

**Food Production Animals Medicine and Surgery**

Code: 102623  
ECTS Credits: 6

Degree	Type	Year	Semester
2502445 Veterinary Medicine	OB	3	2

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

### Contact

Name: Teresa Rigau Mas  
Email: Teresa.Rigau@uab.cat

### Use of Languages

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: Yes  
Some groups entirely in Spanish: No

### Teachers

Martí Pumarola Batlle  
Juan Enrique Rodríguez Gil  
Maria Jesús Palomo Peiró

### Prerequisites

There are no official prerequisites, but having sufficient knowledge of anatomy (morphology), physiology, etholog

The ability to observe and relate to the acquired knowledge in other subjects is very important.

### Objectives and Contextualisation

Located in the second semester of the third year, it is an obligatory subject that introduces student into diseases

Formative objectives:

- Understanding the basic concepts and methodology used in the study of the most frequent diseases of medical
- Understanding the pathogenic mechanisms, which will be the basis for the correct understanding and interpreta
- Making a differential diagnosis based on the signs and injuries observed in animals.

- Developing a prevention and treatment program

## Competences

- Analyse, synthesise and resolve problems and make decisions.
- Apply the basic cures that guarantee the correct function of the reproduction cycle and the resolution of obstetric problems.
- Comunicar la informació obtinguda durant l'exercici professional de manera fluïda, oralment i per escrit, amb altres col·legues, autoritats i la societat en general.
- Demonstrate knowledge and understanding of the general bases of medical and surgical treatments.
- Demonstrate knowledge of English to communicate both orally and in writing in academic and professional contexts.
- Diagnose different individual and collective animal diseases, and know about prevention measures, with emphasis on zoonoses and notifiable disease.
- Draft and present satisfactory professional reports, always maintaining the required confidentiality.
- Handle the correct protocols and technologies used to modify and optimise different animal production systems.
- Make clinical records and accurate and complete clinical exploration of animals.
- Perform a necropsy, including a record of the injuries found, sample taking and storage and posterior transport.
- Perform the most common medical and surgical treatments of animals.
- Value and interpret the production and health parameters of one animal group, considering the economic and welfare aspects.

## Learning Outcomes

1. Analyse, synthesise and resolve problems and make decisions.
2. Apply to clinical practice the knowledge acquired from the subjects of Pathology and General Surgery.
3. Communicate information obtained during professional exercise in a fluid manner, orally and in writing, with other colleagues, authorities and society in general.
4. Conduct a complete physical examination and detect disorders.
5. Correct and prevent disorders of the locomotor apparatus and of other sporadic diseases.
6. Correct, regulate and prevent the most frequent metabolic and nutritional diseases.
7. Define the problems found in physical examinations or in the clinical history of an animal.
8. Demonstrate knowledge of English to communicate both orally and in writing in academic and professional contexts.
9. Describe the etiology, etiopathogeny, diagnosis and treatment of the most frequent medical and surgical diseases in small, equine and livestock animals.
10. Describe the protocol for performing necropsies in different species.
11. Determine when it is necessary or convenient to apply individual medical and/or surgical treatments to livestock animals.
12. Diagnose and solve obstetric and post- delivery problems.
13. Distinguish the prophylactic measures that can be applied to livestock farms to diminish the presence of diseases that affect production.
14. Draft and present satisfactory professional reports, always maintaining the required confidentiality.
15. Identify and prevent problems related with handling of animals that negatively affect their health.
16. Identify and recognise the medical and surgical problems associated to the male and female reproduction apparatus in different animal species.
17. Identify congenital and acquired diseases that affect the proper absorption of foods.
18. Identify damaged organs or tissue and take samples for later study.
19. Identify disorders of the locomotor apparatus and especially those of members and hooves.
20. Identify neurological diseases and the most relevant ones that can sporadically affect the proper systemic functions of animals.
21. Identify the most frequent metabolic disorders.

22. Identify, treat and prevent problems that alter lactation and the functionality of the mammary gland.
23. Identify, treat and prevent the causes of infertility in male and females.
24. Identify, treat and prevent the causes that lead to anoestrus and alter normal cyclicity.
25. Identify, treat and prevent the problems that affect neonates.
26. Produce an anamnesis report in a real practical context.
27. Properly apply hormonal treatments to the regulation and normalisation of reproduction.
28. Recognise when a necropsy should be recommended in different species.

## Content

In this subject, it will be studied the main diseases which origin can be of food, environment, facilities and manag

Theory (29 hours)

Bovine (50%):

- Digestive diseases
- Reproductive pathology
- Pathology of the mammary gland
- Neonatal problems
- Metabolic and nutritional diseases
- Foot pathology. Lameness
- Other diseases of clinical interest and derivatives of management

Sheep and goats (10%):

- Digestive, metabolic and nutrition diseases
- Reproductive and mammary pathology
- Neonatal pathology
- Other diseases of clinical interest and derivatives of management

Porcine (30%):

- Digestive, metabolic and nutrition diseases
- Reproductive and mammary pathology
- Pathology of the neonate piglet and
- Other diseases of clinical interest and derivatives of management

Rabbits (10%):

- Digestive, metabolic and nutrition diseases
- Reproductive and mammary pathology
- Other diseases of clinical interest and derivatives of management

PRACTICE: 35.5h

1- Ruminants (29h):

A) Clinical cases - Simulations in the classroom: 5.5h

- Diagnosis of neurological problems in ruminants: 1.5h (computer classroom), M. Pumarola
- Social-economic assessment of peripartum, clinical and metabolic diseases in bovine farms of high milk production: 4h, S. Calsamiglia. This activity will be developed with a self-learning task.

