

COURSE DESCRIPTION

COURSE DETAILS

Title (of the course): **EMBRIOLOGÍA**

Code: 101454

Degree/Master: **GRADO DE VETERINARIA**

Year: 1

Name of the module to which it belongs: FORMACIÓN BÁSICA COMÚN

Field: ANATOMÍA Y EMBRIOLOGÍA VETERINARIAS

Character: BASICA

Duration: FIRST TERM

ECTS Credits: 3.0

Classroom hours: 30

Face-to-face classroom percentage: 40.0%

Study hours: 45

Online platform:

LECTURER INFORMATION

Name: MORALES LOPEZ, JOSE LUIS (Coordinador)

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PREREQUISITES AND RECOMMENDATIONS

Prerequisites established in the study plan

Common requirements for Veterinary Degree

To study the subject in the multilingual plan of the Degree in Veterinary Medicine, the student must accredit an English level equivalent to the B1 certificate

Recommendations

Common requirements for Veterinary Degree

This subject is delivered in two languages: English and Spanish. The Bilingual teaching will comply with the requirements of Bilingual Program of the University of Córdoba. For Students the required proficiency in English is equivalent to B2 level or above. It will be scheduled with the teaching groups arranged by the Veterinary School. One classroom group subdivided into three laboratory groups.

INTENDED LEARNING OUTCOMES

CE6 Ontogenetic development, birth defects and applications of embryology.

COURSE DESCRIPTION

OBJECTIVES

This course is intended to provide Veterinary students with a overview of the basic facts and concepts of the animal development.

By the completion of this course, students should be able to:

1. Describe the stages and processes of normal embryonic and fetal development in a variety of species appropriate to Veterinary Medicine.
2. Describe the processes involved in the development of many common congenital malformations. Also, the students will demonstrate the ability to correlate between the embryological structures and their practical significance.

CONTENT

1. Theory contents

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The processes of **gametogenesis**, **fertilization** and **cleavage**, leading to blastocyst formation.

The **gastrulation**, describing how the germ layers are formed and how they will eventually give rise to the embryo and foetal membranes.

The process of **implantation** and the formation of the **placenta and foetal membranes** as well as the purposes of these structures.

The **organogenesis**, describing the development of the organic systems regarding their congenital anomalies and the developmental concepts that are believed to be responsible for these anomalies.

2. Practical contents

2. Practical contents

Laboratory classes cover many of the concepts and techniques taught from the previous week of lectures.

METHODOLOGY

Methodological adaptations for part-time students and students with disabilities and special educational needs

It will be taken in account

Face-to-face activities

Activity	Large group	Small group	Total
<i>Assessment activities</i>	1	-	1
<i>Lab practice</i>	-	12	12
<i>Lectures</i>	14	-	14
<i>Tutorials</i>	3	-	3
Total hours:	18	12	30

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Off-site activities

Activity	Total
<i>Exercises</i>	5
<i>Information search</i>	5
<i>Reference search</i>	5
<i>Self-study</i>	30
Total hours	45

WORK MATERIALS FOR STUDENTS

Coursebook
Exercises and activities
Oral presentations

EVALUATION

Intended learnig	Exams	Laboratory Practice	Oral Presentation	Real and/or simulated tasks
<i>CE6</i>	X	X	X	X
Total (100%)	50%	10%	10%	30%
Minimum grade	5	5	5	5

(*)Minimum grade necessary to pass the course

¿Valora la asistencia?:

No

General clarifications on instruments for evaluation:

General clarification about the assessment procedure:

Final exam. The final exam is mandatory in order to pass this subject and without the continuous evaluation is 100% worth of the final grade.

Continuous evaluation: It is optative and it will be carried out throughout the course. It consists of weekly tests, quizzes and assignment (up to worth 30% of the final grade) and oral presentations (up to 20% worth of the final grade). The global score achieved by continuous evaluation can be up to 50% worth of the final grade. Thereby, the final exam worth can be reduced from 100% to 50%, according to the score achieved in the continuous evaluation.

Clarifications on the methodology for part-time students and students with disabilities and special educational needs:

It will be taken in account

COURSE DESCRIPTION

Qualifying criteria for obtaining honors:

calificación final mayor de 9 y prueba complementaria.

BIBLIOGRAPHY

1. Basic Bibliography

Barresi MJF & Gilbert SF (2019). Developmental Biology. 12^a ed. OUP.

Hyttel, P, Sinowatz F & Vejlsted M (2010): Essentials of Domestic Animal Embryology. Saunders, LTD.

McGeady TA, Quinn PJ, Fitzpatrick ES & Ryan MT (2017). Veterinary Embriology. Blackwell Publishing

Monterde, J.G. & Gil, F. (2012): Embriología para estudiantes de Veterinaria. Editorial Intermédica.

