



**Universitas Negeri Surabaya
Faculty of Engineering,
Cosmetology Education Undergraduate Study Program**

**Document
Code**

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Anatomy Physiology	8321302001	MK Strengthening Study Programs	T=2	P=0	ECTS=3.18	1	July 2, 2022
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	Octaverina Kecvara Pritasari, S.Pd, M.Farm, Anjani Nur Ilahi, S.Ked, MARS		Octaverina Kecvara Pritasari, S.Pd, M.Farm			Nia Kusstianti, S.Pd., M.Pd.	

Learning model	Case Studies
-----------------------	---------------------

Program Learning Outcomes (PLO)	PLO study program which is charged to the course																																																																																		
	PLO-5	Applying a professional attitude as an educator and practitioner in the field of cosmetology which includes discipline, honesty, responsibility, ethics, ability to collaborate and communicate effectively																																																																																	
	PLO-6	Skilled in designing and implementing learning tools in schools by prioritizing local wisdom and regional culture																																																																																	
	PLO-11	Able to explain basic knowledge in the field of cosmetology																																																																																	
	Program Objectives (PO)																																																																																		
	PO - 1	Students have knowledge about cells, basic human body tissues, organs and organ systems to understand the processes that occur in the human body																																																																																	
	PO - 2	Students have the ability to analyze cases related to Anatomy and Physiology by utilizing learning resources and ICT																																																																																	
	PLO-PO Matrix																																																																																		
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>P.O</td> <td>PLO-5</td> <td>PLO-6</td> <td>PLO-11</td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PO-2</td> <td></td> <td></td> <td></td> </tr> </table>			P.O	PLO-5	PLO-6	PLO-11	PO-1				PO-2																																																																						
	P.O	PLO-5	PLO-6	PLO-11																																																																															
PO-1																																																																																			
PO-2																																																																																			
PO Matrix at the end of each learning stage (Sub-PO)																																																																																			
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td rowspan="2">P.O</td> <td colspan="16">Week</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> <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> </table>																P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	PO-2																
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	Conduct studies and provide an understanding of the role of Anatomy and Physiology of the human body in the education and learning process in accordance with the curriculum applicable in vocational high schools. Concepts of basic tissue, systems in the body, joints and muscles, food digestion, blood and blood circulation, skin, excretory system, hormones, nerves and reproduction. Learning is carried out by applying a constructivist approach. The learning activity ends with preparing a practicum report, summary report assignment, UTS and UAS.
---------------------------------	---

References	Main :	
		<ol style="list-style-type: none"> Evelyn Pearce. 2010. Anatomi Dan Fisiologi Untuk Perawa t. Jakarta: EGC Watson Roger. 2008. Anatomi Dan Fisiologi Untuk Perawat . Jakarta: EGC Tortora gerard J. And Sandra Reynolds G. 1992. Principles of Anatomy and Physiologi . New York : textbooks Inc. Ganong, W.F. 1983. Fisiologi Kedokteran . Jakarta: Karya Utama Glencoe Science, 2004, Biology: The Dynamics Of Lif e. New York: Mc Graw Hill Companies Setiadi,2007. Anatomi dan Fisiologi Manusia . Yogyakarta: Graha Ilmu.
	Supporters:	

Supporting lecturer	Octaverina Kecvara Pritasari, S.Pd., M.Farm. Nur Ilahi Anjani, S.Ked., M.Kes.
----------------------------	--

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 understand the concepts and meaning of anatomy and physiology of the human body and organ systems	1.- Explain the meaning of anatomy and physiology 2.- Explain cells, tissues, organs and organ systems 3.- Explain the function of tissues and organs	Criteria: Each question has a weight of 25 Form of Assessment : Test		Lectures, Group discussions, Javanese questions 2 x 50		3%
2	Students are able to understand the musculoskeletal system (skeletal system)	1.Explain the muscular system 2.Explain the skeletal system	Criteria: Knowledge Assessment Rubric Form of Assessment : Participatory Activities, Tests		Presentations, discussions and assignments Lectures , Group discussions , Questions and answers Assignment 1: - Explain the muscles of the face and neck - Explain the types of bones - Look for examples of diseases that often occur in the muscular and skeletal systems related to the field of management Make up 2 x 50		3%
3	Students are able to understand the musculoskeletal system (skeletal system)	1.Explain the muscular system 2.Explain the skeletal system	Criteria: Knowledge Assessment Rubric Form of Assessment : Participatory Activities, Tests		Presentations, discussions and assignments Lectures , Group discussions , Questions and answers Assignment 1: - Explain the muscles of the face and neck - Explain the types of bones - Look for examples of diseases that often occur in the muscular and skeletal systems related to the field of management Make up 2 x 50		4%
4	Students understand the theory of blood group testing	1.Explain the cardiovascular system (heart, blood vessels) 2.Explain the circulatory system, blood and blood types 3.Describe disorders and diseases of the circulatory system	Criteria: If answered correctly, the score is 100 Form of Assessment : Participatory Activities, Practice/Performance		Project Based Learning, Group discussion , Task 2 : - Explain the cardiovascular system and human circulatory system - Look for examples of diseases that often occur in the circulatory system Task 3: Carry out a practical blood group		3%

