Farm Animal Production

DIPLOMA COURSE SPECIFICATION

A. BASIC INFORMATION

University:	**University of Sadat City**
Faculty:	**Veterinary Medicine**
Program on which the course is given:	**Diploma of Animal Husbandry**
Department offering the Course:	**Husbandry and Animal Wealth Development**
Course code:	**911**
Course title:	**Farm Animal Production**
Lecture (hr/week):	**1**
Practical (hr/week):	**2**
Course coordinator:	**Dr. Ahmed Dawod**

B.   PROFESSIONAL INFORMATION

١)   Overall aims of course

Upon successful completion of the course, the student will be able to comprehend the principles of animal   production regarding the fields of breeding, nutrition and management in the goal of raising animals of high production potential, gain preliminary competences in animal production and the factors affecting it in order to increase reproductive efficiency, understand the physiology of digestion in ruminants identify types and breeds of farm animals and their type of production and familiarized with the concepts involved in the application of genetic principles to animal improvement.

٢)   Intended learning outcomes of course (ILOs)

a)   KNOWLEDGE AND UNDERSTANDING

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

a.1. enumerate the principles of animal production regarding the fields of heredity, breeding, nutrition and management in the goal of raising animals of high production potential.

a.2. identify preliminary competences in animal production.

a.3. Understand the principles of animal breeding and genetics and how to apply them to increase the efficiency of farm animal production

a.4. describe the reproductive physiology in mammals and birds and the factors affecting it in order to increase reproductive efficiency.

a.5. Recognize the physiology of digestion in ruminants and birds.

a.6. list the nutritive requirements of farm animals.

a.7. identify types and breeds of farm animals and their type of production.

b)   INTELLECTUAL SKILLS

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

b.1. analyze through using group discussions, and problem solving.

b.2. interpret the research results necessary to complete assignments, and creativity through determining how to present material in an effective manner.

b.3. plane for how to deal with and mange animal production enterprises

b.4. compare the new trends for increasing and improving productive efficiency of farm animals.

c)   PROFESSIONAL AND PRACTICAL SKILLS

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

c.1. develop husbandry programs.

c.2. record and analyze production records.

c.3. apply genetic principles in improvement of farm animal production.

c.4. judge farm animal production.

d)   GENERAL AND TRANSFERABLE SKILL

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

d.1. Join and work effectively as part of a team.

d.2. Efficiently make use of library facilities and IT tools.

d.3. Design the spreadsheets, presentation packages and graph plotting.

٣)   Topics and contents

Topic	No. of hours		
	Lect.	Pract.	Total
Introduction to farm animals livestock sector in Egypt	2	4	6
Zoological classification of cattle	2	4	6
Major breeds of dairy cattle & Egyptian cattle and buffaloes	2	4	6
Mammary gland structure and milk secretion	2	4	6

Milking and milking machines	**2**	**4**	**6**
Raising dairy calves and heifers	**2**	**4**	**6**
Herd records	**2**	**4**	**6**
Dairy industry and essentials of establishing a profitable dairy farm	**4**	**8**	**12**
Selecting and judging dairy cattle	**4**	**8**	**12**
Reproduction and reproductive efficiency in dairy cattle	**4**	**8**	**12**
Lactation & Factors affecting milk yield and composition	**2**	**4**	**6**
Managing the dry dairy cow	**2**	**4**	**6**
Herd health program	**2**	**4**	**6**
Establishing the flock in sheep and goat & Reproductive performance in sheep and goat.	**2**	**4**	**6**
Wool and Mohair production & Milk production in sheep and goat.	**2**	**4**	**6**
System of sheep and goat production.	**2**	**4**	**6**
Factors affecting the economics and efficiency of beef cattle production	**2**	**4**	**6**
Beef production systems	**2**	**4**	**6**
Marketing Beef cattle	**2**	**4**	**6**
Total	**44**	**88**	**132**

٤) Teaching and learning methods

4.1. Lectures.

4.2. Practical sessions.

4.3. Self- learning activities.

٥) Student assessment

a. METHODS:

1- Written examination	For assessment of knowledge, back calling and Intellectual skills
2- Practical examination	For assessment of practical and professional skill.
3- Oral examination	For assessment of knowledge and Intellectual skills
4- Student activities	For assessment of 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	2,3,4		-
Practical exam		1-4	1,2,3,4	-
Oral exam	1,2,3,6,7	2,3,4		-
Student activities (assay, seminar, etc.)	1,2,3			**1-3**

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 assignments	10%	Representative samples of presented materials