B) Obstetrics practices with mannequins: 2h, T. Rigau

C) Clinical practice: 21.5h

- Intramural practices (UAB Farm Service) (3.5h): Assistance to farm ruminants, 1.5h, MJ Palomo. Discussion of clinical cases and diagnosis of mammary problems, 1.5h, T. Rigau
- Bovine ambulatory clinic (Coordinators: A. Avila and J. Heras): 18h. Clinical assistance to bovine farms under the direct supervision of professors. Students must record in the portfolio the clinical cases observed and performed procedures and treatments. There will be a session of exposition and discussion of attended clinical cases.

2- Rabbits (3,5h):

A) Clinical practice:

- UAB rabbit farm clinical visit: 1.5h. T. Rigau
- Rabbit necropsy: 2 hours, M. Pumarola

3- Porcine (3h):

A) Seminars:

- Neonatal porcine pathology, 1.5h, JE. Rodriguez

B) Laboratory practice :

- Clinical case from a farm with reproductive problems. 1.5h, JE Rodriguez. This activity will be developed with a self-learning task.

## Methodology

The course is composed of the following activities:

1. Lectures:

The student acquires the knowledge of the subject by attending the theoretical classes and complementing them with self-study of the exposed subjects. Although the theoretical classes are conceived as a unidirectional method of transmitting the teacher's knowledge to the student, it allows to establish direct questions for the students and create discussion.

2. Classroom practices and Seminars:

Classroom practices and seminars are sessions with a dual purpose. It allows deeply work with more knowledge exposed in the lectures and possibility to discuss the results obtained in the requested works, in small groups.

3.

Tutorials:

The tutorials allow establishing a direct dialogue between student and teacher in which the orientation and motivation

4.

Clinical practices, necropsies and farm assistance:

The pedagogical proposal consists in creating the atmosphere and experience that is motivating and interesting for

5.

Self-study:

Theoretical contents are exposed through the resolution of problems or clinical cases ("problem based learning")

The study material used for the subject will be available in the Virtual Campus. This platform will be also used as

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Bovine ambulatory clinics, farm assistance and intramural clinical practices	25	1	2, 5, 6, 7, 11, 12, 15, 17, 22, 23, 4, 26
Laboratory and Classrooms practices	7	0.28	10, 18, 15, 16, 22, 23
Lectures	29	1.16	2, 27, 5, 6, 9, 11, 12, 13, 21, 15, 16, 19, 17, 25, 22, 24, 23, 28
Seminars and presentation of clinical cases	3.5	0.14	27, 5, 6, 9, 13, 21, 15, 16, 17, 23
Type: Supervised			
Tutorials	2	0.08	1, 7, 4, 26, 14
Type: Autonomous			
Self-learning cases	32.5	1.3	1, 27, 3, 6, 7, 9, 13, 21, 15, 22, 23, 26, 14
Study time	45	1.8	27, 5, 6, 9, 11, 12, 13, 21, 15, 16, 19, 17, 20, 25, 22, 24, 23
Videos	4	0.16	6, 12, 22

## Assessment

1- Two written partial exams:

- Evaluation of theoretical and practical knowledge
- Four options multiple choice test, incorrect answered questions subtract 0.33 each
- Overall exam score (75%) = 45% of the first partial and 30% of the second partial
- Grade to pass a partial and the final exam is 5, that has to be able to compensate between two partials, the grade
- Students who will absent exam will be considered as not submitted.

2- Ambulatory clinics and intramural practices, continuous evaluation will be performed by

- Evaluation based on the student's attitude and participation
- Percentage of the qualification = 5%
- The absence not justified the practices subtracts 0.25 of the final grade.
- The absence not justified to ambulatory clinics subtracts 0.5 from the final grade.

3- Evaluation of clinical cases and self-study

:

- Evaluation of clinical problems resolution, both oral and written communication
- Percentage of the qualification = 20%
- If there is not presentation of self-study or clinical cases adds 0 in the calculation of the average grade of the work

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
2 partial exams	45% 1st partial and 30% 2nd partial	2	0.08	27, 5, 6, 10, 9, 11, 12, 13, 21, 18, 15, 16, 19, 17, 20, 25, 22, 24, 23
Attitude during practices, ambulatory clinics and presentation of clinical cases	5%	0	0	1, 2, 3, 14
Self-study cases and clinical cases presentation	20%	0	0	1, 2, 3, 5, 6, 7, 8, 9, 21, 15, 16, 19, 17, 22, 24, 23, 4, 26, 28, 14

## Bibliography

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