







Course Description Form

1.Course Name:

Principle of Animal Production

2.Course Code:

PRAP114

3.Semester / Year:

Second season, 2023-2024.

4. Description Preparation Date:

01/02/2024.

5. Available Attendance Forms:

learning in presence (theoretical and practical).

6. Number of Credit Hours: Total 75 hours

(2 hours theoretical and 3 hours practical), No. of units 3.5.

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

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8. Course Objectives

Course Objectives

- 1.Introducing the student to the classification of animals in the animal kingdom.
- 2.Introducing the student for phenotypic specifications and productive performance of international and local livestock breeds.
- 3.Introducing the student to productive performance, breeding and fattening sheep, and genetic improvement of 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

Strategy theoretical:

Interactive lecture strategy

Discussion strategy

Problem solving strategy by commissioning reports

Brainstorming strategy.

Practical:

Assignment to team work
Assigning tasks and reports for each experiment

10.Course Structure

10	10.Course Structure				
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation
		Outcomes		method	method
1 st	Theoretical 2	Theoretical: a1	Theoretical:	Theoretical:	Theoretical:
		The student learns about	The economic importance	Using of	Quizzes,
		the economic importance	of livestock and its	whiteboard,	Reports,
		of livestock and its	relationship to economic	audio-visual	discussions
		relationship to economic integration.	integration. Factors that led to a decline in level of	means, Discussions.	Exams. Practical:
		The economic importance	animal production in develop		Quizzes,
		of livestock and its	countries and	Practical:	reports,
		relationship to economic	Iraq.	audio aids	posters,
		integration.	Practical:	visual,	discussions,
	Practical 3	Practical: b1	Field operations that take	powerpoint,	Exams.
		Acquires practical and	place on a daily basis,	Bulletins	
		scientific skills in	some of which are monthly	discussions.	
		conducting field	seasonal in animals farm.		
		operations on farm animals.	Neutering, numbering, spraying and dipping,		
			shearing wool,		
			amputating the tail,		
			clipping the beak. Layering.		
2 nd	Theoretical 2	Theoretical: a2	Theoretical:	Theoretical:	Theoretical:
		The student acquires the	Animal kingdom,	use whiteboard,	Quizzes,
		skill in classifying the	classification: Bovine	Audio aids	Reports,
		animal kingdom.	family: cattle genus,	and visual,	discussions
	Practical 3	Practical: b2	Genus Bos, sheep genus,	discussions.	Exams. Practical:
		The student prepares	Genus Ovis. Goat genus,		Quizzes,
		cows for milking	Genus Capra.	Practical:	reports,
		operations, practices	General formal	audio aids	posters,
		daily milking	specifications for beef	visual, powerpo	discussions,
		operations, and manual	cattle, specifications of	Bulletins	Exams
		and mechanical milking	carcasses for beef cattle.	discussions	
		methods.	Practical:		
			Milking, milking		
			methods, and preparing		
			cows for the milking		
3 rd	TEL 4: 10	TD 4: 1 2	process	(TD) 4* 1	(D) 4° 1
3	Theoretical 2	Theoretical: a3	Theoretical:	Theoretical:	Theoretical: Quizzes,
		The student can learn	Cattle breeds in the world:	use whiteboard,	Reports,
		about the productive and	beef cattle, milk cattle,	Audio aids	discussions
		phenotypic characteristics	dual-purpose cattle	and visual,	Exams.
		of internationally known livestock.	Practical: The qualities its definition	discussions.	Practical:
	Dragtical 2	Practical: a1	The suckling, its definition,	Practical:	Quizzes,
	Practical 3		methods of suckling,	audio aids	reports,
<u> </u>		The student acquires	small calves suckling,	audio aids	

		the skill and management experience in practicing the suckling process using both natural and artificial methods.	methods of sucklinging artificial suckling.	visual, powerpo Bulletins discussions.	posters, discussions, Exams
4 th	Theoretical 2	Theoretical: a4	Theoretical:	Theoretical:	Theoretical:
	Practical 3	The student learns about the phenotypic characteristics and productive performance of Iraqi cows. Practical: a2 The student gains scientific experience in designing and constructing livestock housing and providing them with administrative services and artistic.	Iraqi cows: their appearance and production specifications and their breeding areas in Iraq. Breeding of calves, milk fever causes and treatment. Practical: Animal housing,its types, specifications, and technical and engineering conditions in constructing animal housing	use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpo Bulletins discussions	Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams.
5 th	Theoretical 2 Practical 3	Theoretical: b1 The student learns about the phenotypic and genetic characteristics and productive performance of buffalo animals and their daily milk production? Practical: a3 The student learns about farm records, their importance and types in the animal field.	Theoretical: Buffalo, a historical overview the origin and origin of the buffalo and the general and physiological characteristics of the buffalo. Reproduction is buffalo. Breeds of buffalo in the world. Production of milk and meat in buffalo. Practical: Definition of farm records their types, importance, and benefits.	Theoretical: use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpo Bulletins discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams
6 th	Theoretical 2 Practical 3	Theoretical: b2 The student learns about the classification and location of sheep in the animal kingdom, methods of classifying sheep, sheep breeds, meat sheep, milk sheep, and wool sheep. Practical: a4 The student classifies the quality of feed according to its raw fiber content. Introducing students to coarse and concentrated feed materials and the differences between them.	Theoretical: Classification of the location of sheep in the animal kingdom, methods of classifying sheep, breeds of sheep, meat sheep, sheep milk, sheep wool. Practical: Coarse and concentrated feed materials and the differences between them.	Theoretical: use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpo Bulletins discussions	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams.

