Information about the subject

Degree: Bachelor of Science Degree in Veterinary Medicine

Faculty: Faculty of Veterinary Medicine and Experimental Sciences

Code: 1260310 **Name:** Clinical Diagnostic Techniques II (Imaging Diagnosis)

Credits: 6,00 **ECTS Year:** 3 **Semester:** 1

Module: Module of Clinical Sciences and Animal Health

Subject Matter: Alterations in Structure and Function, and Fundamentals of Diagnosis **Type:**

Compulsory

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

Module of Clinical Sciences and Animal Health

Subject Matter	ECTS	Subject	ECTS	Year/semester
Alterations in Structure and Function, and Fundamentals of Diagnosis	36,00	Clinical diagnostic techniques I (Clinical Propedeutics)	6,00	3/1
		Clinical Diagnostic Techniques II (Imaging Diagnosis)	6,00	3/1
		Histopathology and General Pathological Anatomy	6,00	2/1
		Physiopathology and general integrated Pathology I	6,00	2/1
		Physiopathology and general integrated Pathology II	6,00	2/2
		Special pathological anatomy	6,00	2/2
Pharmacology and Therapeutics	12,00	Pharmacology and Toxicology	6,00	3/1
		Pharmacotherapy, preventive medicine and veterinary hygiene	6,00	5/1
Clinical Sciences and Animal Health	60,00	Clinic and health in equines	6,00	3/2
		Clinic and health in water animals	6,00	5/1
		Clinic and health in wild and exotic animals	6,00	3/2

Clinical Sciences and Animal Health	Clinic and health on the farm I	6,00	4/1
	Clinic and health on the farm II	6,00	4/2
	Epidemiology	6,00	3/1
	Pet Clinic	6,00	3/2
	Reproduction and Obstetrics	6,00	3/1
	Veterinary Surgery I	6,00	3/2
	Veterinary Surgery II	6,00	4/1

Recommended knowledge

To have basic knowledge of Anatomy, Physiology and Pathophysiology in the different animal species.

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1   The student searches bibliographic information from different sources and knows how to analyse it with a critical and constructive spirit.

R2   Knowing the basic physical principles of diagnostic imaging techniques used in veterinary medicine.

R3   Knowing the main radiological protection criteria.

R4   Management of the patient to obtain the necessary radiographic projections in each case.

R5   Knowing the normal radiographic and ultrasound anatomy of domestic animals.

R6   Knowing the different contrast techniques that are most commonly used today.

R7   Introduction to new diagnostic imaging techniques such as ultrasound, CT scan, MRI and gammagraphy, with greater emphasis on ultrasound.

R8   Performing the evaluation of an X-ray in a systematic and complete manner.

R9   Knowing the characteristic radiological and ultrasound findings of the most common diseases.

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB2	Capacity to apply knowledge to work or occupation in a professional way and have the competences that are proved by preparing and arguing topics and problem-solving in their specific field of study.				x
CB3	Capacity to gather and interpret relevant data usually within their specific field of study and capacity to make judgments that include reflection on relevant social, scientific or ethical issues.				x
CB4	Capacity to communicate information, ideas, problems and solutions at specialist and non-specialist levels.			x	

GENERAL		Weighting			
		1	2	3	4
CG2	Understanding and applying prevention, diagnosis and individual or collective treatment , and control of animal diseases, individually or in groups, with special attention to zoonoses.				x
CG6	Developing professional practice, acquiring skills related to teamwork, with an efficient use of resources and quality management.			x	
CG7	Identifying emerging risks in all areas of the veterinary profession.		x		

SPECIFIC		Weighting			
		1	2	3	4
E22	Knowing and applying principles and bases of nosology.			x	
E23	Knowing and applying principles and bases of the description and pathogenesis of general alterations of the structure and function of cells, tissues, organs and systems.			x	

