Akashi College		Year	2020		Course Title	Architectural Information Processing

Course Information

Course Code	0051		Course Category	Specialized / Compulsory
Class Format	Lecture		Credits	Academic Credit: 2
Department	Architecture		Student Grade	3rd
Term	Second Semester		Classes per Week	2
Textbook and/or Teaching Materials				
Instructor	KUDOH Kazumi			

Course Objectives

Students are expected to:
(1) Understand the process of using CAD (Vector Works) and the basic operation of the rendering software for creating 3D drawings.
(2) To understand the basic topics related to DTP representation, including figures and image creation. To use this knowledge to improve their visual expression ability and apply it in their graduate studies and various assignments.

Rubric

	Ideal Level	Standard Level	Unacceptable Level
3D model	The student can accurately build a 3D model of a building.	The student can build a 3D model of a building.	The student can not build a 3D model of a building.
Bitmap, Vector Data	The student can use bitmap data, and vector data accurately. The student can create a poster.	The student can use bitmap data, and vector data. The student can create a poster.	The student can not use bitmap data, and vector data. The student can not create a poster.
Layout Design	The student understands the basics of layout design and uses it accurately.	The student understands the basics of layout design and uses it.	The student can not understands the basics of layout design or use it.

Assigned Department Objectives

学習・教育到達度目標 (D) 学習・教育到達度目標 (E)

Teaching Method

Outline	In this course the students are stimulated to actively use the computer on learning the basics of computer use in the field of architectural design and urban planning. The students will master the basic operation of Vector Works 3D CAD design, to foster the routinely and basic skills of computer added design, to be utilized in the creation of drawings necessary for the architectural design exercises. The students will learn how to operate computer graphics and the knowledge necessary to express themselves graphically.
Style	The students using CAD and CG software will acquire modeling skills through the execution of assignments and tutorial tasks. Grading Policy: (1)Assignments (50%): All the exercises and assignments produced in class are evaluated. Here the students' ability to create and expresses himself visually and on 3D graphics are evaluated together with his ability to operate CAD and rendering software. The assignment includes a 3D representation of the design developed on Architectural Studio IV classes. (2)DTP exercises (50%): evaluates the assignments produced in class (posters, reports. Evaluates the achievement of the fundamental contents related to CAD and Illustrator (CAD is evaluated through a standardized assignment) The final grade combines (1) and (2) and a total grade above 60% is necessary to acquire the credits.
Notice	The students should assure that they understand the content learned on the classes and be welling to use the computer and master the basic CAD skills. 3 absences will be excused.

Course Plan

			Theme	Goals
2nd Semester	3rd Quarter	1st	CAD (Vector Works) software 3D basic operations	Basic operations of 3D tool command, learn modeling, viewpoint and projection method and understanding and method of operation for rendering light source
		2nd	3D modeling of a building part 1	Using the floor plan drawing of building produce the modeling of walls, roof, windows and create an exterior perspective drawing of the building. Part 1 basics of modeling, creating the walls and roof
		3rd	3D modeling of a building part 2	Using the floor plan drawing of building produce the modeling of walls, roof, windows and create an exterior perspective drawing of the building. Part 2 create the exterior of the building, doors and approach.
		4th	3D modeling of a building part 3	Using the floor plan drawing of building produce the modeling of walls, roof, windows and create an exterior perspective drawing of the building. Part 3 create the ground, source of light, to complete the exterior perspective of the building and save as an image file.
		5th	3D modeling application	Explanation on the most important points of architectural modeling: wall, roof and fixtures. Explanation on layers link, symbols and how to use them, and how to transform floor and wall surfaces.
		6th	Rendering	Learn the basic of renderings operations of the Render Work software. How to create and transform texture, types of image files and how to save files.

		7th	Rendering a Building part 1	Using the building modeled on the previous 4 weeks, the students will learn to render it with Render Work and how to operate the sources of light.
		8th	Rendering a Building part 1	Using the building modeled on the previous 4 weeks, the students will learn to render it with Render Work and how to operate the sources of light.
	4th Quarter	9th	Adobe Illustrator basic operations	Using sample data, the students will experience the basic operations of adobe illustrator software
		10th	Adobe Illustrator practice	Using sample data, the students will experience the basic operations of adobe illustrator software
		11th	Basic of Image processing	The students learn how to process image
		12th	Applied techniques of Image processing	Object, character input and editing, and techniques to master the Illustrator. Learn how convert data from Vector Works to Illustrator.
		13th	Basics of graphic layout	The students learn how to process image
		14th	Poster Design part 1	Using examples as reference, elaborate the design of a poster to presents the students interests and hobbies.
		15th	Poster Design part 2	To produce the A3-sized posters on the chosen subjects
		16th	No Final Term Exam	

Evaluation Method and Weight (%)

	3D house Model	Assigments 3D Modeling	Other Assigments	Poster	Total
Subtotal	10	40	10	40	100
Basic Proficiency	0	0	0	0	0
Specialized Proficiency	10	40	10	40	100
Cross Area Proficiency	0	0	0	0	0