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

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Ethnobotany	4620102062	Study Program Elective Courses	T=2	P=0	ECTS=3.18	6	July 17, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Dr. Novita Kartika Indah, S.Pd.,M.Si.	Dr. Yuliani, M.Si.	Dr. H. Sunu Kuntjoro, S.Si., M.Si.

Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)

PLO study program that is charged to the course

PLO-6	Able to apply logical, critical, systematic and innovative thinking in the context of developing or implementing science and/or technology according to their field of expertise.
PLO-10	Able to design and conduct experiments in the field of biology, manage, analyze, interpret, document and store research data, to manage biological natural resources
PLO-14	Able to apply biological knowledge and technology to solve natural resource and environmental problems both in the laboratory and in real practice that supports profession and/or entrepreneurship

Program Objectives (PO)

PO - 1	Mastering the concepts of studying ethnic relationships with plants in their environment
PO - 2	Critically analyze local/traditional community knowledge to utilize plants to support their lives as well as community efforts to preserve the plants used.
PO - 3	Apply ethnobotanical concepts that have been mastered in solving problems procedurally in accordance with the field of ethnobotany.
PO - 4	Skilled in recognizing, interpreting and documenting the cultural values of local/traditional communities to utilize plants to support their lives
PO - 5	Make the right decisions based on analysis of information and data, and be able to provide guidance on the relationship between humans and plants independently and in groups
PO - 6	Mastering ethnobotanical research including planning, analysis and reporting.

PLO-PO Matrix

P.O	PLO-6	PLO-10	PLO-14
PO-1			
PO-2			
PO-3			
PO-4			
PO-5			
PO-6			

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																
PO-2																
PO-3																
PO-4																
PO-5																
PO-6																

Short Course Description	This course discusses and studies the cultural values of local communities contained in the use of plants, the interaction of local communities with plant resources and examines the cultural values of plants in terms of multidisciplinary botany, namely taxonomy, morphology, anatomy, ecology and phytochemistry as well as studying local wisdom related to conservation. plant adaptation. Lecture material is delivered using discussion methods and project assignments

References	**Main :**	

1. Akademi Ilmu Pengetahuan Indonesia. 2013. Diskusi Panel: Perkembangan Etnobotani di Indonesia. Online. http://www.aipi.or.id/ diakses tanggal 23 April 2014
2. Cotton, C.M. 1996. Ethtobotnny : Principles and Applications . John Wiley and Sons. Singapore.
3. Edwards Peter. 1980. Food Potential of Aquatic Macrophytes. Philipina: International For Living Aquatic Resources Management
4. Nurjanah, Aulia Azka, Asadatun Abdullah . September 2012. Aktivitas Antioksidan dan Komponen Bioaktif Semanggi air (Marsilea crenata). Jurnal Inovasi dan Kewirausahaan vol 1 Nomor 3. hal 152-158.
5. Simpson, Michael G . 2010. Plant Systematics second edition. Amsterdam: Elsevier .
6. Martin, G.J. 1998. Etnobotani . Tratural Hystory Publication Borimco. Malaysia.
7. Waluyo, Baroto Eko. 1999. Pendekatan Etnobotani Dalam Penelitian Tumbuhan Obat Indonesia. Makalah Utama Seminar Sehari dan Pameran/Bursa Tumbuhan Obat di Kebun Raya Bogor tidak dipublikasi. Bogor: Kebun Raya Bogor.
8. Walujo, E. B. 2004. Pengumpulan Data Etnobotani dalam Rugayah, Elizabeth A W dan Praptiwi (Ed), Pedoman Pengumpulan Data Keanekaragaman Flora. Pusat Penelitian Biologi LIPI Bogor. hal.77-90.

Supporters:

1. Indah, N.I., Yuliani, Wisanti, Eva Kristinawatu P., 2022. Panduan Tugas Proyek Etnobotani. Surabaya: Jurusan Biologi.
2. Akademi Ilmu Pengetahuan Indonesia. 2013. Diskusi Panel: Perkembangan Etnobotani di Indonesia. Online. http://www.aipi.or.id/ diakses tanggal 23 April 2014.
3. Dinas Komunikasi dan Informatika Surabaya. Wisata Budaya dan Kuliner. http://dinkominfo.surabaya.go.id. Diakses tanggal 22 April 2014.
4. Purwanto, U. 1999. Etnobotani-Bioteknologi : Keterkaitan Sistem Pengetahuan Tradisional dan Modern. Makalah pada Seminar IImiah : Membangun Lingkungan Hidup Yang Lestari Dengan Memanfaatkan Bioteknologi Berbasis Keanekaragaman Hayati. Fak. Pertanian Univ. Janabadra. Fak. Biologi dari Prodi Sosiologi FISIP Universitas Atma Jaya dan Kehati. Yogyakarta, 30 Juni 1999.
5. Hakim, L. 2014. Dasar-dasar Ekowisata. Malang : Bayumedia.
6. La Hisa, Agustinus Mahuze, I Wayan Arka. 2018. Etnobotani : pengetahuan lokal suku Marori di Taman Nasional Wasur Merauke. Papua: Balai Taman Nasional Wasur.
7. 9. Yuliani, Susanti, Sari Kusuma Dewi, Novita Kartika Indah. 2019. Kearifan Lokal Keanekaragaman Tumbuhan dan hewan sebagai Motif Batik di Proppo Pamekasan. Prosiding Seminar Nasional dan Workshop Biologi-IPA dan Pembelajaran KE-4.

