Republic of Iraq

The Ministry of Higher Education

& Scientific Research

بسم الله الرحمن الرحيم



University: Diyala College: Agriculture

Department: Animal poroduction

Stage: 4

Lecturer name: zaid Mohammed

Mahdi

Qualification: Assist prof.

Place of work: Coll. Of Agriculture

Flow up of implementation celli pass play

Course Instructor	Dr. Zaid Mohmmed Mahdi				
E-mail	zaidmahdi@uodiyala.edu.iq				
Title	Molecular biology				
Course Coordinator	Spring Course				
Course Objective	Learn importance of molecular genetic to using it at selection tool in animal breeding .				
Course Description	know of molecular genetics, Structure of DNA, Replication of DNA, Gene expression, study of PCR, Electrophoresis, Genetic engineering				
Textbook	Molecular Genetic Principles of genetic engineering				
Course Assessments	Term Tests 20%	Laboratory 15%	Quizzes 5%	Project	Final Exam 60%
General Notes	The system to Article quarterly rather than annually and offers during the spring				

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Department: Animal Production

Stage: Fortt

Lecturer name: Zaid Mohammed

Qualification: Ph.D

Place of work: Coll. Of Agriculture

Flow up of implementation celli pass play

week	Date	Topics Covered	Practical Part	
1	1st week	Chemical and physical Structure of DNA	DNA Extraction	
2	2 nd week	Experimental of DNA	DNA extraction	
3	3 rd week	Replication of DNA	Teqnical of PCR	
4	4th week	Gene expression	Types of PCR	
5	5 th week	Regulation of Gene expression in Eu. And	Types of PCR	
6	6 th week	Pro.	Component of PCR	
7	7 th week	Genetic mutation and their types	Principles of DNA	
8	8th week	Repair of DNA		
9	9th week	Determined of DNA sequencing	White Primers	
10	10 th week	Genetic engineering Restriction of enzyme	Type of Primers	
11	11 th week	Markers of DNA	Electrophoresis	
12	12 th week	Technical of RFLP	Electrophoresis	
13 _{13th week}		Components of		
	13 WEEK		electrophoresis	
14	14th week	Technical of RAPD	Product visualization	
15	15 th week	Review of the article	Molecular operation	

Assist prof. Dr. Zaid Mohammed Mahdi 15/1/2025 Dean Signature: Prof. Dr.Raaed Ibrahim Khalil 15/1/2025