		1	2	3	4
E24	Knowing and applying methods and procedures of clinical examination, additional diagnostic techniques and their interpretation.				x
E25	Knowing and applying imaging diagnostic and radiation biology.				x
E26	Knowing and applying necropsy.	x			
E27	Knowing and applying recognition and diagnosis of different types of injuries and their association with pathological processes.			x	
E29	Knowing and applying diagnosis.				x

TRANSVERSAL		Weighting			
		1	2	3	4
T1	Capacity of analysis, synthesis, implementation of knowledge for problem-solving and decision-making.				x
T2	Understanding and applying the scientific method to professional practice including evidence-based medicine.				x
T3	Basic knowledge of the veterinary profession: legal, economic, administrative, planning and time management issues and the veterinarians' society together with the importance of monitoring quality, standardization and protocols of veterinary practice.		x		
T4	Mastering fluency in oral and written mother tongue communication, listening and responding effectively using a language appropriate to audience and context.			x	
T6	Using information technology to communicate, share, search for, collect, analyze and manage information, especially related to the veterinarian practice.			x	
T8	Efficient and effective work, both independently and as a member of a multidisciplinary team or unit, showing respect, appreciation and sensitivity to the work of others.				x
T10	Ability to learn, to research, and to be aware of the need to keep knowledge updated, and attending training programs.			x	

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
	40,00%	Written assessment of acquired knowledge and skills. The test may consist of a series of open-ended questions or multiple-choice questions about the theoretical contents of the module and/or practical exercises (problem-solving).
	10,00%	Evaluation of the use of the practical lessons in the classroom, of problems or computer science, seminars and tutorials, by means of participation, computer-supported problem solving and the elaboration of the corresponding reports.
	15,00%	Evaluation of the practical laboratory work, which must demonstrate the competences acquired by the student and his or her ability to use them to solve the different situations and problems that arise in a laboratory; this assessment may consist of one of the following methods, or a combination of several of them: an individual written test, the individual or group performance of a laboratory experience, the delivery of an individual or group report on the work carried out in the laboratory.
	15,00%	Evaluation of practical work in a clinic through which the student must demonstrate the competences acquired and the ability to use them to solve the different situations and problems that arise in a clinic; this assessment may involve one of the following methods, or a combination of several of them: a written individual test, the individual or group performance of a clinical experience, the delivery of an individual or group report on the work carried out in the laboratory.

20,00%   Evaluation of group work through a system of continuous assessment throughout the course based on the delivery of assignments the objectives and content of which will be proposed by the teacher.

Observations

In the theoretical part, the average grade must be equal to or greater than 50% to be average along with the other items. The theoretical examination will consist of 40-60 test-type questions and two clinical cases. Of which, the test type presents 80% of the theoretical part and clinical cases 20%. **This test/clinical case written test represents 40% of the final grade**. In the test-type exam there will be four answers with only one true option. The proportion of 3 incorrect questions will subtract one correct one. The non-improvement of the theoretical part will make it impossible for the subject as a whole to be approved.Examination of images with test-type responses, will be performed on the same day as the theoretical examination. The proportion of 3 incorrect questions will subtract one correct one. **Represents 15% of the final note.Internship attendance is considered mandatory for first-enrollment students. Represents 10% on the final note**. **They must be repeated in case of third registration.** During the practical sessions, the teacher will keep track of each student's attendance and attitude. Factors such as punctuality, attention, degree of participation and interest shown during practice will be taken into account. There will be a total of 7 regulated practical sessions and 2 extra sessions in the HV UCV of small animals. Students must attend 8 hours, divided into 2 sessions at the HV UCV, where they will be observing and integrating into the work of the Diagnostic Imaging service. It is very important that they apply the theoretical foundations learned in the daily sessions, so that they are able to understand the usefulness of each technique in medical diagnosis; relationship of anamnesis, physical examination, symptoms with findings and their correlation with different diseases. Two sessions of one hour will be held, where it will be explained how to make a radiographic report and a case discussion will be held. The evaluation will be through individual questions about different aspects of one or more techniques (radiology, ultrasound, echocardiography, computed tomography or magnetic resonance imaging). Knowledge, interest, punctuality and the case discussion session will be scored, constituting 10% of the overall mark.

