SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Visual Programming Practicum	5730102174		**T=0**	**P=2**	**ECTS=3.18**	4	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	....	....	Dodik Arwin Dermawan, S.ST., S.T., M.T.

Learning model	Case Studies

Program Learning Outcomes (PLO)	PLO study program that is charged to the course
	Program Objectives (PO)
	PLO-PO Matrix
	P.O
	PO Matrix at the end of each learning stage (Sub-PO)

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. ini refrensi baris ke 1ini refrensi baris ke 2ini refrensi baris ke 3	
	Supporters:	

Supporting lecturer	Andi Iwan Nurhidayat, S.Kom., M.T. Hafizhuddin Zul Fahmi, S.Kom., M.Sc. I Gde Agung Sri Sidhimantra, 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	Knowing the final goal of the lecture and the material that will be discussed Mastering visual programming concepts based on UI and UX in application development	1. Explains the concept of visual programming 2. Differentiating programming paradigms. 3. Explaining UI and UX in Application development	**Criteria:** Holistic Rubric	Scientific approach, lectures, questions and answers, discussions and problem-based learning 4 X 50			0%

2	Mastering the creation of application forms using visual programming and event-based programming	1.Designer 2.Create application forms and their components 3.Implement events on GUI components	**Criteria:** Holistic Rubric	Scientific approach, lectures, questions and answers, discussions and problem-based learning 4 X 50			0%
3	Mastering the use of control components using WinForm	1.Using the Container component in the application 2.Using Menu Components in applications 3.Using the Control Component in the application 4.Using the Dialog Component in the application 5.Using Data Grid Components in Applications	**Criteria:** Holistic Rubric	Scientific approach, lectures, questions and answers, discussions and problem-based learning 4 X 50			0%
4	Using additional components in application development on the ,Net platform	1.Modify WInForm's standard GUI appearance with MetroFramework 2.Using livechart components	**Criteria:** Holistic Rubric	Scientific approach, lectures, questions and answers, discussions and problem-based learning 4 X 50			0%
5	Mastering the use of data object 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 data binding components in the program, such as: - Data Grid, -Data View	**Criteria:** Holistic Rubric	Scientific approach, lectures, questions and answers, discussions and problem-based learning 4 X 50			0%
6	Mastering the use of Datareader and Dataset to display data from databases	Using Datareader and Dataset in the program	**Criteria:** Holistic Rubric	Scientific approach, lectures, questions and answers, discussions and problem-based learning 4 X 50			0%
7	Mastering application development concepts using WPF and XAML	1.Create and run WPF based projects 2.Create forms/GUIs using XAML	**Criteria:** Holistic Rubric	Scientific approach, lectures, questions and answers, discussions and problem-based learning 4 X 50			0%
8	Sub Summative Exam			4 X 50			0%

No							
9	Mastering WPF in GUI development on the .Net platform	Create an application using WPF	**Criteria:** Holistic Rubric	Approach: Scientific Model: Cooperative Method: Discussion, Presentation 4 X 50			0%
10	Mastering XAML in GUI development on the .Net platform	Create forms/GUIs using XAML	**Criteria:** Holistic Rubric	Approach: Scientific Model: Cooperative Method: Discussion, Presentation 4 X 50			0%
11	Mastering WPF in Visual Programming	Create applications/programs using the WPF framework	**Criteria:** Holistic Rubric	Approach: Scientific Model: Cooperative Method: Discussion, Presentation 4 X 50			0%
12	Mastering the concept of cross-platform application development using UWP	1.Create projects and run projects with UWP 2.Create simple forms with UWP	**Criteria:** Holistic Rubric	Approach: Scientific Model: Cooperative Method: Discussion, Presentation 4 X 50			0%
13	Mastering the use of the .Net framework with UWP for creating cross-platform applications	Create cross-platform applications using UWP	**Criteria:** Holistic Rubric	Approach: Scientific Model: Cooperative Method: Discussion, Presentation 4 X 50			0%
14	Mastering the concept of mobile-based application development with Xamarin	1.Create projects and run projects on mobile platforms 2.Create a simple form in xamarin	**Criteria:** Holistic Rubric	Approach: Scientific Model: Cooperative Method: Discussion, Presentation 4 X 50			0%
15	Mastering the use of the .Net framework with Xamarin for creating mobile applications	Create applications on mobile platforms using Xamarin	**Criteria:** Holistic Rubric	Approach: Scientific Model: Cooperative Method: Discussion, Presentation 4 X 50			0%
16							0%

Evaluation Percentage Recap: Case Study

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.