test and prepare a practical report Phase 1: Determining questions: The lecturer asked: How many types of human blood are there? Name it! Students: respond to lecturer's questions • Phase 2: Develop a Project Plan Lecturer: Give time to students to plan and analyze the tools and materials needed to carry out a blood group test Students: plan and analyze the tools and materials needed to carry out a blood type test • Phase 3 : Arranging a schedule for the Lecturer : Making an agreement on carrying out the blood group test and the deadline for preparing the practicum report Students : preparing a timeline for carrying out the blood group test and completing the preparation of the practicum report along with the results of the analysis • Phase 4 : Monitoring Lecturer : monitor the student process in carrying out the blood group test and know the progress of preparing the report and interpreting the results of the practicum. Students: carry out the practicum and submit the report according to the agreed time limit . • Phase 5: Test the results. Lecturer: see the results of the students' work. Students: present the results of their work starting from the preparation of tools and materials, the process of implementing the practicum, to interpretation and analysis of practicum results • Phase 6: Evaluation of Lecturer Experience: give students time to reflect and revise reports, and provide suggestions and input Students: revise if there is input from the lecturer 2 x 50

5	Students understand the theory of blood group testing	<ol style="list-style-type: none"> 1.Explain the cardiovascular system (heart, blood vessels) 2.Explain the circulatory system, blood and blood types 3.Describe disorders and diseases of the circulatory system 	<p>Criteria: If answered correctly, the score is 100</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>		<p>Project Based Learning, Group discussion</p> <p>Task 2</p> <p>- Explain the cardiovascular system and human circulatory system</p> <p>- Look for examples of diseases that often occur in the circulatory system</p> <p>Task 3: Carry out a practical blood group test and prepare a practical report</p> <p>Phase 1: Determining questions: The lecturer asked: How many types of human blood are there? Name it!</p> <p>Students: respond to lecturer's questions</p> <p>Phase 2: Develop a Project Plan</p> <p>Lecturer: Give time to students to plan and analyze the tools and materials needed to carry out a blood group test</p> <p>Students: plan and analyze the tools and materials needed to carry out a blood type test</p> <p>Phase 3 : Arranging a schedule for the Lecturer :</p> <p>Making an agreement on carrying out the blood group test and the deadline for preparing the practicum report</p> <p>Students : preparing a timeline for carrying out the blood group test and completing the preparation of the</p>		3%

practicum report along with the results of the analysis • Phase 4 :
Monitoring Lecturer : monitor the student process in carrying out the blood group test and know the progress of preparing the report and interpreting the results of the practicum. Students: carry out the practicum and submit the report according to the agreed time limit . • Phase 5: Test the results. Lecturer: see the results of the students' work. Students: present the results of their work starting from the preparation of tools and materials, the process of implementing the practicum, to interpretation and analysis of practicum results • Phase 6: Evaluation of Lecturer Experience: give students time to reflect and revise reports, and provide suggestions and input Students: revise if there is input from the lecturer 2 x 50