The practical evaluation will include any aspect related to the practices carried out during the academic year. Practical knowledge will be assessed in the evaluation of practical activities. The favorable outcome of the evaluation of the practices will be essential to approve the subject. **Represents 15% of the final note. The average grade must be equal to or greater than 50% to be average along with the other items.The presentation and evaluation of group work contributes 20% on the final grade.** Students, divided into small groups, will submit a scientific article or a Radiographic or ultrasound report selected by themselves or by the teacher. The teacher will evaluate the presentation of the article or report, and the involvement of all members of the group. Cases will be worked on and resolved with the task team.**Overall assessment:**

For the final grade, the results of the different evaluation activities are weighted.

To pass the course it will be necessary to obtain, at least, a grade equal to or greater than 50 points out of 100 in the final grade for the course. It would be necessary to obtain a qualification equal to or higher than 40% in the theoretical part, being able to obtain any score in the examination of images and clinical cases. Qualifications passed during the year that the subject is taken will not be saved. It is necessary to sacrifice 50% in the theoretical exam.For the final grade, the results of the various evaluation activities are weighted. Exam review: After the publication of the notes, the student will have the exam review schedules published on the intranet to review their exam, unless specified otherwise by the teachers, outside this time there is no will show the exams. Students who for different reasons do not attend the evaluation of some of the parties on the official date of calls, may be carried out the extraordinary evaluation by means of an oral examination.

MENTION OF DISTINCTION:

According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 ("Sobresaliente"). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1   On-site training activity aimed primarily at acquiring knowledge acquisition skills. It is characterised by the fact that students are spoken to. Also called master class or exposition, it refers to the oral presentation made by the teacher, (with the support of blackboard, a computer and a projector for the display of texts, graphs, etc.), in front of a group of students. They are expository, explanatory or demonstrative sessions of contents. The size of the group is determined by the limit or physical capacity of the classroom; therefore, it is a single group.

M2   On-site training activity aimed primarily at obtaining knowledge application and research skills. Knowledge is built through interaction and activities. The activity consists of supervised monographic sessions with shared participation (teachers, students, experts). The size of the group is variable, from one large group to various small groups, with a minimum of 6 students to ensure interaction. The evaluation will be based on follow-up records kept by the teacher. Participation and the development of the capacity to problematize should be taken into account.

M4   On-site training activity in groups that takes place in the classroom. It includes working with documents and formulating ideas without handling animals, organs, objects, products, or corpses (e.g., work with articles or documents, clinical case studies, diagnostic analyses, etc.). It would correspond to "Animal-free supervised practical work", type e1, from the European evaluation of EAEVE. The size of the group is variable, in a range of 10 to 20 students.

M5   On-site training activity in groups that takes place in the Computer Lab where the computer is used as support for learning. It includes work with computer models, specific software, Web queries, etc. It would correspond to "Animal-free supervised practical work", type e1, from the European evaluation of EAEVE. The size of the group is variable, in a range of 10 to 20 students.

M6   On-site training activity in groups carried out in the laboratory. It includes the sessions where the students develop laboratory experiments, make dissections or use the microscopes for the study of histological or histopathological samples actively and autonomously, under the supervision of the professor. It also includes work with healthy animals, objects, products, corpses (e.g., animal handling, bacteriological practices, physiology or biochemistry, meat inspection, etc.). It would correspond to the "Supervised practical non-clinical animal work" type e2 of the European evaluation of EAEVE. The size of the group is variable, in a range of 10 to 20 students.

