

Ministry of Higher Education and Scientific research



Department of Animal Resources.

College of Agriculture Engineering Science

University of Salahaddin- Erbil

Subject: PRACTICAL POULTRY MANAGEMENT

Course Book – (Year 3)

Lecturer's name: Dr. Azad Shamsaddin Salih

Academic Year: 2023/2024

Course Book

1. Course name	POULTRY MANAGEMENT
2. Lecturer in charge	Dr. Azad Shamsaddin Salih
3. Department/ College	Animal Resource Department - College of Agricultural Engineering sciences
4. Contact	e-mail: azad.salih2@su.edu.krd Tel: (optional) 07504612428
5. Time (in hours) per week	Practical: 3
6. Office hours	5 day a week
7. Course code	
8. Teacher's academic profile	I have got a BSc in 2000 in Animal Resources department – College of Agricultural Engineering sciences – Salahaddin university- Erbil, Kurdistan Region of Iraq. I employed in 2001 at the Animal Resources department – College of Agricultural Engineering sciences – Salahaddin university. I have MSc degree in Animal Resources at Salahaddin university in 2006, and I gained a Ph.D. degree in September 2023 in Poultry Production in Animal Resources department – College of Agricultural Engineering sciences – Salahaddin university.
9. Keywords	
10. Course overview:	<p>Within great changes and development which occurs in the agriculture also big needs come in to protect and keep the product safe and healthy , so the role of good managements appear clearly to reach the highest point of performance and health of birds.</p> <p>Since poultry product becomes one of the great source of food and cheapest origin of protein for human being and even poultry products (meat, eggs) are highly nutrition, palatable and digestible also can be used in many appetizing ways, so care about all conditions inside poultry houses and operating good management become so important to study in details to the students.</p>
11. Course objective:	The poultry industry just keeps growing and increasing year by year, for this reason it's important to our students to learn more about poultry management in all stages of rearing including parent stock, layer breed, broiler breed and even backyard birds to maintain good management so prevent stresses inside poultry houses and occurrence of the some diseases which related with bad management.
12. Student's obligation	

<p>The role of students in the class should attend to the class weekly and I will put some points on it, every week I will do quiz for them and students participate in the class is very important.</p>	
<p>13. Forms of teaching I use the projector to display my objectives by power point, sometimes we need to write some information on the white board to clarify it. I will give all my objectives on the word paper to my students.</p>	
<p>14. Assessment scheme First Exam after six lectures Mark Distribution: Monthly Exam, 12% Quiz and report, 3% Final Exam, 20% Final Mark, 35%</p>	
<p>15. Student learning outcome: After finish these courses the students will be describes different types of poultry house, and equipments that use in it with their different characteristics, which make them suitable for different purposes. The students will be introduce to the basic principles of preparing the house and choosing a good place and right direction for it. Give a basic outline of principles of, management. Explain the poultry industry.</p>	
<p>16. Course Reading List and References: 1- ▪ Singh, R.A.(2004). Poultry production. 3th edition. Kalyani publishers, New Delhi. 2- Rose, S.P.(2001). Principles of poultry science. CABI publishing,UK. 3- Internet sites: www.poltry.com www.syriavet.com www.thepoultrysite.com www.kananaonline.com</p>	
17. The Topics:	Lecturer's name
18. Practical Topics (If there is any)	
<p>First Week Introduction about poultry farms and different types of poultry houses. Aim of subject: to provide complete information about poultry farms parts and all types of poultry houses. Information which get from this lecture: How we define poultry farm What are differences between poultry farm and poultry house. Types of poultry house. Choose the correct type of poultry house according to the environment and weather condition of specific area.</p>	Dr. Azad Sh. Salih

<p>Second Week</p> <p>Design and distances of poultry houses.</p> <p>Aim of subject: to provide complete information about the Design and distances of poultry houses.</p> <p>How we design the poultry houses (halls)?</p> <p>What are the distances that depended on the number of birds (length, width and high) of poultry halls?</p>	
<p>Third Week</p> <p>Litter.</p> <p>Aim of subject: define the litter and its composition and specification of each one.</p> <p>Information which gets from this lecture:</p> <p>What is the purpose of using the litter</p> <p>The main types of litter and materials which introduce it.</p> <p>The reason of using litter on the floor of the poultry house.</p> <p>How we choose the perfect type of litter according to owner condition.</p> <p>How to act to decrease additional need for litter in rearing period and keep it dry so prevent the production of ammonia and moisture, which lead to the occurrence of some diseases like coccidiosis or dermatitis ...etc.</p>	
<p>Forth Week</p> <p>Nests.</p> <p>Aim of subject: definition of nests and we must use them finally their different types.</p> <p>Information which gets from this lecture:</p> <p>What are nests?</p> <p>Why there use necessary for layer breed.</p> <p>Types of nests.</p>	
<p>Fifth Week</p> <p>Roosts.</p> <p>Aim of subject: what we main about roosts and their benefits.</p> <p>Information which gets from this lecture:</p> <p>How we define the roosts.</p> <p>From what made the roosts.</p> <p>How put the roosts in poultry houses and even in backyard birds.</p> <p>What are the benefits from using roosts?</p>	
<p>Sixth Week</p> <p>Heating System</p>	

