

Akashi College		Year	2022		Course Title	Architectural Geometry	
Course Information							
Course Code		4322		Course Category		Specialized / Compulsory	
Class Format		Lecture		Credits		School Credit: 1	
Department		Architecture		Student Grade		3rd	
Term		First Semester		Classes per Week		2	
Textbook and/or Teaching Materials							
Instructor		KUDOH Kazumi					
Course Objectives							
Can create three-dimensional ideas and express them (orthographic projection).							
Can create various architectural drawings using software.							
Rubric							
		Ideal Level		Standard Level		Unacceptable Level	
Achievement 1		Can create three-dimensional ideas and accurately express them (orthographic projection).		Can create three-dimensional ideas and express them (orthographic projection).		Cannot create three-dimensional ideas and express them (orthographic projection).	
Achievement 2		Can accurately create various architectural drawings using software.		Can create various architectural drawings using software.		Cannot create various architectural drawings using software.	
Assigned Department Objectives							
Teaching Method							
Outline		Students will develop the ability to express a three-dimensional space in two dimensions (planes) and the ability to mentally picture a three-dimensional space based on a two-dimensional expression of a space. They will also learn the basic operations of 2D CAD.					
Style		Lessons will include exercises that are in line with the class content to help them understand graphic science. Students will learn how to operate CAD by drawing plan, elevation, and cross-section views.					
Notice		Students must work on exercise problems during class without being absent, and work on the exercise assignments by themselves in accordance with their progress. Students will be expected to try as much as possible to understand and learn the course content during class and work on the exercise assignments. Students who miss 1/3 or more of classes will not be eligible for a passing grade.					
Characteristics of Class / Division in Learning							
<input type="checkbox"/> Active Learning		<input checked="" type="checkbox"/> Aided by ICT		<input checked="" type="checkbox"/> Applicable to Remote Class		<input type="checkbox"/> Instructor Professionally Experienced	
Course Plan							
			Theme		Goals		
1st Semester r	1st Quarter	1st	Points, lines, and marks regarding the concept of orthographic projection		Can create three-dimensional ideas and express them (orthographic projection). Understand orthographic projection.		
		2nd	Plane traces and auxiliary projection, and points and lines on planes		Can draw orthographic projections of planes.		
		3rd	Slope angles and real lengths of straight lines, and intersection points of planes and straight lines		Can draw orthographic projections of planes and straight lines.		
		4th	Drawing three-dimensional objects and the intersection points of three-dimensional objects and straight lines		Can draw orthographic projections of three-dimensional objects.		
		5th	Tangent planes of three-dimensional objects and sections of three-dimensional objects		Can draw orthographic projections of multiple three-dimensional objects.		
		6th	Solid intersecting and shadows		Can draw orthographic projections of multiple three-dimensional objects. Can understand shadows of three-dimensional objects.		
		7th	Shadows		Can express shadows of three-dimensional objects.		
		8th	Midterm exam				
	2nd Quarter	9th	Understanding CAD concepts and learning basic CAD operations related to information and shapes		Understand the basics of creating architectural drawings using software.		
		10th	Learning drawing tools for things like drawing and combining two-dimensional shapes and various types of planar shapes, and drawing centerlines, walls, and columns		Can create plan views using software.		
		11th	Creating architectural plan views and drawing partition walls and openings		Can create plan views using software.		
		12th	Creating architectural plan views, drawing internal and external fittings, and placing fixture lines and symbols		Can create plan views using software.		
		13th	Creating architectural elevation views		Can create elevation views using software.		
		14th	Creating architectural cross-section views and drawing curved walls with fitting details		Can create cross-sectional views using software.		
		15th	Creating architectural plan, elevation, and cross-section views, adding dimensions and room names, and submitting them		Can create cross-sectional views using software. Can modify and complete the architectural drawings created.		
		16th	Final exam				

Evaluation Method and Weight (%)							
	Examination	Assignment	Mutual Evaluations between students	Behavior	Portfolio	Other	Total
Subtotal	85	15	0	0	0	0	100
Basic Proficiency	0	0	0	0	0	0	0
Specialized Proficiency	85	15	0	0	0	0	100
Cross Area Proficiency	0	0	0	0	0	0	0