٦) List of references

6.1. Essential textbooks

- **Walter H. Hsu, William O. Reece and William J. Reece (2008)**: Handbook of Veterinary Pharmacology, 1st edition.
- **Merck, S. and Dohme, C. (2005):** The Merck Veterinary Manual, 9th Edition.
- **Joel G. Hardman, Lee E. Limbird and Alfred G. Gilman (2001)**: Goodman & Gilman's: The Pharmacological Basis of Therapeutics, 10th Edition.
- **H. Richard Adams (1995)**: Veterinary Pharmacology and Therapeutics, 7th Edition.
- **G. C. Brander, D. M. Pugh, R. J. Bywater and W. L. Jenkins (1991):** Veterinary applied pharmacology and therapeutics , 5th Edition.
- **Carl Binz (2008):** Lectures on pharmacology for practitioners and students, Volume: v.2.**Clive , P., Brian, H., Michael, C. and Michael, W. (2006):** Integrated Pharmacology: With Student Consult Access, 3rd Edition.
- **Heinz Lüllmann, M. D.,Klaus Mohr, M. D.,Albrecht Ziegler, Ph.D.,Detlef and Bieger, M. D. (2005):** Color Atlas of Pharmacology, 3rd edition**.**
- **P. Venkatesan and M. J. Wood (1998):** General principles of antimicrobial therapy, pp. 63-78.
- **M. Maureen Dale, John C. Foreman and Tai-Ping D. Fan (1994):** Immunopharmacology, 3rd Edition**.**

6.2. Periodicals

- *Journal of Animal Science*
- *Poultry Science Journal*
- *Livestock Production Science*
- *Animal Science*

British Poultry Science

6.3. Web sites

- http://www.vetmed.wsu.edu/depts.-vcpl/
- http://www.cc.nih.gov/
- http://www.acvcp.org/
- http://www.summitpk.com/pksolutions.htm
- http://www.analyticon.co.uk/pkpdpage.htm

٧) Facilities required for teaching and learning

- ٧،١ Data-show.
- ٧،٢ Network for technology transfer.
- ٧،٣ Computer.

	Course coordinators	Head of department
Name	Dr. Ahmed Dawod	Prof. Dr. Mohamed Atef Yousef Helal

Signature		

Matrix alignment of course topics and ILOs

Topic	No. of hours /week Lect.	No. of hours /week Pract.	Total hours	Hours for lect.	Hours for pract.	ILOs K&U (a)	ILOs I.S (b)	ILOs P.P.S (c)	ILOs G.T.S (d)
Introduction to farm animals livestock sector in Egypt	1	2	6	4	2	1,2,3,4,5,6,7	-	-	1,2,3
Zoological classification of cattle	1	2	6	4	2	2,3,4,5	1,2,3,4	1,2,3	1,2,3
Major breeds of dairy cattle & Egyptian cattle and buffaloes	1	2	6	4	2	2,3,4	1,2,,4	3,4,	1,2,3
Mammary gland structure and milk secretion	1	2	6	4	2	2,3,4,5,6,7	1,2,,4	1,2,3,4	1,2,3
Milking and milking machines	1	2	6	4	2	2	1,2,,4	1,2,3	1,2,3
Raising dairy calves and heifers	1	2	6	4	2	3,4	1,2,,4	1,2,3	1,2,3
Herd records	1	2	6	4	2	3,5,6	1,2,4	1,2,3,4	1,2,3
Dairy industry and essentials of establishing a profitable dairy farm	1	2	12	8	4	4,5,6,7	1,2,4	3,4	1,2,3
Selecting and judging dairy cattle	1	2	12	8	4	5,7	3	3,4	1,2,3
Reproduction and reproductive efficiency in dairy cattle	1	2	12	8	4	6,7	1,2,3,4	1,4	1,2,3
Lactation & Factors affecting milk yield and composition	1	2	6	4	2	1,2,3,4,5,6,7	1,2	1,2,3,4	1,3
Managing the dry dairy cow	1	2	6	4	2	2,3,4,5	3,4	2	1,3
Herd health program	1	2	6	4	2	4,5,6,7	2,4	3	1,3
Establishing the flock in sheep and goat	1	2	6	4	2	1,2,3,4	1,2	1	1,3

& Reproductive performance in sheep and goat.									
Wool and Mohair production & Milk production in sheep and goat.	1	2	6	4	2	1,2,3,4,5,6	1,2,3	2,3,4	1,3
System of sheep and goat production.	1	2	6	4	2	5,6,7	1,2,4	2,3,4	1,3
Factors affecting the economics and efficiency of beef cattle production	1	2	6	4	2	1,7	1,3,4	5,6	1,3
Beef production systems	1	2	6	4	2	1,4,7	1,2,4	5,6	1,3
Marketing Beef cattle	1	2	6	4	2	1,5,7	1,2,4	1,7	1,3
Total			132	88	44				