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7 th	Theoretical 2 Practical 3	The student learns about the types of Iraqi sheep and their appearance and production characteristics, a clarification. Advantages or raising sheep. Practical: a5 The student monitors and determines the quality of pastures and grazing systems	Theoretical: Iraqi sheep: Awassi sheep, Kurdish sheep, Arab sheep, a 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, powerpo Bulletins discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams
8 th	Theoretical 2	Theoretical: a6	Theoretical:	Theoretical:	Theoretical:
	Practical 3	The student can gain knowledge about the characteristics and advantages of goat breeding and the geographical distribution goats in the world. Practical: b3 The breeder can prepare the necessary diets for the animals to meet their needs for nutrient compounds.	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.	use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpo Bulletins discussions	Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams.
9 th	Theoretical 2	Theoretical: a6	Theoretical:	Theoretical:	Theoretical:
	Practical 3	The student can gain knowledge about the characteristics and advantages of goat breedi and the geographical distribution of goats in th world. Practical: b3 The breeder can prepare necessary diets for animals to meet their ne for nutritional compound	Local goats, maraz, mountagoats Practical: Preparing and preparing rations according to nutritional decisions: the maintenance ration and the production ration	Practical: audio aids visual, powerpo Bulletins discussions.	Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams
10 th	Theoretical 2	Theoretical: b3 The student can learn about the productive, phenotypic, and genetic characteristics of horses and camels and determine the location of horses and camels in the animal kingdom.	Theoretical: Horses and camels, introduction, location of horses and camels in the animal kingdom, breeds of horses and camels, types of camels, structure of the digestive system, reproduction in camels and horses.	Theoretical: use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpo Bulletins	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams.
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	Practical 3	Practical: b4	D. a. Attack	discussions	
ļ		The student can	Practical:		
ļ		gain experience in	Male reproductive system,		
ļ		knowing the parts	female reproductive		
ļ		function of the male	system in livestock and		
		female reproductive	poultry.A scientific visit		
ļ		system and method	to the Artificial Insemination		
		of reproduction	Center/Ministry of		
		and reproduction	Agriculture.		
		in livestock and poultry.			
11 th	Theoretical 2	Theoretical: b4	Theoretical:	Theoretical:	Theoretical:
ļ		The student gains	Nutrition and feed:	use whiteboard,	Quizzes,
		scientific experience in	concentrated feed and	Audio aids	Reports,
ļ		preparing and balancing	coarse feed. Preparing,	and visual,	discussions
		diets in terms of	preparing and balancing	discussions.	Exams.
ļ		nutritional components	diets for animals, the basic		Practical:
		for farm animals.	rules in formulating the	Practical:	Quizzes,
ļ	Practical 3	Practical: c1	diet. Practical:	audio aids	reports,
ļ		The student gains	Artificial insemination:	visual, powerpo	posters, discussions,
ļ		theoretical and practical	its definition, semen	Bulletins	Exams
ļ		scientific experience	collection, types of	discussions.	Exams
		about artificial	semen diluents,	aise assions.	
ļ		insemination,	semen preservation.		
ļ		importance, advantages	semen preservation.		
ļ		and disadvantages.			
12 th	Theoretical 2	Theoretical: c1	Theoretical:	Theoretical:	Theoretical:
14	i neoreticai 2				Quizzes,
ļ		The student gains	Food compounds, their	use whiteboard,	Reports,
ļ		experience in determining		Audio aids	discussions
ļ		the needs of animals for	important importance,	and visual,	Exams.
ļ		nutritional compounds,	needs for growth,	discussions.	Practical:
ļ		qualifying him in	fattening, and production	D 41 1	Quizzes,
		management	of food compounds.	Practical:	reports,
		Raising a productive	Practical:	audio aids	posters,
ļ		herd on the farm.	Poultry: Definition of	visual, powerpo	discussions,
ļ	Practical 3	Practical: b5	poultry, determining	Bulletins	Exams.
ļ		The student gains	location of poultry	discussions.	
ļ		scientific experience	in the animal		
ļ		in classifying poultry	kingdom, classification		
ļ		determining its location in	of poultry (biological		
		the animal kingdom and	classification,		
ļ		its economic importance.	classification by		
ļ			origin, economic		
4h			classification).		
13 th	Theoretical 2	Theoretical: a8	Theoretical:	Theoretical:	Theoretical:
		Introducing the student	Poultry, the origin of	use whiteboard,	Quizzes,
		to the internal component	± •	Audio aids	Reports, discussions
		of the egg and the	overview of human	and visual,	Exams.
		factors that help in the	domestication of	discussions.	Practical:
		occurrence of	domestic birds, the		Quizzes,
		diastasis in laying hens.	advantages of raising	Practical:	-
1		diastasis in laying fichs.			reports.
		diastasis in laying nens.	poultry over other farm	audio aids	reports, posters,

