	Universitas Negeri Surabaya Faculty of Mathematics and Natural Sciences Biology Education Undergraduate Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Biogeography	8420502045		T=2	P=0	ECTS=3.18	6	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	.....	.....	Dr. Rinie Pratiwi Puspitawati, M.Si.

Learning model: Project Based Learning

Program Learning Outcomes (PLO)

PLO study program which is charged to the course

Program Objectives (PO)

PLO-PO Matrix

P.O

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

Short Course Description: This course discusses the meaning, function and role of biogeography in relation to geological history; geographic distribution of species and ecosystem diversity over geological timescales; modern biogeography; natural and cultivated benefits; plant strategy and distribution; distribution of animals according to Wallace's line, biodiversity hot-spots; speciation and environmental conditions. Lectures are delivered through discussions, presentations and assignments.

References

Main :

1. Briggs, J.C. 1988. Biogeography and Plate Tectonics . New York: Elsevier.
2. Craine, J.M., 2007. Plant strategy theories: replies to Grime and Tilman. Journal of Ecology 95: 235-240.
3. Pielou, E.C.1994, Biogeography. New York: A Wiley-Interscience Publication John Wiley & Sons.
4. Polunin, Nicholas. 1990. Pengantar Geografi Tumbuhan dan Beberapa Ilmu Serumpun . Yogyakarta: Gadjah Mada Unipress.
5. Whittaker, R.J. 1998. Island Biogeography . New York: Oxford Unipress.
6. Wilson, M.F. & Traveset, A., 2000. Seeds: The Ecology of Regeneration in Plant Communities: 2nd Edition : CAB International: USA
7. Welzen, P.C & Raes, N. 2011. The floristic position of Java. Gardens' Bulletin Singapore 63(1 & 2): 329 – 339.

Supporters:

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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	Understand the definition and role of biogeography in relation to geological history	1.Explain the meaning of biogeography 2.Explain the function and role of biogeography 3.Explain the history of geology in relation to biogeography	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	Assignment Discussion Lecture (Topic of world animal distribution according to Wallace's line) 2 X 50			0%

2	Understand the concept of distribution of world fauna according to Wallacea	1. Explain the boundaries of the Palearctic and Neartic distribution areas 2. Describes the biomes that dominate the Palearctic and Nearctic regions 3. Explain the characteristics of animals typical of the Palearctic and Nearctic regions 4. Demonstrate an honest and independent attitude during the learning process using LPPD	**Criteria:** 1. TASK with a weight of 30% 2. UTS weight 20% 3. Student activities and responses during learning activities are assessed as participation, weight 20% 4. UAS weight 30%	LecturePresentationDiscussionAssignment Self-Understanding Assessment Sheet (LPPD) 2 X 50			0%
3	Understand the concept of distribution of world fauna according to Wallacea	1. Explain the boundaries of the Ethiopian and Oriental distribution areas 2. Describes the biomes that dominate the Ethiopian and Oriental regions 3. Explain the characteristics of animals typical of the Ethiopian and Oriental regions 4. Demonstrate an honest and independent attitude during the learning process using LPPD	**Criteria:** 1. TASK with a weight of 30% 2. UTS weight 20% 3. Student activities and responses during learning activities are assessed as participation, weight 20% 4. UAS weight 30%	· Presentation · Discussion · Assignment of Self-Understanding Assessment Sheet (LPPD) 2 X 50			0%
4	Understand the concept of distribution of world fauna according to Wallacea	· Explain the boundaries of the Australian and Neotropical distribution areas · Explain the biomes that dominate the Australian and Neotropical regions · Explain the characteristics of animals typical of the Australian and Neotropical regions · Demonstrate an honest and independent attitude during the learning process using LPPD	**Criteria:** 1. TASK with a weight of 30% 2. UTS weight 20% 3. Student activities and responses during learning activities are assessed as participation, weight 20% 4. UAS weight 30%	· Presentation · Discussion · Assignment · Self-Understanding Assessment Sheet (LPPD) 2 X 50			0%
5	Understand the concept of distribution of world fauna according to Wallacea	· Explain the diversity of animals based on the territorial division of the Wallace and Weber lines · Explain the differences in animal characteristics based on the territorial division of the Wallace and Weber lines · Demonstrate an honest and independent attitude during the learning process using LPPD	**Criteria:** 1. TASK with a weight of 30% 2. UTS weight 20% 3. Student activities and responses during learning activities are assessed as participation, weight 20% 4. UAS weight 30%	· Presentation · Discussion · Assignment · Self-Understanding Assessment Sheet (LPPD) 2 X 50			0%

