



Universitas Negeri Surabaya
Faculty of Engineering,
Electrical Engineering Undergraduate Study Program

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date																																											
Telemedicine Techniques	2020102238		T=2	P=0	ECTS=3.18	6	July 18, 2024																																											
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator																																												
			Dr. Lusia Rakhmawati, 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)																																																	
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 5%; text-align: center;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 3%;">1</td> <td style="width: 3%;">2</td> <td style="width: 3%;">3</td> <td style="width: 3%;">4</td> <td style="width: 3%;">5</td> <td style="width: 3%;">6</td> <td style="width: 3%;">7</td> <td style="width: 3%;">8</td> <td style="width: 3%;">9</td> <td style="width: 3%;">10</td> <td style="width: 3%;">11</td> <td style="width: 3%;">12</td> <td style="width: 3%;">13</td> <td style="width: 3%;">14</td> <td style="width: 3%;">15</td> <td style="width: 3%;">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	Provide knowledge about telehealthcare concepts, basic concepts of wireless communication, wireless technology in patient monitoring, medical information processing technology, wireless telemedicine system deployment, safeguarding and privacy in medical data, Caring for the community, and future technology trends in healthcare.																																																	
References	Main :																																																	
	1. B. Fong, A. C. M. Fong, C. K. Li. 2011. Telemedicine Technologies: Information Technologies in Medicine and Telehealth. John Wiley & Sons. WHO. 2009. Telemedicine Opportunities and developments in Member States: report on the second global survey on eHealth. WHO Press.																																																	
	Supporters:																																																	
Supporting lecturer	EPPY YUNDRA Dr. Lusia Rakhmawati, S.T., M.T. Pradini Puspitaningayu, S.T., M.T., Ph.D.																																																	
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	Understand the concept of telehealthcare	<ul style="list-style-type: none"> · Explore the concept of telehealthcare · Understand the different definitions of telemedicine · Understand the development of telemedicine · Know the types of telemedicine · Understand patients and care 	<p>Criteria:</p> <ol style="list-style-type: none"> 1.The assessment criteria are carried out by looking at aspects: 2.1. Participation: carried out by observing student activities (weight 2) 3.2. UTS: carried out with an assessment during the middle of the semester (weight 2) 4.3. UAS: carried out every semester to measure all indicators (weight 3) 5.4. Task: carried out on each indicator (weight 3) 6.Student Final Grade: 7.Participation Score (2) %2 Lever Score (3)%2 UTS Score (2)%2 UAS Score (3) divided by 10. 	Lectures, discussions and questions and answers 2 X 50		0%
2	Understand the concept of telehealthcare	<ul style="list-style-type: none"> · Explore the concept of telehealthcare · Understand the different definitions of telemedicine · Understand the development of telemedicine · Know the types of telemedicine · Understand patients and care 	<p>Criteria:</p> <ol style="list-style-type: none"> 1.The assessment criteria are carried out by looking at aspects: 2.1. Participation: carried out by observing student activities (weight 2) 3.2. UTS: carried out with an assessment during the middle of the semester (weight 2) 4.3. UAS: carried out every semester to measure all indicators (weight 3) 5.4. Task: carried out on each indicator (weight 3) 6.Student Final Grade: 7.Participation Score (2) %2 Lever Score (3)%2 UTS Score (2)%2 UAS Score (3) divided by 10. 	Lectures, discussions and questions and answers 2 X 50		0%

3	Understand wireless communications	<ul style="list-style-type: none"> · Know the basics of wireless communication · Get to know the types of wireless networks 	<p>Criteria:</p> <ol style="list-style-type: none"> 1.The assessment criteria are carried out by looking at aspects: 2.1. Participation: carried out by observing student activities (weight 2) 3.2. UTS: carried out with an assessment during the middle of the semester (weight 2) 4.3. UAS: carried out every semester to measure all indicators (weight 3) 5.4. Task: carried out on each indicator (weight 3) 6.Student Final Grade: 7.Participation Score (2) %2 Lever Score (3)%2 UTS Score (2)%2 UAS Score (3) divided by 10. 	Lectures, discussions, questions and answers, exercises and assignments 2 X 50			0%
4	Understand the concept of remote patient monitoring	Understand the basic concept of emergency recovery. Be able to explain remote recovery. Understand wireless technology in hospitals. Study general health assessment	<p>Criteria:</p> <ol style="list-style-type: none"> 1.The assessment criteria are carried out by looking at aspects: 2.1. Participation: carried out by observing student activities (weight 2) 3.2. UTS: carried out with an assessment during the middle of the semester (weight 2) 4.3. UAS: carried out every semester to measure all indicators (weight 3) 5.4. Task: carried out on each indicator (weight 3) 6.Student Final Grade: 7.Participation Score (2) %2 Lever Score (3)%2 UTS Score (2)%2 UAS Score (3) divided by 10. 	Lectures, discussions, questions and answers, practice 2 X 50			0%

5	Understand the concept of remote patient monitoring	Understand the basic concept of emergency recovery. Be able to explain remote recovery. Understand wireless technology in hospitals. Study general health assessment	Criteria: 1.The assessment criteria are carried out by looking at aspects: 2.1. Participation: carried out by observing student activities (weight 2) 3.2. UTS: carried out with an assessment during the middle of the semester (weight 2) 4.3. UAS: carried out every semester to measure all indicators (weight 3) 5.4. Task: carried out on each indicator (weight 3) 6.Student Final Grade: 7.Participation Score (2) %2 Lever Score (3)%2 UTS Score (2)%2 UAS Score (3) divided by 10.	Lectures, discussions, questions and answers, practice 2 X 50			0%
6							0%
7							0%
8							0%
9							0%
10							0%
11							0%
12							0%
13							0%
14							0%
15							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.