BIOLOGY LEARNING STRATEGY LESSON PLAN

	MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY MULAWARMAN UNIVERSITY FACULTY OF TEACHING AND EDUCATION SCIENCE BIOLOGICAL EDUCATION STUDY PROGRAM	No. Doc	4.1
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LESSON PLAN					
Subject	**Course Code**	**Clusters of Courses**	**Weight (credit)**	**Semester**	**date Compilation**
Biology Learning Strategy	19050163W032	Course Offered by Study Program	3	4	March 4, 2020
Authorization	**Course Coordinator**	**TEAM Teaching Courses**			**Coordinator of Study Program**
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Learning Outcomes	**Learning Outcomes of Study Program Graduates (LO-Study Program) Charged on Courses**	
	Knowledge	K2 Able to implement pedagogical science in learning Biology in the context of Tropical Rain Forest and its Environment
	General Skills	GS2 Able to apply logical, critical, systematic, and innovative thinking in making strategic decisions by applying humanities values in the field of biology and learning based on relevant information and data
	Course Learning Outcomes (CLO)	

	1. Able to implement pedagogical science in field of learning process so that active, effective, efficient and meaningful learning occurs to achieve optimal learning outcomes which are part of the learning strategy including approaches to learning, learning models, learning methods, concept maps, and basic teaching skills in Tropical Rain Forests and their Environment 2. Able to apply logical, critical, systematic, and innovative thinking in making strategic decisions by paying attention to and applying humanities values that are in accordance with the field of pedagogic science in learning process so that active, effective, efficient and meaningful learning occurs to achieve optimal learning outcomes which is part of the learning strategy based on relevant information and data
Integrated Principle Scientific Studies of Unmul	Dimension 2: Social and Cultural Entities 2.1. INDIVIDUAL COMMUNITY GROUPS AND INTERACTIONS: human interaction with nature in tropical rain forest areas.
Course Description	This course examines and analyzes various way to organize the components of the learning process so that active, effective, efficient and meaningful learning occurs to achieve optimal learning outcomes. This course discusses: 1) Explanation of learning strategies: types of learning strategies, teaching and learning presentation techniques, the nature of learning strategies, implications of learning systems in education, 2) Introduction to learning and teaching, Creating a framework for learning; 3) Introduction of teachers in achieving the standard of the educational process; 4) The learning system in the standard of the education process; 5) Learning approach: Scientific approach: 6) *Contextual Teaching and Learning* (CTL); 7) a problem solving approach; 8) constructivism approach; 9) open-ended approach; 10) approach to science process skills; 11) learning models; 12) Teaching methods; 13) concept map; 14) Basic teaching skills.

<table>
<tr><td>Reference</td><td colspan="2">

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<tr><td rowspan="2">Learning Media</td><td>Software :</td><td>Hardware :</td></tr>
<tr><td>Software, Internet (google), PPT</td><td>Labtop, Book, Paper, Module</td></tr>
<tr><td>Pre Courseterms (if any)</td><td colspan="2">-</td></tr>
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Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Students are able to understand and apply the Lecture Contractinclude: a) Competency standards, basic competencies, and lecture indicators; b) The purpose of the lecture; c) Lecture techniques and assignments from learning strategies; d) Learning evaluation techniques. e) Explain the overall scope of the learning strategy material in outline; f.) Explaining the meaning of learning strategies from various educational expert opinions	1.Utilizing science and technology in understanding the scope of learning strategies, principles, and basic procedures in the field of biology and learning in schools. 2. Understanding learning strategies	1. The scope of learning strategies, principles, and basic procedures in the field of biology and its learning in schools 2. Understanding learning strategies	• Strategy: 1. Models: Direct learning (conventional) 2. Method: Lectures, Q&A, assignments 3. Lecturer submits lecture contract, course description 4. Explain the meaning of learning strategies	• Work independently and interact with other students of different ethnicities in discussions and questions and answers on the scope of learning strategies, principles, and basic procedures in the field of biology and learning at school and understand the meaning of learning strategies	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. presence	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	5	5,12,15,16
2	a. Able to master the types of learning strategies, teaching and learning presentation techniques, the	Explain the types of learning strategies, teaching and learning presentation	Biology learning strategies: 1. Types of learning strategies 2. Teaching and	• Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion,	Work independently, and interact with other students discussing the types of learning strategies,	Process assessment which includes: 1. attitude, 2. knowledge 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral,	5	5,12,15,16

