

DISCIPLINE DESCRIPTION

1. Information on the study programme

1.1 Academic Institution	University of Oradea
1.2 Faculty	Faculty of Environmental Protection
1.3 Department	Animal Husbandry and Agritourism
1.4 Field of study	Animal Husbandry
1.5 Cycle of study	Bachelor
1.6 Study programme/Qualification	Animal Husbandry/Engineer

2. Information on the discipline

2.1 Name of discipline	Anatomy Histology Embryology II						
2.2 Course holder	Lect. PhD. Eng. Codrin Gavra						
2.3 Seminar/Laboratory/Project holder	Lect. PhD. Eng. Codrin Gavra						
2.4 Year of study	I	2.5 Semester	II	2.6 Type of evaluation	Exam	2.7 Regime of discipline	C

(C) Compulsory; (O) Optional; (E) Elective

3. Total estimate time (hours per semester of didactic activities)

3.1 Number of hours per week	4	out of which: 3.2 course	2	out of which: 3.3 seminar/laboratory/project	2
3.4 Total hours in the curriculum	56	out of which: 3.5 curs	28	out of which: 3.6 seminar/laboratory/project	28
Time allotment					hours
Study assisted by manual, course support, bibliography and notes					22
Additional documentation in the library/on specialised electronic platforms and in the field					20
Preparation of seminars/laboratories/topics/reports, portfolios and essays					18
Tutorship					2
Examinations					4
Other activities: consultations					3
3.7 Total hours of individual study	69				
3.8 Total hours per semester	125				
3.9 Number of credits	5				

4. Prerequisites (where appropriate)

4.1 curriculum	•
4.2 competences	<ul style="list-style-type: none"> • Basic knowledge regarding the field of animal biology; • Competences of information and documentation, the application of knowledge, of individual and group activity.

5. Conditions (where appropriate)

5.1. related to course	<ul style="list-style-type: none"> • Lecture hall equipped with laptop, projector, whiteboard, plates, which ensures conditions for active and interactive learning; • It requires compliance with the rules of ethics and good conduct during the course and respecting the timetable; • Active presence and attendance at courses is recommended, absences implicitly affecting the final result. In the case of absences, the responsibility lies with the students to determine the part of the lost subject matter and take measures for recovery; • Mobile phones and similar devices are not allowed during classes.
5.2. related to seminar/laboratory/ project	<ul style="list-style-type: none"> • Students are required to wear white robe at the laboratory works • Anatomy Histology Embryology laboratory equipped with microscopes, histological preparations and preserved anatomical parts, plates; • Mobile phones and similar devices are not allowed during classes.

6. Specific competences acquired	
Professional competences	<ul style="list-style-type: none"> • Identification of the main notions, concepts and laws specific to the cellular and tissue levels of organisation and functioning of living matter; • Knowing of the structure and functions of the animal body and the relationships between its various constituent organs; • The ability to identify histological preparations and preserved anatomical parts, regardless of their origin, with specific differences; • Identification of methods, techniques, usual methods of observation, investigation and exploration of animal organisms and their organization; • Understanding of the development process of the cells, tissues, and their specific characters, depending on the role they fulfil.
Transversal competences	<ul style="list-style-type: none"> • Use of effective lifelong learning methods and techniques for the purpose of training and continuous professional development; • Responsible and effective implementation of the tasks related to the professions in the field, while respecting the principles of professional ethics; • Identifying the role of a team and assuming the appropriate professional and personal responsibilities; • Cultivating a correct and timely work discipline, responsibility for work, team spirit formation, and awareness of the importance of search and research.

7. Objectives of discipline (coming from the specific competences acquired)

7.1 General objective	<ul style="list-style-type: none"> • Acquiring theoretical and practical knowledge about the morphology of the whole animal body, the organs, systems and components, respectively the student develops his/her skills to correctly apply the accumulated knowledge.
7.2 Specific objectives	<ul style="list-style-type: none"> • Knowledge and understanding of the macroscopic composition of the animal body; • Acquiring the notions of osteology, myology, arthrology; • Understanding the structure of the animal body and the interrelations with physiology; • Acquiring the method of describing the structure of the anatomical formations in correlation with the species.

