

**Jordan University of Science and Technology**  
**Faculty of Agriculture**  
**Department of Animal Production**  
**Semester**

<b>Course Information</b>	
<b>Course Title</b>	Meat Science
<b>Course Number</b>	
<b>Prerequisites</b>	
<b>Course Website</b>	
<b>Instructor</b>	Dr. Abdullah Yousef
<b>Office Location</b>	
<b>Office Phone</b>	7201000 Ext. 22255
<b>Office Hours</b>	11:15 – 12:15 (Sun, Mon, Tue, and Wed) or by appointment
<b>E-mail</b>	<a href="mailto:abdullah@just.edu.jo">abdullah@just.edu.jo</a>
<b>Teaching Assistant</b>	
<b>Course Description</b>	

<b>Text Book</b>	
<b>Title</b>	Sheep production Handbook
<b>Author(s)</b>	Sheep industry development Program inc. Denver, Colorado, USA
<b>Publisher</b>	Sheep industry development Program inc. Denver, Colorado, USA
<b>Year</b>	1985
<b>Edition</b>	
<b>Book Website</b>	
<b>References</b>	<ol style="list-style-type: none"> <li>1. Sheep and Wool, by M.P.Botkin, R. A.Field and C. L. Johnson. Prentice Hall, 1988.</li> <li>2. Battaglia, R. A. and V. B. Mayrose. 1981. Handbook of livestock Management Techniques. Macmillan Publishing Company.</li> </ol>

<b>Assessment Policy</b>		
<b>Assessment Type</b>	<b>Expected Due Date</b>	<b>Weight</b>
<b>First Exam</b>		25
<b>Second Exam</b>		25
<b>Final Exam</b>		40
<b>Field activities, reports</b>		10

Course Objectives	Weights
<p>To apply the principles learned from the core courses in the Animal Sciences curriculum to successful management of sheep. This includes topics such as:</p> <ul style="list-style-type: none"> <li>Breeding that deals primarily with the fundamentals of Sheep Genetic Improvement</li> <li>Lamb growth</li> <li>Production requirements</li> <li>Housing</li> <li>Reproduction</li> <li>Nutrition</li> <li>Management</li> <li>Wool production</li> <li>Health</li> </ul>	

Teaching & Learning Methods

<b>Learning Outcomes:</b> Upon successful completion of this course, students will be able to
<ul style="list-style-type: none"> <li>- Be familiar with the production of sheep in all of its aspects and to get a basic training in handling all types of sheep.</li> </ul>
<ul style="list-style-type: none"> <li>- Compile and justify a set of objectives appropriate to the operation of specific sheep production systems and developed a broad understanding of the nature of sheep production systems, and ways in which the various components of these systems interact with each other.</li> </ul>
<ul style="list-style-type: none"> <li>- Plan, monitor, evaluate and integrate breeding, nutrition, reproduction and health programs for sheep production systems, and to describe ways in which recent and potential future technological advances may be used to improve the efficiency of various aspects of sheep production.</li> </ul>

Useful Resources

<b>Course Content</b>		
<b>Week</b>	<b>Topics</b>	<b>Chapter in Text (handouts)</b>
0-1	<b>Ecology and Distribution:</b> – Introduction – Sheep Production in Jordan	
2	<b>Breeding, genetics and selection:</b> – Breeds and basic concepts in genetics – Genetics value and selection – Mating systems	
3	<b>Lamb growth and carcass composition:</b> – Influences of age, weight, sex, diet and breed	
4-5	<b>Production requirements and facilities:</b> – Capital, feeds, land, labor and markets – Buildings and equipment – Handling facilities	
6-7	<b>Reproduction in sheep:</b> – Normal reproduction in the ewe – Factors affecting reproduction in the ewe and ram – Pregnancy testing – Out-of-season lambing – Hormonal control of reproduction – Semen collection and AI	
8-9	<b>Nutrition:</b> – Nutrient requirements and minerals – Nutrition of ewe – Lamb feeding – Ration formulation and feed additives	
10-12	<b>Management:</b> – Starting sheep operation – Management calendar – Lambing and weaning management – Feeding management	
13-15	<b>Health:</b> – Health considerations – Diseases of lambs and ewes	

<b>Additional Notes</b>	
<b>Assignments</b>	
<b>Exams</b>	No make-up exams unless excused
<b>Cheating</b>	
<b>Attendance</b>	Attendance is required
<b>Workload</b>	
<b>Graded Exams</b>	
<b>Participation</b>	Participation in the class is encouraged

<b>Laboratory</b>	In this part of the course, it is required from each Student to attend, participate and write a report on each practice every week.
<b>Projects</b>	