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	nature of learning strategies, the implications of the learning system in the world of education to support biology learning in schools. b. Have a responsible attitude towards work in studying learning strategies independently;	techniques, the nature of learning strategies, the implications of the learning system in the world of education to support biology learning in schools	learning presentation techniques 3. The nature of learning strategies 4. The implications of the learning system in the world of education	presentation, question and answer, 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of the types of learning strategies, teaching and learning presentation techniques, the nature of learning strategies, the implications of the learning system in the world of education to support biology learning in schools 4. Students, under the guidance of lecturers, make conclusions regarding the	teaching and learning presentation techniques, the nature of learning strategies, the implications of the learning system in the world of education to support biology learning in schools		written, portfolio		

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
				types of learning strategies, teaching and learning presentation techniques, the nature of learning strategies, the implications of the learning system in education to support biology learning in schools					
3	a. Able to utilize science and technology in Mastering the theories, concepts, principles of teacher introduction in achieving standard educational processes to support biology learning in schools. b. Have independent motivation to always follow scientific developments regarding the standard of the	Explain introduction of teachers in achieving educational process standards	Introduction of teachers in achieving educational process standards: 1. Improving Teacher Professional Ability 2. Optimizing the Teacher's Role in the Learning Process	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen the	Working independently, and interacting with other students discussing the introduction of teachers in achieving the standard of the educational process	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	7.5	7.15

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	educational process to support continuous learning as the scientific basis for his profession. c. Demonstrate a responsible attitude towards work in studying the introduction of teachers in achieving the standards of the educational process independently;			understanding of the introduction of teachers in achieving the standard of the educational process 4. Students, under the guidance of lecturers, draw conclusions regarding the introduction of teachers in achieving the standard of the educational process					
4	a. Able to utilize science and technology in understand in understand the learning system in the standard educational process to support biology learning in schools b. Able to demonstrate independent, quality, and measurable performance in determining the learning system in the appropriate	Explaining the learning system in the standard educational process: a. *System Definition and Use* b.Factors Influencing the Learning System c. Components in the Learning System	The learning system in the standard of the educational process: a. *System Definition and Use* b.Factors Influencing the Learning System c. Components in the Learning System	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups,	Work independently and in groups and interact with other students about the learning system in the standard educational process: a. *System Definition and Use* b.Factors Influencing the Learning System c. Components in the Learning System	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	7.5	7.15

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	standard of education process in biology learning; c. Able to apply logical, critical, systematic, and innovative thinking in the context of the development or implementation of science and technology that pays attention to and applies humanities values in accordance with the field of Biology Education d. Able to be responsible for the achievement of group work results and supervise and evaluate the completion of work assigned to workers under their responsibility;			mutually strengthen understanding of the learning system in the standard education process: a. *System Definition and Use* b.Factors Influencing the Learning System c. Components in the Learning System 4. Students, under the guidance of lecturers, make conclusions regarding the learning system in the standard educational process: a. *System Definition and Use* b.Factors Influencing the Learning System c. Components in the Learning					