8. Content*

8.1 Course	Methods of teaching	No. of hours/remarks
VII. The digestive system – generalities, oral cavity, tongue, teeth, systematisation of teeth, salivary glands, pharynx, oesophagus, stomach, small intestine, large intestine, the adjacent glands of the digestive system (liver, gallbladder, pancreas)	Lecture, debate, video projection system of the didactic material	6
VIII. Poultry digestive system – oral cavity, pharynx, oesophagus, stomach, small intestine, large intestine, cloaca, liver, pancreas	Lecture, video projection system of the didactic material, plates, debate	2
IX. Respiratory system – respiratory tract (nasal cavities), pharynx, larynx, trachea, lungs, thoracic cavity and pleural cavities, respiratory system of poultry	Lecture, exposing, video projection system of the teaching material, debate	4
X. Urinary system – the kidneys, nephron, renal arteries, renal pelvis, ureters, urinary bladder, urethra	Lecture, video projection system of the didactic material, debate, plates	2
XI. Reproductive system – male reproductive system (scrotum, spermatic cord, testicles, male genital extratesticular paths, accessory genital glands, copulatory	Lecture, video projection system of the didactic material,	6

organ); female reproductive system (ovaries, fallopian tubes, uterus, vagina, vulval vestibule, vulva, mammary gland)	debate, plates	
XII. Circulatory system – the cardiovascular system, the lymphatic system	Lecture, video projection system of the didactic material, debate, exposure	2
XIII. Neuro-endocrine system – central nervous system, peripheral nervous system, vegetative nervous system, the endocrine glands, analyzers (sense organs)	Lecture, exhibition, video projection system of the didactic material, exemplification	6
Bibliography:		
<ol style="list-style-type: none"> Mireşan Voara, 2009 – <i>Comparative anatomy, histology and embryology</i>. AcademicPres Publishing House – Cluj-Napoca. Gheţie V., Paştea E., Riga I. Th., 1954 – <i>Atlas of comparative anatomy</i>. Vol. I. Agro-Forestry State Publishing House – Bucureşti. Gheţie V., Chiţescu Şt., Coţofan V., Hillebrand A., 1976 – <i>Atlas of domestic birds anatomy</i>. Academy of the Socialist Republic of Romania Publishing House. Gheţie V., Bica Popii O., Chiţescu Şt., Nicolescu V., Oprişescu P., Bălănescu F., 1967 – <i>Anatomy of domestic animals</i>. Didactics and Pedagogy Publishing House – Bucureşti. Paştea E., 1985 – <i>Comparative Anatomy of domestic animals</i>. Vol. I, II. Didactics and Pedagogy Publishing House – Bucureşti. Ganta C. V., 2007 – <i>Anatomy of domestic animal</i>. Vol. I, II, III. Orizonturi Universitare Publishing House – Timişoara. Botărel S., Cotea C., Gaboreanu M., 1982 – <i>Histology and Veterinary Medical Embryology</i>. Didactics and Pedagogy Publishing House – Bucureşti. Miclea M., Voara Mireşan, 1997 – <i>Anatomy, histology, embryology</i>. Tipo Agronomia Publishing House – Cluj-Napoca. Miclea M., Voara Mireşan, Miclăuş V., 1998 – <i>Anatomy and histology of domestic animals</i>. Genesis Publishing House – Cluj-Napoca. 		
8.2 Laboratory	Methods of teaching	No. of hours/remarks
VII. The digestive system – generalities, oral cavity, tongue, teeth, systematisation of teeth, salivary glands, pharynx, oesophagus, stomach, small intestine, large intestine, the adjacent glands of the digestive system (liver, gallbladder, pancreas)	Exposing, conversation, macroscopic study of formalized organs to different species of domestic animals, plates, anatomical models	6
VIII. Poultry digestive system – oral cavity, pharynx, oesophagus, stomach, small intestine, large intestine, cloaca, liver, pancreas	Exposing, conversation, macroscopic study of formalized organs to different species of domestic animals, plates, anatomical models	2
IX. Respiratory system – respiratory tract (nasal cavities), pharynx, larynx, trachea, lungs, thoracic cavity and pleural cavities, respiratory system of poultry	Topographic sections, exposing, formalized preparations, plates	4
X. Urinary system – the kidneys, nephron, renal arteries, renal pelvis, ureters, urinary bladder, urethra	Exposing, plates, work sheets, anatomical models	2
XI. Reproductive system – male reproductive system (scrotum, spermatic cord, testicles, male genital extratesticular paths, accessory genital glands, copulatory organ); female reproductive system (ovaries, fallopian tubes, uterus, vagina, vulval vestibule, vulva, mammary gland)	Exposing, conversation, topographical sections, macroscopic study of organisms formalized to different species of domestic animals, plates	6
XII. Circulatory system – the cardiovascular system, the lymphatic system	Exposing, formalized preparations, plans, anatomical models	2