<p>Aim of subject: Heating poultry houses during cold season by different system. Information which gets from this lecture: Define heating system. Take acknowledge about different system of heating Advantages and disadvantages of each system. How choose the correct system, which fits owner finance and region condition.</p> <p>Seventh week</p> <p>Feeders and Drinkers</p> <p>Aim of subject: Important of these equipment's and types Information which get from this lecture: What we mean about manual feeder and automatic feeder. Different types of each one and which prefer than another. What we mean about drinker. Different types of drinkers, which system the best.</p> <p>Eighth Week:</p> <p>Visiting and Working in our poultry houses in the college's farm.</p> <p>Ninth Week:</p> <p>Cooling system</p> <p>Aim of subject: how uses the perfect system for cooling poultry houses to engorge bird for better performance. Information which gets from this lecture: General definition of cooling system. Types of cooling system. Advantages and disadvantages of each type of system.</p> <p>Tenth Week:</p> <p>Cooling system by evaporation</p> <p>Aim of subject: Cooling poultry hoses by the evaporative method by tow way. Information which gets from this lecture: Definition of evaporation way. Defferent types of the evaporating system which include: Cooling system by evaporating along the house from one side Cooling system by evaporating from the center of the houses. Cooling system by evaporating from one side of the house.</p> <p>Eleventh Week:</p> <p>Fogging cooling system and positive cooling system.</p> <p>Aim of subject: Definition of fogging cooling system positive cooling system. Information which get from this lecture:</p>	
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<p>General definition of both systems. Advantages and disadvantages of each system.</p> <p>Twelfth Week:</p> <p>Ventilation system. Aim of subject: Choosing the perfect way of ventilation which fit the design of the poultry house. Information which gets from this lecture: Why ventilation important in poultry houses. How to put the fans which fit the environmental condition and design of the house.</p> <p>Thirteenth Week:</p> <p>Measuring ventilation requirement in poultry houses. Aim of subject: How can measure the amount of air need by birds inside the house. Information which gets from this lecture: How calculate amount of air need by bird according their weight. Put right number of fans.</p> <p>Fourteenth Week:</p> <p>Types of ventilation Aim of subject: Knowledge about ways and types of ventilation. Information which gets from this lecture: Natural ventilation way. Artificial ventilation way.</p> <p>Fifteenth Week:</p> <p>Visiting the broiler breed house to see a type of cooling system and how put the fans by correct way and number.</p>	
<p>19. Examinations:</p> <p>Q1- what is the Types of poultry houses</p> <p>Q2- choose the right answer ?</p> <ul style="list-style-type: none">• consist from one big hall, control automatic feeder ,electric ,light and fans. (Poultry farm , Poultry farm) <p>Q3-what is the aims of using the following in poultry houses .</p> <ul style="list-style-type: none">• Litter• Nests• Roosts <p>Q4- how many types of nests we have and what is the purpose from using of each type?</p>	

Q5- what are the benefits from using litter in poultry house floor?

Q6- how many types of manual feeders we have ,which one you prefer and why?

Q7- answer by (T) OR (F)

- Incubators 150 cm in diameter are used to heat 1500 chicks.
- Used lamps infrared to heat a small number of birds

Q8- how many types of cooling system we have?

Q9- what are the advantages of fogging system of cooling?

Q10- Solution this Example: - Hall its length 40 m and width 10m and height 3 which contains broiler, occupant space 15 chickens so it is 6000 chicken in the hall, note that the maximum weight of them is 1.5 kg per bird . How can ventilate this hall? How many fans that required?

If you know following (Number of times of change air in summer = 30 times , The power of the fan is 4000 per m³ / hour , Average kg of body weight of air = 4 m³ / hour)

Solution:-

The first method :by estimating the number of times of change air in the hall

The size of the hall = length * width * height

$$40 * 10 * 3 = 1200 \text{ m}^3$$

Number of times of change air in summer = 30 times (according to table)

The amount of air that necessary to change each hour = the size of the hall * The number of times of air change

$$1200 * 30 = 36,000 \text{ M}^3$$

The number of required fans = The amount of air that necessary to change each hour / fan's power

$$36000 \div 4000 \text{ m}^3 / \text{h} = 9 \text{ fan}$$

$$36000 \div 6000 \text{ m}^3 / \text{h} = 6 \text{ fan}$$

The second method: assessing the needs of each kilogram body weight of fresh air:

Maximum weight is in the hall = 1.5 * 6000 kg = 9000 kg body weight

Average kg of body weight of air = 4 m³ / hour (according to the table)

Total amount of renewal air = 9000 * 4 = 36 000 M³ / hour

Accordingly, the numbers of fans are:

$$36000 \div 4000 \text{ m}^3 / \text{h} = 9 \text{ fan}$$

$$36000 \div 6000 \text{ m}^3 / \text{h} = 6 \text{ fan}$$

behaviour in response to reduced day length?

20. Extra notes:

Here the lecturer shall write any note or comment that is not covered in this template and he/she wishes to enrich the course book with his/her valuable remarks.

21. Peer review

پیداچونہوہی ھاوہل

This course book has to be reviewed and signed by a peer. The peer approves the contents of your course book by writing few sentences in this section.

(A peer is person who has enough knowledge about the subject you are teaching, he/she has to be a professor, assistant professor, a lecturer or an expert in the field of your subject).

ئەم كۆرسىبووكە دەبىتت لەلایەن ھاوئەلئىكى ئەكادىمىيەو سەير بىكرىت و ناوەرۆكى بابەتەكانى كۆرسەكە پەسەند بىكات و جەند ووشەيەك بنووسىتت لەسەر شىاوى ناوەرۆكى كۆرسەكە و واژووى لەسەر بىكات.
ھاوئەل ئەو كەسەيە كە زانىارى ھەبىت لەسەر كۆرسەكە و دەبىتت پلەى زانستى لە ماموستا كەمتر نەبىت.