M7   On-site training activity that is defined as the clinical practical work developed in the Veterinary Clinical Hospital or clinical centres ascribed to the University, as well as itinerant clinical practices, mainly with ruminants, equids, pigs, birds and aquatic animals. Also included are necropsies, surgical workshops and training in clinical examination techniques or diagnosis with healthy patients. In these practical sessions the student will always work with animals, which can be healthy (e.g. propaedeutic or obstetrics) or clinical cases (individual or collective), including a protocol or work scheme, being supervised by a teacher and assuming the provision of a service. This type of training corresponds to type e3 of the EAEVE European evaluation called "Clinical Training" (strickly hands-on)". The size of the group will be 5 students or fewer.

M8   A set of on-site training activities carried out by the teacher to provide personalised attention to the student or in small groups with the aim of reviewing and discussing the materials and topics presented in classes, seminars, readings, carrying out projects, etc. The aim is to ensure a truly comprehensive education of the student rather than a mere transfer of information. It is, therefore, a personalized assistance relationship in which the tutor assists, facilitates and guides one or more students in the learning process.

M9   Set of processes that attempt to evaluate the learning outcomes of students expressed in terms of acquired knowledge, capacities, skills or abilities developed and manifested attitudes. It covers a wide range of activities that can be developed for students to demonstrate their training (e.g. written, oral and practical tests, projects or assignments). It also includes the Official Calls.

M10   Autonomous training activity, including activities and coursework, bibliographic searches. The results obtained from unsupervised group and teamwork will be evaluated, with particular attention paid at the time of evaluation to the acquisition of specific knowledge development skills through group work.

M11   Autonomous training activities related to personal study, or the preparation of individual course assignments. The individual preparation of readings, essays, problem solving, papers, reports, etc. will be evaluated through presentations or submissions during theoretical classes, practical classes, seminars and/or tutorials. The evaluation of the submitted papers will consider the structure of the paper, the quality of the documentation, originality, spelling and presentation.

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
Theoretical lessons (TL) M1	R2, R3, R5, R6, R7, R8, R9	50,00	2,00
Seminars (S) M2	R5, R6, R7, R8, R9	12,00	0,48
Laboratory Practice (LP) M6	R4, R5, R7, R8	25,00	1,00
Tutorial M8	R2, R3, R6, R7, R8, R9	1,00	0,04
Evaluation (Ev) M9	R2, R3, R4, R5, R6, R7, R8, R9	2,00	0,08
TOTAL		**90,00**	**3,60**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
Group work M10	R7, R8, R9	20,00	0,80
Individual work M11	R2, R3, R5, R6, R7, R8, R9	40,00	1,60
TOTAL		**60,00**	**2,40**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
UD I: BASIC DIAGNOSTIC IMAGING PHYSICS. RADIOPROTECTION. CONTRAST MEDIA.	SUBJECT 1. BASIC RADIOPROTECTION CONCEPTS. ATOMIC STRUCTURE, ELECTROMAGNETIC RADIATION, ENERGY, UNITS, ELECTROMAGNETIC SPECTRUM.SUBJECT 2. INTERACTION OF RADIATION WITH MATTER.SUBJECT 3. X-RAY EQUIPMENT: PHYSICAL BASIS, CHARACTERISTICS AND PROPERTIES. SUBJECT 4. THE RADIATION BEAM. X RAY SPECTRUM. SUBJECT 5. MAGNITUDES AND UNITS IN DOSIMETRY. SUBJECT 6. DETECTION AND DOSIMETRY OF RADIATION. SUBJECT 7. GENERAL ASPECTS OF THE INTERACTION OF RADIATION WITH THE BIOLOGICAL ENVIRONMENT. SUBJECT 8. GENERAL CRITERIA AND BASIC MEASURES IN RADIOLOGICAL PROTECTION. SUBJECT 9. OPERATIONAL RADIOLOGICAL PROTECTION TOMOGRAPHIES. SUBJECT 10. TOMOGRAPHIES: TAC, RMN, GAMMAGRAFIA AND ECHOGRAPHY.

