	SEMESTER LEARNING PLAN **DEPARTMENT OF GEOMATICS ENGINEERING** **FACULTY OF CIVIL, PLANNING, and GEO ENGINEERING**		
PROGRAM	**UNDERGRADUATE**		
COURSE NAME	**Field Camp**	**CODE**	**RM184625**
SEMESTER	**VI (six)**	**CREDITS**	**4 (four)**
LECTURERS			

COURSE MATERIALS	1	Introduction to field camp
	2	Methods of land surveying in terrestrial, extraterrestrial, and remote sensing
	3	Methods of data processing in terresrial, extraterrestrial, and remote sensing
	4	Survey of geographical place names and the study of place names (toponymy)
	5	Cartography and presenting the regional potential map
EXPECTED LEARNING OUTCOMES THAT IMPOSED IN THE COURSE	C	Able to identify, formulate, analyze and solve problems in the fields of geodesy, surveying, hydrographic, remote sensing, photogrammetry, and cadastral.
	D	Able to perform spatial data acquisition using modern measurement methods, geospatial data processing, using industry standard software, and making standard designs and analyzes in the fields of geodesy, surveying, hydrography, remote sensing, photogrammetry, and cadastral.
	E	Able to apply information & communication technology and the latest technological developments in the fields of geodesy, surveying, hydrographic, remote sensing, photogrammetry, geographic information systems, and cadastral.
	F	Able to compile scientific reports and provide solutions based on leadership, creativity and communication skills as well as being responsible for the work done.
	G	Able to plan, perform and evaluate the process of surveying and mapping activities using the latest technology in the fields of geodesy, surveying, hydrographic, remote sensing, photogrammetry, and cadastral.
	H	Able to work in inter-disciplinary and inter-cultural teams so they can compete at national and international levels.
COURSE LEARNING OUTCOMES	1	Able to do the work of land surveying and mapping in the selected regions
	2	Able to create a map based on the theory and right procedure with many methods (e.g. terrestrial and remote sensing)

ABILITY CATEGORIES	*Cognitive Prosecess*	*Analyse*
	Knowledge Domain	*Procedural*
	Psychomotor	*Conscious control*
	Affective	*Change of attitude*

Class	Lesson learning outcome	Criteria dan Assessment Indicator	Weight	Learning Materials	Learning Experience	Learning Methods	Estimated Time
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1-2	Able to explain the meaning and purpose of field camp	Accuracy to define the meaning and purpose of field camp	10,00%	The meaning and purpose of field camp	Lecture Writing resume	Lecture Self Task	2x(2x50')
3-4	Able to understand and apply the terrestrial method for a regional potential map	Accuracy to do terrestrial surveying to map a potential region	20,00%	The terrestrial method to create a large scale map (e.g. a regional potential map)	Writing resume Outside Practical Training	Lecture Outside Practice	2x(2x50')

5-7	Able to measure GCP with GNSS	Able to measure GCP with GNSS receiver	20,00%	Method of GNSS surveying to measure ground control points (GCP)	Writing resume Outside Practical Training	Lecture Outside Practice	2x(2x50')
8	Mid-Semester Evaluation						
9-10	Able to create a regional map with the remote sensing technique	Able to operate UAV for the mapping purpose	10,00%	UAV Phootgrammetry	Writing resume	Lecture	3x(2x50')
		Able to interpret from a satellite image to a map		Remote sensing and image interpretation	Outside Practical Training Presentation Report	Outside Practice Discussion	
11-13	Able to process data and analyze the result for mapping a potential region	Able to process data from the results of land surveying	30,00%	Data processsing from GNSS and terrestrial measurements	Writing resume	Lecture	3x(2x50')
		Able to analyze the result of land surveying		Data processing in remote sensing	Outside Practical Training Presentation Report	Outside Practice Discussion	
14-15	Able to present the final result of field camp	Accuracy to present the result of field camp	10,00%	Data presentation from the result of field camp	Lecture	Lecture	2x(2x50')
				Presentation for the result of field camp	Presentation Report	Presentation and Discussion	
16	Final Semester Evaluation						
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