



**Jordan University of Science and Technology**  
**Faculty of Veterinary Medicine**  
**Department of Veterinary Clinical Sciences**  
**First semester, 2021/2022**

**Syllabus**

**VM101 - Animal Husbandry and Welfare; Co-request course(s): BIO 103**

<b>Course Coordinator</b>	Dr.Hasan Y Al-Omari Office: C1 L2	Mobile: 0797022857 Email: alomari75@yahoo.com
<b>Office Hours</b>	Sunday 10:00 -11:00 am Tuesday 10:00 -11:00 am <b>Online any time</b>	
<b>Class Meetings</b>	<p><b>Lectures:</b></p> <p>Sunday and Tuesday 08:30 -09:30 am (Blended: <b>Hall 1 NB49</b> and <b>Hall 2 online platform</b>)</p> <p><b>Labs: sections 1-7</b></p> <p><b>Section 1:</b> 11:30-2:30 (Tuesday)</p> <p><b>Section 2:</b> 2:30-5:30 (Tuesday)</p> <p><b>Section 3:</b> 11:30-2:30 (Wednesday)</p> <p><b>Section 4:</b> 2:30-5:30 (Wednesday)</p> <p><b>Section 5:</b> 11:30-2:30 (Thursday)</p> <p><b>Section 6:</b> 2:30-5:30 (Thursday)</p> <p><b>Section 7:</b> 11:30-2:30 (Sunday)</p> <p>Most labs will meet at the <b>agricultural station farm</b>.</p> <p>Because the labs frequently will involve the use of live animals, it is advised that suitable clothing be worn. This includes white lab coats, coveralls, and boots.</p>	
<b>Required Texts</b>	<p><b>Scientific Farm Animal Production by T. G. Field and R. E. Taylor. 2007. 9th Ed.</b></p> <p><b>Keeping Livestock Healthy: A Veterinary Guide to Horses, Cattle, Pigs, Goats &amp; Sheep, by N. Bruce Haynes. 2001. 4th Ed.</b></p>	

<b>Course Description</b>	<p>Different methods of handling and controlling domestic animals such as cows, sheep, goats, horses and camels in addition to small animals (dogs and cats) are discussed. The course also covers the identification of different anatomical body regions. Besides, the student will be introduced to certain distribution and behavioral aspects of domestic animals. In addition, this course will cover a wide range of areas in animal welfare, bioethics, business and professional ethics, and ethics and technology within emphases on animal rearing that meets religious and human standards.</p>
<b>Course Objectives</b>	<p><b>By the end of the course, students should:</b></p> <ol style="list-style-type: none"> <li>1. Be familiar with livestock terminology, the expected performance of animals raised using good management and husbandry practices, and characteristics of the primary breeds of farm livestock.</li> <li>2. Understand principles underlying the selection of replacement stock for continued genetic improvement in the herd or flock.</li> <li>3. Understand animal reproduction, some management principles for improving reproductive efficiency</li> <li>4. Know the major components of livestock feeds and be able to compare similarities and differences in feed digestion by cattle, sheep, and horses.</li> <li>5. Learn; regarding small animals; how injured or sick animals communicate, and what animals are trying to tell us. Then, learn about behavior and physical restraint; and house-training.</li> </ol>
<b>Grading System</b>	<p><b>Grades scheme:</b>  Midterm exam: 30 points  Field work exam: 10 points  Final Practical exam: 10 points  Final theory exam: 40 points  Total 100 points</p> <p><b>Exams dates:</b>  According to University Schedule</p>
<b>Course Outline</b>	
<b>Week</b>	<b>Topic</b>

1-2	<b>Introduction to:</b> Animal husbandry and welfare Animal contributions to human
3-4	<b>Animal behavior of different animal species</b> <b>Animal welfare (Pain, Stress,)</b>
5-6	<b>Dairy and beef cattle management;</b> Methods used for cattle identification Dairy cattle breeds Reproduction and production of dairy cattle Management of heifers and newborn calves Manipulation and restrain of cattle Age assessment and cattle dentations Cattle housing systems Nutrition of cattle Records used in cattle industry The lactation cycle of dairy cattle Milking systems
6-7	<b>Equine management;</b> Types of horses, description and identification Care of the mare and foals, weaning system Care of the stallion, grooming, clipping Dentition and age assessment Nutrition of horses Stables
8-9	<b>Pet animal management</b> Breeds of dogs and cats Manipulation and restrain of pets Age assessment and dentition Reproduction management of pets Nutrition of pet animals Vaccination programs for pet animals
10-12	<b>Sheep and goat management;</b> General sheep terminology, sheep breeds, flock management Dentition and aging Nutrition, grazing systems Shearing, castration, docking, hoofs trimming, and housing Breeding season Resting period and preparation for mating Lambing
13	<b>Camelids management;</b> Terminology-classification Care of camel Dentition and aging Nutrition Reproduction and parturition
14	<b>Swine Managements</b> Terminology Reproduction

First Semester, 2021-2022  
Animal Husbandry and Welfare VM101  
Syllabus of the practical sessions

<b>Week #</b>	<b>Topic</b>	<b>Place</b>	<b>Instructor</b>
2	Orientation and visit to the JUST farm	Univ. farm	Dr.Hasan Y Al-Omari
3-4	<b>Cattle;</b> Animal body points Identification methods Casting and restraint Temp, resp, pulse, and blood sampling Dentition and age estimation Construction of cows housing Milking systems Feeding of dairy and beef cattle	Univ. farm	Dr.Hasan Y Al-Omari
5-7	<b>Equine;</b> Animal body points and horse colors Identification methods Casting and restraint Temp, resp, pulse, and blood sampling Dentition and age estimation Care of hoof and claws Construction of horse stables Feeding of horses	Univ. farm	Dr.Hasan Y Al-Omari
8-10	<b>Pet animals;</b> Handling and control Estimation of age Hair cutting, nail trimming and body points Temp, resp, pulse, and blood sampling Feeding of dogs and cats	Health center	Dr.Hasan Y Al-Omari
11-13	<b>Sheep and goat;</b> Identification methods Animal control, casting and restraint Dentitions and estimation of age Temp, resp., pulse and blood sampling Shearing, dipping, ducking, and castration Feeding of small ruminants	Univ. farm	Dr.Hasan Y Al-Omari