**COURSE LEARNING PLAN**

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| | UNIVERSITY OF BRAWIJAYA<br>FACULTY OF ANIMAL SCIENCE<br>DEPARTMENT OF ANIMAL SCIENCE<br>UNDERGRADUATE STUDY OF ANIMAL SCIENCE<br>LESSON PLAN – POULTRY PRODUCTION SCIENCE |

| Course | Code | Weight (credits) | Semester | Compilation Date |
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| Poultry Production | PEP 4004 | 3 (2-1) credits | 3 | July 25, 2020 |

| Aunthorization | Supervising Lecturer | Head of Undergraduate Study Program | Vice Dean 1 |
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| | Dr. Ir. Muharlien, MP. | Dr. Herly Evanuarini, S.Pt. MP. | Dr. Halim Natsir, S.Pt. MP. IPM.ASEAN ENG. |

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| Learning Outcomes (LO) | LO |
| | 1. LO 3 Demonstrate a friendly attitude, cares for the welfare of the animal and its halalness.<br>2. LO 4 Able to develop comprehensive insight and mindset according to the science and field of the animal industry.<br>3. LO 6 Able to apply Biological Science, Physiology, Nutritional Science, Breeding Science, and Livestock Farming Management to comprehend the concept and implement it in the field of animal science.<br>4. LO 11 Able to show performance, both independently and in teamwork (inter-and multi-disciplinary), identify and analyze to solve problems in a quality and measurable way |
| | CLO |
| | 1. Students are able to explain the history of development, livestock policies, breeds, and strains of poultry.<br>2. Students are able to explain and identify the morphology, anatomy, and physiology of poultry.<br>3. Students are able to explain and apply hatchery management or practices.<br>4. Students are able to explain and identify the open house and closed house systems.<br>5. Students are able to explain basic knowledge of feed, diseases, and prevention of poultry disease. |
| Brief Course Description | This course discusses the history of development, poultry policies, breeds, and strains of poultry in the world and Indonesia, morphology, anatomy, and physiology of poultry, hatcheries, open house and closed house systems, and basic knowledge of feed, diseases, and prevention of poultry disease. |
| Learning Contents | 1. Introduction<br>2. History and Development of Poultry Farming<br>3. Poultry Policies<br>4. Poultry Breeds and Strains in Indonesia and the World<br>5. Poultry Morphology, Anatomy, and Physiology 1<br>6. Poultry Morphology, Anatomy, and Physiology 2 |

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| | 7. Hatching 1<br>8. Hatching 2<br>9. Open Poultry House System<br>10. Closed Poultry House System<br>11. Basic Poultry Feed<br>12. Basic Poultry Diseases<br>13. Basic Prevention of Poultry Diseases<br>14. Selection and Culling |
| References | 1. Muharlien, dkk, 2018. Ilmu Produksi Ternak Unggas. Brawijaya Press<br>2. PERATURAN MENTERI PERTANIAN REPUBLIK INDONESIA NOMOR 32/PERMENTAN/PK.230/9/2017 tentang Penyediaan, Peredaran, dan Pengawasan Ayam Ras dan Telur Konsumsi<br>3. Cobb, 2008. Hatchery Management Guide. Cobb-vantress.com<br>4. Muharlien dan Achmanu, 2011. Ilmu Unggas. Brawijaya Press<br>5. Heni S. 2010. Biologi Unggas. Brawijaya Press<br>6. Hy-Line Internasional, 2019. Hy-Line Red Book: Management and Disease Control. www.hyline.com.<br>7. HANDBOOK OF POULTRY SCIENCE AND TECHNOLOGY, A JOHN WILEY & SONS, INC., PUBLICATION<br>8. USSEC, 2017. Biosecurity Guide for Commercial Poultry Production in the Middle East and North Africa. U.S. Soybean Export Council. www.ussec.org. |
| Learning Media | Software: Microsoft Office, pdf, Education Apps for Teaching and Learning (Video, Google Classroom, Zoom, Google-form, e-book)<br>Hardware: Incubator, Closed Poultry House Miniature, Computer, Printer |
| Teaching Team | 1. Dr. Ir. Muharlien, MP.<br>2. Dr. Ir. Edhy Sudjarwo, MS.<br>3. Heni Setyo Prayogi, S.Pt.,M.A.Sc.<br>4. Adelina Ari Hamiyanti, S.Pt.,MP.<br>5. Dr. Dyah Lestari Yulianti, S.Pt. MP. |
| Prerequisite course | Introduction to Animal Science |

| Week (s) | Sub-Course Learning Outcomes (SCLO) | Indicators | Learning Materials/ Topics | Learning Methods | Criteria & Form of Assessment | Weighted Scores (%) |
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| (1) | (2) | (3) | (4) | (5) | (6) | (7) |

