## Course Description of the Principle of Animal Production

1.Course Name:
Principle of Animal Production
2.Course Code:

PRAP114

3. Semester / Year:

first season, 2023-2024.

4. Description Preparation Date:

1/2/2024

5. Available Attendance Forms:

learning in presence (theoretical and practical)

6. Number of Credit Hours (Total of Units:

75 hours (2 hours theoretical and 3 hours practical). 3.5 unit

7. Course administrator's name (mention all, if more than one name)

Name: Wassem khalid ahmade

Name: Raghd nabil

8. Course Objectives

Course Objectives

1. Introducing the student to the classification of animals in the animal kingdom.

- Introducing the student for phenotypic specifications and productive performance of international and local livestock breeds.
- Introducing the student to productive performance, breeding and fattening sheep, and genetic improvement local sheep.

4. Introducing the student to nutrition and preparing fattening diets for sheep.

- 5. Introducing the student to the field operations that take place daily and weekly for cattle and sheep in the animal field.
- 6. Introducing the student to the nature and types of animal breeding housing.
- 7. Introducing the student to the most important common diseases that affect livestock and sheep, their pathogens

and methods of prevention.

8. Involving students in practical application of laboratory experiments in groups.

## 9. Teaching and Learning Strategies

Interactive lecture strategy

Discussion strategy

Problem solving strategy by commissioning reports

Brainstorming strategy.

Assignment to team work

Assigning tasks and reports for each experiment

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 <sup>st</sup>	Theoretical 2	Theoretical: a1 The student learns about the economic importance of livestock and its relationship to economic integration. The economic importance	Theoretical: The economic importance of livestock and its relationship to economic importance of livestock and its relationship to economic importance in the livestock and its relationship to economic importance in t	Theoretical: Using of whiteboard, audio-visual means, Discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical:

	Practical 3	of livestock and its relationship to economic integration. Practical: b5 Acquires practical and scientific skills in conducting field operations on farm animals	integration. Factors that led to a decline in level of animal production in developing countries and Iraq. Practical: Field operations that take place on a daily basis, some of which are monthly and seasonal in animals farm. Neutering, numbering, spraying and	Practical: audio aids visual, powerpoint, Bulletins and discussions.	Quizzes, reports, posters, discussions, Exams.
2 <sup>nd</sup>	Theoretical 2	Theoretical: a2	dipping, shearing wool, amputating the tail, clipping the beak.  Layering.  Theoretical:	Theoretical:	Theoretical:
		The student acquires the skill in classifying the animal kingdom.	Animal kingdom, classification: Bovine family: cattle genus,	use whiteboard, Audio aids	Quizzes, Reports, discussions
	Practical 3	Practical: b6 The student prepares cows for milking operations, practices daily milking operations, and manual and mechanical milking methods.	Genus Bos, sheep genus, Genus Ovis. Goat genus, Genus Capra. General formal specifications for beef cattle, specifications of carcasses for beef cattle. Practical: Milking, milking methods, and preparing cows for the milking process	and visual, discussions. Practical: audio aids visual, powerpoint, Bulletins and discussions	Exams. Practical: Quizzes, reports, posters, discussions, Exams
3rd	Theoretical 2 Practical 3	Theoretical: a3 The student can learn about the productive and phenotypic characteristics of internationally known livestock. Practical: a10 The student acquires the skill and management experience in practicing the suckling process using both natural and artificial methods.	Theoretical: Cattle breeds in the world: beef cattle, milk cattle, dual-purpose cattle Practical: The suckling,its definition, methods of suckling, small calves suckling, and methods of sucklinging and artificial suckling.	Theoretical: use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpoint, Bulletins and discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams

