COURSE DETAILS

Title (of the course): NUTRITIONAL SUPPORT OF ORPHAN, SENILE AND SICK ANIMALS

Code: 101507

Degree/Master: GRADO DE VETERINARIA Year: 5

Duration: FIRST TERM

Name of the module to which it belongs: OPTATIVIDAD

Field: OPTATIVA Character: OPTATIVA ECTS Credits: 3.0

ECTS Credits: 3.0 Classroom hours: 30
Face-to-face classroom percentage: 40.0% Study hours: 45

Online platform:

LECTURER INFORMATION

Name: NÚÑEZ SÁNCHEZ, MARIA NIEVES (Coordinator)

Department: PRODUCCIÓN ANIMAL

Area: PRODUCCIÓN ANIMAL

Office location: Animal Nutrition Unit; Animal Production Department

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Name: CARRIÓN PARDO, DOMINGO Department: PRODUCCIÓN ANIMAL

Area: PRODUCCIÓN ANIMAL

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PREREQUISITES AND RECOMMENDATIONS

Prerequisites established in the study plan

Students must hold B1 English level.

Recommendations

It is recommended to have completed the subjects Physiology, Internal Medicine, and Animal Nutrition and Feeding.

INTENDED LEARNING OUTCOMES

CT1 To solve problems.

CT3 Ability to apply knowledge in a practical way.

CT8 Motivation for quality.

CE23 Study of microorganisms affecting animals and those with an industrial, biotechnological or ecological

application.

CE55 Animal nutrition and nourishment.



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OBJECTIVES

This is an advanced course intended for students of Veterinary Medicine who want to improve their knowledge on how to feed animals incapable of feeding themselves, and the proper feeding of animals with special requirements due to old age or due to disease.

The students will also have access to the research activity carried out by the Animal Production Department related to this field.

CONTENT

1. Theory contents

The course is divided into three modules according to its main topics. Each module will be split into individual lessons that deal with several aspects related to the corresponding topic.

- I. Feeding the newborn orphan animals. Milk feeding and weaning periods.
- II. Feeding the elderly. Basic nutrition overview. Changes in nutritional needs associated with old age.
- III. Nutrition and disease. Nutrition-related disorders. Nutrition and feeding in disease management and prevention.

An extra lesson dealing with the research activity related to the main topics discussed in the subject will be included.

2. Practical contents

Practicals will consist of:

- 1. Proper feeding of orphan, elderly and sick animals. Case studies.
- 2. Prescription diets. Case studies.

SUSTAINABLE DEVELOPMENT GOALS RELATED TO THE CONTENT

Good health and well-being Quality education

METHODOLOGY

General clarifications on the methodology (optional)

CLIL (Content and Language Integrated Learning) methodology will be used to create a 'natural' environment for contents and language learning, to help students to fix previous knowledge and acquire specific vocabulary throughout the course.

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

The required methodological adaptations will be taken into account and in accordance with current regulations for both part-time students and students with disabilities and special educational needs.



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Face-to-face activities

Activity	Large group	Medium group	Total
Case study	-	9.5	9.5
Lectures	16.5	-	16.5
Seminar	-	4	4
Total hours:	16.5	13.5	30.0

Off-site activities

Activity	Total	
Information search	12	
Reference search	12	
Self-study	21	
Total hours	45	

WORK MATERIALS FOR STUDENTS

Case studies

Exercises and activities

Oral presentations

PDF files (via Moodle) and handouts dealing with the different units will be provided.

Clarifications

PDF files with the main contents of the lectures will be uploaded on Moodle.

For the practical sessions, case studies, handouts and other working materials will also be provided.

EVALUATION

Intended learning	Case Studies	Exams	Exams Oral Presentation	
CE23	X			
CE55	X	X	X	X
CT1	X	X	X	X
СТ3	X	X	X	X
CT8		X	X	



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Intended learning	Case Studies	Exams	Oral Presentation	Problem solving
Total (100%)	15%	<i>55</i> %	20%	10%
Minimum grade	5	5	5	5

(*)Minimum mark (out of 10) needed for the assessment tool to be weighted in the course final mark. In any case, final mark must be 5,0 or higher to pass the course.

Method of assessment of attendance:

80% of attendance to theoretical sessions will be required to pass the course. The grade obtained in the theoretical contents may be increased up to 10% if that qualification is higher than 5 and if the percentage of assistance is higher than 95%.

