

Course Description Form

1. Course Name:					
Animals Breeding					
2. Course Code:					
ANB332					
3. Semester / Year:					
Spring 2024					
4. Description Preparation Date:					
1/2/2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
75 hours (2 + 3) *15 weeks					
7. Course administrator's name (mention all, if more than one name)					
Name: Dr. Esraa Mobasher Tawfwq Email: esraa-mobasher@uomosul.edu.iq Name: Dr. Muthanna Fathi Abdullah Email: muthanna.f.a@uomosul.edu.iq					
8. Course Objectives					
Course Objectives		<ul style="list-style-type: none"> Introducing students to the basics of genetics, including Mendel's laws... Defining the gene, what its components are, how to calculate the frequency of the gene, and the factors affecting it What are the components of phenotypic variation and patterns of gene expression Calculating the average effect of the gene and the effect of gene replacement and estimating the kinship coefficient Internal breeding and genetic features in the animal population and ways to improve them.... Conducting examinations and preparing practical reports 			
9. Teaching and Learning Strategies					
Strategy		<p>Audio methods (teaching explanation of the topic) Style of writing on the blackboard The method of direct dialogue between the teacher and the student, with student's evaluation in class participation</p>			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	2Theoretic 3 My wo	A1: heoretical: The student	Theoretical: Principles of statistics nee in	Audio and visual methods (teaching explanation of the	Exams, reports, discussion

		introduced statistical processes and knowledge of general principles animal husbandry and improvement Practical: A1: The student applies all statistical operations	Animal breeding improvement Practical: Measures of concentration and measures of dispersion	topic) Style of writing on the blackboard The method of direct dialogue between the teacher and the student, with the student's evaluation and class participation	quizzes
Second	2Theoretical 3 My work	Theoretical B1: Among the most important expressions of the gene (combination effect, dominance, superiority) Practical A2: Defines regression coefficient and correlation coefficient and solve an example to extend the value of e coefficient	Theoretical: Some genetic principles in Animal breeding and improvement, gene expression patterns, Practical: Measures of association (coefficient Regression and correlation coefficient	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The method of direct dialogue between the teacher and the student, with the student's evaluation in class participation	Exams, reports, discussions, quizzes
Third	2Theoretical 3 My work	Theoretical C1: Among the most important expressions of the gene (combination effect, dominance, superiority) Practical A4: Defines regression coefficient and correlation coefficient and solve an example to extend the value of e coefficient	Theoretical: Gene frequency, frequency calculation Gene if a pair of Genes with a cluster effect And sovereign, random mating Hardy-Weinberg rule Practical Explain the concept of gene replication	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The method of direct dialogue between the teacher and the student, with student's evaluation and class participation	Exams, reports, discussion, quizzes
Fourth	2Theoretical 3 My work	Theoretical B2: Explains importance of factors affecting gene replication and how to calculate them (migration, mutation, chance selection) Practical A5: It shows	Theoretical Factors affecting gene duplication Practical Factors affecting gene duplication (mutation and migration)	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The method of direct dialogue between the teacher and the student, with student's evaluation	Exams, reports, discussion, quizzes

		importance of factors affecting gene replication; defines mutation, types, migration, and its effect on gene replication		class participation	
Fifth	2Theoretical 3 My work	Explains how to calculate C2: calculates phenotypic variation, the effect of a gene, and gene replacement, what are quantitative descriptive characteristics Practical A6: Knows chance and selection and their effect on gene replication	Phenotypic variation Practical Factors affecting gene frequency (chance and selection)First semester exam	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The method of direct dialogue between the teacher and the student, and the student's evaluation in class participation	Exams, reports, discussions, quizzes
Sixth	2Theoretical 3 My work	Theoretical C3: Explains concept of kinship and how to calculate it Practical A3: It shows importance analysis of variance in analyzing results and extent of influence of various factors on them, and finds an analysis variance table	Theoretical The relationship between relatives Practical Analysis of variance and normal distribution	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The method of direct dialogue between the teacher and the student, and the student's evaluation in class participation	Exams, reports, discussions, quizzes
Seventh	2Theoretical 3 My work	Theoretical C4: The kinship coefficient calculated in event that there internal education and the internal education calculated Practical C3: It shows and calculates coefficient of kinship	Theoretical Calculating the kinship coefficient Practical Kinship and relationship between individuals	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The method of direct dialogue between the teacher and the student, and the student's evaluation in class participation	Exams, reports, discussions, quizzes

