



Universitas Negeri Surabaya
Faculty of Engineering
, Information Technology Education Undergraduate Study
Program

Document
Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight	SEMESTER	Compilation Date																																	
Visual Programming	8320703063		T=3 P=0 ECTS=4.77	3	July 17, 2024																																	
AUTHORIZATION	SP Developer		Course Cluster Coordinator		Study Program Coordinator																																	
		Drs. Bambang Sujatmiko, M.T.																																	
Learning model	Project Based Learning																																					
Program Learning Outcomes (PLO)	PLO study program which is charged to the course																																					
	PLO-8	Mastering the concepts and implementation in developing software engineering, games, intelligent multimedia, and network computer engineering.																																				
	PLO-13	Able to develop innovative educational products or learning resources using scientific design-based strategies to support teaching activities that can be integrated with ICT.																																				
	Program Objectives (PO)																																					
	PLO-PO Matrix																																					
		<table border="1" style="margin: auto;"> <tr> <td style="width: 33%;">P.O</td> <td style="width: 33%;">PLO-8</td> <td style="width: 33%;">PLO-13</td> </tr> </table>					P.O	PLO-8	PLO-13																													
P.O	PLO-8	PLO-13																																				
PO Matrix at the end of each learning stage (Sub-PO)																																						
	<table border="1" style="margin: auto;"> <tr> <td rowspan="2" style="width: 10%;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 5%;">1</td> <td style="width: 5%;">2</td> <td style="width: 5%;">3</td> <td style="width: 5%;">4</td> <td style="width: 5%;">5</td> <td style="width: 5%;">6</td> <td style="width: 5%;">7</td> <td style="width: 5%;">8</td> <td style="width: 5%;">9</td> <td style="width: 5%;">10</td> <td style="width: 5%;">11</td> <td style="width: 5%;">12</td> <td style="width: 5%;">13</td> <td style="width: 5%;">14</td> <td style="width: 5%;">15</td> <td style="width: 5%;">16</td> </tr> </table>					P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P.O	Week																																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																						
Short Course Description	This course teaches the basics of visual programming including visual programming concepts, objects, events, the basics of validation, integration and compilation along with simple applications in a programming environment.																																					
References	Main :																																					
	1. Tony Gaddis dkk. 2012. Starting Out with Visual C# , Third Edition. Boston: Pearson . 2. Benyamin Perkins, Jacob V H, Jon D.Reid. 2015. Beginning Visual C# Programming. John Wiley: Canada . 3. Karli Watson, dkk. 2012. Beginning Visual C#, Programming. John Wiley: Canada . 4. Paul Deitel, Harvey Deital. 2012. Visual C#, How To Program, Fifth Edition. Pearson: Boston .																																					
	Supporters:																																					
Supporting lecturer	Ronggo Alit, M.M., M.T.																																					
Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [Estimated time]		Learning materials [References]	Assessment Weight (%)																															
		Indicator	Criteria & Form	Offline (offline)	Online (online)																																	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)																															

1	Knowing the final goal of the lecture and the material that will be discussed. Mastering visual programming concepts. Differentiating existing programming paradigms	1. Explain the concept of visual programming. 2. Differentiate between programming paradigms.		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
2	Mastering the creation of application forms using visual programming	1. Using the Form Designer 2. Creating an application form and its components		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
3	Mastering the use of control components in visual programming	1. Using control components in applications or programs, such as: a. Text box b. Check box c. Radio Button d. Track bars e. List Bar 2. Using the List control component in the program, such as: a. List Box b. List View Combo Box		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
4	Mastering the use of control components in visual programming	1. Using control components in applications or programs, such as: a. Text box b. Check box c. Radio Button d. Track bars e. List Bar 2. Using the List control component in the program, such as: a. List Box b. List View Combo Box		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
5	Mastering the use of dialogue or dialogue forms in programs	1. Using dialogue components in the program, such as: a. Message Box b. Common dialog Can use dialog components to display errors (checking errors in the program)		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
6	Mastering the use of dialogue or dialogue forms in programs	1. Using dialogue components in the program, such as: a. Message Box b. Common dialog Can use dialog components to display errors (checking errors in the program)		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
7	Mastering the use of menus, toolbars and status bars in programs	1. Using the Menu component in the program. 2. Using the Toolbar component in the program 3. Using the Status Bar component in the program		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
8	UTS			4 X 50			0%
9	Mastering the use of advanced control components in visual programming	1. Using control components in applications or programs, such as: a. Control Panel b. Group Box c. Three Views d. Image List e. Control Tab f. Selected Index g. Split Containers		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%

10	Mastering the use of advanced control components in visual programming	1. Using control components in applications or programs, such as: a. Control Panel b. Group Box c. Three Views d. Image List e. Control Tab f. Selected Index g. Split Containers		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
11	Mastering the use of Windows Forms and WPF in Visual Programming	Create application/program forms using WPF		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
12	Mastering the use of Windows Forms and WPF in Visual Programming	Create application/program forms using WPF		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
13	Mastering the use of ADO.NET and ODBC components to access data. Using Data Binding components	1. Using the data access component in the application to access data in the database 2. Using the data binding component in the program, such as: a. Data Grid b. DataView		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
14	Mastering the use of ADO.NET and ODBC components to access data. Using Data Binding components	1. Using the data access component in the application to access data in the database 2. Using the data binding component in the program, such as: a. Data Grid b. DataView		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
15	Mastering the use of Datareader and Dataset to display data from databases	Using Datareader and Dataset in the program		Approach: Scientific, Model: Cooperative, Method: Discussion, Presentation 4 X 50			0%
16							0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
		0%

Notes

- 1. Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
- 2. The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- 3. Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- 4. Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- 5. Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
- 6. Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
- 7. Forms of assessment:** test and non-test.

8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.