

		<ol style="list-style-type: none"> Gill, F.B. 2007. Ornithology , Third Edition. New York: W.H. Freeman and Company. Holmes, D.A. dan Nash, S. 1989. The Birds of Java and Bali . Oxford: Oxford University Press. MacKinnon, J., Phillipps K., Balen B. van. 2010. Burung-burung di Sumatera, Jawa, Bali, dan Kalimantan . Bogor: Burung Indonesia. Satria, R., Ambarwati, A., Rahayu, D.A, Kuntjoro, S., 2021. Panduan Proyek Mini Mandiri Ornitologi. Surabaya: Jurusan Biologi FMIPA Unesa. 					
		Supporters:					
		<ol style="list-style-type: none"> Herdiawan B, Ambarwati R, Artaka T, 2020. Bird diversity of resort Ranu Darungan, Bromo Tengger Semeru National Park, Indonesia. Eco. Env. & Cons. 26 (April Suppl. Issue) : 2020; pp. (S111-S116) Ramadhani A., Ambarwati R., Gumilang R.S., 2022. Diversity and abundance of water birds in the mangrove area of south coast of Bangkalan, Madura Island, Indonesia. Biodiversitas 23 (6): 3277-3284. 					
Supporting lecturer		Dr. Nur Ducha, S.Si., M.Si. Dr. H. Sunu Kuntjoro, S.Si., M.Si. Reni Ambarwati, S.Si., M.Sc. Dwi Anggorowati Rahayu, S.Si., 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	<ol style="list-style-type: none"> Understand the scope of ornithology Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough" Able to be responsible both as an individual and as a group in carrying out tasks. 	<ol style="list-style-type: none"> Explain the scope of ornithology Show honest and independent character Demonstrate responsible character 	Criteria: Assessment is carried out on the following aspects: Participation is an assessment of students' positive activities as well as honest, independent, responsible character (weight 2) UTS test as a UTS score, is carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments equivalent to UAS (weight 3) Final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10 Form of Assessment : Participatory Activities, Tests	Presentation and discussion, 2x5 article review	Presentations and discussions, article reviews	Material: Scope of ornithology Bibliography: Gill, FB 2007. <i>Ornithology, Third Edition.</i> New York: WH Freeman and Company.	4%
2	<ol style="list-style-type: none"> Understanding the evolution and phylogeny of birds Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough" Able to be responsible both as an individual and as a group in carrying out tasks. 	<ol style="list-style-type: none"> Explain the evolution and phylogeny of birds Show honest and independent character Demonstrate responsible character 	Criteria: Assessment is carried out on the following aspects: Participation is an assessment of students' positive activities as well as honest, independent, responsible character (weight 2) UTS test as a UTS score, is carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments equivalent to UAS (weight 3) Final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10 Form of Assessment : Participatory Activities, Tests	Presentation and discussion, review of 2x50 articles		Material: Evolution and Phylogeny of birds Reference: Gill, FB 2007. <i>Ornithology , Third Edition.</i> New York: WH Freeman and Company.	5%

3	<p>1.Understand the structure and function of birds</p> <p>2.Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3.Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1.Explain the structure of bird feathers</p> <p>2.Show honest and independent character</p> <p>3.Demonstrate responsible character</p> <p>4.Compare the feather structure of several types of birds</p> <p>5.Analyze the relationship between feather structure and bird flight ability</p> <p>6.Analyzing the relationship between muscles and birds' flight ability</p>	<p>Criteria: Assessment is carried out on the following aspects: Participation is an assessment of students' positive activities as well as honest, independent, responsible character (weight 2) UTS test as a UTS score, is carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments equivalent to UAS (weight 3) Final NA is (participation valuex2) (Assignment valuex3) (UTSx2 value) (UASx3 value) divided by 10</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Presentation and discussion, review of 2x50 articles		<p>Material: Structure and function</p> <p>References: <i>Gill, FB 2007. Ornithology, Third Edition. New York: WH Freeman and Company.</i></p>	7%
4	<p>1.Understanding behavior and communication in birds</p> <p>2.Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3.Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1.Explain the brain and sensory apparatus</p> <p>2.Compare visual communication of birds</p> <p>3.Analyze bird vocalizations</p> <p>4.Analyze learning and behavioral development</p> <p>5.Show honest and independent character</p> <p>6.Demonstrate responsible character</p>	<p>Criteria: Assessment is carried out on the following aspects: Participation is an assessment of students' positive activities as well as honest, independent, responsible character (weight 2) UTS test as a UTS score, is carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments equivalent to UAS (weight 3) Final NA is (participation valuex2) (Assignment valuex3) (UTSx2 value) (UASx3 value) divided by 10</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Presentation and discussion, review of 2x50 articles		<p>Material: Bird behavior and communication</p> <p>References: <i>Gill, FB 2007. Ornithology, Third Edition. New York: WH Freeman and Company.</i></p>	7%

