



**YOGYAKARTA STATE UNIVERSITY
FACULTY OF MATHEMATICS AND NATURAL SCIENCE**

LESSON PLAN

**RPP/MAA 319/10
1 April 2010**

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 using Two-Dimensional Arrays
6. Indicator :
 - Students are able to explain the difference between One and Two-Dimensional Arrays
 - Students are able to compose a program to solve a problem that has data type Two-Dimensional array
7. Essential Concepts : TWO-DIMENSIONAL ARRAYS
8. Learning Activity : 21

| 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 • Some students are asked to share their idea about the next topic (in last meeting they have asked to read the material) | 10' | Explanation and Discussion | Computer, LCD | A:36, B.1, B.3 | Thinking logically, critically, creatively, and innovatively Caring about social matters and environment |
| Main Activities | <ul style="list-style-type: none"> • Students are invited to give active participation in the discussion to find some problem that has 2D array data type • Lecturer helps students to get the right concepts of the topic • In pair, students discuss to express the problem into 2D array • Students share their result to others in front of class | 75' | Explanation Demonstration, Discussion, practice, group work | | | |
| Closure | Student and lecturer conclude the discussion | 10' | | | | |

| | | | | | | |
|-----------|---|----|--|--|--|--|
| Follow up | of the topic Students are asked to study the next topic and find many resources about them in the Internet | 5' | | | | |
|-----------|---|----|--|--|--|--|

Learning Activity : 22 (practice, 1 sks practice = 100')

| Component | Detail Activity | Time | Method | Media | References | Character |
|-----------------|--|------|------------------------------|---------------------|------------------|--|
| Opening | Lecturer greets students, tells the objective of the meeting 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 in 2D array | 80' | Practice, 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 describes the introduction of the next material Students are supposed to read the next material in handout and explore the Internet. | 5' | Explanation | | | |

9. Assessment

Identify the data from your own environment that can be expressed using two dimensional array and then compose a program to manipulate them.

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,

Sri Andayani, M.Kom
NIP 19720426 199702 2 001