DU 2.- DIAGNOSTIC IMAGING IN SMALL ANIMALS.

SUBJECT 11. INTRODUCTION TO ABDOMINAL X-RAY. Radiographic technique. Radiographic anatomy.
SUBJECT 12. INTRODUCTION TO THORACIC X-RAY. Radiographic technique. Radiographic anatomy.
SUBJECT 13. INTRODUCTION TO MUSCULOSKELETAL RADIOGRAPHY. Radiographic technique. Radiographic anatomy.
SUBJECT 14. IMAGE DIAGNOSIS OF ABDOMINAL PATHOLOGIES. Radiographic appearance. Interpretation of congenital and acquired alterations of the cavity.
SUBJECT 15. IMAGE DIAGNOSIS OF ABDOMINAL DISEASES. Radiographic aspects, radiographic interpretation of congenital and acquired alterations of the mediastinum and thoracic wall. Pulmonary patterns.
SUBJECT 16. IMAGE DIAGNOSIS OF HEAD AND SPINE PATHOLOGIES (AXIAL SKELETON). Radiographic technique. Radiographic anatomy, interpretation of congenital and acquired alterations. Myelography, CT and MRI.
SUBJECT 17. IMAGE DIAGNOSIS OF MUSCLE SKELETAL PATHOLOGIES (APENDICULAR SKELETON). Interpretation of congenital and acquired disorders.

DU 3. DIAGNOSTIC IMAGING IN LARGE ANIMALS.

SUBJECT 18. RADIOLOGICAL STUDY OF THE LOCOMOTOR APPARATUS IN EQUINE. Radiographic technique. Normal radiographic anatomy. Interpretation of the main radiological alterations of the equine locomotor system.

SUBJECT 19. ECOGRAPHIC STUDY OF THE lOCOMOTOR APPARATUS IN EQUINE. Ultrasound technique. Ultrasound anatomy. Interpretation of the main echographic alterations of the equine locomotor system.

SUBJECT 20. ECOGRAPHIC STUDY OF THE EQUINE ABDOMEN. Ultrasound technique. Ultrasound anatomy. Interpretation of the main ultrasound alterations of the equine abdomen.

SUBJECT 21. ECOGRAPHIC STUDY OF THE EQUINE CARDIORESPIRATORY SYSTEM. Ultrasound technique. Ultrasound anatomy. Interpretation of the main echographic alterations of the equine cardiorespiratory system.

SUBJECT 22. CLINICAL CASES, LOCOMOTOR APPARATUS AND ABDOMEN IN EQUINE. Presentation and resolution of clinical cases.

SUBJECT 23. CLINICAL CASES CARDIORESPIRATORY SYSTEM IN EQUINE.

Organization of the practical activities:

	Content	Place	Hours
PR1.	Practice 1. Introducción to the X-ray room.	Hospital	1,00
PR2.	Practice 2. Positioning 1. Thorax, Abdomen, Axial Skeleton.	Hospital	2,00
PR3.	Practice 3. Positioning 2. Appendicular skeleton.	Hospital	2,00
PR4.	Practice 4. General abdomen ultrasound.	Hospital	2,00
PR5.	Echocardiography	Hospital	2,00
PR6.	Diagnostic imaging service	Farm	2,00
PR7.	eminar 3. Clinical cases Appendicular skeleton	Farm	2,00
PR8.	Practice 5. Equine locomotor apparatus.	Hospital	4,00
PR9.	Practice 6. Cardiorespiratory system in horses.	Lecture room	2,00
PR10.	Seminar 1. Equine clinical cases.	Lecture room	2,00
PR11.	Seminar 2: Small Animal Clinical Cases	Lecture room	2,00
PR12.	Practical examination	Hospital	2,00

Temporary organization of learning:

