



**Universitas Negeri Surabaya
Faculty of Sports and Health Sciences
Bachelor of Sports Science Study Program**

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight	SEMESTER	Compilation Date																																
Basic Pharmacology and Doping	8920102045		T=2 P=0 ECTS=3.18	4	July 17, 2024																																
AUTHORIZATION	SP Developer		Course Cluster Coordinator		Study Program Coordinator																																
		Dr. Heri Wahyudi, S.Or., M.Pd.																																
Learning model	Project Based Learning																																				
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																				
	Program Objectives (PO)																																				
	PLO-PO Matrix																																				
		P.O																																			
Short Course Description	This course examines the general principles of pharmacology, the effects of drugs and treatments, as well as materials or substances and methods that can improve performance in sports.																																				
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 5%;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 2%;">1</td> <td style="width: 2%;">2</td> <td style="width: 2%;">3</td> <td style="width: 2%;">4</td> <td style="width: 2%;">5</td> <td style="width: 2%;">6</td> <td style="width: 2%;">7</td> <td style="width: 2%;">8</td> <td style="width: 2%;">9</td> <td style="width: 2%;">10</td> <td style="width: 2%;">11</td> <td style="width: 2%;">12</td> <td style="width: 2%;">13</td> <td style="width: 2%;">14</td> <td style="width: 2%;">15</td> <td style="width: 2%;">16</td> </tr> </table>					P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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References	Main : 1. Fourcroy, JL. 2009. Pharmacology, Doping and Sport A Scientific guide for Athletes, coaches, physicians, scientists and administrators. Routledge 2. Tim Pengampu Farmakologi Dasar dan Doping. 2017. Handout Farmakologi Dasar dan Doping 3. Joenoes, N.Z. 2003. Ars Prescribendi Resep yang Rasional. Airlangga University Press 4. Katzung, BG, Masters, SB, Trevor, AJ.2012. Basic & Clinical Pharmacolog. The McGraw Hill Companies, New York 5. Waddington, I & Smith, A. 2009. An Introduction to Drug in Sport. Routledge Supporters:																																				
Supporting lecturer	Dr. Dita Yuliastrid, S.Si., M.Kes. Anna Noordia, S.TP., M.Kes. dr. Ananda Perwira Bakti, M.Kes. I MADE WIJAYA																																				
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	Mastering the General Principles of Pharmacology	<ol style="list-style-type: none"> 1.Explain the meaning of Pharmacodynamics 2.Explain the meaning of Pharmacokinetics 3.Explain the meaning of Biopharmaceuticals 4.Explain the therapeutic and toxic effects of drugs 	Criteria: <ol style="list-style-type: none"> 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3) 	Lectures, discussions, questions and answers 2 X 50			0%
2	Understand the form and absorption of drugs as well as drug interactions	<ol style="list-style-type: none"> 1.Explain the form and absorption of drugs 2.Explain drug interactions 	Criteria: <ol style="list-style-type: none"> 1.Participation during lectures and peer teaching is carried out through observation (weight 2). Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then given a weight (3) 	Lectures, discussions, questions and answers 2 X 50			0%
3	Understand the meaning of addiction and drug abuse	Explain the meaning of addiction and drug abuse	Criteria: <ol style="list-style-type: none"> 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3) 	Lectures, discussions, questions and answers 2 X 50			0%
4	Understand the meaning of doping and sport	Explain the meaning of doping and sport	Criteria: <ol style="list-style-type: none"> 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3) 	Lectures, discussions, questions and answers 2 X 50			0%
5	Understand the role of Glutamine and Antioxidants for sports performance	Explain the role of Glutamine and Antioxidants for sports performance	Criteria: <ol style="list-style-type: none"> 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3) 	Lectures, discussions, questions and answers 2 X 50			0%

6	Understanding the role of Anabolic-androgenic steroids for sports performance	Explain the role of Anabolic-androgenic steroids for sports performance	Criteria: Participation during lectures and peer teaching is carried out through observation (weight 2). Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then given a weight (3)	Lectures, discussions, questions and answers 2 X 50			0%
7	Understand the role of stimulants and diuretics for sports performance	Explain the role of stimulants and diuretics for sports performance	Criteria: Participation during lectures and peer teaching is carried out through observation (weight 2). Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then given a weight (3)	Lectures, discussions, questions and answers 2 X 50			0%
8	Midterm exam		Criteria: The subsummative test (UTS) is carried out once with indicators 1-7 via a written exam and is given a weighting of (2)	1 X 50			0%
9	Understand the role of macronutrients for sports performance	· Explain the role of macronutrients for sports performance	Criteria: 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3)	Lectures, discussions, questions and answers 2 X 50			0%
10	Understand the role of fluids and alkalizers for sports performance	Explain the role of fluids and alkalizers for sports performance	Criteria: 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3)	Lectures, discussions, questions and answers 2 X 50			0%
11	Understand the role of Creatine, Caffeine, Carnitine for sports performance	Explains the role of Creatine, Caffeine, Carnitine for sports performance	Criteria: 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3)	Lectures, discussions, questions and answers 2 X 50			0%

12	Understanding the role of Erythropoietin doping and blood doping for sports performance	Explain the role of Erythropoietin doping and blood doping for sports performance	Criteria: 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3)	Lectures, discussions, questions and answers 2 X 50			0%
13	Understand the role of Growth Hormone in sports performance	Explain the role of Growth Hormone in sports performance	Criteria: 1.Participation during lectures and peer teaching, carried out through observation (weight 2) 2.Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then weighted (3)	Lectures, discussions, questions and answers 2 X 50			0%
14	Understanding Gene Doping and Gene Therapy	Explaining Gene Doping and Gene Therapy	Criteria: Participation during lectures and peer teaching is carried out through observation (weight 2). Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then given a weight (3)	Lectures, discussions, questions and answers 2 X 50			0%
15	Understanding the effects of doping substances on athletes' health	Explain the effects of doping substances on athletes' health	Criteria: Participation during lectures and peer teaching is carried out through observation (weight 2). Assessment of written tests in peer teaching is considered an assignment, the scores are averaged, then given a weight (3)	Lectures, discussions, questions and answers 2 X 50			0%
16	Final exams		Criteria: 1.UAS scores are carried out in writing with indicators 9-15 given a weight (3) 2.The final NA is (participation grade") (assignment grade%2 3) (UTS grade%2 2) UAS grade (3) divided by 10	2 X 50			0%

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** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities 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.