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	Practical 3	Practical: a7 The student can identify internal components of the egg and select suitable eggs for hatching.	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, powerpo Bulletins discussions	discussions, Exams
14 th	Practical 3	Theoretical: a9 The student learns about the classification of poultry according to geographical location. Classification of poultry according to production performance. Practical: c2 The student gains practical experience in conducting egg hatching operations. Using the hatching Machine.Cleaning, sterilization and health conditions in preparing and equipping the hatching machines.	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. Suitable environmental conditions for hatching.	Theoretical: use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpo Bulletins discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams.
15***	Theoretical 2	Theoretical: c2 The student gains experience and power of observation in detecting infestations with external and internal parasites. Cleaning and disinfecting animal housing periodically during the breeding and production period.	Theoretical: Parasites and diseases: external and internal parasites, bacterial and viral diseases. Organizing a scientific visit for students to the veterinary hospital to examine the students for medical cases. Practical: Bacterial diseases: symptoms, causes, treatment.	Theoretical: use whiteboard, Audio aids and visual, discussions. Practical: audio aids visual, powerpo Bulletins discussions.	Theoretical: Quizzes, Reports, discussions Exams. Practical: Quizzes, reports, posters, discussions, Exams

Practical 3	Practical: c3	Viral diseases:symptoms,	
	The student can identify	causes, treatment	
	and diagnose pathologica		
	infections, whether their		
	causes are bacterial or		
	viral for infected animals		
	Providing treatment for		
	infected animals.		

11. Course Evaluation:

No.	Evaluation methods	Evaluation date (week)	marks	Relative weight (%)
1	The first short test Quiz (1). Theoritical: Practical	Week 4: Theoritical: Short test Quiz (1). Week 4: Practical: Short test Quiz (1).	Theoretical: 2.5 Practical: 2.5	5%
2	Monthly exam (1).	Week 9: Theoretical test (1). Week 9: Practical test (1).	Theoretical: 10 Practical: 5	15%
3	Second short test Quiz.(2).	Week 11: Theoritical:Short test Quiz (2). Week 11: Practical:Short test Quiz (2)	Theoretical: 2.5 Practical: 2.5	5%
4	Monthly exam (2).	Week 13: Theoritical test (2). Week 13: Practical test (2).	Theoretical: 10 Practical: 5	15%
5	Quest rate.	Seasonal rates are announced at the end of the semester.	Theoretical: 25 Practical: 15	40%
6	Final practical test.	Practical exams week.	20	20%
7	Final theoretical test.	The week of theoretical exams.	40	40%
8	Total	The final score of the theoretical and practical of final exam at the end of academic year.	100	100%

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	Principles of Animal Production
(curricular books, if any)	(Authors by Prof.Dr.Najib Tawfiq Ghazal,
	Prof.Dr.Nahil Mohammad Ali Suleiman

	and Prof.Dr.Radi Khattab Abdullah,2000.
	Dar Al–Kutub for Printing and Publishing, University of Mosul/Iraq.
Main references (sources)	1.Animal Nutrition translated into Arabic Language by (Dr. Ahmed Al Haj Taha and Dr. Mohamed Ramzi Taqa) for the year 1985. Dar Al-Kutub for Printing and Publishing, Univer
	of Mosul/Iraq.
	2.Principles of Animal Production (Auhor by Prof. Dr. Mohammad Ali Makki Al-Rubaie), for the year 2020. Al Noor Library. 3 Dairy cattle .(Prof. Dr. Ahmed Al-Haj Taha, Dr. Akram Thanoun Younis, and Dr. Mahmoud Rashid Al-Rashed)
	for the year 1989. Dar Al-Kutub for Printing and Publishing, Universit
	of Mosul/Iraq.
Recommended books and references	1.Egyptian Journal of Animal Production:ISSN=0302-4520, and the impact factor of the journal is (1.84)/,Association of Arab Universities Cairo-Egypt.
(scientific journals, reports)	https://www.arabimpactfactor.com/pages/tafaseljournal.php?id=846 6&date=2022 4.Journal of Animal Sciences and Livestock Production.
	ISSN:2577-0594,CiteScore:0.79. https://www.primescholars.com/animal-sciences-and-livestock-
	production.html 3.Journal of Animal,Poultry & Fish Production (JAPFP),Publisher:Scientific Society of Agricultural Sciences,Ismaila,Egyl https://japfp.journals.ekb.eg/
Electronic References, Websites	1.Animal production in hot regions (a series of lectures on animproduction materials). https://lejan6olabia.site123.me / 2.Animal and poultry production/Faculty of Agriculture and Natural Resources/Aswan University/Egypt. https://agr.aswu.edu.eg/sections/animal-and-poultry-production/ 3. Department of Animal Production/College of Agricultural Engineeri Sciences/University of Baghdad. Teaching lectures https://coagri.uobaghdad.edu.iq/?page_id=15013
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