DETAILS OF THE SUBJECT

Title: NEUROANATOMÍA Y ANATOMÍA TOPOGRÁFICA
Code: 101456
Degree/Master: GRADO DE VETERINARIA
Name of the module to which it belongs: FORMACIÓN BÁSICA COMÚN
Field: ANATOMÍA Y EMBRIOLOGÍA VETERINARIAS
Character: BASICA
Duration: FIRST TERM
ECTS Credits: 6
Classroom hours: 60
Face-to-face classroom percentage: 40%
Non-contact hours: 90
Online platform: http://www3.uco.es/m1314

TEACHER INFORMATION

Name: LOPEZ RIVERO, JOSE LUIS (Coordinador)
Department: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Area: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Office location: EDIFICIO SANIDAD ANIMAL, 1ª PLANTA
E-Mail: an1lorij@uco.es
Phone: 957218143

Name: DIZ PLAZA, ANDRES MARIA
Department: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Area: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Office location: EDIFICIO SANIDAD ANIMAL, 1ª PLANTA
E-Mail: an1dipla@uco.es
Phone: 957218142

Name: MIRO RODRIGUEZ, FRANCISCO
Department: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Area: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Office location: EDIFICIO SANIDAD ANIMAL, 1ª PLANTA
E-Mail: an1mirof@uco.es
Phone: 957218143

Name: RODRIGUEZ BARBUDO, MARIA VICTORIA
Department: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Area: ANATOMÍA Y ANATOMÍA PATOLÓGICA COMPARADAS
Office location: EDIFICIO SANIDAD ANIMAL, 1ª PLANTA
E-Mail: an1robam@uco.es
Phone: 957218144

SPECIFICOS OF THE SUBJECT

REQUIREMENTS AND RECOMMENDATIONS

Prerequisites established in the study plan

To have passed the subjet Embriología y Anatomía Sistemática, of the same degree. The Students who does not
fulfill this previous requirement could not neither take or attend the activities of the subject.

Recommendations

Attention, continuous study of the scheduled classroom activities. Attendance is strongly recommended to all classroom activities, theoretical and practical activities of the subject.

<table>
<thead>
<tr>
<th>SKILLS</th>
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<tbody>
<tr>
<td>CE7</td>
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<td>CE8</td>
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<table>
<thead>
<tr>
<th>OBJECTIVES</th>
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<tbody>
<tr>
<td>Having a basic and integrated knowledge of the Central Nervous System and Common Integument of the domestic animals.</td>
</tr>
<tr>
<td>Have a specific knowledge of the morphology, location, topography and relationships of the organs and anatomical structures of the body regions in species of veterinary interest: carnivores, horse, ruminants, swine and birds.</td>
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<table>
<thead>
<tr>
<th>CONTENT</th>
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<tbody>
<tr>
<td>1. Theoretical content</td>
</tr>
<tr>
<td>CENTRAL NERVOUS SYSTEM</td>
</tr>
<tr>
<td>ANATOMY OF THE CENTRAL NERVOUS SYSTEM. GENERAL MORPHOLOGY. Morphology, size and evolutionary aspects. Introductory morphological study. SPINAL CORD. Configuration and topography: extension and portions, grooves and fissures, columns of white matter. Organization and structure: Central canal, gray matter (nuclei and columns of the dorsal, intermediate and ventral horns) and white matter (tracts of the dorsal, lateral and ventral columns).</td>
</tr>
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SPECIAL SOMATIC AFFERENT (SSA) PATHWAYS. Visual, Auditory and vestibular (balance) pathways.

SOMATIC EFFERENT PATHWAYS. Upper and lower motor systems. Pyramidal and extrapyramidal systems. Cerebellar function.


SENSE ORGANS


VISUAL SENSE ORGANS. Development. The Eyeball. The retina (internal tunic ). The Optic nerve. The vascular tunic: choroid, ciliary body and iris. The fibrous tunic: sclera and cornea. Refracting media of the eyeball: Cristallyne and humors of the eyeball.


SENSE OF HEARING. The inner ear (vestibulocochlear organ). membranous labyrinth: vestibular and cochlear portions. bony labyrinth: vestibule, cochlea and internal acoustic meatus. Vessels and nerves.