Morales, JL (2020). Fundamentos de embriología Vetrinaria. Ediciones DF.

Wolpert L, Tivkle C & Martinez Arias A (2019) Principles of development. 5^o ed. OUP .

2. Further reading

None

COORDINATION CRITERIA

Common learning outcomes

SCHEDULE

Period	Assessment activities	Lab practice	Lectures	Tutorials
1# Fortnight	0,0	0,0	1,0	2,0
2# Fortnight	0,0	1,0	2,0	1,0
3# Fortnight	0,0	2,0	2,0	0,0
4# Fortnight	0,0	2,0	2,0	0,0
5# Fortnight	0,0	2,0	2,0	0,0
6# Fortnight	0,0	2,0	2,0	0,0
7# Fortnight	0,0	2,0	2,0	0,0
8# Fortnight	1,0	1,0	1,0	0,0
Total hours:	1,0	12,0	14,0	3,0

The methodological strategies and the evaluation system contemplated in this Course Description will be adapted according to the needs presented by students with disabilities and special educational needs in the cases that are required.

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CONTINGENCY PLAN: CASE SCENARIO A

Case scenario A will correspond to a diminished on-site academic activity due to social distancing measures affecting the permitted capacity of classrooms.

METHODOLOGY

General clarifications on the methodology on case scenario A

A multimodal (hybrid) teaching system will be adopted, combining both on-site and remote classes via videoconference (synchronous) that will be held in the timetable approved by the corresponding Faculty or School. The time distribution of teaching activities (both on-site and remote) will be decided by the aforementioned Faculties and Schools bearing in mind the permitted capacity of classrooms and social distancing measures as established at that time.

EVALUATION

Intended learning	Exams	Oral Presentation	Real and/or simulated tasks
CE6	X	X	X
Total (100%)	50%	10%	40%
Minimum grade	4	4	4

(*)Minimum grade necessary to pass the course

Attendance will be assessed (Scenario A)?:

No

General clarifications on instruments for evaluation (Scenario A):

General clarification about the assessment procedure:

Final exam. The final exam is mandatory in order to pass this subject and without the continuous evaluation is 100% worth of the final grade.

Continuous evaluation: It is optative and it will be carried out throughout the course. It consists of weekly tests, quizzes and assignment (up to worth 30% of the final grade) and oral presentations (up to 20% worth of the final grade). The global score achieved by continuous evaluation can be up to 50% worth of the final grade. Thereby, the final exam worth can be reduced from 100% to 50%, according to the score achieved in the continuous evaluation.

The evaluation test for extraordinary calls will consist of a final exam type questionnaire, keeping the grade obtained through continuous evaluation in the previous course that will have a value of up to 50%.

Clarifications on the methodology for part-time students and students with disabilities and special educational needs (Scenario A):

It will be taken in account

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Qualifying criteria for obtaining honors (Scenario A):

calificación final mayor de 9 y prueba complementaria.

CONTINGENCY PLAN: CASE SCENARIO B

Case scenario B will bring about a suspension of all on-site academic activities as a consequence of health measures.

METHODOLOGY

General clarifications on the methodology on case scenario B

On-site teaching activities will be held via videoconference (synchronous) in the timetable approved by the corresponding Faculty or School. Alternative activities will be proposed for reduced groups in order to guarantee the acquisition of course competences.

EVALUATION

Intended learning	Exams	Oral Presentation	Real and/or simulated tasks
CE6	X	X	X
Total (100%)	50%	10%	40%
Minimum grade	4	4	4

(*)Minimum grade necessary to pass the course

Moodle Tools	Exposición oral	Exámenes	Pruebas de ejecución de tareas reales y/o simuladas
Cuestionario		X	X
Tarea			X
Videoconferencia	X		

Attendance will be assessed (Scenario B)?:

No

General clarifications on instruments for evaluation (Scenario B):

General clarification about the assessment procedure:

Final exam. The final exam is mandatory in order to pass this subject and without the continuous evaluation is

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100% worth of the final grade.

Continuous evaluation: It is optative and it will be carried out throughout the course. It consists of weekly tests, quizzes and assignment (up to worth 30% of the final grade) and oral presentations (up to 20% worth of the final grade). The global score achieved by continuous evaluation can be up to 50% worth of the final grade. Thereby, the final exam worth can be reduced from 100% to 50%, according to the score achieved in the continuous evaluation.

The evaluation test for extraordinary calls will consist of a final exam type questionnaire, keeping the grade obtained through continuous evaluation in the previous course that will have a value of up to 50%.

Clarifications on the methodology for part-time students and students with disabilities and special educational needs (Scenario B):

It will be taken in account

Qualifying criteria for obtaining honors (Scenario B):

calificación final mayor de 9 y prueba complementaria.