		Document Code
UNESA	**Universitas Negeri Surabaya** **Faculty of Engineering,** **Bachelor of Information Systems Study Program**	

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Basic Programming	5720103034		**T=3**	**P=0**	**ECTS=4.77**	1	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	....	....	I Kadek Dwi Nuryana, S.T., M.Kom.

Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)	**PLO study program that is charged to the course**	
	PLO-5	Have faith in God Almighty and be able to show a religious attitude;
	PLO-24	Mastering concepts and skills in computer programming languages;
	PLO-29	Able to apply knowledge in the fields of computing, computer networks and programming in accordance with scientific disciplines;
	Program Objectives (PO)	
	PO - 1	Students can design algorithms, flowcharts for solving problems and then apply them practically into a program using a programming language
	PO - 2	Understand the theory about the basics of using C# programs in creating simple programs
	PLO-PO Matrix	

P.O	PLO-5	PLO-24	PLO-29
PO-1			
PO-2			

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
PO-1																
PO-2																

Short Course Description	This course teaches basic programming concepts, practical and technical knowledge and experience regarding algorithms, flowcharts and their application in the C# programming language. The basic materials for making programs are programming basics, introduction to the C# programming language, C# control structures, completing conditions, loops, arrays, strings, pointers, functions and abstract data types/structures.

References	**Main :**	
	1. Microsoft, 2013.NET Framework SDK Documentation. Microsoft. 2. Microsoft Visual Studio, 2013 .NET Documentation. Microsoft. 3. Schild ,Herbert T.,2009, C# - A Begginer 19s Guide. Osborne/McGraw-Hill 4. Stephens, Rod., 2014. C# 5,0 PROGRAMMER 19S REFERENCE. John Wiley & Sons, Inc. 5. Standard ECMA 334, 2001 - C# Language Specification. ECMA. 6. Tien ,Tan Soei., 2001: Bahasa C# untuk Pemrograman Berorientasi Objek. Elex Media Komputindo.	
	Supporters:	

	Supporting lecturer	Anita Qoiriah, S.Kom., M.Kom. Dwi Fatrianto Suyatno, 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	Able to know basic programming languages and the use of the C# language in the .NET Framework	- Mentions changes in programming languages in the world - Mentions and explains the .NET Framework		Presentations, discussions and questions and answers. 3 X 50			3%
2	Produce a program in C# and utilize Visual Studio applications.	- Create a simple program in C#. - Install Visual Studio on each student's computer.		Presentation, discussion and question and answer 3 X 50			3%
3	Understand the basics of the C# programming language	1. Able to write the C# programming language in a structured manner. 2. Explain the function of declaration syntax in C#.		Presentation, discussion and question and answer 3 X 50			3%
4	Understand variables, constants and Parameters in C# language.	- Explain the procedure for declaring variables. - Explain the procedure for using constants. - Explain the rules for using parameters		Presentations, discussions, questions and answers, and quizzes. 3 X 50			3%
5	Understanding Flowcharts in C# program implementation	- Understand the concept of flowcharts to describe programs		Presentation, discussion and question and answer 3 X 50			3%
6	Understanding Arithmetic operators in C#	Understand the levels of arithmetic functions in the C# language.		Presentation, discussion and application practice. 3 X 50			3%
7	Understand the function of the Increment and Decrement operators in C#	- Understand the application of increment and decrement functions in C#		Presentation, discussion and application practice. 3 X 50			3%
8	UTS			3 X 50			25%
9	Understand program control in creating C# programs using IF ELSE conditionals.	1. Implement control functions in simple programs. 2. Look for errors in using the if control. 3. Utilization of the IF ELSE function within other IFs.		Presentation, discussion and application practice. 3 X 50			6%

10	Understand program control in creating C# programs using IF ELSE conditionals.	1. Implement control functions in simple programs. 2. Look for errors in using the if control. 3. Utilization of the IF ELSE function within other IFs.		Presentation, discussion and application practice. 3x50			6%
11	Understand the control function with the SWITCH function	- Explain the placement of switch functions in a simple control program.		Presentation, discussion and application practice. 3 X 50			6%
12	Understand the control function with the SWITCH function	Explain the placement of switch functions in a simple control program.		Presentation, discussion and application practice. 3x50			6%
13	Discuss the need for control in business processes.	- Explain and place the AND operator function. - Explain and place the OR operator function. - Explain and place the function of the XOR operator. - Explain and place the function of the NOT operator.		Presentation, discussion and application practice. 3 X 50			6%
14	Discuss the need for control in business processes.	Explain and place the AND operator function. - Explain and place the OR operator function. - Explain and place the function of the XOR operator. - Explain and place the function of the NOT operator.		Presentation, discussion and practice of 3x50 applications			6%
15	Understand the repetition process using the FOR function	Explain the meaning of the FOR function in a simple program		Presentation, discussion and application practice. 3 X 50			6%
16	Understand the repetition process by using the WHILE function	Explain the meaning of the WHILE function in a simple program		Presentation, discussion and application practice. 3 X 50			6%

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.