

Course Syllabus

1	Course title	Dairy Cattle Management
2	Course number	602319
3	Credit hours	3 hrs.
	Contact hours (theory, practical)	3 , 0
4	Prerequisites/corequisites	Dairy Cattle Production (602215)
5	Program title	B.Sc. in Animal Production
6	Program code	
7	Awarding institution	University of Jordan
8	School	Agriculture
9	Department	Animal Production
10	Course level	3 rd year
11	Year of study and semester (s)	First semester 2020/2021
12	Other department (s) involved in teaching the course	None
13	Main teaching language	English
14	Delivery method	<input type="checkbox"/> Face to face learning <input checked="" type="checkbox"/> Blended <input type="checkbox"/> Fully online
15	Online platforms(s)	<input type="checkbox"/> Moodle <input checked="" type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....
16	Issuing/Revision Date	10/10/2021

**17 Course Coordinator:**Name: Prof. **Mufeed A. Alnimer**

Contact hours: 9.30 – 10.30 (Sun, Tue, Thu)

Office number: **032**Phone number: **22383**Email: **amufeed@ju.edu.jo****18 Other instructors: No other instructors.****19 Course Description:**

Discuss the importance of feed storage and feeding methods, use of computer in recording and planning, the use of new techniques in reproduction to improve fertility, the use of new milking machines in controlling diseases, determining bull's selection criteria for herd improvement and the facilities and equipment needs for housing management.

20 Course aims and outcomes:

A- Aims:

The General objective of this course is to establish basic knowledge of how to manage and operate commercial dairy farms. Also to gain experience to provide facilities and equipment concerning housing, milking, breeding, and feeding dairy cows and how to apply efficient management of dairy herds especially in record keeping, selection, culling and herd health in order to increase dairy production.

B- Students Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

Program SLOs*	SLO (1)	SLO (2)	SLO (3)	SLO (4)	SLO (5)	SLO (6)	SLO (7)	SLO (8)
SLOs of the course								
(1) Student should have the scientific knowledge regarding the basic concepts and subjects of dairy cattle management.	X	X						
(2) Student should be capable to combine between all subjects regarding the dairy farm in order to give proper decisions.								
(3) Student should understand how to apply these concepts to the efficient management of a dairy herd in order to obtain high production with good quality.	X							
(4) Student should expect the problems or imbalances that may occur in a dairy farm to be ready to solve it.			X					
(5) The student's ability to distinguish and analyze the effects of each subject (sector) on dairy farm productivity.								
(6) The capability of student to manage all sectors in a dairy farm involving the farm staff.								
(7) Preparing scientific reports on various topics related to dairy farm management based on different resources including scientific papers in refereed journals.								

(8) Applying skills gained through the course topics and scientific reports in the field training courses.		X						
(9) The student has the skill to manage a dairy farm depending on the acquired knowledge and skills in this course.			X	X			X	
(10) The student uses all his energies with the acquired skills in this course to improve the level of knowledge of others especially dairy farmers.								

***Program SLOs:**

ILO (1): Demonstrate a deep understanding of the basic principles in the various areas of livestock production; including nutrition, physiology, genetics, health and management.

ILO (2): Apply the acquired knowledge in various areas of livestock production.

ILO (3): Utilize critical thinking and logical reasoning in addressing issues related to livestock production.

ILO (4): Communicate effectively with a wide range of related stakeholders and provide appropriate extension services.

ILO (5): Apply the principles of public safety and environmental protection.

ILO (6): Acquire and apply practical skills along with keeping up with recent advances in livestock production.

ILO (7): Identify basic principles of research methodology and evidence-based decision making.

ILO (8): Abide by the professional, ethical and legal considerations relevant to the livestock production.

