



University of Salahaddin

College of Sciences of Agricultural Engineering

Department of Animal Resource

Subject: Animal behavior and welfare (Course Book)

Grade: Two

Lecturers' Names: Mrs. Shireen Dhahir Mohammad

Mrs. Rand Rostam Mohammed

Academic Year: 2023-2024

Course Book

1. Course name	Animal behaviour and welfare
2. Lecturer's Name	Sheren Dhahir Mohammad Rand Rostam Mohammed
3. Department/ College	Animal Resource
4. Contact	e-mail:: shireen.mohammad@su.edu.krd Tel: 0750 rand.mohammed@su.edu.krd Tel: 0750
5. Time (in hours) per week	Practical: 3
6. Office hours	Available from Sunday to Thursday.
7. Course code	
8. Teacher's academic profile	Shireen Dhahir { Bsc. in Animal Resource Dept. (2008) Msc. in Poultry Production (2015) Rand Rostam { Bsc. in Animal Resource Dept. (2010) Msc. in Poultry Production (2021)
9. Keywords	Poultry, Animal, Behavior, Welfare, Production, Health
<p>10. Course overview:</p> <p>Knowledge of the Behaviour of the stock and the application of that knowledge in the care of the stock plays an important part in the maximization of production efficiency of a poultry production enterprise. In addition, the management of the domestic fowl has received considerable attention over recent years from the community, particularly animal liberation groups, because of the way that commercial poultry management systems have intensified. As a consequence, the study of poultry Behaviour is important to the unit manager, not only to ensure that the welfare of the birds and production efficiency are maintained but also to minimize the influence of what is often uninformed debate. Behaviour is the way that animals respond to the different stimuli they encounter in their environment. The stimuli may be from other birds, their environment, people or any other thing or occurrence.</p>	
<p>11. Course objective:</p> <ol style="list-style-type: none"> 1. Understand that Animal Behavior is affected by both of genetic and environment elements. 2. Understand the Animal Behavior gestures in both of industry and backyard farming. Manage and control the flock or group of Animals in any condition of management. 	
<p>12. Student's obligation</p> <ul style="list-style-type: none"> ➤ Weekly quizzes will cover the material presented during the previous week lecture. ➤ Students are required to wear lab-coat at each class. ➤ Students must pay attention in class to record their notes. 	

- Students that disrupt the class during lecture will be removed from the lesson.
- Cell phones and other electronic devices are PROHIBITED in the classroom.

13. Teaching and Learning Methods:

- Displaying the information through data show via power point slides, images, videos show.
- In addition to white board and colorful markers.
- Discussions and Class activities
- Seminars by student groups and within class discussions
- Visiting farms.

Facilities Required for Teaching and Learning

- Small group of students.
- Up- to- date references in library.
- Well-equipped poultry houses and rearing pens
- Medium size flocks of farm animals as sheep, cow, goat, chicken, quail...etc

14. Assessment scheme

1- Assessment 1: Class tests weekly (activities and written quiz) to assess understanding of previous lecture.

2- Assessment 2 and 3: Written monthly exams to assess student understanding of the taught topics and practical application in solving problems. Two monthly exams will be done (15 marks/exam); the exams will be done after every 4 lectures (5th lecture is exam)

Weighing of assessments (in each semester):

	<u>Exam</u>	<u>Marks/Exam</u>
Assessment 1	Class tests	5
Assessment 2	Written <u>monthly</u> (1)	15
Assessment 3	Written <u>monthly</u> (2)	15
Total Marks/ semester		35

19. Examination's question bank:

1. Compositional: In this type of exam the questions usually starts with Explain how, What are the reasons for...?, Why...?, How....?
What are Factors that influence social Behavior?

- a) Individual recognition
- b) Communication among individuals
- c) Pecking and the peck order

2. True or false type of exams:

In this type a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence. Examples should be provided

*Birds are not highly responsive to touch. **False, Birds are highly responsive to touch**

3. Multiple choices:

In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase. Examples should be provided.

* Fowls recognize each other by..... a) smell b) **appearance** c) vocal calls

16. Student learning outcome:

After completing this course, students be able to:

- Separate the types of behaviors.
- Know and differentiate the normal or abnormal behavior of animals.
- Increase the efficiency of production by understanding their manner and providing the optimum condition to produce.
- Manage the farm and control the options that affect behavior of Animals.
- Know about different methods to behave with Animals in different situations.

