



Universitas Negeri Surabaya
Faculty of Economics and Business
Digital Business Undergraduate Study Program

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date																																																																																			
MOBILE APPLICATION PROGRAMMING	6120903029		T=2	P=1	ECTS=4.77	4	July 17, 2024																																																																																			
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator																																																																																				
	Anita Safitri, S.Kom., M.Kom.		Riska Dhenabayu, S.Kom., M.Kom.			Hujjatullah Fazlurrahman, S.E., MBA.																																																																																				
Learning model	Project Based Learning																																																																																									
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																																																									
	Program Objectives (PO)																																																																																									
	PO - 1	C2. Master the knowledge and ability to build an application/device that has complex functions and is combined into one unified system. Mastering the knowledge and ability to build an application/device that has complex functions and is incorporated into a single unified system.																																																																																								
	PO - 2	C4. Students are able to design and create mobile applications																																																																																								
	PO - 3	C3. Students are able to apply integration and testing techniques for mobile applications both in stand alone, client-server mode and interfacing with other hardware.																																																																																								
	PLO-PO Matrix																																																																																									
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>P.O</td></tr> <tr><td>PO-1</td></tr> <tr><td>PO-2</td></tr> <tr><td>PO-3</td></tr> </table>						P.O	PO-1	PO-2	PO-3																																																																															
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PO Matrix at the end of each learning stage (Sub-PO)																																																																																										
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> </thead> <tbody> <tr><td>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></tr> <tr><td>PO-2</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> <tr><td>PO-3</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> </tbody> </table>						P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	PO-2																	PO-3																
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Short Course Description	This course uses the project based learning method. This course provides conceptual and implementation knowledge of mobile application development and its interaction with web services to develop personal and enterprise scale mobile applications. This course uses the project based learning method. This course provides conceptual and implementable knowledge of mobile application development and its interaction with web services to develop personal and enterprise-scale mobile applications.																																																																																									
References	Main :																																																																																									
	<ol style="list-style-type: none"> 1. 1. Official Android Developer Documentation http://developer.android.com/. 2. 2. Esposito, Dino, Architecting Mobile Solutions for the Enterprise, 2012, O'Reilly Media. 3. 3. Iversen, Jakob & Eierman, Michael, Learning Mobile App Development A Hands-on Guide to Building Apps with iOS and Android , 2014, Pearson Education. 4. 4. Meier, Reto, Professional Android 4 Application Development, 2012, John Wiley and Sons. 5. 5. McWherter, Jeff & Gowell, Scott, Professional Mobile Application Development, 2012, John Wiley & Sons. 																																																																																									
	Supporters:																																																																																									
	1. Modul Praktikum Pemrograman Aplikasi Mobile																																																																																									
Supporting lecturer	Dr. Nanang Hoesen Hidroes Abbrori, S.T., M.T.I. Anita Safitri, M. Kom.																																																																																									
Week-	Final abilities of each learning	Evaluation			Help Learning, Learning methods, Student Assignments, [Estimated time]			Learning materials [References]	Assessment Weight (%)																																																																																	

	stage (Sub-PO)	Indicator	Criteria & Form	Offline (<i>offline</i>)	Online (<i>online</i>)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Students are able to explain in general terms programming in a mobile environment. Students can explain in outline programming in a mobile environment	Accuracy in explaining mobile programming concepts. Accuracy in explaining the concept of mobile programming.	Form of Assessment : Participatory Activities	Offline 3x50			4%
2	Students are able to install the Android IDE. College students can install the Android IDE.	1.2.1 Accuracy in installing the Android IDE. 2.2.2 Accuracy in deploying applications to emulators, devices and 3rd parties.	Form of Assessment : Practice / Performance	offline 3x50		Material: Installation and Introduction to Android Programming Library: 1. <i>Official Android Developer Documentation</i> http://developer.android.com/...	5%
3	Students are able to explain the concepts of activity and intent. Students are able to use activities and intents in Android projects. Students are able to explain the concept of activity and the internet. Students are able to use activities and intentions in Android projects	1.3.1. Accuracy in explaining the concept of activity & intent. Accuracy in explaining the concept of activity & intent. 2.3.2. Accuracy in implementing activity & intent. Accuracy in implementing activity & intent.	Form of Assessment : Participatory Activities	offline 3x50			5%
4	Students are able to apply various Android layouts. Students are able to apply various Android layouts.	4.1. Accuracy in applying Android layout to different case studies. Accuracy in applying the android layout to different case studies.	Criteria: 5 Form of Assessment : Practice / Performance	offline			5%
5	5. Accuracy in explaining the widget concept.		Form of Assessment : Practice / Performance	3x50			5%
6	6. Accuracy in applying Android widgets to different case studies.		Form of Assessment : Practice / Performance				5%
7	Achievement of planned abilities: - Accuracy in understanding the concept of storing data in arrays. - Accuracy in understanding the concept of storing data in files		Form of Assessment : Practice / Performance				5%
8			Criteria: Form of Assessment : Project Results Assessment / Product Assessment, Test				15%
9	Accuracy in implementing menu events in Android applications.		Form of Assessment : Practice / Performance				5%
10	Accuracy in explaining the concept of data storage with a data base on Android		Form of Assessment : Participatory Activities				5%
11	Accuracy in adding data display and delete functions.		Form of Assessment : Practice / Performance				5%

12	1.Accuracy in explaining the concept of distribution files and application distribution 2.Accuracy in distributing Android applications.		Form of Assessment : Participatory Activities, Practice/Performance				5%
13	1.Accuracy in explaining the concept of location services. 2.Accuracy in implementing the location service concept using the Google Map API.		Forms of Assessment : Participatory Activities, Practical Assessment, Practical / Performance				5%
14	Accuracy in applying the concepts of creating Android applications that have been taught.		Form of Assessment : Practical Assessment, Practice/Performance				5%
15	Project Progress		Form of Assessment : Practice / Performance				5%
16			Form of Assessment : Project Results Assessment / Product Assessment, Test				15%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	18.17%
2.	Project Results Assessment / Product Assessment	15%
3.	Practical Assessment	4.17%
4.	Practice / Performance	46.67%
5.	Test	15%
		99.01%

Notes

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Forms of assessment:** test and non-test.
- 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.
- 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.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 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%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.