



**SAMSEN WITTAYALAI SCHOOL
ENGLISH PROGRAM**

COURSE OUTLINE

Subject: Graphic Animation (SC20279)

Course Classification: Foundation Additional

Learning Period: 2 Periods/Week

Credit Unit: 1.0

Grade Level: Mattayomsuksa 1 (Grade 7)

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 3D course.
4. Learners have access to essential tools to get started with Tinkercad.
5. Learners can use the 3D Primitive Shapes to create more complex designs.
6. Learners create a fountain by aligning shapes with the Align tool.
7. Learners create a temple using shape generator custom shapes.
8. Learners identify the attributes they want to include in their dream room, plan it on paper, use basic math, and then recreate their vision in Tinkercad.
9. Learners access the critical tools to get started with Maya.
10. Learners understand the functions of basic tools in Maya.
11. Learners create objects using tools and joint them as a piece of work.
12. Learners create 3D Models using all tools and techniques.
13. Learners work in groups with their classmates.
14. 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 Graphic Animation <ul style="list-style-type: none"> - Topics of semester 1/2022 - Learn how to get the Autodesk Maya software - Register for the Autodesk Tinkercad website 	3	2
2.	Let's Learn Tinkercad <ul style="list-style-type: none"> - Navigation and Menus - Moving, Rotating, and Scaling Objects - Making and Manipulating Grouped Objects 	4	2
3.	3D Primitive Shapes <ul style="list-style-type: none"> - Introduction to 3D Primitive Shapes - Learn to identify 3D shapes in a larger design - Build a Tinkercad House 	5	2
4.	Align Tool <ul style="list-style-type: none"> - Understand the Align Tool - Learn to build a Fountain by aligning shapes with the Align tool 	6	2
5.	Build a Temple <ul style="list-style-type: none"> - Learn to create a temple using shape generator custom shapes 	7	2
6.	Project: Design Your Dream Room <ul style="list-style-type: none"> - Intro to Project - Research 	8	2

Week	Topics / Contents	Indicators	Period(s)
7.	Project: Design Your Dream Room <ul style="list-style-type: none"> - Sketch and Determine Scale - Learn how to convert measurements 	8	2
8.	Project: Design Your Dream Room <ul style="list-style-type: none"> - Design your room in Tinkercad - Make a presentation 	8	2
9	Project Presentation <ul style="list-style-type: none"> - Students presented their dream room idea 	8	2
10.	Midterm Exam Review <ul style="list-style-type: none"> - Review for midterm examination 	1, 2	2
11.	Mid-Term Exam		
12.	Maya User Interface and Tool Panel <ul style="list-style-type: none"> - Learn how to access the critical tools to get started with Maya 	9	2
13.	Project Management and Navigation <ul style="list-style-type: none"> - Learn how to set up project scene and navigate around the viewport 	10	2
14.	Polygon Primitive and Tools <ul style="list-style-type: none"> - Learn how to use primitive objects to model 3D forms and move, scale, and rotate them to create more complex forms in the scene 	11	2
15.	Modeling a Whale <ul style="list-style-type: none"> - Understand all techniques to apply for this work. - Learn how to use all techniques you have to learn to create a Whale Model 	12	2
16.	Group Work Preparation <ul style="list-style-type: none"> - Students making up a group in 5 peoples - Students brainstorm ideas for their project 	13	2
17.	Group Work Updates <ul style="list-style-type: none"> - Understand the way to present group work - Learn to present their scene design to the class like professional 	13	2
18.	Group Work Presentation <ul style="list-style-type: none"> - Students present their group work project 	14	
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"> • Tinkercad House • Tinkercad Fountain • Tinkercad Temple • Dream Room 	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"> • Basic Polygon • Maya Tools • Modeling a Whale • Group Work 	Before Final Exam			✓	
Final	20	Final Examination	Final Exam	✓			