4 <sup>th</sup>	Theoretical 2	Theoretical: a4	Theoretical:	Theoretical:	Theoretical:
		The student learns about	Iraqi cows: their	use	Quizzes,
		the phenotypic	appearance and	whiteboard,	Reports,
		characteristics and	production	Audio aids	discussions
		productive performance	specifications	and visual,	Exams.
		of Iraqi cows.	and their breeding areas	discussions.	Practical:
	Practical 3	Practical: all	in	uiscussions.	Quizzes,
	Fractical 3		1797:	Practical:	reports,
		The student gains	Iraq. Breeding of calves, milk fever causes and	The through a little and the little	
		scientific experience in		audio aids	posters,
		designing and	treatment.	visual,	discussions,
		constructing livestock	Practical:	powerpoint,	Exams.
		housing and providing	Animal housing,its	Bulletins and	
	1	them with administrative	types, specifications,	discussions	
	1	services and artistic.	and technical and	l i	
	1		engineering conditions		
	1 1		in constructing animal		
	1 1		housing		*
5 <sup>th</sup>	Theoretical 2	Theoretical: b1	Theoretical:	Theoretical:	Theoretical:
-	I iicorciicui Z	The student learns about	Buffalo, a historical	use	Quizzes,
	1 1	the phenotypic and	overview of the origin	whiteboard,	Reports,
		genetic characteristics	and origin of the buffalo	Audio aids	discussions
	1	0			Exams.
		and productive	and the general and	and visual,	
		performance of buffalo	physiological	discussions.	Practical:
		animals and their daily	characteristics		Quizzes,
	Practical 3	milk production?	of the buffalo.	Practical:	reports,
		Practical: a12	Reproduction in buffalo.	audio aids	posters,
		The student learns	Breeds of buffalo in	visual,	discussions,
		about farm records,	the world. Production of	powerpoint,	Exams
		their importance and	milk	Bulletins	
		types in the animal field	and meat in buffalo.	and	
			Practical:	discussions.	
			Definition of farm		
			records		
			their types,importance,		
			and benefits.		
6 <sup>th</sup>	Theoretical 2	Theoretical: b2	Theoretical:	Theoretical:	Theoretical:
0	Theoretical 2		Classification of the	- ROSE AND ON PRODUCTION OF	Quizzes,
		The student learns about		use	Reports,
		the classification and	location of sheep in the	whiteboard,	discussions
		location of sheep in the	animal kingdom,	Audio aids	
		animal kingdom,	methods	and visual,	Exams.
	Practical 3	methods of classifying	of classifying sheep,	discussions.	Practical:
		sheep, sheep breeds,	breeds		Quizzes,
		meat sheep, milk sheep,	of sheep, meat sheep,	Practical:	reports,
	Melv facel	and wool sheep.	sheep	audio aids	posters,
		Practical: a13	milk, sheep wool.	visual,	discussions,
		The student classifies	Practical:	powerpoint,	Exams.
		the quality of feed	Coarse and concentrated	Bulletins	
	1		feed materials and	and	V
		according to its raw	the differences between		8
		fiber content.		discussions	-
	4 3 cm / may	Introducing students to	them. كالفال والفال		

i.e.		coarse and concentrated feed materials and the differences between them.			
7 <sup>th</sup>	Theoretical 2 Practical 3	theoretical a5 The student learns about the types of Iraqi sheep and their appearance and production characteristics, and clarification. Advantages of raising sheep. Practical: a14 The student monitors and determines the quality of pastures and grazing systems	Theoretical: Iraqi sheep: Awassi sheep, Kurdish sheep, Arab sheep, and Hamdaniya sheep. Naemi sheep, Najdi sheep. Appearance and production specifications. Practical: Pastoralism, definition of pasture, pasture and grazing systems, Types of pastures: natural pastures, artificial pastures.	Theoretical: use whiteboard, Audio aids and visual, discussions.  Practical: audio aids visual, powerpoint, Bulletins and discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams
8 <sup>th</sup>	Theoretical 2 Practical 3	Theoretical: a6 The student can gain knowledge about the characteristics and advantages of goat breeding and the geographical distribution of goats in the world. Practical: b7 The breeder can prepare the necessary diets for the animals to meet their needs for	Theoretical: Goats, goat breeds in hot and semi-hot areas, European goat breeds, Iraqi goat breeds, Local goats, maraz, mountain goats Practical: Preparing and preparing rations according to nutritional decisions: the maintenance ration and production ration.	Theoretical: use whiteboard, Audio aids and visual, discussions.  Practical: audio aids visual, powerpoint, Bulletins and discussions	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams.
9 <sup>th</sup>		nutrient compounds. Theoretical: a6 The student can gain knowledge about the characteristics and advantages of goat breeding and the geographical distribution of goats in the world. Practical: a15 The breeder can prepare the necessary diets for the animals to meet their needs for nutritional compounds		Theoretical:	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams

10 <sup>th</sup>	Theoretical 2	Theoretical: b3	Theoretical: Horses and camels,	Theoretical:	Theoretical: Quizzes,
		The student can learn about the productive, phenotypic, and genetic	introduction, location of horses and camels in the	whiteboard, Audio aids	Reports, discussions Exams.
	Practical 3	characteristics of horses and camels and determine the location of horses and camels in the animal kingdom.	animal kingdom, breeds of horses and camels, types of camels, structure of the digestive system, reproduction in camels	and visual, discussions. Practical: audio aids visual,	Practical: Quizzes, reports, posters, discussions,
		Practical: b8 The student can gain experience in knowing the parts and function of the male and	and horses.  Practical: Male reproductive system, female	powerpoint, Bulletins and discussions	Exams.
		female reproductive system and method of reproduction and reproduction in livestock and poultry.	reproductive system in livestock and poultry.A scientific visit to the Artificial Insemination Center/Ministry of Agriculture.		
11 <sup>th</sup>	Theoretical 2	Theoretical: b4 The student gains scientific experience in preparing and balancing	Theoretical: Nutrition and feed: concentrated feed and coarse feed. Preparing,	Theoretical: use whiteboard, Audio aids	Theoretical: Quizzes, Reports, discussions
a a th	Practical 3	diets in terms of nutritional components for farm animals. Practical: c3 The student gains theoretical and practical scientific experience about artificial insemination, importance,advantages and disadvantages.	preparing and balancing diets for animals, the basic rules in formulating the diet. Practical: Artificial insemination: its definition, semen collection, types of semen diluents, semen preservation.	and visual, discussions.  Practical: audio aids visual, powerpoint, Bulletins and discussions.	Exams. Practical: Quizzes, reports, posters, discussions, Exams
12 <sup>th</sup>	Theoretical 2	Theoretical: c1 The student gains experience in determining the needs of animals for nutritional compounds,	Theoretical: Food compounds, their definition, their most important importance, needs for growth,	Theoretical: use whiteboard, Audio aids and visual,	Quizzes, Reports, discussions Exams.
	Practical 3	qualifying him in management Raising a productive herd on the farm. Practical: b9 The student gains scientific experience	fattening, and production of food compounds. Practical: Poultry: Definition of poultry, determining the location of poultry. In the animal kingdom, classification	Practical: audio aids visual, powerpoint, Bulletins and	Practical: Quizzes, reports, posters, discussions, Exams.

		in classifying poultry and determining its location in the animal kingdom and its economic importance.	of poultry (biological classification, classification by origin, economic classification).	discussions	
13 <sup>th</sup>	Theoretical 2  Practical 3	Theoretical: a8 Introducing the student to the internal components of the egg and the factors that help in the occurrence of diastasis in laying hens.  Practical: a16 The student can identify internal components of the egg and select suitable eggs for hatching.	Theoretical: Poultry, the origin of poultry, a historical overview of human domestication of domestic birds, the advantages of raising poultry over other farm animals., the location of poultry in the animal kingdom. Practical: Eggs and their components, definition of the egg and identification of its components, factors that help in the appearance of laying in laying hens. Classification of poultry (biological classification, classification according to origin, economic classification).	visual, powerpoint, Bulletins and discussions	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams
14 <sup>th</sup>	Theoretical 2  Practical 3	Theoretical: a9 The student learns about the classification of poultry according to geographical location. Classification of poultry according to production performance. Practical: c4 The student gains practical experience in conducting egg hatching operations. Using the hatching Machine Cleaning,	Theoretical: Poultry breeds, classification of poultry according to geographic location, classification of poultry according to production performance. Practical: Hatching, hatching methods, types and sizes of hatching machines, design and classification of hatching places.	Theoretical: use whiteboard, Audio aids and visual, discussions.  Practical: audio aids visual, powerpoint, Bulletins and discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams.