17. List of References:

1. Essential Books:

- A. Clive J.C. Phillips (2016) Nutrition and the Welfare of Farm Animals. Springer International Publishing Switzerland. ISBN 978-3-319-27354-9 ISBN 978-3-319-27356-3 (eBook) DOI 10.1007/978-3-319-27356-3.
- B. Christine J Nicol (2015). The Behavioural Biology of Chickens. School of veterinary science. Bristol University.
- C. Robert Grillo (2014). Chicken Behavior: An Overview of Recent Science. Free from harm journal.
- D. Donald M. Broom and Andrew F. Fraser (2007) Domestic animal behaviour and welfare. 4th edition. CAB International. ISBN 978-1-84593-287-9.
- E. Michael C. Appleby, Joy A. Mench, and Barry O. Hughes (2006) Poultry behaviour and welfare. CABI Publishing. ISBN 0-85199-667-1.
- F. Michael Dockery and Michael Reiss (1996) Animal behaviour. National STEM Center.

2. Network sites

18. Lectures' Topics:	Lecturer's Name
<p>➤ 1st Lecture: Introduce course book, lessons' keywords and the importance of each lecture.</p>	<p>Shireen Dhahir Mohammad (3 hrs) 22/1/2024</p>
<p>➤ 2nd Lecture: Definition of Animal Behavior</p> <ul style="list-style-type: none"> -Factors governing behavior responses -Types of behaviors 	<p>Shireen Dhahir Mohammad (3 hrs) 22/1/2024</p>
<p>➤ 3rd Lecture: Social Behavior</p> <ul style="list-style-type: none"> -Individual recognition -Communication -Pecking and the peck order 	<p>Shireen Dhahir Mohammad (3 hrs) 29/1/2024</p>
<p>➤ 4th Lecture: Maintenance Behavior</p> <ul style="list-style-type: none"> -Feeding chicks and Feed intake -Drinking -Comfort Behaviour 	<p>Shireen Dhahir Mohammad (3 hrs) 5/2/2024</p>
<p>➤ 5th Lecture: Non-adaptive or displacement Behavior</p> <ul style="list-style-type: none"> -Pecking and Cannibalism -Fear in poultry 	<p>Shireen Dhahir Mohammad (3 hrs) 12/2/2024</p>

<p><u>6th Lecture:</u> Welfare Definitions</p> <p>-Importance of welfare on poultry health, performance and product quality.</p>	<p>Shireen Dhahir Mohammad (3 hrs) 19/2/2024</p>
<p><u>7th Lecture:</u> Welfare issues at</p> <ul style="list-style-type: none"> - Breeder flock - Hatchery - Broiler farm - Laying hens house 	<p>Shireen Dhahir Mohammad (3 hrs) 26/2/2024</p>
<p>➤ <u>8th Lecture:</u> Cattle behaviors: Feeding behavior</p> <ul style="list-style-type: none"> -Factors affecting on feeding behavior -Drinking behavior 	<p>Rand Rostam Mohammed (3 hrs) 4/3/2024</p>
<p>➤ <u>9th Lecture:</u> Rumination behavior</p> <ul style="list-style-type: none"> -Rest and sleep behavior -Locomotion behavior and types. 	<p>Rand Rostam Mohammed (3 hrs) 25/3/2024</p>
<p>➤ <u>10th Lecture:</u> Social behaviors in cattle:</p> <ul style="list-style-type: none"> -Likeness between animal -Individual space -Hierarchy behaviors (Dominance and Subordination) 	
<p>➤ <u>11th Lecture:</u> Reproductive and Sexual Behavior</p> <ul style="list-style-type: none"> -Oestrus behavior -Several methods of estrus detection 	<p>Rand Rostam Mohammed (3 hrs) 1/4/2024</p>
<p>➤ <u>12th Lecture:</u> Newroz</p>	<p>Rand Rostam Mohammed (3 hrs) 8/4/2024</p>
<p>➤ <u>13th Lecture:</u> Sheep behaviour</p> <ul style="list-style-type: none"> -Flocking behavior -Sheep social behavior 	<p>Rand Rostam Mohammed (3 hrs) 15/4/2024</p>

<p>-Sheep Sense</p> <p>➤ 14th Lecture: Goat's behaviors</p> <p>➤ 15th Lecture: Visiting an integrated poultry project in Kurdistan Region (Erbil governorate) to display the lectures practically.</p> <p>➤ 16th Lecture: Discussing the reports prepared by students about the Animal behaviour and welfare in Kurdistan region particularly and throughout the world generally.</p>	<p>Rand Rostam Mohammed (3 hrs) 22/4/2024</p> <p>Shireen Dh. + Rand R. (3 hrs) 29/4/2024</p> <p>Shireen Dh. + Rand R. (3 hrs) 6/5/2024</p>
<p>19. 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.</p>	
<p>20. Peer review پیداچوونہوہی 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).</p>	