



LESSON PLAN

**FRM/FMIPA/063-00
1 April 2010**

1. Faculty /Study Program : Mathematics and Science/Mathematics Education
2. Course & Code : Computer Application, MAA311
3. Credit : Theory : 2 sks Practice: 1 sks
4. Semester/Time : IV Time: 100 minutes
5. Basic competence : Students are able to make a program to solve mathematics problem that contains selection condition in MATLAB
6. Indicator :
Student can:
 - make a program to solve a problem using if-end command in MATLAB
 - make a program to solve a problem using if-elseif-end command in MATLAB
7. Essential Concepts : Computer application for handle selection condition problems using if-end and if-elseif-end in MATLAB
8. Learning Activity : 25

Component	Detail Activity	Time	Method	Media	References	Character
Opening	<ul style="list-style-type: none"> • Lecturer greets the students and asks some students to tell some important points of the topic in the last meeting • Lecturer describes its relation to the next topic. 	5'	Explanation and Discussion	Computer, LCD	A:74	Thinking logically, critically, creatively, and innovatively
Main Activities	<ul style="list-style-type: none"> • Students try the script m-file to solve a problem using if-end and if-elseif-end command by following the instruction in handout • In pair, students discuss the meaning of the command. • After 50 minutes, Lecturer ask students to make a group of 4 (2 pairs) to share their discussion results. • Lecturer facilitate students if they have some problems or questions about the topic • Students get 	80'	Explanation Demonstration, Discussion, practice, group work			Caring about social matters and environment Appreciative of works and achievements of others

Closure	<p>opportunity to visit the other group to share and compare their result.</p> <ul style="list-style-type: none"> Students present their conclusion <p>Lecturer asks students to share their conclusion about the topic</p>	10'				
Follow up	Students get assignment to find or create their own problem to be solved using if-end and if-elseif-end command	5'				

Learning Activity : 26 (practice, 1 sks practice = 100')

Component	Detail Activity	Time	Method	Media	References	Character
Opening	Lecturer greets students and asks some students to tell the main idea of last topic, and delivers a lab sheet	5'	Explanation and Discussion	Computer, worksheet		Thinking logically, critically, creatively, and innovatively
Main Activities	<ul style="list-style-type: none"> Students exchange their problem as the result of assignment in the last meeting Students work in a pair to solve their friend problems, i.e. to make some script m-file using if-end and if-elseif-end command. Students share their results 	80'	Practicum using computer, by self/in a group		worksheet / quiz	Caring about social matters and environment
Closure	Lecturer gives feedback to the result of students' work	10'	Explanation			
Follow up	Lecturer gives motivation to the students to explore the all discussed material by themselves	5'	Explanation			

9. Assessment

Quiz:

Write a script to find the largest number among three number A, B and C

10. Reference

Compulsory:

A. Sri Andayani, Handout of Computer Application, FMIPA UNY 2009

Additional:

B. Hanselman, D. & Littlefield, B. 2000. Mastering MATLAB, A Comprehensive Tutorial and Reference. Prentice-Hall International, Inc.

C. <http://www.matworks.com/access/helpdesk/help/>

D. <http://www.math.siu.edu/matlab/tutorial2.pdf>

Yogyakarta, 21 December 2010
Professor,

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