		health co in prepar equipping hatching	ing and	conditions for hatchi	ng.	
15 <sup>th</sup>	Theoretical 2 Practical 3	detecting with exte internal p Cleaning disinfecti housing p during th production  Practical: The stude and diagr infection causes ar viral for	ent gains ce and observation in infestations rnal and earasites. and ng animal periodically e breeding and on period.  c5 ent can identify nose pathological s, whether their e bacterial or infected animals g treatment for	Theoretical: Parasites and diseases external and internal parasites, bacterial an viral diseases. Organizing a scientific visit for students to the veterinary hospital to examine the students medical cases. Practical: Bacterial diseases: symptoms, causes, treatment. Viral diseases:symptocauses, treatment	whiteboard, Audio aids and visual, discussions.  Practical: audio aids visual, powerpoint, Bulletins and discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams
No.	1.Course Evaluati Evaluation meth		Evaluation date (	week)	Marks	Relative weight
	1000			Control of the Contro	The state of the s	Table 1 and
1	The first short test Quiz (Interritical:				m	(%)
	Theoritical:	est Quiz (I		cal: Short test Quiz (1 l: Short test Quiz (1).	Theoretical: 2.5 Practical: 2.5	5%
2				l: Short test Quiz (1).		
	Theoritical: Practical	1).	Week 4: Practica Week 9: Theoret Week 9: Practica Week 11: Theoret	l: Short test Quiz (1).	Practical: 2.5 Theoretical: 10	5%
	Theoritical: Practical Monthly exam (  Second shor	1). t test	Week 4: Practica Week 9: Theoret Week 9: Practica Week 11: Theoret	l: Short test Quiz (1). ical test (1). l test (1). tical:Short test Quiz (2) al:Short test Quiz (2)	Practical: 2.5  Theoretical: 10 Practical: 5  Theoretical: 2.5	15%
3 4	Theoritical: Practical Monthly exam (  Second shor Quiz.(2).	1). t test	Week 4: Practical Week 9: Theoret Week 9: Practical Week 11: Theori Week 11: Practical Week 13: Theori Week 13: Practical	l: Short test Quiz (1). ical test (1). l test (1). tical:Short test Quiz (2) al:Short test Quiz (2)	Practical: 2.5  Theoretical: 10 Practical: 5  Theoretical: 2.5 Practical: 2.5  Theoretical: 10 Practical: 5	5% 15% 5%
3	Theoritical: Practical Monthly exam (  Second shor Quiz.(2).  Monthly exam (	1). t test 2).	Week 4: Practical Week 9: Theoret Week 9: Practical Week 11: Theoret Week 11: Practical Week 13: Theoret Week 13: Practical Seasonal rates are of the semester.	l: Short test Quiz (1). ical test (1). l test (1). tical:Short test Quiz (2) cal:Short test Quiz (2) tical test (2). cal test (2).	Practical: 2.5  Theoretical: 10 Practical: 5  Theoretical: 2.5 Practical: 2.5  Theoretical: 10 Practical: 5  Theoretical: 25	5% 15% 5%

8	Total	The final score of the theoretical and practical of final exam at the end of academic year.	100	100%
	ributing the score out of 10 monthly, or written exam	0 according to the tasks assigned to the stud s, reports etc .	lent such as da	aily preparation, daily
12.1	earning and Teaching Re-	sources .		
	aired textbooks	Principles of Animal Production		
(cum	ricular books, if any)	(Authors by Prof.Dr.Najib Tawfiq of Prof.Dr.Nahil Mohammad Ali Sule and Prof.Dr.Radi Khattab Abdullah Dar Al-Kutub for Printing and Publ	iman 1,2000.	ersity of Mosul/Iraq.
Mair	n references (sources)	1. Animal Nutrition translated into by (Dr. Ahmed Al Haj Taha and D for the year 1985. Dar Al-Kutub of Mosul/Iraq.  2. Principles of Animal Production Prof. Dr. Mohammad Ali Makki Al Noor Library.  3 Dairy cattle .( Prof. Dr. Ahmed Al Thanoun Younis, and Dr. Mahmou for the year 1989. Dar Al-Kutub for Mosul/Iraq.	Arabic Languar. Mohamed for Printing at (Auhor by Al-Rubaie), fo Al-Haj Taha, ad Rashid Al-	uage Ramzi Taqa) nd Publishing, Unive r the year 2020. Dr. Akram Rashed)
refer	ommended books rences entific journals, reports)	and 1.Egyptian Journal of Animal Prod impact factor of the journal is (1.84 Cairo-Egypt. https://www.arabimpactfactor.com 6&date=2022 4.Journal of Animal Sciences and I	4)/,Associatio /pages/tafasel	n of Arab Universitie journal.php?id=846
		ISSN:2577-0594,CiteScore:0.79. https://www.primescholars.com/ani production.html 3.Journal of Animal,Poultry & Fish (JAPFP),Publisher:Scientific Sciences,Ismaila,Egypt. https://japfp.journals.ekb.eg/		and-livestock-
Elect	tronic References, Website		olabia.site12. aculty of Agri mal-and-poul n/College of / eaching lectur	3.me / culture and Natural <u>try-production/</u> Agricultural Engineer

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Instructor of practical subject

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