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| 1 | CLO 1 | | **Introduction/Semester Lesson Plan (RPS)** | | | |
| 2 | CLO 1 | Students are able to explain the history and the development of poultry farming in the world and Indonesia | **History and the development of poultry farming in the world and Indonesia** | Lecture, Discussion, Test | Students' active participation, Test/exam | |
| 3 | CLO 1 | Students are able to explain livestock policies/regulations (Laws/Ministerial Regulation/Directorate General Regulations) | **Poultry Farming Policies/Regulations**<br>– Poultry Production<br>– Poultry Raising System (Independent/Partnership)<br>– Supply and Market Chain<br>– Livestock and Raw Material Industry | | Test/exam | |
| 4 | CLO 1 | Students are able to explain poultry strains and breeds in the world and Indonesia | **Poultry Strains and Breeds in Indonesia and the World** | Lecture, Discussion | Test/exam | |
| 5 | CLO 2 | Students are able to identify and explain the morphology and anatomy of poultry including comb, feather, skeleton, skin | **Poultry Morphology, Anatomy, and Physiology**<br>– Morphology and Anatomy | Lecture, Discussion, Practicum | Test/exam, observation of practical performance in the laboratory. | |
| 6 | CLO 2 | Students are able to identify and explain the physiology of poultry, including vision, lighting, moulting, broodiness, and thermoregulator | **Poultry Morphology, Anatomy, and Physiology**<br><br>**Poultry Physiology**<br>– Vision<br>– Lighting<br>– *Moulting*<br>– Broodiness<br>– Thermoregulator | Lecture, discussion, practicum, demonstration | Test/exam | |

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| 7 | CLO 3 | Students are able to explain and carry out hatchery practices including natural and artificial incubation or hatching, factors in hatching, and incubators | **Hatching**<br>– Natural and Artificial Hatching<br>– Factors in Hatching<br>– Introduction of Incubators | Lecture, discussion, practicum, demonstration | Test/exam | |
| 8 | CLO 3 | Students are able to explain the basics of embryonic development and the basics of hatching in industry | **Hatching**<br>– Basics of Embryonic Development<br>– Basics of Hatching in Industry | Lecture, Discussion | Test/exam | 10% |
| 9 | MIDTERM EXAM | | | | | 30% |
| 10 | CLO 4 | Students are able to identify and explain the open house | **Open House**<br>– Construction<br>– Equipment and Facilities<br>– Density | Lecture, discussion, practicum, demonstration | Test/exam | |
| 11 | CLO 4 | Students are able to identify and explain closed-house | **Closed House**<br>– Construction<br>– Equipment and Facilities<br>– Density | Lecture, discussion, practicum, demonstration | Test/exam | |
| 12 | CLO 5 | Students are able to explain the basics of poultry feed | **Basics of Poultry Feed**<br>Feeding in Production Phase (Broilers and Layers) | Lecture, discussion, practicum, demonstration | Test/exam, observation of practical performance in the laboratory | |
| 13 | CP-MK 5 | Students are able to explain the basics of poultry disease | **Basic Poultry Disease**<br>– Types of Poultry Diseases (based on disease agents and their spread)<br>– Signs of Disease | Lecture, Discussion. | Test/exam | |

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| 14 | CLO 5 | Students are able to explain the basics of preventing poultry disease | **Basic Poultry Disease Prevention**<br>– Sanitation<br>– Biosafety<br>– Vaccination | Lecture, discussion, practicum, demonstration | Test/exam | |
| 15 | CLO 5 | Students are able to explain the selection and culling procedures for broilers and layers | **Selection and *Culling***<br>– Broilers<br>– Layers | Lecture, discussion, practicum, demonstration | Test/exam | |
| 16 | FINAL EXAM | | | | | 30% |
| | TOTAL | | | | | 100% |