6	Understand key concepts about the history of biogeography and basic principles of biogeography	· Explain the main approaches to biogeography: ecology, history and conservation · Explain that biogeography is a synthetic science · Determine the five areas that produced the Renaissance in biogeography · Compose the historical stages of the development of biogeography independently	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	· Lectures and questions and answers · Presentations and discussions 2 X 50			0%
7	Understand the types and areas of natural distribution	· Explain the boundaries of natural distribution areas of plants · Explain the 3 main phytogeographic patterns and describe significant plant genera · Define endemic types by illustrating significant plant genera · Explain the differences between paleoendemics and neoendemics	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	· STAD 2 X 50 Cooperative			0%
8	U.S.S		**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	2 X 50			0%
9	Understand the Malaesiana flora region with its characteristics	· Explain the meaning of the flora of Malaesiana · Explain the demarcation node boundaries of the Malaesiana flora · Explain the modification of the Wallacea line for dividing the Malaesiana flora area · Compare the floristic characteristics of each main region of Malaesiana · Provide reasons for the inaccuracy of the list of Malaesiana's floristic riches · Compile a study of the position of floristics on the island of Java based on references provided has been provided	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	· Lectures and questions and answers · Discussions · Assignments 2 X 50			0%
10	Understanding floristics in Indonesia and its floristic diversity hotspots.	· Explain the characteristics of Indonesian floristics. · Explain that Sulawesi is unique in terms of its floristics · Compare the floristics of Kalimantan with other regions in Indonesia · Explain the hotspot areas for floral diversity in Indonesia	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30% 5.TASK with a weight of 30% 6.UTS weight 20% 7.Student activities and responses during learning activities are assessed as participation, weight 20% 8.UAS weight 30%	Discussion 2 X 50			0%

11	Understand dispersal types in fauna and flora with examples.	· Explain the comparison between long distance dispersal and vicarians as a discontinuous distribution mechanism. · Explain the differences in dispersal types: Jump dispersal, Diffusion and Secular migration · Give examples of each type of dispersal along with the characteristics of the dispersal.	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	· Lectures and questions and answers · Discussions · Assignments 2 X 50			0%
12	Explain the distribution of plants and its relationship to the ecosystem	· Explain the need for seed dispersal · Explain the mechanism of seed dispersal · Explain the effect of seed dispersal on population structure · Explain the effect of seed dispersal on colonization and plant community structure · Explain the relationship between seed dispersal and animal communities	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	Assignment Discussion Presentation 2 X 50			0%
13	Understand plant strategies for survival	· Explain the definition of plant strategy · Explain the types of plant strategy · Give examples of certain plant strategies · Explain the relationship between strategy and plant stature	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	· Presentation · Discussion · Assignment 2 X 50			0%
14	Understand the types and distribution areas of cultivated plants	· Explain the concept of plant domestication · Explain the distribution area of cultivated plants by Vavilov · Make a report on the results of a literature review about one cultivated plant in Indonesia regarding domestication and the type of distribution area	**Criteria:** 1.TASK with a weight of 30% 2.UTS weight 20% 3.Student activities and responses during learning activities are assessed as participation, weight 20% 4.UAS weight 30%	2 X 50 Presentation Assignment Discussion			0%
15	Understand the concept of speciation and the speciation process in relation to environmental conditions	· Explain the variation of living things, its relation to natural selection · Explain the concepts of types · Explain the mechanism of allopatric speciation · Explain the mechanism of sympatric speciation · Differentiate between allopatric and sympatric speciation		Assignment Discussion Presentation 2 X 50			0%
16							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** 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.