

Akashi College		Year	2024		Course Title	Exercises of Surveying II	
Course Information							
Course Code		6231		Course Category		Specialized / Compulsory	
Class Format		Practical training		Credits		Academic Credit: 2	
Department		Civil Engineering		Student Grade		2nd	
Term		Second Semester		Classes per Week		2	
Textbook and/or Teaching Materials		Handout					
Instructor		IKUTA Ami,OSHIRO Yuki,NABESHIMA Yasuyuki					
Course Objectives							
Learn how to set out to the site, and can practically apply the surveying theory.							
Rubric							
		Ideal Level		Standard Level		Unacceptable Level	
Achievement 1		Learn how to set out to the site, and can accurately calculate and practically apply the surveying theory.		Learn how to set out to the site, and can practically apply the surveying theory.		Do not learn how to set out to the site, and cannot practically apply the surveying theory.	
Achievement 2		Fully understand photographic surveying, and can perform survey with equipment.		perform survey with equipment.Understand photographic surveying, and can perform survey with equipment.		Do not understand photographic surveying, and cannot perform survey with equipment.	
Assigned Department Objectives							
Teaching Method							
Outline		Learn how to set out to the site, and become able to practically apply the surveying theory.					
Style		Practical trainings and exercises will be conducted by several faculty members. Exercises are carried out together with the reviewing of class contents. The evaluation will be based 80% on reports, and 20% on attitude toward class activities. However, in cases where reports., etc. are inadequate, students must re-submit them, or will be given 59 points or less for their evaluation.					
Notice		Commit to the basics and make accurate measurements, and improve the quality of deliverables. Be attentive to safety. This course's content will amount to 90 hours of study in total. These hours include the learning time guaranteed in classes and the standard self-study time required for pre-study / review, and completing assignment reports. Students who miss 1/3 or more of classes will not be eligible for evaluation.					
Characteristics of Class / Division in Learning							
<input type="checkbox"/> Active Learning		<input type="checkbox"/> Aided by ICT		<input checked="" type="checkbox"/> Applicable to Remote Class		<input type="checkbox"/> Instructor Professionally Experienced	
Course Plan							
			Theme		Goals		
2nd Semester	3rd Quarter	1st	Route surveying (setting out of simple curve and clothoid curve)		Can explain the simple curves and relaxation curves, and describe the methods of setting out.		
		2nd	Route surveying (setting out of simple curve and clothoid curve)		Can explain the simple curves and relaxation curves, and describe the methods of setting out.		
		3rd	Route surveying (setting out of simple curve and clothoid curve)		Can explain the simple curves and relaxation curves, and describe the methods of setting out.		
		4th	Route surveying (setting out of simple curve and clothoid curve)		Can explain the simple curves and relaxation curves, and describe the methods of setting out.		
		5th	Triangulation		Can explain the procedure and calculation method for triangulation. Can explain the survey system (national control points, etc.).		
		6th	Triangulation		Can explain the procedure and calculation method for triangulation. Can explain the survey system (national control points, etc.).		
		7th	Triangulation		Can explain the procedure and calculation method for triangulation. Can explain the survey system (national control points, etc.).		
		8th	Topographical survey (road longitudinal profile)		Can explain the road longitudinal profile.		
	4th Quarter	9th	Photographic surveying		Can explain the principle and method of photographic surveying. Can explain the nature and use of contour lines.		
		10th	Photographic surveying		Can explain the principle and method of photographic surveying. Can explain the nature and use of contour lines.		
		11th	Photographic surveying		Can explain the principle and method of photographic surveying. Can explain the nature and use of contour lines.		
		12th	topographic surveying (using LiDAR sensor)		Can explain the topographic surveying using using LiDAR sensor.		

		13th	topographic surveying (using LiDAR sensor)	Can explain the topographic surveying using using LiDAR sensor.
		14th	topographic surveying (using drone)	Can explain the topographic surveying using using drone.
		15th	topographic surveying (using drone)	Can explain the topographic surveying using using drone.
		16th	No final exam	

#### Evaluation Method and Weight (%)

	Exams	Reports	Mutual Evaluations	Attitude	Portfolio	Other	Total
Subtotal	0	80	0	20	0	0	100
Basic Proficiency	0	20	0	5	0	0	25
Specialized Proficiency	0	50	0	10	0	0	60
Cross-Disciplinary Proficiency	0	10	0	5	0	0	15