

**Jordan University of Science and Technology**  
**Faculty of Veterinary Medicine**  
**Department of Basic Veterinary Medical Sciences**  
**First Semester 2021/2022**

<b>Course Information</b>	
<b>Course Title</b>	Animal Physiology 2
<b>Course Number</b>	VM223
<b>Prerequisites</b>	Animal Physiology 1
<b>Course Website</b>	E-learning
<b>Instructor</b>	Dr. Falah Shidaifat
<b>Office Location</b>	G1 L3
<b>Office Phone</b>	26768
<b>Office Hours</b>	TBA
<b>E-mail</b>	falah@just.edu.jo
<b>Teaching Assistant</b>	Non
<b>Objective and Course Description</b>	
<p>This is a continuation of general animal physiology I course in which the function of the Renal system, respiratory system, endocrinology and animal reproduction will be described. As in many learning circumstances a good memory is helpful but it will not substitute for a full, knowledgeable, logical thinking process that is required to master the discipline of physiology</p>	

<b>Text Book</b>	
<b>Title</b>	Textbook of Veterinary Physiology
<b>Author(s)</b>	James G. Cunningham and Bradley G. Klein
<b>Publisher</b>	AAUNDERS- ELSEVIER
<b>Year</b>	2007
<b>Edition</b>	Fourth
<b>Book Website</b>	<a href="http://evolve.elsevier.com/cunningham/physiology">http://evolve.elsevier.com/cunningham/physiology</a>
<b>References</b>	Other additional Readings Clinical Anatomy and Physiology Text book of Medical Physiology by Guyton and Hall Physiology by Berne and Levy

Assessment Policy		
Assessment Type	Expected Due Date	Weight
Midterm	As scheduled by the registrar office	50%
Final Exam (practical & theory)	As scheduled by the registrar office	50%

Teaching & Learning Methods
Theory: Online lectures and discussions using Microsoft teams

Useful Resources
<ol style="list-style-type: none"> <li>1. Text book of Medical Physiology by Guyton and Hall</li> <li>2. Physiology by Berne and Levy</li> <li>3. Clinical Anatomy and Physiology</li> </ol>

Course Contents		
Weeks	Topics	Chapters
1	Glomerular filtration and its regulation	41
2	Tubular processing of glomerular filtrate	42
3	Regulation of water and electrolyte balance	43
4	Acid-base balance	44
5	Lung ventilation	45
6	Pulmonary blood flow and concepts of ventilation perfusion ratio	46
7	Gas exchange and gas transport	47,48
8	Control of ventilation	49
9	Overview of general principles of endocrine system and hormones	33
10	Hypothalamus and pituitary gland	33
11	Hormones of the adrenal gland	33
12	Thyroid and parathyroid gland	34
13	Hormones of the pancreas	34
14	Hormonal regulation of reproductive system Embryology and Male reproductive patterns	35, 40
15	Female Reproductive cycles and sexual behavior	36,37
16	Pregnancy, parturition and lactation	38,39
	<b>Final exam</b>	

Additional Notes	
Exams	Most of the questions will be multiple choice and short discussion questions, however, some long question may be included. A few points from each exam may be in the form of quizzes. These will be for your benefits and are intended to facilitate your understanding.
Cheating	University rules and regulation will be applied
Attendance	University rules and regulation will be applied
Graded Exams	Midterm and final
Participation	Discussion during the lectures and answers questions are considered
Laboratory	No laboratory at this course
Projects	No project at this level