Attendance to practical sessions is compulsory.

General clarifications on instruments for evaluation:

The students will be evaluated according to the competences. The evaluation system will be based on the level of acquisition of the competencies indicated in the course, through tests, continuous assessment, and seminars, bibliographic works, and evaluation of the practicals.

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

Specific learning conditions will be provided for part-time students and students with disabilities and special educational needs.

The grades will be valid for all calls of the 2022/23 academic year.

Clarifications on the evaluation of the first extraordinary call and extra-ordinary call for completion studies:

The evaluation of the first extraordinary call and the extraordinary call for completion of the studies, when necessary, will be done in accordance with the University and the Faculty of Veterinary Medicine regulations. The students affected should get in contact with the professor responsible for the subject.

Qualifying criteria for obtaining honors:

The global mark should be higher than 9.5 out of 10.



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BIBLIOGRAPHY

1. Basic Bibliography

Ackerman, Nicola. 2008. Companion Animal Nutrition. Elsevier.

Buffington, Tony, and others. 2004. Manual of Veterinary Dietetics. Elsevier.

Case, Linda P., and others. 2011. Canine and Feline Nutrition. 3rd edition. Mosby Elsevier.

Fascetti, Andrea J. and others. 2012. Applied Veterinary Clinical Nutrition. Wiley-Blackwell.

Hand, Michael S., and others. 2010. Small Animal Clinical Nutrition, 5th Edition. Mark Morris Associates.

Mc Clure T.J. 1994. Nutritional and Metabolic Infertility in the Cow. CAB.

Merck Veterinary Manual. 2006. http://www.merckmanuals.com/vet/index.html

Michell, A.R. and others. 1991. Fluidoterapia Veterinaria. Acribia.

Nylor, Jonathan M. and Ralston Sarah L. 1991. Large Animal Clinical Nutrition. Mosby.

Pibot, Pascale and others. 2006. Enciclopedia de la Nutrición Clínica Canina. Royal Canin.

Shane, Simon M. 2006. Nutritional and Digestive Disorders of Poultry. Nottingham University Press.

2. Further reading

Doctors Foster and Smith. Diseases & Conditions Contributing to Dog Obesity. http://www.peteducation.com

Doctors Foster and Smith. Eclampsia (Puerperal Tetany, Milk Fever, Hypocalcemia) in Dogs.

http://www.peteducation.com

Doctors Foster and Smith. Food Allergies and Food Intolerance. http://www.peteducation.com

Doctors Foster and Smith. Health Risks in Overweight or Obese Dogs. http://www.peteducation.com

Doctors Foster and Smith. Preventing Dog Obesity. http://www.peteducation.com

Richardson, Daniel C. Skeletal Diseases of the Growing Dog: Nutritional Influences and the Role of Diet.

https://www.msu.edu/~silvar/hips.htm

Rutherfurd-Markwick, Kay J. and Wouter H. Hendriks. Functional Foods and Nutraceuticals for Cats and Dogs.

http://en.engormix.com/Articles/View.aspx?id = 415

COORDINATION CRITERIA

Common evaluation criteria
Tasks performance

SCHEDULE

Period	Case study	Lectures	Seminar	
1# Fortnight	0,0	1,5	0,0	
2# Fortnight	0,0	5,0	0,0	
3# Fortnight	0,0	4,0	0,0	
4# Fortnight	0,0	4,0	0,0	
5# Fortnight	3,0	1,0	0,0	
6# Fortnight	3,0	1,0	0,0	



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Period	Case study	Lectures	Seminar
7# Fortnight	0,0	0,0	4,0
8# Fortnight	3,5	0,0	0,0
Total hours:	9,5	16,5	4,0

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.

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.

CLIL (Content and Language Integrated Learning) methodology will be used to create a 'natural' environment for content and language learning, to help students to fix previous knowledge and acquire specific vocabulary throughout the course.

The evaluation of the theoretical contents will be carried out through continuous evaluation questionnaires and an exam as a final evaluation, as detailed in the section "General clarifications on instruments for evaluation", where the evaluation of the practical sessions will also be detailed.