Supporting lecturer	Dr. Wisanti, M.S. Prof. Dr. Yuliani, M.Si. Dr. Novita Kartika Indah, S.Pd., M.Si.

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 ethnobotanical concepts	1.1. Understand the various meanings of ethnobiology 2.2. Understand the history of ethnobotany 3.3. Understand the scope of ethnobotany	**Criteria:** 1.Reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.USS weight 20% 3.Student activities and responses during learning activities are assessed as PARTICIPATION, weight 20% 4.US weight 3-% 5.Essay questions are assessed together at USS 6.US weight 30% **Form of Assessment** : Project Results Assessment / Product Assessment	1. lecture 2. Discussion 3. Assignment 100 minutes	1. lecture 2. discussion 3. assignment 100 minutes	**Material:** • Various definitions of ethnobotany • History of the emergence of ethnobotany **Reference:** *Cotton, CM 1996. Ethtobotnny: Principles and Applications. John Wiley and Sons. Singapore.*	5%
2	Understand the emic and ethical studies of the relationship between plants and their environment	• Understand the scope of ethnobotany • Explain the field of ethnobotany studies	**Criteria:** 1.Reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.USS weight 20% 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION, weight 20% 4.Essay questions are assessed together at USS 5.US weight 30% **Form of Assessment** : Participatory Activities	1. Lecture, 2. discussion, 3. assignment 100 minutes	1. Lecture, 2. discussion, 3. assignment 100 minutes		5%

3	Understand the concept of local knowledge and local wisdom	Understand the concept of local knowledge	**Criteria:** 1.Reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.USS weight 20% 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION, weight 20% 4.Essay questions are assessed together at USS **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	1. lecture 2. discussion 3. assignment 100 minutes	1. lecture 2. discussion 3. assignment 100 minutes	**Material:** • Differentiating between ethnic and emic studies • Identifying ethnic and emic studies • explaining local knowledge **Library:** *Indonesian Academy of Sciences. 2013. Panel Discussion: Development of Ethnobotany in Indonesia. On line. http://www.aipi.or.id/... accessed 23 April 2014*	5%
4	Understand the concept of local knowledge and local wisdom	1.1. Understand the concept of local wisdom 2.3. Identify local knowledge and local wisdom	**Criteria:** 1.Practical reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.USS weight 20% 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION, weight 20% 4.Essay questions are assessed together at USS **Form of Assessment** : Participatory Activities	1. lecture 2. discussion 3. assignment 100 minutes	1. lecture 2. discussion 3. assignment 100 minutes	**Material:** Definition of local wisdom, examples of local wisdom **Reference:** *Martin, GJ 1998. Ethnobotany. Tratural Hystory Publication Borimco. Malaysia.*	5%
5	Understand the concept of local knowledge and local wisdom	Understand the concept of ethnotaxonomy	**Criteria:** 1.Practical reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.USS weight 20% 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION, weight 20% 4.Essay questions are assessed together at USS 5.US weight 30% **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	1. lecture 2. discussion 3. assignment 100 minutes	1. lecture 2. discussion 3. assignment 100 minutes	**Material:** Ethnotaxonomic concepts and examples **References:** *Martin, GJ 1998. Ethnobotany. Tratural Hystory Publication Borimco. Malaysia.*	5%

