

Course Description Form

1. Course Name:	
Poultry breeding	
2. Course Code:	
PBRE415	
3. Semester / Year:	
the first semester/ 2024-2025	
4. Description Preparation Date:	
15/1/2025	
5. Available Attendance Forms:	
Full time (theoretical lecture + practical) weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2 hours and 3 practical hours per week for 15 weeks, the number of units is 3.5 units	
7. Course Administrator's Name (Mention All, If More Than One Name)	
Name : Name::bashar adham ahmed Email: basharadham@uodiyala.edu.iq	
8. Course Objectives	
Course Objectives: Graduating students who are able to:	The student will be familiar with the genetic resources of poultry and the method of classifying them scientifically. The method of inheriting qualitative traits in chickens. <i>Estimating the genetic parameters of quantitative traits</i>
9. Teaching and Learning Strategies	
Strategy	Learn about improving birds, breeding and measuring quantitative traits through increasing production. Learn about commercial and government farm management through studying animal records. The student gains initial theoretical and practical experience to work on improving the animal production sector
10. Course Structure	

Theoretical part					
Week	Hours	Required learning outcomes	Unit or Subject	Learning Method	Evaluation Method
1	2	Origin of Chickens , development of poultry breeding goals .	Poultry breeding	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
2	2	General principles of heredity, chromosomes in birds, sex determination, sex-	Poultry breeding	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	2	Definition of qualitative traits, and distribution of	Poultry breeding	Lecture Dialogue & discussion	Daily, monthly and final exams and daily reports
4	2	Definition of quantitative traits, patterns of inheritance,	Poultry breeding	Lecture Dialogue & discussion	Daily, monthly and final exams and daily reports
5	2	Estimation of genetic parameters, genetic correlation,	Poultry breeding	Lecture Dialogue & discussion	Daily, monthly and final exams and daily reports
6	2	Genetic selection, selection for qualitative and quantitative traits,	Poultry breeding	Lecture Dialogue & discussion	Daily, monthly and final exams and daily reports
7	2	Mating systems, inbreeding, inbreeding	Poultry breeding	Lecture Dialogue &	Daily, monthly and final exams
8	2	Out breeding , combining ability	Poultry breeding	Lecture Dialogue &	Daily, monthly and final exams
9	2	Breeding programs for broiler production.	Poultry breeding	Lecture Dialogue &	Daily, monthly and final exams
10	2	Breeding programs for egg production.	Poultry breeding	Lecture Dialogue &	Daily, monthly and final exams
11	2	Genetic disorders , pattern of inheritance.	Poultry breeding	Lecture Dialogue &	Daily, monthly and final exams
12	2	Genetics of fertility and semen traits.	Poultry breeding	Lecture Dialogue &	Daily, monthly and final exams
13	2	Conservation for poultry genetic resources .	Poultry breeding	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
14	2	Genetic engineering in poultry	Poultry breeding	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
15	2	DNA markers assistance genetic selection.	Poultry breeding	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

Practical part					
Week	Hours	Required learning outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	3	Species of poultry , Variety , strains .	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
2	3	Modification in Mendelian ratios influenced by epistatic genes and lethal genes, practical process for autosexing.	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
3	3	Test Cross, Back Cross , Diallel Cross , examples of the inheritance of qualitative traits in chickens.	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
4	3	Applications in calculating the degree of relationship between relatives and its importance in quantitative genetics.	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
5	3	Flock pedigree and records	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
6	3	Estimation of genetic parameters – Examples.	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
7	3	Calculating efficiency of selection , Selection index .	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
8	3	Calculating of inbreeding coefficient	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
9	3	Three way cross , Four way cross in poultry breeding.	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
10	3	Egg production measurements, the quality traits for egg	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports

		selection.			
11	3	Genetic disorders, examples .	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
12	3	Measurements and selection for semen traits.	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
13	3	Mating methods for pedigree in poultry	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
14	3	Artificial insemination in poultry – training	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
15	3	General review	Poultry breeding	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports

11. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, monthly, or written exams, reports, etc.

12. Learning and Teaching Sources

Required Textbooks (Curricular Books, If Any)	Hassan, K. H. 2011. Poultry Breeding . Diyala Press. Iraq. Crawford , R.D. 1990. Poultry Breeding and Genetics . Muir , W.M. and S.E., Aggrey .2003. Poultry Genetics , Breeding and Biotechnology.
Main References (Sources)	Many other references and article from internet .
Recommended Books and References (Scientific Journals, Reports...)	Iraqi academic journal
Electronic References, Websites	