5	<p>1.Understand bird reproduction and development</p> <p>2.Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3.Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1.Explain the mating system</p> <p>2.Explain the mating system</p> <p>3.Explain the nest structure and incubation of birds</p> <p>4.Explain the development of young birds. Explain brood parasites and cooperative breeders</p> <p>5.Show honest and independent character</p> <p>6.Demonstrate responsible character</p>	<p>Criteria: Assessment is carried out on the following aspects: Participation is an assessment of students' positive activities as well as honest, independent, responsible character (weight 2) UTS test as a UTS score, is carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments equivalent to UAS (weight 3) Final NA is (participation value x2) (Assignment value x3) (UTS x2 value) (UAS x3 value) divided by 10</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Presentation and discussion, review of 2x50 articles	Presentation and discussion, review of 2x50 articles	<p>Material: Reproduction and development of birds</p> <p>Reference: <i>Gill, FB 2007. Ornithology, Third Edition. New York: WH Freeman and Company.</i></p>	7%
6	<p>1.Understanding bird conservation</p> <p>2.Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3.Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1.Explain the various types of bird conservation</p> <p>2.Analyzing conservation efforts for a type of bird</p> <p>3.Show honest and independent character</p> <p>4.Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x2) (Assignment value x3) (UTS x2 value) (UAS x3 value) divided by 10</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Presentation, Discussion 2x50	Presentation, Discussion 2x50	<p>Material: Bird Conservation</p> <p>Bibliography: <i>Gill, FB 2007. Ornithology , Third Edition. New York: WH Freeman and Company.</i></p> <p>Material: Bird distribution</p> <p>References: <i>Herdiawan B, Ambarwati R, Artaka T, 2020. Bird diversity of Ranu Darungan resort, Bromo Tengger Semeru National Park, Indonesia. Eco. Env. & Cons. 26 (April Suppl. Issue) : 2020; pp. (S111-S116)</i></p>	7%

7	<p>1.Understand ornithological research methods and techniques</p> <p>2.Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3.Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1.Explains ornithological research methods and techniques</p> <p>2.Show honest and independent character</p> <p>3.Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10</p> <p>Form of Assessment : Participatory Activities, Tests</p>	Presentation, discussion and review of 2x50 articles	Presentation, discussion and review of 2x50 articles	<p>Material: Ornithology research methods and techniques</p> <p>References: Satria, R., Ambarwati, A., Rahayu, DA, Kuntjoro, S., 2021. <i>Ornithology Independent Mini Project Guide</i>. Surabaya: Biology Department, FMIPA Unesa.</p>	7%
8	UTS	UTS	<p>Criteria: UTS</p> <p>Form of Assessment : Test</p>	UTS 2 X 50		<p>Material: - Library:</p>	0%
9	<p>1.Able to design research in the field of ornithology that is relevant to the realities of life in the management of biological resources.</p> <p>2.Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3.Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1.Make an ornithological research plan</p> <p>2.Show honest and independent character</p> <p>3.Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Project assignments 2x50	Project assignments	<p>Material: Ornithology research methods and techniques</p> <p>References: Satria, R., Ambarwati, A., Rahayu, DA, Kuntjoro, S., 2021. <i>Ornithology Independent Mini Project Guide</i>. Surabaya: Biology Department, FMIPA Unesa.</p>	8%

