



**Universitas Negeri Surabaya**  
**Faculty of Sports and Health Sciences,**  
**Bachelor of Physical Education, Health & Recreation Study**  
**Program**

Document Code

**SEMESTER LEARNING PLAN**

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>	<b>SEMESTER</b>	<b>Compilation Date</b>																																	
Exercise Physiology II	8520102047		T=2 P=0 ECTS=3.18	3	July 18, 2024																																	
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>	<b>Study Program Coordinator</b>																																		
	.....		.....	Dr. Mochamad Ridwan, S.Pd., M.Pd.																																		
<b>Learning model</b>	Case Studies																																					
<b>Program Learning Outcomes (PLO)</b>	PLO study program that is charged to the course																																					
	Program Objectives (PO)																																					
	PLO-PO Matrix																																					
		<table border="1" style="margin: auto;"> <tr><td style="width: 30px;">P.O</td></tr> </table>					P.O																															
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	PO Matrix at the end of each learning stage (Sub-PO)																																					
	<table border="1" style="margin: auto;"> <tr> <td rowspan="2" style="width: 30px;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 20px;">1</td> <td style="width: 20px;">2</td> <td style="width: 20px;">3</td> <td style="width: 20px;">4</td> <td style="width: 20px;">5</td> <td style="width: 20px;">6</td> <td style="width: 20px;">7</td> <td style="width: 20px;">8</td> <td style="width: 20px;">9</td> <td style="width: 20px;">10</td> <td style="width: 20px;">11</td> <td style="width: 20px;">12</td> <td style="width: 20px;">13</td> <td style="width: 20px;">14</td> <td style="width: 20px;">15</td> <td style="width: 20px;">16</td> </tr> </table>					P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																						
<b>Short Course Description</b>	Provides understanding and mastery of the functions of the human body's organs during rest and physical training.																																					
<b>References</b>	<b>Main :</b>																																					
	1. Foss, Keteyian. 1998. Fox Physiological Basis for Exercise and Sport. 6th Edition. Boston, Massachusetts : Mc Graw-Hill. 2. Kusnanik, Nining dkk. 2011. Dasar-dasar Fisiologi Olahraga. Surabaya: Unesa University Press. 3. Soekarman. 1987. Dasar Olahraga untuk Pembina Pelatih dan Atlet. Edisi 1. Jakarta: Inti Idayu Press. 4. Wilmore, Costill, Kenney. 2008. Physiology of Sport Exercise. 4th Edition. USA: Human Kinetics.																																					
	<b>Supporters:</b>																																					
<b>Supporting lecturer</b>	JUANITA DOLORES HASIANE NASUTI Dr. dr. Endang Sri Wahjuni, M.Kes.																																					
<b>Week-</b>	<b>Final abilities of each learning stage (Sub-PO)</b>	<b>Evaluation</b>		<b>Help Learning, Learning methods, Student Assignments, [ Estimated time]</b>		<b>Learning materials [ References ]</b>	<b>Assessment Weight (%)</b>																															
		<b>Indicator</b>	<b>Criteria &amp; Form</b>	<b>Offline ( offline )</b>	<b>Online ( online )</b>																																	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)																															

1	Understand the meaning of the cardiorespiratory system	Explain the cardiorespiratory system	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50			0%
2	Mastering the cardiovascular system at rest and activity	1.Explain the anatomy and physiology of the cardiovascular system 2. Understanding blood circulation	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50			0%
3	Mastering the cardiovascular system at rest and activity	1.Explain cardiac output. 2. Understanding heart regulation 3.Explain changes in the cardiovascular system during rest and exercise.	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50			0%
4	Mastering the cardiovascular system at rest and activity	1.Explain the physiology of blood pressure 2.Understand blood distribution during rest and exercise	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50			0%
5	Mastering the cardiovascular system at rest and activity	Understand the function of blood, blood cells and blood types	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50			0%
6	Mastering the cardiovascular system at rest and activity	Explains the Karvonen method, namely how to calculate the working pulse	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50			0%
7	Understand the physiology of warming up and cooling down	1.Explain the purpose and function of warming up and the consequences if it is not done. 2.Explain the purpose and function of cooling down and the consequences if it is not done.	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50			0%
8	Mastering face-to-face material I to VII		<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Test 2 X 50			0%

9	Identify the anatomy of the respiratory system, influencing factors and pulmonary ventilation	Explain the anatomy and physiology of the respiratory system	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50		0%
10	Understand respiratory regulation. Understand lung ventilation, alveolar ventilation during rest and exercise	Understand respiratory regulation, alveolar ventilation	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50		0%
11	Mastering the respiratory system during rest and activity.	Understand pulmonary ventilation, alveolar ventilation at rest and exercise	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50		0%
12	Mastering the respiratory system during rest and activity	Understanding gas transport	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50		0%
13	Understanding VO <sub>2</sub> max, the factors that influence it and how to increase it	1.Explain the meaning of VO <sub>2</sub> max 2.Explain the factors that influence VO <sub>2</sub> max	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50		0%
14	Mastering the respiratory system during rest and activity	Understand gas exchange	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50		0%
15	Understanding VO <sub>2</sub> max, the factors that influence it and how to increase it.	1.Explains how to increase VO <sub>2</sub> max 2.Explains how to measure VO <sub>2</sub> max	<b>Criteria:</b> Full marks are obtained if you can answer all questions correctly	Lectures, discussions and questions and answers 2 X 50		0%
16						0%

#### Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

#### 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 materials 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.

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.