XIII. Neuro-endocrine system – central nervous system, peripheral nervous system, vegetative nervous system, the endocrine glands, analyzers (sense organs)	Exposing, conversation, macroscopic study of formalized organs to different species of domestic animals, plates, anatomical models	6
--	--	---

Bibliography:

1. **Mireşan Vioara**, 2009 – *Comparative anatomy, histology and embryology*. AcademicPres Publishing House – Cluj-Napoca.
2. **Gheţie V., Paştea E., Riga I. Th.**, 1954 – *Atlas of comparative anatomy*. Vol. I. Agro-Forestry State Publishing House – Bucureşti.
3. **Gheţie V., Chiţescu Şt., Coţofan V., Hillebrand A.**, 1976 – *Atlas of domestic birds anatomy*. Academy of the Socialist Republic of Romania Publishing House.
4. **Gheţie V., Bica Popii O., Chiţescu Şt., Nicolescu V., Oprişescu P., Bălănescu F.**, 1967 – *Anatomy of domestic animals*. Didactics and Pedagogy Publishing House – Bucureşti.
5. **Paştea E.**, 1985 – *Comparative Anatomy of domestic animals*. Vol. I, II. Didactics and Pedagogy Publishing House – Bucureşti.
6. **Ganta C. V.**, 2007 – *Anatomy of domestic animal*. Vol. I, II, III. Orizonturi Universitare Publishing House – Timişoara.
7. **Botărel S., Cotea C., Gaboreanu M.**, 1982 – *Histology and Veterinary Medical Embryology*. Didactics and Pedagogy Publishing House – Bucureşti.
8. **Miclea M., Vioara Mireşan**, 1997 – *Anatomy, histology, embryology*. Tipo Agronomia Publishing House – Cluj-Napoca.
9. **Miclea M., Vioara Mireşan, Miclăuş V.**, 1998 – *Anatomy and histology of domestic animals*. Genesis Publishing House – Cluj-Napoca.

* The content, respectively the number of hours allocated to each course/seminar/laboratory/project will be detailed during the 14 weeks of each semester of the academic year.

* The books presented in the bibliography are printed in Romanian language. Titles and Publishing Houses have been translated into English language for the discipline description.

9. Corroboration of discipline content with the expectations of the epistemic community, professional associations and representative employers from the field corresponding to the study programme

- Discipline exists in the curricula of the universities and profile faculties of Romania, thus being in accordance with the curriculum in other university centres;
- By acquiring theoretical notions and practical aspects included in the discipline of *Anatomy, Histology, Embryology*, students acquire consistent knowledge to facilitate their application in professional work;
- For a better concordance and coordination of the discipline with the requirements of the labour market, have and will occur meetings with representatives of the business environment, respectively with professors from pre-university education.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the final grade
10.4 Course	- The correctness of assimilated knowledge; - Coherence and logic in the subject's exposure; - Level of assimilation of the discipline specific terms.	Written examination, active participation in courses	70%
10.5 Laboratory	- The ability to apply the acquired notions in practice; - Level of assimilation of laboratory work.	Colloquium, active participation in the laboratory	30%
10.6 Minimum standard of performance			
<ul style="list-style-type: none"> • Correct assimilation of elementary notions and terms specific to discipline, respectively the names of anatomical apparatus, organs and systems. 			

Date of completion
19.06.2023

Signature of course holder
Lecturer Dr. Eng. Codrin Gavra
(gavracodrin@gmail.com)



Signature of seminar
laboratory/project holder
Lecturer Dr. Eng. Codrin Gavra
(gavracodrin@gmail.com)



Date of approval in the department
21.06.2023

Signature of the Head of Department
Lecturer Dr. Eng. Monica Dodu
(monica_dodu@yahoo.com)



Dean signature
Assoc. Prof. Dr. Eng. Cristina Maurescu
(cristina_maurescu@yahoo.com)