6	1.Understand the application of ethnobotany in various fields of science 2.1. Explain the application of ethnobotany in various fields of science 3.3. Understand the application of food ethnobotany 4.4. Distinguish between agricultural ethnobotany and food ethnobotany	1.1. Explain the application of ethnobotany to various sciences 2.2. Understand the application of agricultural ethnobotany 3.3. Understand the application of food ethnobotany	**Criteria:** 1.Practical reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.USS weight 20% 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION with a weight of 20%	1. lecture 2. discussion 3. assignment 100 minutes	1. lecture 2. discussion 3. assignment 100 minutes		5%
7	Understand the application of ethnobotany in various fields of science	1.5. Understand the ethnobotany of medicine 2.6. Understand ethnobotanical medicine 3.7. Distinguish between ethnobotany medicine and ethnobotany medicine 4.8. Understand cultural anthropology	**Criteria:** 1.Practical reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.USS weight 20% 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION with a weight of 20% 4.Essay questions are assessed together at USS **Form of Assessment** : Project Results Assessment / Product Assessment	1. lecture 2. discussion 3. assignment 100 minutes	1. lecture 2. discussion 3. assignment 100 minutes	**Materials:** • Ethnobotany medicine • Ethnobotany medicine • Cultural anthropology • Ethnotourism **Reference:** *Hakim, L. 2014. Basics of Ecotourism. Malang: Bayumedia.*	10%
8				USS 100 minutes	USS 100 minutes		20%
9	Understand examples of ethnobotanical research	1.1. Understand ethnobotany articles 2.2. Present a biology article 3.find the advantages and disadvantages of ethnobiology articles	**Criteria:** 1.Reports and products are assessed as ASSIGNMENTS with a weight of 30%, 2.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION, weight 20% 3.USS weight 20%, 4.US bottle 30% **Form of Assessment** : Project Results Assessment / Product Assessment	1. discussion 2. assignment 3. presentation 100 minutes	1. discussion 2. assignment 3. presentation 100 minutes	**Material:** Enobiology articles **Bibliography:** *Waluyo, Baroto Eko. 1999. Ethnobotanical Approach in Research on Indonesian Medicinal Plants. The Main Paper of the One Day Seminar and Medicinal Plant Exhibition/Exchange at the Bogor Botanical Gardens was not published. Bogor: Bogor Botanical Gardens.*	10%
10		1.1. Understand quantitative research 2.2. Understand qualitative research 3.3. Identify quantitative research	**Criteria:** 1.Reports and products are rated as 20% weighted ASSIGNMENT, 2.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION with a weight of 20% 3.USS weight 20% **Form of Assessment** : Project Results Assessment / Product Assessment	1. lecture 2. discussion 100 minutes	1. lecture 2. discussion 100 minutes	**Material:** Quantitative research **References:** *Walujo, EB 2004. Ethnobotanical Data Collection in Rugayah, Elizabeth AW and Praptiwi (Ed), Guidelines for Collecting Flora Diversity Data. LIPI Bogor Biology Research Center. p.77-90.*	5%

11		1.1. Understand quantitative research 2.2. Understand qualitative research 3.3. Identify quantitative research	**Criteria:** 1.The report and product are rated as DUTY with a weight of 30%, US bottle 3 2.USS weight 20%, 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION with a weight of 20%, **Form of Assessment** : Project Results Assessment / Product Assessment	1. lecture 2. discussion 100 minutes	1. lecture 2. discussion 100 minutes	**Material:** Qualitative research **References:** *Walujo, EB 2004. Ethnobotanical Data Collection in Rugayah, Elizabeth AW and Praptiwi (Ed), Guidelines for Collecting Flora Diversity Data. LIPI Bogor Biology Research Center. p.77-90.*	5%
12	Able to design ethnobotanical research in the surrounding environment	1.1. Critically analyze the knowledge of local/traditional communities in the surrounding environment 2.2. Write critically about the background to ethnobotanical problems in the surrounding environment 3.3. Write down the objectives of ethnobotanical research in the surrounding environment	**Criteria:** 1.The report and product are rated as DUTY with a weight of 30%, US bottle 3 2.USS weight 20%, 3.Student activities and responses during learning activities, especially practicums, are assessed as PARTICIPATION with a weight of 20%	100 minute discussion	100 minute discussion	**Material:** Project Assignments **References:** *Indah, NI, Yuliani, Wisanti, Eva Kristinawatu P., 2022. Guide to Ethnobotany Project Assignments. Surabaya: Biology Department.*	5%
13	Able to design ethnobotanical research in the surrounding environment	1. 2.Develop ethnobotanical research instruments	**Criteria:** 1.Reports and products are rated as DUTY with 30% weight, USS 20% weight, US bottle 3 2.Student activities and responses during learning activities are assessed as PARTICIPATION with a weight of 20%, 3.USS weight 20%, **Form of Assessment** : Project Results Assessment / Product Assessment	100 minute discussion	100 minute discussion		5%
14	Able to design ethnobotanical research in the surrounding environment		**Criteria:** 1.The report and product are rated as DUTY with a weight of 30%, US bottle 3 2.USS weight 20% 3.Student activities and responses during learning activities are assessed as PARTICIPATION with a weight of 20%, **Form of Assessment** : Project Results Assessment / Product Assessment	100 minute discussion	100 minute discussion	**Material:** Project Assignments **References:** *Indah, NI, Yuliani, Wisanti, Eva Kristinawatu P., 2022. Guide to Ethnobotany Project Assignments. Surabaya: Biology Department.*	10%

15			**Criteria:** 1.The report and product are rated as DUTY with a weight of 30%, US bottle 3 2.USS weight 20%, 3.Student activities and responses during learning activities are assessed as PARTICIPATION with a weight of 20%, **Form of Assessment** : Project Results Assessment / Product Assessment	1. discussion, 2. presentation 100 minutes	1. discussion, 2. presentation 100 minutes	**Material:** Project Assignments **References:** *Indah, NI, Yuliani, Wisanti, Eva Kristinawatu P., 2022. Guide to Ethnobotany Project Assignments. Surabaya: Biology Department.*	10%
16	UAS		**Form of Assessment** : Test	US 100 minutes	US 100 minutes		20%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	15%
2.	Project Results Assessment / Product Assessment	65%
3.	Test	20%
		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.