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EVALUATION

Intended learnig	Case Studies	Exams	Oral Presentation	Problem solving
CE23	X			
CE55	X	X		X
CT1	X	X	X	X
СТ3	X	X	X	X
CT8		X	X	
Total (100%)	15%	55%	20%	10%
Minimum grade	4	4	4	4

(*)Minimum mark (out of 10) needed for the assessment tool to be weighted in the course final mark. In any case, final mark must be 5,0 or higher to pass the course.

Method of assessment of attendance (Scenario A):

80% of attendance to theoretical sessions will be required to pass the course. The grade obtained in the theoretical contents may be increased up to 10% if that qualification is higher than 5 and if the percentage of assistance is higher than 95%.

Attendance to practical sessions is compulsory.

General clarifications on instruments for evaluation (Scenario A):

The students will be evaluated according to the competencies. The evaluation system will be based on the level of acquisition of the competencies indicated in the course, through tests, continuous assessment, seminars, bibliographic works, and evaluation of the practicals, as follows:

The theoretical contents will be evaluated through exams, having two components: continuous assessment and final evaluation. For continuous assessment, students will have Moodle questionnaires on the contents related to each unit. The average grade obtained in the continuous evaluation will represent 40% of the total grade of the theoretical content. At the end of the course, in the official calls, there will be a face-to-face exam on the theoretical contents of the subject, whose weight in the total grade of the theoretical part will be 60%. This final theoretical exam may be multiple choice type or short answer questions. To pass the exam it will be necessary to get a minimum grade of 4. The practicals will be evaluated with problem-solving, the development of case studies related to the contents, and the oral presentation of a case study on proper feeding of orphan, elderly and sick animals. A minimum grade of 4 will be required to pass the evaluation.

*In any case, the final grade to pass the course must be equal to or greater than 5.0.



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

Specific learning conditions will be provided for part-time students and students with disabilities and special educational needs.

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.

CLIL (Content and Language Integrated Learning) methodology will be used to create a 'natural' environment for content and language learning, to help students to fix previous knowledge and acquire specific vocabulary throughout the course.

The evaluation of the theoretical contents will be carried out through continuous evaluation questionnaires and an exam as a final evaluation, as detailed in the section "General clarifications on instruments for evaluation", where the evaluation of the practical sessions will also be detailed.



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EVALUATION

Intended learnig	Case Studies	Exams	Oral Presentation	Problem solving
CE23	X			
CE55	X	X		X
CT1	X	X	X	X
СТ3	X	X	X	X
CT8		X	X	
Total (100%)	15%	55%	20%	10%
Minimum grade	4	4	4	4

(*)Minimum mark (out of 10) needed for the assessment tool to be weighted in the course final mark. In any case, final mark must be 5,0 or higher to pass the course.

Moodle Tools	Case Studies	Exams	Oral Presentation	Problem solving
Questionnaire		X		
Synchronous tests via videoconference		X		
Task	X			X
Videoconference			X	

Method of assessment of attendance (Scenario B):

80% of attendance to theoretical sessions will be required to pass the course. The grade obtained in the theoretical contents may be increased up to 10% if that qualification is higher than 5 and if the percentage of assistance is higher than 95%.

Attendance to practical sessions is compulsory.

General clarifications on instruments for evaluation (Scenario B):

The students will be evaluated according to the competencies. The evaluation system will be based on the level of acquisition of the competencies indicated in the course, through tests, continuous assessment, seminars, bibliographic works, and evaluation of the practicals, as follows:

The theoretical contents will be evaluated through exams, having two components: continuous assessment and final evaluation. For continuous assessment, students will have Moodle questionnaires on the contents related to each unit. The average grade obtained in the continuous evaluation will represent 40% of the total grade of the theoretical content. At the end of the course, in the official calls, there will be a face-to-face exam on the theoretical contents of the subject, whose weight in the total grade of the theoretical part will be 60%. This final



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theoretical exam may be multiple choice type or short answer questions. To pass the exam it will be necessary to get a minimum grade of 4. The practicals will be evaluated with problem-solving, the development of case studies related to the contents, and the oral presentation of a case study on proper feeding of orphan, elderly and sick animals. A minimum grade of 4 will be required to pass the evaluation.

*In any case, the final grade to pass the course must be equal to or greater than 5.0.

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

Specific learning conditions will be provided for part-time students and students with disabilities and special educational needs.



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