Middle ear. Sound transmission substrate. Tympanic cavity: General organization. External ear: external acoustic meatus and pinna. Cartilages and muscles of the hear. Innervation and blood supply.
COMMON INTEGUMENT

Development, structure and constitution of the skin. Hair and skin glands. Skin muscles and innervation areas of

Blood supply, lymph and nerve supply.

2. Practical contents

ANATOMY OF THE HORSE AND CARNIVORES

HEAD, NECK, BACK AND THORAX OF CARNIVORES. HEAD. Conformation and external features. Surface
and external features. Surface anatomy and deep structures. Radiographic Anatomy. BACK. Conformation and
Conformation and surface anatomy. Thoracic wall. Pleura and lungs. Mediastinum. Heart. Esophagus, trachea and

ABDOMEN, PELVIS, GENITAL AND MEMBERS OF CARNIVORES. ABDOMEN. Configuration and surface
Kidneys and Adrenal glands. Vascular, nervous and lymphatic structures. Abdominal palpation. Radiographic
Anatomy. PELVIS. General considerations. Rectum and anal canal. Urinary bladder. GENITAL ORGANS. Female
Nerves of the forelimb. Radiographic Anatomy. HIND LIMB. Pelvic region (Croup), hip and thigh. Knee and Leg.

THE HEAD AND NECK OF THE HORSE. HEAD. Conformation and external features. Skeleton. Surface
Pharynx and the Diverticulum of the auditory tube (Guttural pouch). Larynx. Eye and accessory organs. blood and

THE BACK AND THORAX OF THE HORSE. BACK. Conformation and surface features. Spine. Muscles of the
of the thorax. Lymphatic structures.


ANATOMY OF THE RUMINANTS, PIGS AND BIRDS


CENTRAL NERVOUS SYSTEM AND SENSE ORGANS


METHODOLOGY

General clarifications on the methodology. (optional)

Due to the practical profile of the subject (two-thirds of its content), classroom activities are considered essential for monitoring and learning. However, needs of the part-time students will be taken into consideration.

This subject is taught in English optionally according to the requirements of the Plan for the Promotion of Plurilingualism at the University of Cordoba 2014 to 2017.
Methodological adaptations for part-time students

Any specific case will be analyzed.

Face-to-face activities

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<tr>
<th>Activity</th>
<th>Large group</th>
<th>Medium group</th>
<th>Small group</th>
<th>Total</th>
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<tr>
<td>Assessment activities</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory</td>
<td>-</td>
<td>-</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Lectures</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Seminar</td>
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<td>12</td>
<td>-</td>
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<td>Total hours:</td>
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<td>12</td>
<td>24</td>
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Not on-site activities

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<td>Bibliographic consultations</td>
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<tr>
<td>Finding information</td>
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<td>Self-study</td>
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<td>Total hours:</td>
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WORK MATERIALS FOR STUDENTS

Internship notebook
Dossier
Manual of the subject

EVALUATION

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<tr>
<th>Skills</th>
<th>Tools</th>
<th>Attendance sheets</th>
<th>Multiple choice exam</th>
<th>Short answer tests</th>
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<td>CE7</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>Total (100%)</td>
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<tr>
<td>Minimum grade.(*)</td>
<td>5</td>
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(*): Minimum grade necessary to pass the subject

General clarifications on instruments for evaluation:

The above percentages are in accordance to the relative proportion of each assessment tool on the overall score on each block of the subject. However, each of the assessment tests must be overcome independently, with a minimum score of 5 out of 10.

General clarifications on evaluation and methodological adaptation for part-time students:

Any specific case will be analyzed.

**Qualifying criteria for obtaining honors:** Results in the relevant assessment tests
Aclaraciones generales sobre las evaluaciones parciales, calificación mínima para eliminar materia y periodo de validez:

The results of the two partial eliminatory will maintained until the two first official calls of February, but not until the September exam. Each of the partial tests consists in two parts, a continuous assessment and a practical examination both of them must be overcome independently.

BIBLIOGRAPHY

1. Basic Bibliography:


2. Further reading:


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<th>COORDINATION CRITERIA</th>
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<td>- Delivery date job</td>
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<td>- Performing activities</td>
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### SCHEDULE

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**Total hours:** 2 24 20 14