	SEMESTER LEARNING PLAN DEPARTMENT OF GEOMATICS ENGINEERING FACULTY OF CIVIL, PLANNING, and GEO ENGINEERING		
PROGRAM	**UNDERGRADUATE**		
COURSE NAME	**Land Information System**	**CODE**	**RM184955**
SEMESTER	**Elective Course**	**CREDITS**	**3 (three)**
LECTURERS	**Agung Budi Cahyono (Coord)** **Yanto Budisusanto, Udiana W. Deviantari**		

COURSE MATERIALS	1	Land Information System Concepts
	2	Land Information System Equipment and Legal Foundation
	3	Land Cadastre Data and Information Requirement
	4	Basics of php/html, CMS and Map Service
	5	information Systems Application for Land Cadastre
	6	Land Information System Design
	7	Information Systems Application for Land Cadastre
	8	Analysis of Land System Design
EXPECTED LEARNING OUTCOMES THAT IMPOSED IN THE COURSE	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.
COURSE LEARNING OUTCOMES	1	Students have knowledge of information systems concepts
	2	Students have knowledge of the basic theories and methods of information systems for land
	3	Students have the ability to design simple land cadastre applications
	4	Students have experience to make land cadastre applications with GIS
	5	Students are able to present and analyze land information systems
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	Students are able to explain the basic principles and concepts of Land Information Systems	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	5	Basic understanding of Information Systems Land Data Concepts Legal Foundation	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
3	Students are able to explain the data needs for Land Information and Land Administration	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	10	Relationship of Land Information System with Land Politics, Land Management, and Land Administration	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'

Week	Ability	Assessment Criteria	Weight	Material	Method	Learning Type	Time
4-5	Students are able to explain the Model Land Database: Conceptual	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	10	Relational Data Model Techniques Entity Relationship Technique	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
6	Students are able to explain the Model Land Database: Logical and Physical	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	20	DBMS Normalization Techniques: defining, creating, maintaining, and controlling access to databases	Lecture	Teacher-centered	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
7	Students are able to compile a Land Database	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	10	Types of spatial land data Types of land textual data	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
8	Mid Semester Evaluation						
9-10	Students are able to understand the components of the Land Information System	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	15	1. Lay out with CMS 2. Basics of programming languages (php, html) 3. Map Service (map server, Stat Map)	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
11-12	Students are able to design a Land Information System	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	10	1. Planning 2. Analysis 3. Design 4. Development	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
13-14	Students are able to use the Land Information System application	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	10	Utilization of the CTF Application and GeoKKP	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
15	Students are able to analyze the Design of Land Systems	Material completeness, depth of explanation, effectiveness of communication, accuracy of attitude	10	Identify Understand Analyze Report	Lecture	Teacher-centered learning	1 x 50'
					Discussion	Student-centered learning	1 x 50'
					Practice	Problem-based learning	1 x 50'
16	Final Semester Evaluation						
Total			100				