10	<p>1. Able to carry out research in the field of ornithology, both field and non-field research/morphology and DNA research in accordance with procedures.</p> <p>2. Able to document research data well</p> <p>3. Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>4. Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1. Carrying out research</p> <p>2. Document research data well</p> <p>3. Show honest and independent character</p> <p>4. Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Presentation, discussion and review of 2x50 articles	Presentation, discussion and review of 2x50 articles	<p>Material: Birds of Java and Bali</p> <p>References: Holmes, DA and Nash, S. 1989. <i>The Birds of Java and Bali</i>. Oxford: Oxford University Press.</p> <hr/> <p>Material: Field Guide</p> <p>Bibliography: MacKinnon, J., Phillipps K., Balen B. van. 2010. <i>Birds in Sumatra, Java, Bali and Kalimantan</i>. Bogor: Birds of Indonesia.</p>	8%
11	<p>1. Able to carry out research in the field of ornithology, both field and non-field research/morphology and DNA research in accordance with procedures.</p> <p>2. Able to document research data well</p> <p>3. Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>4. Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1. Carrying out research</p> <p>2. Document research data well</p> <p>3. Show honest and independent character</p> <p>4. Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Presentation, discussion and review of 2x50 articles	Presentation, discussion and review of 2x50 articles	<p>Material: Birds of Java and Bali</p> <p>References: Holmes, DA and Nash, S. 1989. <i>The Birds of Java and Bali</i>. Oxford: Oxford University Press.</p> <hr/> <p>Material: Field Guide</p> <p>Bibliography: MacKinnon, J., Phillipps K., Balen B. van. 2010. <i>Birds in Sumatra, Java, Bali and Kalimantan</i>. Bogor: Birds of Indonesia.</p>	8%

12	<p>1. Able to carry out research in the field of ornithology, both field and non-field research/morphology and DNA research in accordance with procedures.</p> <p>2. Able to document research data well</p> <p>3. Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>4. Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1. Carrying out research</p> <p>2. Document research data well</p> <p>3. Show honest and independent character</p> <p>4. Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Presentation, discussion and review of 2x50 articles	Presentation, discussion and review of 2x50 articles	<p>Material: Birds of Java and Bali</p> <p>References: Holmes, DA and Nash, S. 1989. <i>The Birds of Java and Bali</i>. Oxford: Oxford University Press.</p> <p>Material: Field Guide</p> <p>Bibliography: MacKinnon, J., Phillipps K., Balen B. van. 2010. <i>Birds in Sumatra, Java, Bali and Kalimantan</i>. Bogor: Birds of Indonesia.</p>	8%
13	<p>1. Able to process, analyze and interpret/synthesize so as to produce new knowledge/information/solutions.</p> <p>2. Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3. Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1. Process, analyze and interpret research data</p> <p>2. Shows independent and honest character</p> <p>3. Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Project assignments 2x50	Project assignments 2x50	<p>Material: Example of data processing</p> <p>References: Ramadhani A., Ambarwati R., Gumilang RS, 2022. <i>Diversity and abundance of water birds in the mangrove area of the south coast of Bangkalan, Madura Island, Indonesia</i>. Biodiversity 23 (6): 3277-3284.</p>	8%

14	<p>1. Able to present research results in the form of writing scientific articles</p> <p>2. Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3. Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1. Write scientific articles based on research results</p> <p>2. Show honest and independent character</p> <p>3. Demonstrate responsible character</p>	<p>Criteria: Participation is an assessment of students' positive activities as well as their honest, independent, responsible character (weight 2) UTS test as UTS score, carried out to assess all relevant indicators through written tests for meeting activities 1-7, (weight 2) Assignments per topic as assignments (weight 3) Project assignments are equivalent to UAS (weight 3) The final NA is (participation value x 2) (Assignment value x 3) (UTS x 2 value) (UAS x 3 value) divided by 10</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	Project assignments 2x50	Project assignments 2x50	<p>Material: article example Bibliography: <i>Herdiawan B, Ambarwati R, Artaka T, 2020. Bird diversity of Ranu Darungan resort, Bromo Tengger Semeru National Park, Indonesia. Eco. Env. & Cons. 26 (April Suppl. Issue) : 2020; pp. (S111-S116)</i></p>	8%
15	<p>1. Able to present research results in the form of writing scientific articles</p> <p>2. Able to apply transferable skills to develop eco-commitment in an effort to realize the character of "Faith, Smart, Independent, Honest, Caring and Tough"</p> <p>3. Able to be responsible both as an individual and as a group in carrying out tasks.</p>	<p>1. Write scientific articles based on research results</p> <p>2. Show honest and independent character</p> <p>3. Demonstrate responsible character</p>	<p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Project assignments 2x50	Project assignments 2x50	<p>Material: article example References: <i>Ramadhani A., Ambarwati R., Gumilang RS, 2022. Diversity and abundance of water birds in the mangrove area of the south coast of Bangkalan, Madura Island, Indonesia. Biodiversity 23 (6): 3277-3284.</i></p>	8%
16	UAS	uas	<p>Criteria: UAS</p> <p>Form of Assessment : Test</p>	UAS	UAS	<p>Material: - Library:</p>	0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	26%
2.	Project Results Assessment / Product Assessment	52%
3.	Test	22%
		100%

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.
- 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.
- 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.