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
				System					
5	a. Mastering the concept of a learning approach, a scientific approach to support biology learning in schools b. Able to demonstrate independent, quality, and measurable performance in determining the right learning approach in biology learning c. Have independent motivation to always follow scientific developments continuously as the basis for a scientific approach to his profession; d. Demonstrate a responsible attitude towards work in studying a scientific approach to learning as a scientific basis for his profession e. Able to be responsible for the achievement of group work results	Explain : a. Understanding the learning approach b. Understanding the scientific approach c. Steps of a scientific approach: observing, questioning, associating, experimenting, networking	a. learning pastor definition b. Understanding scientific approach c. Steps of a scientific approach: observing, questioning, associating, experimenting, networking	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of learning approaches, scientific approaches 4. Students, under the guidance of lecturers, draw conclusions regarding the learning approach, scientific approach	Work independently and in groups and interact with other students discussing learning approaches, scientific approaches	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	10%	13.14

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	and for the completion of the work assigned under his responsibility;								
6	a. Mastering the theory of *Contextual Teaching and Learning* (CTL) approach to support biology learning in schools. b. Able to demonstrate independent, quality, and measurable performance in understanding the *Contextual Teaching and Learning* (CTL) approach in biology learning c. Demonstrate a responsible attitude towards work in learning approaches*Contextual Teaching and Learning* (CTL) on learning as a scientific basis for the profession d. Able to be responsible for the achievement of the results of group	Explain: a. understanding of *Contextual Teaching and Learning* (CTL) approach b.Purpose *Contextual Teaching and Learning* (CTL) c. Learning strategy *Contextual Teaching and Learning* (CTL).	a. Definition of *Contextual Teaching and Learning* (CTL) approach b.Purpose *Contextual Teaching and Learning* (CTL) c. Learning strategy *Contextual Teaching and Learning* (CTL).	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of the approach *Contextual Teaching and Learning* (CTL). 4. Students, under the guidance of lecturers, draw conclusions regarding the	Work independently and in groups and interact with other students discussing approaches *Contextual Teaching and Learning* (CTL).	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	5%	6.13

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	work towards the completion of the work assigned under his responsibility.			approach *Contextual Teaching and Learning* (CTL).					
7	a. Mastering the theory of problem solving approaches, to support biology learning in schools. b. Have independent motivation to always follow scientific developments in problem solving approaches, as the basis for scientific approaches to their profession; d. Demonstrate a responsible attitude towards work in studying problem solving approaches, as a scientific basis for his profession e. Able to be responsible for the achievement of group work results and for the completion of the	Explain: a. Understanding of problem solving approach (problem solving) b. Theories that support the Problem Solving approach. c. Approach learning steps problem solving d. The advantages and disadvantages of the problem solving approach include:	a. Understanding of problem solving approach (problem solving) b. Theories that support the Problem Solving approach. c. Approach learning steps problem solving d. The advantages and disadvantages of the problem solving approach	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of problem solving approaches 4. Students, under the guidance of lecturers, draw conclusions regarding the problem solving	Work independently and in groups and interact with other students discussing problem solving approaches	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	10%	11,13,14

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	work assigned under his responsibility;			approach					
8	Mid-Semester Exam								
9	a. Mastering constructivism approach theory to support biology learning in schools. b. Have independent motivation to always follow the scientific development of constructivism approach as the basis of scientific approach for his profession; d. Demonstrate a responsible attitude towards work in studying the constructivism approach as a scientific basis for his profession e. Able to be responsible for the achievement of group work results and for the	Explain: a. Understanding the Constructivism Learning Approach b. Purpose Constructivism Learning Approach c. Characteristics of the Constructivism Learning Approach d. Steps of Constructivism Learning Approach e. Strengths and Weaknesses of the Constructivism Learning Approach	a. Understanding the Constructivism Learning Approach b. Purpose Constructivism Learning Approach c. Characteristics of the Constructivism Learning Approach d. Steps of Constructivism Learning Approach e. Strengths and Weaknesses of the Constructivism Learning Approach	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of the constructivist-me approach 4. Students, under the guidance of lecturers, draw conclusions regarding the constructivist-me . approach	Work independently and in groups and interact with other students discussing the constructivism approach	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	10%	13.14

