



ISO 9001:2008

RENCANA PEMBELAJARAN

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Disusun Oleh	Diperiksa Oleh	Disetujui Oleh	Tanggal Berlaku
			1 Januari 2013
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RENCANA PEMBELAJARAN

Mata kuliah : Research Methodology **Semester** : 1 (dua) **Kode Mata Kuliah** : **SKS** : 3

Program Studi : Magister Teknik Informatika **Dosen** :

CAPAIAN PEMBELAJARAN: After completing this course the students are expected to be able to produce a well written research proposal with adequately developed research design, and to analyse and intepret result.

(1) Week	(2) Expected competency	(3) Topics/ Learning materials	(4) Learning Methods	(5) Assessment Criteria	(6) WEIGHT
1-4	At the end of week 3 all students are expected to be well equipped with the basic knowledge of Discrete Mathematics and Data structures that are required to analyse most of algorithms. The understanding of function growth order and efficiencies measure that are fundamental in the analysis of algorithm is expected to be grounded in the mind of each student	<ol style="list-style-type: none"> 1. Discrete mathematics 2. Data structures 3. Function growth order 4. Worst-case, Best-case and Average-case efficiencies. 	Lecture, discussion and exercise	<p>Understanding of the discrete mathematics and data structures.</p> <p>Ability to use properties of discrete mathematical constructs to solve equations.</p>	10%
5-8	Students are able to develop design strategy according to the research being conducted, the sampling design going to be used. In addition, they are able to choose the right	<ol style="list-style-type: none"> 1. Design strategies 2. Sampling design 3. Measurement 4. Measurement scales 	Lecture, discussion and exercise	Ability to choose a design strategy and design measurement and measurement scales require for the study.	10%

	measurement according to the problem being investigated				
9-12	<p>Students develop skills necessary for exploring secondary data to produce information at the exploratory phase and construct problem statement, research objectives. The ability to explore secondary data is also useful in conducting literature search to find solution ideas.</p> <p>Students understand the steps required in data preparation and how to explore, display and examining data.</p>	<ol style="list-style-type: none"> 1. Exploring secondary data. 2. Data preparation and description 3. Exploring, displaying and examining data 	Lecture, discussion and exercise	<p>Ability to use secondary data to formulate research question or hypothesis.</p> <p>Ability to prepare, explore, display, and examining data</p>	20%
13-16	<p>Students are expected to understand techniques used to perform statistical hypotheses testing and be able to conduct such test. In Addition to the ability to test hypothesis of difference, students are also expected to</p>	<ol style="list-style-type: none"> 1. Hypothesis testing 2. Measures of association 3. Multivariate analysis 4. Presenting results 	Lecture, discussion and exercise	<p>Ability to analyze data collected from a research activity and presenting the result. Competence acquired from this course is assessed by the ability of the student to produce a research proposal.</p>	30%

<p>develop skills and knowledge required to carry out correlation analysis to test relational hypotheses. These skills also extend to more complex problems which involved multiple variables. Finally, students must acquire the skills required to produce well written report and presentation.</p>				
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