



**SAMSEN WITTAYALAI SCHOOL
ENGLISH PROGRAM**

COURSE OUTLINE

Subject: Computer Graphic (SC30279)

Course Classification: Foundation Additional

Learning Period: 2 Periods/Week

Credit Unit: 1.0

Grade Level: Mattayomsuksa 4 (Grade 10)

Semester 1, Academic Year 2022

Learning Area: Science and Technology

Samsenwittayalai School, English Program

Teacher: Miss Thanaphorn Thongdee

I. COURSE DESCRIPTION

A study of techniques and stages of work, set of tools and basic components of MAYA, the computer animation and modelling software, to enable learners to use basic tools and commands. The course provides learners with processes of work, render and various components, creating the animation of three-dimension objects to base their knowledge that will lead to ability in using other programmes systematically. Studying an animation is a bit like studying how to act and learning to draw backgrounds is very much like being a set designer. The learners can enjoy the layout, learn to think like a director of photography. It's an artistic artwork with many layers that so many have perfected in their own ways.

By presenting the lessons in an appropriate order and in a creative way along with class activities, group projects and assignments it will help the learners to summarize the main point of knowledge, the concept, the definition, the postulate, or any of the theorems considered from the content. Evaluations are done via various assessment methods according to the school's curriculum and the Individual student's skill level and interest. Familiar situations or latest events are used to illustrate ideas, and learners are given more opportunities to experience hands-on applications of the concepts and practising they study.

For applying the knowledge and develop it in their daily life. The course encourages learners to an understanding of the principle and methods of problem-solving through information technology processes; ability to apply roles of information technology, data and information, processing and management of information, computer and related accessories, software, and the principle of accurate problem solving or creation of work; to have ethical and moral in using information technology. The advantage animation has over other mediums is its incredible respect for time and attention to space and resolution. A dedicated animator can learn to see motion in unexpected ways, ordering space and sound differently than perhaps any other library has invented. Animators are known for being some of the most patient artists as well as some of the most efficient ones.

II. INDICATORS / LEARNING OUTCOMES

1. Learners' reading, analytical thinking and writing skills meet the criteria prescribed by the respective educational institutions.
2. Learners' desirable characteristics meet the criteria prescribed by the respective educational institutions.
3. Learners have a software program for the 2D and 3D course.
4. Learners create believable 2D characters in a narrative setting.
5. Learners create a storyboard used to illustrate a story or show the changes of scene.
6. Learners learn various aspects of animation using a variety of 2D software.
7. Learners have access to essential tools to get started with Tinkercad.
8. Learners can use the 3D Primitive Shapes to create more complex designs.
9. Learners practice basic skills like scale, move, and rotate to create a Japanese style building.
10. Learners build a column, then use that column to create an amazing Roman inspired Dome.
11. Learners create 3D Models using all tools and techniques about the future self.
12. Learners work in groups with their classmates and think of Paper Craft 3D Model.
13. Learners explain the principles of three-dimensional working and the benefits of Maya.

III. TENTATIVE COURSE OUTLINE

Week	Topics / Contents	Indicators	Period(s)
1.	Introduction to Computer Graphic <ul style="list-style-type: none"> - Topics of semester 1/2022 - Classroom Rules - What is Computer Graphic? 	3	2
2.	Character Design <ul style="list-style-type: none"> - What is Character Design? - 2D Character Design Drawing 	4	2
3.	Introduction to Storyboard <ul style="list-style-type: none"> - What is a Storyboard? - Why You Need a Storyboard? - Camera Shot Sizes 	5	2
4.	Create a Storyboard <ul style="list-style-type: none"> - Storyboard Checklist - How to Create a Storyboard - Register for www.storyboardthat.com 	5	2
5.	Storyboard Presentation <ul style="list-style-type: none"> - Define relevant presentation topics - Students presented their storyboards 	5	2
6.	Introduction to Animation <ul style="list-style-type: none"> - What is the definition of animation? - Types of animation - History of animation 	6	2

Week	Topics / Contents	Indicators	Period(s)
7.	2D Animation <ul style="list-style-type: none"> - What is 2D Animation? - 2D Software 	6	2
8.	Create 2D Animation <ul style="list-style-type: none"> - Learn how to use Animaker software - Create videos by themselves 	6	2
9	2D Animation Presentation <ul style="list-style-type: none"> - Define relevant presentation topics - Students presented their 2D Animation Videos 	6	2
10.	Midterm Exam Review <ul style="list-style-type: none"> - Review for midterm examination 	1, 2	2
11.	Mid-Term Exam		
12.	Let's Learn Tinkercad <ul style="list-style-type: none"> - Navigation and Menus - Moving, Rotating, and Scaling Objects 	7	2
13.	3D Primitive Shapes <ul style="list-style-type: none"> - Learn to identify 3D shapes in a larger design - Build a Tinkercad House 	8	2
14.	Basics with Japanese Architecture <ul style="list-style-type: none"> - Learn how to practice basic skills like scale, move, and rotate to create a Japanese style building. 	9	2
15.	Build a Roman Dome <ul style="list-style-type: none"> - Learn how to build a column, then use that column to create an amazing Roman inspired Dome. 	10	2
16.	Future Self 3D Model <ul style="list-style-type: none"> - Learn how to create a helmet for a Fire Fighter or a Tutu for a ballerina. 	11	2
17.	Group Work: Paper Craft 3D Model <ul style="list-style-type: none"> - Use Paper Craft model for the creation of 3D objects - Students brainstorm ideas for their project 	12	2
18.	Group Work Presentation <ul style="list-style-type: none"> - Define relevant presentation topics - Students present their group work project 	13	2
19.	Final Exam Review <ul style="list-style-type: none"> - Review for final examination. 	1, 2	2
20.	Final Exam		

VII. ASSIGNMENT

SGS No.	Score (Points)	Assignment	Deadline	Type			Remark
				Test	Individual	Group	
1.	20	HomeWorks: <ul style="list-style-type: none"> • 2D Character Design Drawing • Storyboard Presentation • 2D Animation • Animation Presentation 	Before Midterm Exam		✓		
Midterm	20	Midterm Examination	Midterm Exam	✓			
10.	10	Learners' reading, analytical thinking	Before Final Exam		✓		
11.	10	Learners' desirable characteristics	Before Final Exam		✓		
12.	20	Projects: <ul style="list-style-type: none"> • Japanese Architecture • Roman Dome • Future Self 3D Model • Group Work 	Before Final Exam			✓	
Final	20	Final Examination	Final Exam	✓			