

## ANATOMY II

**Study Programme: MIMV    Curricular Year: 1<sup>st</sup>    Semester: 2<sup>nd</sup>    Compulsory    Credits: 4.5 ECTS**

**Lecturer(s):** Graça Alexandre-Pires (CCP e R), João Afonso, Fernando Ferreira, Luísa Jorge

### 1. Contact hours: Lectures - 28, Practicals - 56

### 2. Objectives

The Anatomy II aims to make students proficient in:

1. Identification, location and morphological characterization of the organs of the digestive, respiratory, urinary, genitals, udder and the cardiovascular system allowing the distinction of these organs in the main animal species;
2. Anatomical organization of the thoracic, abdominal and pelvic cavities, ligaments and mesos;
3. Identification and location of hormone producer organs;
4. Knowledge and identification of muscles responsible for locomotion and movement as well as mimic; their organization into groups and their actions;

Students should understand the functional reason of anatomical structures and clinical application of that knowledge and its variability in animals from the main species.

### 3. Programme:

1. Elements of the digestive tract, specificity and morphological organization;
2. Elements of the respiratory apparatus organs, specificity and morphological organization;
3. Elements of the genital apparatus, specificity and morphological organization;
4. Elements of the urinary apparatus, specificity and morphological;
5. Elements of the cardiovascular system, specificity and morphological organization;
6. Hormone producer organs, specificity and morphological organization;
7. Elements of the mechanics of movement, namely muscle groups (muscles of the face, the pinna, cervical, shoulder girdle, the back and loins, chest and abdomen, thoracic and pelvic limbs)..

### 4. Bibliography:

- Afonso, J., Ferreira, F., Mendes-Jorge, L. & Alexandre-Pires, G. (2012). *Aparelhos e sistemas nos animais domésticos*. FMV.
- Alexandre-Pires, G. (2010). *Notas sobre o Sistema Cardiovascular*. FMV- UTL.
- Alexandre-Pires, G., Afonso, J, Ferreira, F, Mendes-Jorge, L. (2014). *Atlas de Miologia*. FMV.
- Dyce, K.M., Sack, W.O. & Wensing, C.J.G., (2010). *Tratado de Anatomia Veterinária*. Elsevier.
- Getty, R. & Grossman, J. D. & Sisson, S. (2000). *Anatomia dos Animais Domésticos de Sisson e Grossman*. Nova Guanabara.
- Mc Lelland, J. (1992). *Atlas en Color de Anatomia de las Aves*. Mc Graw-Hill.
- Ruberte, J. & Sautet, J. (1995). *Atlas de Anatomia del Perro y del Gato - Cabeza y Cuello*. Grafica In Multimedia.
- Ruberte, J. & Sautet, J. (1995). *Atlas de Anatomia del Perro y del Gato - Tórax y Miembro Torácico*. Multimédica/Friskies.
- Ruberte, J. & Sautet, J. (1995). *Atlas de Anatomia del Perro y del Gato - Abdómen, Pelvis y Miembro Pelviano*. Multimédica/Friskies.

### 5. Assessment

The students' knowledge is evaluated at the end of the term with a written examination including theoretical subjects and a practical examination concerning identification of anatomical structures.