YOGYAKARTA STATE UNIVERSITY
FACULTY OF MATHEMATICS AND NATURAL SCIENCE

LESSON PLAN

1. Faculty /Study Program   : Mathematics and Natural Science/Mathematics Education
2. Course / Code   : Computer Programming, MAA 319
3. Credit   : Theory : 2   Practice : 1
4. Semester/Time   : Sem: V,   Time : 2 x 100 minutes
5. Basic Competence   : Students are able to compose a program to solve a problem in mathematics that has various data types
6. Indicator   :
   ➢ Students are able to explain kind of data types
   ➢ Students are able to use appropriate data types to compose a program for a given problem
   ➢ Students are able to use appropriate operation for data types in a program
7. Essential Concepts   : Assignment and Operations, Data Type
8. Learning Activity   : 5

Component	Detail Activity	Time	Method	Media	References	Character
Opening	Lecturer reminds students the previous topic and relates it to todays topic	5'	Explanation and Discussion	Computer, LCD	A:9-17, B.3	Thinking logically, critically, creatively, and innovatively
Main Activities	• Students get opportunity to read the handout for a few minutes and the express their understanding of the topic	80'	Explanation Demonstration, Discussion, practice, group work			
	• Lecturer facilitates students to get the main idea of the topic					Caring about social matters and environment
	• In pair, students discuss the topic, and try to compose a program using kind of data types and operate them					
	• Students present their idea to other students					
	• Other students give their opinion					
Closure	Lecturer guides student to conclude the topic	10'				
Follow up	Students, in pair, get assignment to study the next topic and prepare to present their result for the next meeting	5'				

Learning Activity   : 6 (practice, 1 sks practice = 100')

Component	Detail Activity	Time	Method	Media	References	Character
Opening	Lecturer opens the class and deliver a lab sheet	5'	Explanation and Discussion	Computer, worksheet		Thinking logically, critically, creatively, and innovatively
Main Activities	Students practice and do exercises to compose a program to solve some problems	80'	Practice, by self/in a group		worksheet / quiz	
Closure	Lecturer gives feedback to the result of students' work	10'	Explanation			Caring about social matters and environment
Follow up	Lecturer describes the introduction of the next material	5'	Explanation			

9. Assessment

   Specify the appropriate data type and operation for the problem of finding `n!` (n factorial).

10. References
 A. Compulsory :

   Sri Andayani, 2010. Handout of Computer Programming, FMIPA UNY.

 B. Additional
   1. Jogiyanto, H.M. (1989). Turbo Pascal, Yogyakarta, Andi Offset
   2. http://pascalprogramming.byethost15.com
   3. http://www.taoyue.com
   4. http://www.geocities.com/SiliconValley/Horizon/5444/

              Yogyakarta, 23 August 2010
              Lecturer,

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