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	completion of the work assigned under his responsibility;								
10	a.Mastering the theory of approach Open-Ended Learning approach to support biology learning in schools. b. Have independent motivation to always follow the development of scientific approachesOpen-Ended Learning as the basis for a scientific approach to his profession; d. Demonstrate a responsible attitude towards work in learning approachesOpen-Ended Learning as a scientific basis for his profession e. Able to be responsible for the achievement of group work results and for the completion of the work assigned under	Explain: a.Understanding Approach Open-Ended Learning b. Steps of the Open-Ended Learning approach c. The advantages and disadvantages of the Open-Ended Learning approach	a.Understanding Approach Open-Ended Learning b. Steps of the Open-Ended Learning approach c. The advantages and disadvantages of the Open-Ended Learning approach	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of the approach Open-Ended Learning 4. Students, under the guidance of lecturers, draw conclusions regarding the approach Open-Ended Learning	Work independently and in groups and interact with other students discussing approaches Open-Ended Learning	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	10%	13.14

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	his responsibility;								
11	a. Able to master the science process skills approach to support biology learning at school b. Able to demonstrate independent, quality, and measurable performance in determining appropriate science process skills in biology learning c. Demonstrate a responsible attitude towards work in learning the science process skills approach as a scientific basis for his profession d. Able to be responsible for the achievement of work results towards the completion of work related to science process skills under his responsibility e. Able to be responsible for the	Explain: a. Understanding science process skills b. Benefits of Science process skills c. Assessment of science process skills; d.Indicators of science process skills and their characteristics	a. Understanding science process skills b. Benefits of Science process skills c. Assessment of science process skills; d.Indicators of science process skills and their characteristics	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of the science process skills approach 4. Students, under the guidance of lecturers, draw conclusions regarding the approach to science process skills	Work independently and in groups and interact with other students discussing the science process skills approach	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	10%	4.8

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	achievement of group work results and for the completion of the work assigned under his responsibility;								
12	a. Able to master learning models to support biology learning at school b. Able to show independent, quality, and measurable performance in determining the right learning model in biology learning c. Have independent motivation to always follow scientific developments continuously as the basis for continuous learning models as the scientific basis for their profession; d. Demonstrate a responsible attitude towards work in studying learning models as a scientific basis for their profession e. Able to be	a. Explaining learning models b. Explaining learning models: Learning model Direct (Direct Instruction) Learning modelCooperative (Cooperative Learning) Learning model Contextual (Contextual Teaching and Learning) Learning model Guided Discovery (Discovery Learning) Learning modelProblem Based (Problem	a. Definition of learning model b. Learning models: Learning model Direct (Direct Instruction) Learning modelCooperative (Cooperative Learning) Learning model Contextual (Contextual Teaching and Learning) Learning model Guided Discovery (Discovery Learning) Learning modelProblem Based (Problem	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of learning models and the steps 4. Students, under the guidance of lecturers, make conclusions regarding	Work independently and in groups and interact with other students about learning models and the steps	Discipline (seriousness in attending lectures, punctuality in collecting assignments)	Assessment criteria: PAP Assessment indicators: Communication skills in making presentations (indicators: mastery of the material, ability to explain, ability to use media, mastery and class management) Activity (indicators: number of questions/responses, quality of		2,3,10, 13

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	responsible for the achievement of the results of group work and supervise and evaluate the completion of the work assigned under his responsibility	Based Learning)	Based Learning)	learning models and the steps			questions, accuracy of responses/answers		
13	a. Able to master learning methods to support biology learning at school b. Able to demonstrate independent, quality, and measurable performance in determining appropriate learning methods in biology learning c. Have independent motivation to always follow scientific developments continuously as the basis for continuous learning methods as the scientific basis for their profession; d. Demonstrate a responsible attitude towards work in studying learning methods as a scientific basis for	a. Explaining learning methods b. The advantages of each learning method c. Deficiency . of each learning method	a. Definition of learning method b. Learning methods: lecture method (conventional), discussion, question and answer, recitation, experiment, field trip, assignment, percentage c. The advantages and disadvantages of each learning model	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of teaching methods, the advantages and disadvantages of teaching methods	Work independently and in groups and interact with other students about teaching methods, advantages and disadvantages of teaching methods	Discipline (seriousness in attending lectures, punctuality in collecting assignments)	Assessment criteria: PAP Assessment indicators: Communication skills in making presentations (indicators: mastery of the material, ability to explain, ability to use media, mastery and class management) Activity (indicators: number of	7.5	5,6,9,12

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	his profession. e. Able to be responsible for the achievement of group work results and supervise and evaluate the completion of the work assigned under his responsibility;			4. Students, under the guidance of lecturers, make conclusions regarding teaching methods, advantages and disadvantages of teaching methods			questions/responses, quality of questions, accuracy of responses/answers		
14	a. Able to master concept maps (understanding, benefits, types and methods of making) to support biology learning at school b. Able to apply logical, critical, systematic, and innovative thinking in the context of developing a concept map that pays attention to and applies humanities values in accordance with the field of Biology Education. c. Demonstrate a responsible attitude towards work in	Explain: a. understanding of concept map b. Benefits of concept maps c. Concept map types d. how to make a concept map	a. Definition of concept map b. Benefits of concept maps c. Concept map types d. how to make a concept map	Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of concept maps (understanding	Work independently and in groups and interact with other students about concept maps (understanding, benefits, types and methods of making)	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment : oral, written, portfolio	7.5	6.10

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	studying concept maps as a scientific basis for their profession d. Able to be responsible for the achievement of group work results and supervise and evaluate the completion of the work assigned under his responsibility;			, benefits, types and methods of making) 4. Students, under the guidance of lecturers, draw conclusions regarding concept maps (understanding, benefits, types and methods of making)					
15	a. Able to master basic teaching skills to support biology learning at school b. Able to demonstrate independent, quality, and measurable performance in understanding basic teaching skills in biology learning c. Demonstrate a responsible attitude towards work in learning basic teaching skills as a scientific basis for their profession	a. Explain the meaning of basic teaching skills b. Explaining 8 basic teaching skills, skills: 1) asking, 2) providing reinforcement, 3) making variations, 4) explaining, 5) opening and closing lessons, 6) guiding small group discussions,	a. Understanding basic teaching skills b. 8 basic teaching skills, skills: 1) asking, 2) providing reinforcement, 3) making variations, 4) explaining, 5) opening and closing lessons, 6) guiding small group discussions,		Strategy: 1. Models: *STAD* 2. Methods: lecture, discussion, presentation, question and answer, assignment. 3. With the provision of understanding independently, and in groups, mutually strengthen understanding of the 8 basic	Work independently and in groups and interact with other students discussing the 8 basic teaching skills	Process assessment which includes: 1. attitude, 2. knowledge 3. skills 4. task	▪ Assessment criteria: PAP ▪ Form of assessment: oral, written, portfolio	9,10,13

Weeks	Sub-CLO	Indicator	Study Material	Learning Strategies (Models and Methods)	Student Learning Experience	Evaluation			Reference
						Type	Criteria	Weight (%)	
	d. Able to be responsible for the achievement of work results towards the completion of work related to basic teaching skills under his responsibility e. Able to be responsible for the achievement of group work results and for the completion of the work assigned under his responsibility;	7) managing the class ,8) teach small groups and individuals	7) managing the class, 8) teach small groups and individuals		teaching skills 4. Students, under the guidance of lecturers, make conclusions regarding 8 basic teaching skills				
16	Final Semester Exam								

Samarinda, March 4, 2020

Coordinator of Biology Education Study program

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