6	Students have the ability to explain the respiratory system and its disorders	<p>1.1. Explain the structure and function of the skin</p> <p>2.2. Explain the structure and function of hair</p> <p>3.3. Explain the structure and function of nails</p> <p>4.4. Explain the disorders and diseases that are often found in the skin, hair and nails</p>	<p>Criteria: Each question item has a weight of 20, if answered correctly</p> <p>Forms of Assessment : Participatory Activities, Practice/Performance, Tests</p>	2 X 50	<p>Problem/Case Based Learning, Group discussion, Task 4:</p> <ul style="list-style-type: none"> - Explain the structure and function of skin, hair and nails in humans - Classify examples of diseases that are often found in skin, hair and nails, and diagnose the causes and how to treat them accordingly <p>general domain Task 5: Problem Based Learning Example of a PBL/CBL scenario: A 25 year old woman comes to have her hair and scalp treated . He complained that his scalp felt itchy and scaly since 1 month ago. Apart from that, hair loss is also found. Phase 1: identifying terms / concepts: students explain what itching, scaly skin, hair loss is. Phase 2: identify the problem: students identify what problems are occurring (itching, scaly skin, hair loss), the problem (since 1 month ago), and chronology Phase 3: analyze the problem: students analyze the problem they are complaining about: - how it started complaints arise? - Have you ever experienced the same complaint? - is there a history of allergies? - Do you have family or friends who experience the same complaint? - What are the things that aggravate or relieve the complaint? Phase 4: problem structuring: students analyze and diagnose the possible causes of complaints that arise. Phase 5: identify learning objectives (analysis and evaluation): students analyze and plan appropriate treatment for complaints felt by clients</p>	<p>Material: Structure and function of skin Reader: <i>Evelyn Pearce. 2010. Anatomy and Physiology for Nurses t. Jakarta: EGC</i></p> <hr/> <p>Material: Structure and function of hair Reference: <i>Watson Roger. 2008. Anatomy and Physiology for Nurses. Jakarta: EGC</i></p> <hr/> <p>Material: Disorders and diseases that are often found in the skin, hair and nails. Reference: <i>Ganong, WF 1983. Medical Physiology. Jakarta: Main Works</i></p>	5%

7	Students have the ability to explain the respiratory system and its disorders	<p>1.1. Explain the structure and function of the skin</p> <p>2.2. Explain the structure and function of hair</p> <p>3.3. Explain the structure and function of nails</p> <p>4.4. Explain the disorders and diseases that are often found in the skin, hair and nails</p>	<p>Criteria: Each question item has a weight of 20, if answered correctly</p> <p>Forms of Assessment : Participatory Activities, Practice/Performance, Tests</p>	2 X 50	<p>Problem/Case Based Learning, Group discussion, Task 4: - Explain the structure and function of skin, hair and nails in humans - Classify examples of diseases that are often found in skin, hair and nails, and diagnose the causes and how to treat them accordingly general domain Task 5: Problem Based Learning Example of a PBL/CBL scenario: A 25 year old woman comes to have her hair and scalp treated . He complained that his scalp felt itchy and scaly since 1 month ago. Apart from that, hair loss is also found. Phase 1: identifying terms / concepts: students explain what itching, scaly skin, hair loss is. Phase 2: identify the problem: students identify what problems are occurring (itching, scaly skin, hair loss), the problem (since 1 month ago), and chronology Phase 3: analyze the problem: students analyze the problem they are complaining about: - how it started complaints arise? - Have you ever experienced the same complaint? - is there a history of allergies? - Do you have family or friends who experience the same complaint? - What are the things that aggravate or relieve the complaint? Phase 4: problem structuring: students analyze and diagnose the possible causes of complaints that arise. Phase 5: identify learning objectives (analysis and evaluation): students analyze and plan appropriate treatment for complaints felt by clients</p>	<p>Material: Structure and function of skin Reader: <i>Evelyn Pearce. 2010. Anatomy and Physiology for Nurses t. Jakarta: EGC</i></p> <p>Material: Structure and function of hair Reference: <i>Watson Roger. 2008. Anatomy and Physiology for Nurses. Jakarta: EGC</i></p> <p>Material: Disorders and diseases that are often found in the skin, hair and nails. Reference: <i>Ganong, WF 1983. Medical Physiology. Jakarta: Main Works</i></p>	5%
8	Students can answer all the questions in the UTS	UTS	Form of Assessment : Test		Midterm Exam, 2 x 50 Written Tests		20%

9	Students are able to understand the food digestive system. (advanced)	1.1. Explain the respiratory system 2.2. Explain the respiratory tract 3.3. Explain the difference between chest and abdominal breathing 4.4. Explain the disorders and diseases that are often found in the respiratory system	Criteria: If the answer is correct, then the score is 100		Presentation, Discussion, questions and answers 2 x 50	Material: respiratory organs Reader: <i>Evelyn Pearce. 2010. Anatomy and Physiology for Nurses t. Jakarta: EGC</i> ----- Material: Differences in chest and abdominal breathing Reference: <i>Watson Roger. 2008. Anatomy and Physiology for Nurses. Jakarta: EGC</i> ----- Material: disorders and diseases that are often found in the respiratory system Reference: <i>Ganong, WF 1983. Medical Physiology. Jakarta: Main Works</i>	3%
10	Students are able to understand food metabolism	1.1. Explain the digestive system 2.2. Explain mechanical and chemical digestion of food	Criteria: If answered correctly then the score is 100 Form of Assessment : Participatory Activities, Practice/Performance		Group discussion, Question and answer Task 7: - Explain the human digestive system and tract - Look for examples of diseases that often occur in the digestive system 2 x 50		3%

11	Able to explain the urinary system and urine examination	<ol style="list-style-type: none"> 1.- Explain the urinary system 2.- Explain urine examination techniques 3.- Explain the process of urine formation 	<p>Criteria: If answered correctly, the score is 100</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>		Presentations, discussions, questions and answers 2 x 50	<p>Material: urinary system</p> <p>Reader: <i>Evelyn Pearce. 2010. Anatomy and Physiology for Nurses t. Jakarta: EGC</i></p> <hr/> <p>Material: disorders and diseases that are often found in the urinary system.</p> <p>Reference: <i>Tortora Gerard J. And Sandra Reynolds G. 1992. Principles of Anatomy and Physiology. New York : textbooks Inc.</i></p>	3%
12	Students are able to understand the lymphatic system (lymph nodes)	<ol style="list-style-type: none"> 1.1. Explain about lymph nodes 2.2. Explain the location and course of the lymph nodes 3.3. Explain the disorders and diseases that are often found in the lymphatic system 	<p>Criteria: Each question item has a scoring of 25</p> <p>Form of Assessment : Participatory Activities</p>		presentation, discussion, question and answer 2 x 50	<p>Material: lymphatic system (lymph nodes)</p> <p>Reference: <i>Evelyn Pearce. 2010. Anatomy and Physiology for Nurses t. Jakarta: EGC</i></p> <hr/> <p>Material: disorders and diseases that are often found in the lymphatic system.</p> <p>Reader: <i>Watson Roger. 2008. Anatomy and Physiology for Nurses. Jakarta: EGC</i></p> <hr/> <p>Material: disorders and diseases that are often found in the lymphatic system</p> <p>Reference: <i>Glencoe Science, 2004, Biology: The Dynamics Of Life. New York: Mc Graw Hill Companies</i></p>	4%

13	Able to explain the clogged gland system (hormones)	<p>1.- explain the meaning of the hormonal system. - explain the factors that influence the work of hormones.</p> <p>2.- explain the function of hormones</p> <p>3.- explain the factors that influence the work of hormones</p> <p>4.- Explain abnormalities that occur in the hormonal system</p>	<p>Criteria: If answered correctly, the score is 100</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>		Presentations, discussions, questions and answers 2 x 50		4%
14	Able to explain the nervous system	<p>1.- explain the meaning of the nervous system.</p> <p>2.- explain the function of nerves</p> <p>3.- explain the factors that influence the work of the nerves.</p> <p>4.- Explain abnormalities that occur in the nervous system</p>	<p>Criteria: 1. Each question item has a weight of 25 2.- explain the factors that influence the work of the nerves.</p> <p>Form of Assessment : Participatory Activities</p>		Presentations, discussions, questions and answers 2 x 50	<p>Material: Explains the central nervous system and autonomic nervous system Reader: <i>Evelyn Pearce. 2010. Anatomy and Physiology for Nurses t. Jakarta: EGC</i></p> <p>Material: Explains the factors that influence nerve function. Reference: <i>Tortora Gerard J. And Sandra Reynolds G. 1992. Principles of Anatomy and Physiology. New York : textbooks Inc.</i></p> <p>Material: Explains disorders and diseases that are often found in the nervous system. Reference: <i>Ganong, WF 1983. Medical Physiology. Jakarta: Main Works</i></p>	4%

15	Be able to explain the reproductive system	<p>1.- explain the meaning of the reproductive system.</p> <p>2.- explain the function of the reproductive organs</p> <p>3.- Explain abnormalities that occur in the reproductive system</p> <p>4.- Describe efforts to prevent reproductive system disorders</p>	<p>Criteria: If you answer everything correctly, the score is 100</p> <p>Form of Assessment : Participatory Activities, Practice/Performance</p>	Discussion, assignments, practice working on LKM 2 X 50		<p>Material: Explains the male and female reproductive systems</p> <p>Reader: <i>Evelyn Pearce. 2010. Anatomy and Physiology for Nurses t. Jakarta: EGC</i></p> <p>Material: Explains disorders and diseases that are often found in the reproductive system.</p> <p>Reader: <i>Watson Roger. 2008. Anatomy and Physiology for Nurses. Jakarta: EGC</i></p> <p>Material: Explains efforts to maintain healthy reproductive organs and prevent disease.</p> <p>Reference: <i>Ganong, WF 1983. Medical Physiology. Jakarta: Main Works</i></p>	3%
16	Final exams		Form of Assessment : Test		Final Semester Examination (written test) 2 x 50		30%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	24.34%
2.	Practice / Performance	12.84%
3.	Test	59.84%
		97.02%

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.

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.