Block of content	Number of sessions	Hours
UD I: BASIC DIAGNOSTIC IMAGING PHYSICS. RADIOPROTECTION. CONTRAST MEDIA.	6,00	12,00
DU 2.- DIAGNOSTIC IMAGING IN SMALL ANIMALS.	25,00	50,00
DU 3. DIAGNOSTIC IMAGING IN LARGE ANIMALS.	14,00	28,00

References

Adams y Stashak. Claudicación en el caballo. 6 ed. Intermédica. 2014.Butler JA, Colles CM, Dyson SJ, K SE y Poulos PW. Clinical Radiology of the horse. 3 ed. Blackwell Science, 2008.Coulson A., Lewis N. An atlas of interpretative radiographic anatomy of the dog and cat. 2 ed. Blackwell Publishing, 2008.Evans H. Miller's Anatomy of the Dog. WB Saunders Co., 1993.Jerrold T. Bushberg. The Essential Physics of Medical Imaging. Lippincott Williams & Wilkins, 2002.

Kidd JA, Lu KG y Frazer ML. Atlas of Equine Ultrasonography. 3 ed. Wiley Blackwell, 2014.Nyland TG y Matton JS. Diagnóstico ecográfico en pequeños animales. 2 ed. WB Saunders Co., 2004Reef VB. Equine Diagnostic Ultrasound. WB Saunders Co, 1998Lisa M. Lavin. Radiography in Veterinary Technology. WB Saunders, 1998.

Roldán J, Vázquez FJ y Méndez JL. Valoración de los hallazgos radiográficos del modelo de precompra AVEE. Servet, 2020.Schwarz T, Saunders J. Veterinary Computed Tomography. Willey-blackwell, 2011.Thomas S. Curry, III, James E. Dowdey, Robert C. Murry, Jr. Christensen´s physics of diagnostic radiology 4 Ed. Lippincott Williams & Wilkins., 1990.Thrall DE. Manual de Diagnóstico Radiológico Veterinario. 4 ed. Elsevier, 2003.Manuales BSAVA (abdominal imaging, thoracic imaging, musculoskeletal imaging, ultrasonography, radiography and radiology)REVISTAS NACIONALES- Clínica Veterinaria de Pequeños Animales (AVEPA)-ConsultaREVISTAS EXTRANJERAS• Veterinary Radiology and Ultrasound• In Practice• Journal of American Veterinary Medicine Association• Veterinary Medicine• Veterinary Record• Journal Small Animal Practice

Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

Situation 1: Teaching without limited capacity (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

Situation 2: Teaching with limited capacity (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

X	Microsoft Teams
	Kaltura

Situation 3: Confinement due to a new State of Alarm.

In this case, the following changes are made:

1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

| X | Microsoft Teams |

| | Kaltura |

Explanation about the practical sessions:

In the case of regulated practices (1-7), videos will be made by the teacher in charge, including all its content. In addition, a series of final questionnaires will be attached in order to evaluate the knowledge acquired by the student.

Practices 8 and 9 will be clinical cases of small interactive animals (X-rays, ultrasound and CT), with short multiple choice questions at the end of them.

2. System for Assessing the Acquisition of the competences and Assessment System

ONSITE WORK

Regarding the Assessment Tools:

☐ The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

☒ The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used
Multiple choice test evaluation of the theoretical contents	40	The resolution of clinical cases will not be carried out	CAMPUS UCV-NET + MICROSOFT TEAMS
Multiple choice evaluation with images.	20	Change the percentage awarded	CAMPUS UCV-NET + MICROSOFT TEAMS
Evaluation of the attendance to practices	20	The student must answer a questionnaire after viewing the video of the practice	CAMPUS UCV-NET + MICROSOFT TEAMS
Self working	20	The student must carry out a work on a topic indicated by the teacher	CAMPUS UCV-NET + MICROSOFT

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

Comments to the Assessment System: