University of Sadat City
Faculty of Veterinary Medicine
Dept. of Physiology
(2014-2015)

Poultry physiology (Advanced) (622P)

PhD COURSE SPECIFICATION

A. BASIC INFORMATION

University:	**University of Sadat City**
Faculty:	**Veterinary Medicine**
Program on which the course is given:	**PhD in Veterinary Medical Sciences (Physiology)**
Department offering the Course:	**Physiology**
Course code:	**622**
Course title:	**Poultry Physiology (Advanced)**
Lecture (hr/week):	**2**
Practical (hr/week):	**2**
Course coordinator:	**Prof. Dr. Said I. Fathalla**

B. PROFESSIONAL INFORMATION

1) Overall aims of course

Identify basic and advanced knowledge and skills of physiological functions of avian body systems.

2) Intended learning outcomes of course (ILOs)

a) KNOWLEDGE AND UNDERSTANDING

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

a.1. Define the hormonal mechanism, action, secretion, disorders in birds.

a.2. Realize the digestion in birds in comparison with that of other mammals.

a.3. Recognize respiration in birds and the factors affecting it.

a.4. Describe thermoregulation and stress in birds.

a.5. Define cardiovascular system in birds.

a.6. Identify reproductive pattern in birds and hormonal control of reproduction.

a.7. Recognize the egg production.

b) INTELLECTUAL SKILLS

By the end of this course, the student should be able to:-

b.1. Interpret hormonal assay in birds.
b.2. Discriminate the hormonal control of egg production
b.3. Interpret hematological findings.
b.4. Analyze semen samples.

b.5. Interpret digestive enzymes in birds.

c) PROFESSIONAL AND PRACTICAL SKILLS

By the end of this course, the student should be able to:-

c.1 Analyze hormone level.
c.2. Analyze sperm samples.
c.3. Perform blood picture in birds.

c.4. Asses digestive enzymes activity.

d) GENERAL AND TRANSFERABLE SKILL

By the end of this course, the student should be able to:-

d.1. Organize tasks and resources,
d.2. Search for new information and technologies,

d.3. Use available presentation aids (e.g. Projectors or Data Show) to present clearly and effectively a scientific topic in a tutorial, a staff meeting or the yearly scientific day.

3) Topics and contents

Topic	No. of hours		
	Lect.	Pract.	Total
Digestion in Bird	10	-	10
Endocrine system in bird	12	-	12
Cardiovascular system in bird	13	-	13
Thermoregulation in bird	10	-	10
Avian respiration	8	-	8
Egg production	5	-	5
Male Reproduction	15	-	15
female Reproduction	15	-	15
Hormonal assay in poultry	-	30	30
Poultry blood picture	-	24	24
Semen analysis	-	20	20
Examination of digestive enzymes activity	-	14	14
Total	**88**	**88**	**176**

4) Teaching and learning methods

a. Lectures.
b. Practical sessions.
c. Self-learning activities.

d. Student assessment

a. METHODS:

- Written exam to assess knowledge, information and intellectual skills.
- Practical exam to assess professional and practical skills.
- Oral exam to assess knowledge and information and intellectual skills.
- Student activities for assessing knowledge and general and transferable skills.

b. MATRIX ALIGNMENT OF THE MEASURED ILOS/ ASSESSMENTS METHODS:

	K.U (a)	I.S (b)	P.P.S (c)	G.S (d)
Written exam	1-2-3-4-5-6-7	1-2-3-4-5		
Practical exam			1-2-3-4	
Oral exam	1-2-6-7	1-2-3-5		
Student activities				1,2,3

c. WEIGHT OF ASSESSMENTS:

Assessment	Allocated Mark	Evidence
Final written exam	**50%**	Marked and signed written paper
Practical exam	**20%**	Marked and signed practical exam paper
Oral exam	**20%**	Signed list of oral exam marks
Student activities	**10%**	Assay, presentations, discussions, review

e. List of references

6.1. Essential textbooks

1- **Causey, G.W. 1999**, Strukie's Avian physiology, 5th edition, academic press, London and sandeigo.

2- **William O. Reece 2004,** Dukes' Physiology of Domestic Animals, 12th edition, Cornell University Press.

3-Berne, R.M. & Levy, M.N. (eds) 1996, *Principles of Physiology*, 2nd edition, Mosby, Sydney.

4- Keith B. 2013, Fish physiology

6.3. Web sites

- **J. of avian physiology.**
- **J. of animal science**
- **J. of applied physiology**
- **J. of veterinary physiology**
- *** J. of comparative biochemistry & physiology**

f. Facilities required for teaching and learning

7.1 Data-show.
7.2 Laboratory animals for experimental physiology.
7.3 Network for technology transfer.
7.4 Laboratory kits for experimental physiology.
7.5 Computer.

	Course coordinators	Head of department
Name	Prof. Dr. Said I. Fathalla	Prof. Dr. Shaaban Gadallah
Signature		

Matrix alignment of course topics and ILOs

Topic	No. of hours /week		Total hours	Total hours for Lect.	Hours for Pract.	ILOs			
	Lect.	Pract.				K.U (a)	I.S (b)	P.P.S (c)	G.T.S (d)
Digestion in Bird	2		10	10		2	5		1-3
Endocrine system in bird	2		12	12		1	1		1-3
Cardiovascular system in bird	2		13	13		5			1-3
Thermoregulation in bird	2		10	10		4			1-3
Avian respiration	2		8	8		3			1-3
Egg production	2		5	5		7	2		1-3
Male Reproduction	2		15	15		6	1		1-3
Female Reproduction	2		15	15		6	1		1-3
Hormonal assay in poultry		2	30	-	30		1	1,2	1
Poultry blood picture		2	24	-	24		1-2	3	1
Semen analysis		2	20	-	20		1	4	1
Examination of digestive enzymes activity		2	14	-	14		1	5	1
Total			176	88	88				