SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
BIOPSYCHOLOGY	7320102152		T=2	P=0	ECTS=3.18	1	July 17, 2023

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Siti Jaro'ah, M.A.	Damajanti Kusuma Dewi, S.Psi., M.Si.	Yohana Wuri Satwika, S.Psi., M.Psi.

Learning model	**Case Studies**			
Program Learning Outcomes (PLO)	**PLO study program which is charged to the course**			
	Program Objectives (PO)			
	PO - 1	Able to analyze biological relationships (nervous system and brain) with human behavior		
	PLO-PO Matrix			

P.O
PO-1

PO Matrix at the end of each learning stage (Sub-PO)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PO-1																

Short Course Description	This course discusses the relationship between science and technology in the application of Biopsychology, including coverage of biopsychology, neurons and the nervous system, synapses, brain plasticity, motor and sensory systems, biopsychology and motivation, as well as the nervous system and psychological disorders.

References	Main :	
	1. Kalat, J.W. 2019. Biological Psychology (13th Ed). Cengage. 2. Carlson, N.R. & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.	
	Supporters:	
	1. Pinel, J.P.J., & Barnes, S.J. 2022. Biopsychology (11th Ed). Pearson.	

Supporting lecturer	dr. Erick Tanara, Sp. An dr. Sisi Artayasuinda, Sp.KJ dr. Ariesia Dewi Ciptorini, Sp.N. Fitrania Maghfiroh, M.Psi., Psikolog Onny Fransinata Anggara, S.Psi., M.Psi., Psikolog dr. Rizky Patria Nevangga, M.Or. dr. Devi Purnamasari Sasongko, M.Biomed. Siti Jaro'ah, S.Psi., M.A.

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	Students are able to understand and explain the meaning of biopsychology and the history of the development of biopsychology in psychological studies	1. Students can explain the meaning of biopsychology 2. Students can explain the relationship between biology and behavior.	**Criteria:** Full marks are obtained if you do all the questions correctly **Form of Assessment** : Participatory Activities	Contextual Instruction 2 X 50		**Material:** Understanding Biopsychology and History of the development of Biopsychology **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.* **Material:** Understanding Biopsychology and History of the development of Biopsychology **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.*	3%
2	Students are able to understand and explain the anatomy of nerve cells and synapses.	1. Students can explain the anatomy of nerve cells. 2. Students can explain synapses and neurotransmitters.	**Criteria:** Full marks if you do all the questions correctly **Form of Assessment** : Participatory Activities	Contextual Instruction 2 X 50		**Material:** Anatomy of nerve cells and synapses **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.* **Material:** Anatomy of nerve cells and synapses **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.* **Material:** Anatomy of nerve cells and synapses **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.*	3%

| 3 | Students are able to understand the anatomy of the central nervous system and research methods in biopsychology. | Students are able to explain the anatomy of the central nervous system (brain) | **Criteria:** Full marks if you do all the questions correctly

Form of Assessment : Participatory Activities | | Contextual Instruction 2 X 50 | **Material:** Central nervous system anatomy and biopsychology research methods **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*

Material: Central nervous system anatomy and biopsychology research methods **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.*

Material: Central nervous system anatomy and biopsychology research methods **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 3% |
| 4 | Students are able to understand the anatomy of the central nervous system and research methods in biopsychology. | Students are able to explain the anatomy of the central nervous system (brain) | **Criteria:** Full marks if you do all the questions correctly

Form of Assessment : Participatory Activities | | Contextual Instruction 2 X 50 | **Material:** Central nervous system anatomy and biopsychology research methods **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*

Material: Central nervous system anatomy and biopsychology research methods **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.*

Material: Central nervous system anatomy and biopsychology research methods **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 3% |

5	Students are able to understand brain development and plasticity, as well as the genetic evolution of behavior.	Students are able to explain brain development and plasticity, as well as the genetic evolution of behavior.	**Criteria:** Active in asking or answering questions **Form of Assessment** : Participatory Activities	Small Group Discussion 2 X 50		**Material:** Brain Development and Plasticity References **:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.* **Material:** Brain Development and Plasticity References **:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.*	5%
6	Students are able to understand the sensory nervous system and its relationship to behavior	Students are able to explain the sensory nervous system in humans and its relationship to behavior	**Criteria:** Active in discussion sessions (asking and answering questions) **Form of Assessment** : Participatory Activities	Small Group Discussion 2 X 50		**Material:** Sensory nervous system **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.* **Material:** Sensory nervous system **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.* **Material:** Sensory nervous system **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.*	4%
7	Students are able to understand the motor nervous system and its relationship to behavior.	Students are able to explain the motor nervous system in humans and its relationship to behavior.	**Criteria:** Active in discussion sessions (asking and answering questions) **Form of Assessment** : Participatory Activities	Small Group Discussion 2 X 50		**Material:** Motor nervous system **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.* **Material:** Motor nervous system **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.* **Material:** Motor nervous system **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.*	4%
8	Midterm Exam (UTS)	The correctness of the answers given by students	**Criteria:** Number of correct answers **Form of Assessment** : Test	Written Test 2 X 50		**Material:** Material 1-7 **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*	20%

