Kafrelsheikh University
Faculty of Veterinary Medicine

COURSE SPECIFICATION

(2016 / 2017)

1- Basic Information:

Code no.: ……

Course title: Animal, Poultry and Fish Breeding and Production (A,B)

Academic Year: 2nd year *of B. V. Sc. Program*

Total teaching hours: 135 h

- **Lectures**: **75h**
- **Practical**/small group sessions: **60 h**

2- OVERALL AIMS OF THE COURSE:

At the end of this course, students should gain the basic concepts, principles and the essential practical skills in the field of poultry, cattle, buffalo, sheep, goat and fish production and genetic improvement.

3- INTENDED LEARNING OUTCOMES (I. L. Os.):

3-A: KNOWLEDGE and UNDERSTANDING:

By the end of the course, students should be able to:

A1- Outline the Poultry Houses types, Designs and Environments

A2- Explain the requirements for egg incubation and brooding principles and management of chicks.

A3- Discuss the basic principles of management of growing pullets, broilers and layers and lighting systems.

A4- Review factors affecting efficiency of beef cattle and systems of beef cattle production.

A5- Outline the principles of animal breeding and genetics and how to apply them to increase the efficiency of farm animal production

A6- Determine population genetics, mating systems and hybrid vigor, genetic parameters, correlation and selection for genetic improvement of poultry, fish and farm animal populations.

A7- Explain the measures of reproductive efficiency and management of heat detection in dairy cattle and the principles of judging dairy cattle

A8- Define lactation curve and review factors affecting milk yield and and management of dry cow

A9- State Principles and practices of fish production.

A10- Specify the requirements, breeding and production characteristics of an efficient sheep and goat flocks.

3-B: INTELLECTUAL SKILLS:

By the end of the course, students should be able to:

B1- Choose the proper approach for genetic improvement relative to economic priority in different species,

B2- Discriminate reasons and sources of production inefficiency in poultry, cattle, sheep and goat production

B3- Interpret farm summaries and efficiency indices for herd/flock evaluation and enhancement,

B4- Manipulate the development in animal breeding and production into practical needs,

B5- Modify management and breeding schedules in response to emerging and unexpected problems,

B6- Propose production and breeding systems to animal owners relevant to the socio–economics and resource availability

3- C: PRACTICAL AND PROFESSIONAL SKILLS:

By the end of the course, students should be able to:

C1- Collect farm data for production/reproduction efficiency assessment,

C2- Calculate efficiency indices from current and retrospective performance data,

C3- Apply sound management practices to newborn, growing and mature animals,

C4- Design system of mating appropriate for different production systems,

C5- Select breeds and parents for genetic improvement according to the pre–set breeding goals,

C6- Design individual and herd/flock production, reproduction, and health records,

C7- Judge animals based on production efficiency and physical type,

C8- Determine herd/flock housing, space, and equipment requirements in relation to a specified Production system.

3- D: GENERAL AND TRANSFERABLE SKILLS:

By the end of studying the course, the graduate should be able to:

D1- Coach and work in a multidisciplinary team.

D2- Organize and control tasks and resources.

D3- Utilize computer and internet skills.

D4- Search the web and collect information to build up a review.

D5- Communicate with professional and discussion groups and colleagues.

4 - COURSE CONTENTS:

4.A: First semester topics:-

Topic	No. of Hours	Lecture	Practical
Introduction	2	2	--
Poultry production	21	21	--
Beef cattle production	6	6	--
Animal breeding	16	16	--
Poultry classifications:	2	--	2
Biology of domestic fowl	2	--	2
The Timing of Major Embryonic Developments	2	--	2
Principles of Japanese quail	2	--	2
Ostrich production	2	--	2
Turkey production	2	--	2
Duck and geese production	2	--	2
Rabbit production and management	2	--	2
Major breeds of beef cattle	2	--	2
Animal breeding	12	--	12
Total	75	45	30

4.B: Second semester topics:

Topic	No. of Hours	Lecture	Practical
Dairy cattle production:	14	14	--
Sheep and Goat production:	6	6	--
FISH PRODUCTION:	10	10	--
Dairy cattle production:	14	--	14
Types and breeds of sheep & goats.	4	-	4
Biological characteristics of fish species.	12	-	12
Total	60	30	30

5- TEACHING & LEARNING METHODS:

5.1- Lectures with the help of slide show presentation

5. 2- Discussions and class activities

5. 3- Information collection from the internet and text books

5. 4- Making individual reports about poultry or dairy operations

5. 5- Field trips to a well-known and respected poultry and dairy operations.

6. METHODS FOR STUDENTS With limited capabilities:-

- **No disabled students until now, but if present the methods are-:**

  *** Activation of office hours .**

  *** Discussion with them during practical session.**

7. STUDENT ASSESSMENT:

7.a Used methods	Written examination	Oral examination	Practical examination	Activities
7.b time	At the end of each term	At the end of each term	After the 14th week of each term	After the 5th and 10th week of each term
7.c grads	50	20	20	10

8. LEARNING AND REFERENCE MATERIALS:

8-1: BASIC MATERIALS:

- **Department notes:** available for students to purchase from the department.

8-2: Recmonded books:

82.a- Commercial Chicken Production Manual. North, M.O. 1978.. Second Edition. AVI Publishing Company, West Port. Connecticut

8.2.b- Poultry Breeding and Genetics (1990). Crawford R.D. El-Sevier Science Pub., B.V.

8.2.c- Animal Breeding. Use of New Technologies.; B. Kinghorn, J. van der Werf, and M. Ryan. 2001. Twynam Press.

8.2.d- Phillips, C.J.C. (2001) Principle of Cattle Production. CAB International Wallingford, Oxon Ox10 8De, UK.

8.2.e- Simm, G. (1998) Genetic Improvement of cattle and sheep. Farming Press, Miller Freeman, UK, Ltd.

8.3: web sites and jouranls …..and so on

- Periodicals, Web Sites
- Egyptian poultry science
- Poultry science
- British poultry science
- World poultry science
- Aquaculture
- Animal breeding Abstracts
- Dairy science
- Animal science
- Journal of world aquaculture society.
- Aquaculture magazine
- Web sites related to the program contents

Intended learning out comes of each topic

TOPIC	K.U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
1st Semister				
Poultry production	A1+A2 + A3	B1 – B6	C1- C4	D1- D5
Beef cattle production	A4	B1 – B6	C1- C4	D1- D5
Animal breeding:	A5 + A6	B1 – B6	C1- C4	D1- D5
2nd Semister				
Dairy cattle production	A7+A8	B1 – B6	C1- C4	D1- D5

Sheep and Goat production	**A10**	**B1 – B6**	**C1- C4**	**D1- D5**
Fish Production	**A9**	**B1 – B6**	**C1- C4**	**D1- D5**

Intended learning out comes Evaluation

Method	Matrix alignment of the measured ILOs/ Assessments methods			
	K&U (a)	I.S (b)	P&P.S (c)	G.S (d)
Student activities and periodical exams	a1, a2, a7, a8	b1- b6	--	d1- d5
Written exam	a1- a10	b1-b6	--	--
Oral exam	a1- a10	b1-b6	--	--
Practical exam	--	--	c1 – c8	--

Course Coordinator	Head of Department
Prof.dr.M Atef	Prof.dr.Shawky Mahmoud