



Universitas Negeri Surabaya
Faculty of Engineering,
Bachelor of Information Systems Study Program

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Visual Programming	5720103071		T=3	P=0	ECTS=4.77	5	July 17, 2024
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
			I Kadek Dwi Nuryana, S.T., M.Kom.	

Learning model	Case Studies																																																																		
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																																		
	Program Objectives (PO)																																																																		
	PO - 1	Ability to create simple database applications																																																																	
	PLO-PO Matrix																																																																		
		<table border="1" style="margin-left: 40px;"> <tr> <td style="text-align: center;">P.O</td> <td colspan="15"></td> </tr> <tr> <td style="text-align: center;">PO-1</td> <td colspan="15"></td> </tr> </table>															P.O																PO-1																																		
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PO-1																																																																			
Short Course Description	PO Matrix at the end of each learning stage (Sub-PO)																																																																		
		<table border="1" style="margin-left: 40px;"> <tr> <td style="text-align: center;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td></td> <td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td><td style="text-align: center;">7</td><td style="text-align: center;">8</td><td style="text-align: center;">9</td><td style="text-align: center;">10</td><td style="text-align: center;">11</td><td style="text-align: center;">12</td><td style="text-align: center;">13</td><td style="text-align: center;">14</td><td style="text-align: center;">15</td><td style="text-align: center;">16</td> </tr> <tr> <td style="text-align: center;">PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>															P.O	Week																	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																
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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 :	
		<ol style="list-style-type: none"> 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 Dr. Ricky Eka Putra, S.Kom., M.Kom.

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	<p>1. Students are able to understand the objectives of the course and apply the basics of visual programming with the Visual Studio.NET IDE</p> <p>2. Students understand the concept of Visual Programming with C#</p>	<p>1. Explaining Learning Contracts and RPS</p> <p>2. Explains the basics of programming, hardware, software and storage</p> <p>3. Explain GUI (Graphical User Interface) and Objects</p> <p>4. Explaining the Visual Studio.NET IDE.</p> <p>5. Implemented project creation in Visual Studio.NET</p> <p>6. Implements saving the project, reopening the project, and closing the project</p>		<p>Scientific approach, lectures, questions and answers, discussions and problem-based learning</p>		15%
2	<p>1. Students are able to understand the objectives of the course and apply the basics of visual programming with the Visual Studio.NET IDE</p> <p>2. Students understand the concept of Visual Programming with C#</p>	<p>1. Explaining Learning Contracts and RPS</p> <p>2. Explains the basics of programming, hardware, software and storage</p> <p>3. Explain GUI (Graphical User Interface) and Objects</p> <p>4. Explaining the Visual Studio.NET IDE.</p> <p>5. Implemented project creation in Visual Studio.NET</p> <p>6. Implements saving the project, reopening the project, and closing the project</p>		<p>Scientific approach, lectures, questions and answers, discussions and problem-based learning</p>		15%

3	<p>1.Students Apply visual programming for data processing</p> <p>2.Students are able to apply visual programming for branching (decision making)</p>	<p>1.Implement reading input data from textbox</p> <p>2.Design input and output displays with GUI components</p> <p>3.Apply programming for data processing</p> <p>4.Implement display and set the display (format) of processing results</p> <p>5.Implementing the use of Math Class</p> <p>6.Implement Error Handling</p> <p>7.Implementing branching in C#</p> <p>8.Implement GUI components for branching</p> <p>9.Implement input validation</p>		<p>Scientific approach , lectures, questions and answers, discussions and problem-based learning</p>			10%
4	<p>1.Students Apply visual programming for data processing</p> <p>2.Students are able to apply visual programming for branching (decision making)</p>	<p>1.Implement reading input data from textbox</p> <p>2.Design input and output displays with GUI components</p> <p>3.Apply programming for data processing</p> <p>4.Implement display and set the display (format) of processing results</p> <p>5.Implementing the use of Math Class</p> <p>6.Implement Error Handling</p> <p>7.Implementing branching in C#</p> <p>8.Implement GUI components for branching</p> <p>9.Implement input validation</p>		<p>Scientific approach , lectures, questions and answers, discussions and problem-based learning</p>			10%

5	<p>1. Students are able to apply visual programming for loops, file operations and random numbers</p> <p>2. Students are able to apply modular methods</p>	<p>1. Explain the concept of repetition</p> <p>2. Implement GUI components with loops</p> <p>3. Implement File operations</p> <p>4. Implement the dialog component</p> <p>5. Apply random numbers</p> <p>6. Implement load Event</p> <p>7. Explain the method</p> <p>8. Explain passing parameters by value and by reference</p> <p>9. Explain the return value of the method</p> <p>10. • Implement methods with GUI</p> <p>11. Describes arrays</p> <p>12. Describes arrays as method arguments</p> <p>13. Describes the array class</p> <p>14. Explain the algorithm on arrays</p> <p>15. Implementing arrays with GUI display</p> <p>16. Implementing a multidimensional array</p>	<p>Criteria:</p> <p>7</p>	<p>Scientific approach , lectures, questions and answers, discussions and problem-based learning</p>			0%
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6	<p>1. Students are able to apply visual programming for loops, file operations and random numbers</p> <p>2. Students are able to apply modular methods</p>	<p>1. Explain the concept of repetition</p> <p>2. Implement GUI components with loops</p> <p>3. Implement File operations</p> <p>4. Implement the dialog component</p> <p>5. Apply random numbers</p> <p>6. Implement load Event</p> <p>7. Explain the method</p> <p>8. Explain passing parameters by value and by reference</p> <p>9. Explain the return value of the method</p> <p>10. • Implement methods with GUI</p> <p>11. Describes arrays</p> <p>12. Describes arrays as method arguments</p> <p>13. Describes the array class</p> <p>14. Explain the algorithm on arrays</p> <p>15. Implementing arrays with GUI display</p> <p>16. Implementing a multidimensional array</p>		<p>Scientific approach , lectures, questions and answers, discussions and problem-based learning</p>			7%
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7	<p>1. Students are able to apply visual programming for loops, file operations and random numbers</p> <p>2. Students are able to apply modular methods</p>	<p>1. Explain the concept of repetition</p> <p>2. Implement GUI components with loops</p> <p>3. Implement File operations</p> <p>4. Implement the dialog component</p> <p>5. Apply random numbers</p> <p>6. Implement load Event</p> <p>7. Explain the method</p> <p>8. Explain passing parameters by value and by reference</p> <p>9. Explain the return value of the method</p> <p>10. • Implement methods with GUI</p> <p>11. Describes arrays</p> <p>12. Describes arrays as method arguments</p> <p>13. Describes the array class</p> <p>14. Explain the algorithm on arrays</p> <p>15. Implementing arrays with GUI display</p> <p>16. Implementing a multidimensional array</p>		Scientific approach, lectures, questions and answers, discussions and problem-based learning			7%
8	Midterm exam						25%
9							7%
10							7%
11							7%
12							7%
13							0%
14							0%
15	Final exams						25%
16			Form of Assessment : Project Results Assessment / Product Assessment				40%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Project Results Assessment / Product Assessment	40%
		40%

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** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities 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.