		and the relations between individual			
Eighth	2Theoretic 3 My wor	Theoretical B3: The kins coefficient calculated in event that there internal educat and the inter education calculated Practical C4: It shows calculates coefficient of kins and the relations between individual	Different methods of education, education Interna (raising relatives), education Tarziya, external education (crossbreeding), hybrid strength, Mixing breeds	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo between the teac and the student, v the student's evaluat in class participation	Exams, reports, discussion quizzes
Ninth	2Theoretic 3 My wor	Theoretical A3: Familiar with most important ty of mixing of stra (external mixi apical mixing, ba mixing...etc.) Practical C2: Explains concept of Har Weinberg rule	Theoretical Mixing breeds Practical Hardy-Weinberg rule	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo between the teac and the student, v the student's evaluat in class participation	Exams, reports, discussion quizzes
Tenth	2Theoretic 3 My wor	Theoretical C7: Explains meaning of gen equivalent calculates the va of genetic equival through selection C5: experiments the relations between father son and calculatin through full broth and half-sibs.	Theoretical Some genetic parameters of t population (genetic equivale and methods for estimating Practical Genetic features of the anima population (genetic equivale	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo between the teac and the student, v the student's evaluat in class participation	Exams, reports, discussion quizzes
Eleven	2Theoretic 3 My wor	Theoretical C6: He can calculate the frequency coefficient in various practical C7: ways The student calculates	Theoretical Some genetic features of population (frequ coefficient) Practical Explaining the concept of iterative coefficient, purpose of its use, and characteristics for which it	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo between the teac and the student, v	Exams, reports, discussion quizzes

		using special equations the frequency coefficient and what is its theoretical basis	theoretically,	the student's evaluation in class participation	
Twelve	2Theoretic 3 My work	Theoretical C7: Explains meaning of b correlation calculates correlation value Practical A7: Understands genetic connecti the reasons for emergence betw two traits, importance in ani husbandry, methods evaluating it	Theoretical Some genetic features of clan (genetic relatedness) Practical Calculating the gen correlation between two tr in different ways	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo between the teacher the student, with student's evaluation class participation	Exams, reports, discussions quizzes
Thirteen	2Theoretic 3 My work	Theoretical A4: Recognizes intensity of election and relationship to electoral difference Practical C1: Calculates gene frequency va in a number animal populations	Theoretical Election Practical Exercises and problems ab gene duplication	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo between the teach and the student, v the student's evaluat in class participation	Exams, reports, discussion quizzes
Fourteen	2Theoretic 3 My work	Theoretical B2: Selection intens and electo differential Practical A2: Correlat measures (regress coefficient correlation coefficient)	Intensity of selection, relationship between electoral difference and intensity of selection Factors affecting gen equivalence, methods selection For one trait, selection meth for more than one trait	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo between the teach and the student, v the student's evaluat in class participation	Exams, reports, discussions quizzes
Fifteen	2Theoretic 3 My work	Theoretical B5: Explains importance of gen engineering learns about mod methods in the fi of animal breed	Theoretical Genetic engineering genetics Molecular field of breed and improvement Practical animal Evaluation of animal rec	Audio and visual methods (teaching explanation of the topic) Style of writing on blackboard The met of direct dialo	Exams, reports, discussions quizzes

	and improvement Practical A8: He uses animal records to evaluate animals, compare them and prepare detailed report about them	(report and discussion	between the teacher and the student, with the student's evaluation in class participation
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11. Course Evaluation

Distributing 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 Resources

Required textbooks (curricular books, if any)	Animal husbandry book / written by Has Karam and Salah Jalal
Main references (sources)	
Recommended books and references (scientific journals, reports...)	-Falconer, D.S. and Mackay, T.F. 2012.
Electronic References, Websites	Journal of Agriculture



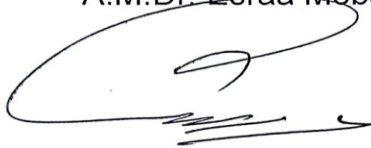
Theoretical subject teacher

A.M. Dr. Esraa Mobasher Tawfeq,



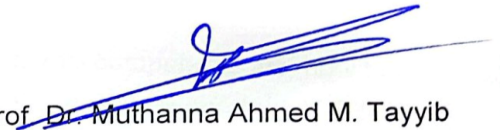
Practical subject teacher

M. Dr. Muthanna Fathi Abdullah



Prof. Dr. Omar D. Muhammad

Head of the Animal Production Department



Prof. Dr. Muthanna Ahmed M. Tayyib

Chairman of the Scientific Committee