22. Topic Outline and Schedule:

Week	Lecture	Topic	Intended Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
1	1.1	INTRODUCTION AND OBJECTIVES	See the students learning outcomes (SLOs) table		Microsoft Teams	Synchronous	Home works, Quizzes and exams	Chapter 61-67, Van Horn and Wilcox. 1997.
	1.2	DAIRY COW HOUSING SYSTEM		Blended		---		
	1.3			Fully Online				
2	2.1	Tie stalls		Blended		Synchronous		
	2.2							
	2.3			Fully Online				
3	3.1	Loose houses		Blended		Synchronous		
	3.2	Free-stalls		Fully Online		---		
	3.3							
4	4.1	MILKING MANAGEMENT:		Blended		Synchronous		
	4.2	Teat Structure						
	4.3	Teat Canal, Cistern, Sphincter muscle, Teat Opening		Fully Online				
5	5.1	Machine milking Milk Machine Components		Blended		Synchronous		
	5.2							
	5.3		Fully Online	---				
6	6.1	Machine milking and mastitis control	Blended	Synchronous				
	6.2	Monitoring udder health						
	6.3	Lactation	Fully Online	---				
7	7.1	NUTRITION AND FEEDING	Blended	Synchronous				
	7.2	Nutrients in the feed						

	7.3	Energy and protein metabolism		Fully Online		---		and Wilcox. 1997.
8	8.1	Feeds for dairy cows		Blended		Synchronous		
	8.2	Ration formulation		Fully Online		---		
	8.3							
9	9.1	Feeding guide		Blended		Synchronous		Dairy Cattle internet sites.
	9.2	Feed additives		Fully Online		---		
	9.3	Nutritional influences on reproductive function						
10	10.1	REPRODUCTIVE MANAGEMENT		Blended		Synchronous		
	10.2	Heat detection and Insemination		Fully Online		---		Chapter 11-24, Van Horn and Wilcox. 1997.
	10.3							
11	11.1	Pregnancy and calving		Blended		Synchronous		
	11.2	Methods for reducing effects of heat stress on pregnancy		Fully Online		---		
	11.3							
12	12.1	Reproductive efficiency		Blended		Synchronous		Dairy Cattle internet sites.
	12.2	Application of hormones in reproduction		Fully Online		---		
	12.3							
13	13.1	CALVES AND HEIFER RAISING MANAGEMENT		Blended		Synchronous		
	13.2	Feeding calves and heifers		Fully Online		---		
	13.3							
14	14.1	Replacement heifer		Blended		Synchronous		Chapter 40-44, Van Horn and Wilcox. 1997.
	14.2	Records and record keeping		Fully Online		---		
	14.3							



15	15.1	Heifer health (protection) Heifer growth		Blended		Synchronous		Dairy Cattle internet sites.
	15.2							
	15.3			Fully Online		---		

23 Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Mid Exam	30%	DAIRY COW HOUSING SYSTEM + MILKING MANAGEMENT + NUTRITION AND FEEDING	See the students learning outcomes (SLOs) table	Sunday 28/11/2021	Face to face
Participation, Reports and Quizzes	20%	Along the semester		Different dates	Online + Face to face
Final Exam	50%	All class materials		According to administration and registration unit	Face to face

24 Course Requirements

Students should have a computer and good internet connection with an account on Microsoft teams.

25 Course Policies:

A- Attendance policies: Students are expected to attend all lectures but if a student is absent from class, it is their responsibility to get the material that was missed and the UJ regulations will followed if absences exceed the upper threshold limit.

B- Absences from exams and submitting assignments on time: Each status will be treated according to UJ regulations.

C- Health and safety procedures: Not applicable.

D- Honesty policy regarding cheating, plagiarism, misbehavior: According to UJ regulations.



E- Grading policy: **See the previous section.**

F- Available university services that support achievement in the course: **According to UJ regulations.**

26 References:

A- Required book(s), assigned reading and audio-visuals:

David K. Beede. Large Dairy Herd Management. Third Edition. American Dairy Science Association. 2017.

B- Recommended books, materials and media:

- Brian H, Nigel C, Ted F, Robert G, David K, Douglas J, and Joseph M. Dairy Freestall Housing and Equipment. Eighth Edition Iowa State University/ Ames. Iowa.2013
- Michel A Wattiaux. Raising Dairy Heifers. Babcock Institute/University of Wisconsin, Madison, USA. 1996.
- Michel A Wattiaux. Reproduction and Genetic Selection. Babcock Institute/University of Wisconsin, Madison, USA. 1996

Michel A Wattiaux. Nutrition and Feeding. Babcock Institute/University of Wisconsin, Madison, USA. 1996

27 Additional information:

No

Name of Course Coordinator: Prof. Mufeed Alnimer. Signature: ----- Date: 10/10/2021
Head of Curriculum Committee/Department: ----- Signature: -----
Head of Department: -----Signature: -----
Head of Curriculum Committee/Faculty: -----Signature: -----
Dean: ----- Signature: -----