| 9 | Students are able to understand wakefulness and sleep behavior in humans | Students are able to explain the process of human sleep and wakefulness behavior | **Criteria:** Active in discussion sessions (asking and answering questions)

Form of Assessment : Participatory Activities | Small Group Discussion 2 X 50 | | **Material:** Waking and sleeping behavior **Reference:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*

Material: Awake and sleep behavior **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.*

Material: Wakefulness and sleep behavior **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 3% |
| 10 | Students are able to understand the body's internal regulatory system and its relationship to behavior | Students are able to explain the body's internal regulations and relate them to behavior | **Criteria:** Active in discussion sessions (asking and answering questions)

Form of Assessment : Participatory Activities | Small Group Discussion 2 X 50 | | **Material:** Internal regulation of the body **Reference:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*

Material: Internal regulation of the body **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.*

Material: Internal regulation of the body **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 4% |

| 11 | Students are able to understand the relationship between hormones and reproductive behavior | Students are able to explain the relationship between hormones and reproductive behavior | **Criteria:** Active in discussion sessions (asking and answering questions)

Form of Assessment : Participatory Activities | Small Group Discussion 2 X 50 | | **Material:** Hormones and Reproductive Behavior **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*

Material: Hormones and Reproductive Behavior **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.*

Material: Hormones and Reproductive Behavior **References:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 5% |
| 12 | Students are able to understand the biological relationship with human emotions | Students are able to explain the biological relationship with human emotions | **Criteria:** Active in discussion sessions (asking and answering questions)

Form of Assessment : Participatory Activities | | Small Group Discussion 2 X 50 | **Material:** Biology and Emotions **Bibliography:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*

Material: Biology and Emotions **Bibliography:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.*

Material: Biology and Emotions **Bibliography:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 3% |

| 13 | Students are able to understand the relationship between biological systems and learning abilities, memory and intelligence | Students are able to explain the relationship between biological systems and learning abilities, memory and intelligence | **Criteria:** Active in discussion sessions (asking and answering questions) **Form of Assessment** : Participatory Activities | Small Group Discussion 2 X 50 | | **Material:** Learning Ability, Memory, and Intelligence **Bibliography:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.* **Material:** Learning Ability, Memory, and Intelligence **Bibliography:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.* **Material:** Learning Ability, Memory, and Intelligence **Bibliography:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 4% |
| 14 | Students are able to understand high-level cognitive functions in humans | Students are able to explain cognitive functions and their relationship to language skills, awareness and decision making | **Criteria:** Active in discussion sessions (asking and answering questions) **Form of Assessment** : Participatory Activities | Small Group Discussion 2 X 50 | | **Material:** Language, Consciousness, and Decision Making **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.* **Material:** Language, Consciousness, and Decision Making **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.* **Material:** Language, Consciousness, and Decision Making **Bibliography:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.* | 3% |

No	Sub-PO	Indicator	Assessment Criteria & Form	Learning Form & Method, Time		Learning Materials & References	Weight
15	Students are able to understand the relationship between biological systems and psychological disorders	Students are able to explain the relationship between biological disorders and psychological disorders	**Criteria:** Student activity in answering questions or asking questions **Form of Assessment :** Participatory Activities	Contextual Instruction Small Group Discussion Problem Based Learning 2 X 50		**Material:** Biological and Psychological Disorders **References:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.* **Material:** Biological and Psychological Disorders **References:** *Carlson, NR & Birkett, M. 2021. Foundation of Behavioral Neuroscience (10th Ed). Pearson.* **Material:** Biological and Psychological Disorders **Bibliography:** *Pinel, JPJ, & Barnes, SJ 2022. Biopsychology (11th Ed). Pearson.*	3%
16	Final Semester Examination (UAS)	Students are able to compose a final assignment (case analysis of psychological & nervous system disorders)	**Criteria:** Completeness and Depth of Report Writing **Form of Assessment :** Test	Problem Based Learning 2 X 50		**Material:** 25% material before UTS, 75% material after UTS **Reader:** *Kalat, JW 2019. Biological Psychology (13th Ed). Cengage.*	30%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	50%
2.	Test	50%
		100%

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.