprite character. Use the desired sprite editor of choice. Refer to the image below as example | Piskel App offline |