Course Description Form

1. Course Name: Reproductive biotechnology

2. Course Code: VEC5117

3. Semester / Year : 2nd semester / 5th stage

4. Description Preparation Date:13/2/2024

5. Available Attendance Forms: presence

6. Number of Credit Hours (Total) / Number of Units (Total) / 45 hour /2 unit

7. Course administrator's name (mention all, if more than one name)

Name: Fatima Juma Azgar
Email: fatmaasgar@uokirkuk.edu.iq

8. Course Objectives

Course Objectives	**١- Accustoming the learner to discussing, researching, and deducing everything he hears, see and thinks about in order to arrive at the facts (developing the student's scientific spirit)** **2- Identify modern reproductive technologies and their scientific terminology.** **3- Identifying the uniformity of estrus in farm animals.** **4- Helping the student on how to transfer embryos into farm animals.** **5- Learn how to use ultrasound and diagnose it.**

9. Teaching and Learning Strategies

Strategy	- Teaching the student the ability to diagnose diseases. - Teaching the student the ability to treat animals. - Teaching the student to raise and deal with animals.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4		Uitrasonography –general information	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
2	4		Uitrasonography in Large animal	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process

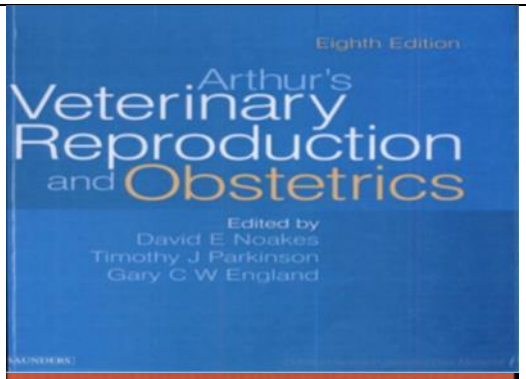
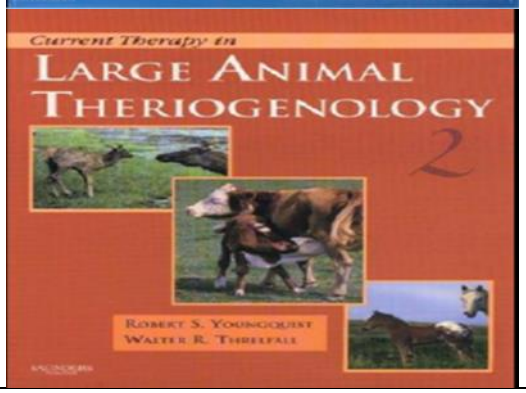
3	4		Uitrasonography in small animal	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
4	4		Estrous Synchronization in bovine	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
5	4		Estrous Synchronization in ovine and caprine	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
6	4		Control age of puberty	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
7	4		Superovulation	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
8	4		Mid-term exam	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
9	4		Embryo Transfer in domestic anim	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
10	4		Oocyte Collection	(١hours)Theory (2 hours) Lab	Theoretical tests and the process
11	4		IN VITRO FERTILIZATION	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
12	4		Sperm sexing (*Gender Selection)*	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
13	4		Cloning	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
14	4		Suppress of reproductive system	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
15	4		Ovariectomy and castration	(١ hours)Theory (2 hours) Lab	Theoretical tests and the process
16		Final exam			

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc .
It includes (2٠) theoretical and (٢٠) practical exams, and the final exam is (٣0) theoretical + (٣0) practical .

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	No

Main references (sources)	 
Recommended books and references (scientific journals, reports…)	---
Electronic References, Websites	Depending on availability