DISCIPLINE SHEET

1. Study programme

1.1.	**"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST**
1.2.	**FACULTY OF DENTISTRY**
1.3.	**DEPARTMENT 1**
1.4.	**DISCIPLINE Anatomy**
1.5.	**STUDY DOMAIN: Health, sectoral regulated within the European Union**
1.6.	**STUDY LEVEL: I (Bachelor's degree) and II (Master's degree)**
1.7.	**STUDY PROGRAMME: DENTAL MEDICINE IN ENGLISH**

2. Discipline

2.1.	**Discipline name according to the study curriculum:** TOPOGRAPHIC, FUNCTIONAL AND CROSS-SECTIONAL ANATOMY OF THE HEAD AND NECK				
2.2.	**Discipline code: MD04OP19EN**				
2.3.	**Discipline type (FD/SD/CD): -**				
2.4.	**Discipline optionality (COD/ED/FAD): ED**				
2.5.	**Lectures tenure:** Prof.Dr.Rusu Mugurel Constantin				
2.6.	**Practical classes / seminar tenure:** As.Univ.Dr.Bichir Cătălina				
2.7. Year of study	**I**	**2.8. Semester**	**II**	**2.9. Evaluation (E/C/V)**	**C**

3. Estimated total time (hours/ semester of teaching and training activity /individual study)

I. University training						
3.1. Number of hours per week	**2**	**from which:**	**3.2. lecture**	**1**	**3.3. practical class/ seminar**	**1**
3.4. Total hours in the study curriculum	**28**	**from which:**	**3.5. lecture**	**14**	**3.6. practical class/ seminar**	**14**
II. Preparation/ individual study						
Time distribution						**hours**
Study of lecture materials, textbooks, books, study of the minimum recommended bibliography						20
Additional documentation activity in the library, on online platforms						-
Specific preparation activities for projects, practical classes, preparation of assignments, reports						12
Preparation for presentations or evaluations, preparation for the final examination						--
Tutoring activity						
Other activities						-
3.7. Total hours of individual study						32
3.8. Total hours per semester (3.4.+3.7.)						60
3.9. Number of credits						2

4. Prerequisites (where appropriate)

4.1. curriculum	Notions of head anatomy (Anatomy 2)	
4.2. proficiencies	N/A	

5. Conditions (where appropriate)

5.1. for lecture activity	online platform	
5.2. for practical class/ seminar activity	IT devices, online platform	

6. Learning outcomes*

Knowledge	Skills	Responsibility and autonomy
Upon completion of this course, students will be able to: • Analyze the detailed anatomy of functional zones within the maxilla and mandible, understanding their biomechanical properties and clinical implications for treatment planning • Describe the anatomical factors contributing to dental impaction, including spatial relationships, and developmental variations • Explain the complex patterns of accessory innervation of teeth, including cross-innervation, aberrant nerve pathways, and their clinical significance for anesthetic procedures • Comprehensively describe the anatomy of all cervical regions, including fascial compartments, triangular divisions, and contained neurovascular structures • Analyze the detailed anatomy of cervical lymphatic drainage patterns and their clinical significance • Explain the complex three-dimensional relationships between deep perioral spaces and their role in infection spread, surgical access, and treatment complications	**Upon completion of this course, students will be able to:** • Perform detailed analysis of maxillary and mandibular functional zones using advanced imaging techniques and anatomical correlation • Demonstrate advanced skills in predicting and assessing dental impaction patterns through three-dimensional anatomical analysis • Identify and trace accessory nerve pathways relevant to dental anesthesia using anatomical specimens and imaging studies • Utilize multimodal imaging (CT, MRI, CBCT) to analyze complex anatomical relationships • Perform detailed anatomical measurements and calculations • Demonstrate proficiency in identifying anatomical variations that impact surgical approaches and treatment outcomes	**Upon completion of this course, students will be able to:** • Take responsibility for accurate anatomical assessment • Demonstrate leadership in interdisciplinary team discussions involving complex anatomical considerations • Show autonomous problem-solving skills when encountering rare anatomical variations • Take responsibility for maintaining detailed documentation of anatomical findings • Show initiative in researching and staying current with advances in surgical anatomy and anatomical imaging techniques • Demonstrate responsibility for patient education regarding anatomical factors affecting treatment options and outcomes • Take autonomous responsibility for quality

• Describe the comprehensive neurovascular anatomy of the endocranial skull base, including detailed relationships between foramina, cranial nerves, and vascular structures • Analyze the intricate anatomy of deep pharyngeal spaces and their clinical relevance in airway management and pathology spread • Explain the detailed surgical anatomy of the infratemporal region, including approaches, anatomical landmarks, and potential complications • Describe the comprehensive anatomy of the masticatory space and its clinical significance in oral and maxillofacial surgery • Correlate anatomical knowledge with advanced imaging findings and surgical planning considerations	• Correlate cadaveric dissection findings with advanced imaging studies • Apply anatomical knowledge to problem-solve complex clinical scenarios involving head and neck	assurance in anatomical assessment

7. Discipline objectives (correlated with learning outcomes)

7.1. General objective	After studying this discipline, students will be able to recognize in the imaging anatomy the cervico-cephalic anatomical elements, their variations and physiological changes and will have essential anatomical knowledge in order to understand clinical and surgical anatomy.	
7.2. Specific objectives	It is proposed that at the end of the course students will be able to independently study elements of imaging, descriptive and topographic dentomaxillary and orofacial anatomy, both normal and variational, to assimilate the concept of personalized anatomy for personalized dentistry. The anatomical training of the future dentist is augmented by the anatomical-functional approach to the topics of this discipline.	

8. Contents

8.1. Lecture	**Teaching methods**	**Observations**
Anatomy of the functional zones of the maxilla and mandible	1. Master class 2. Demonstrations 3. Exposure of the material according to the analytical program, using multimedia means, overhead projector, Power Point	
Anatomy of dental impaction		
Accessory innervation of teeth		
The Regions of the Neck (I)		
The Regions of the Neck (II)		

The Regions of the Neck (III)	presentations, anatomical movies, Photoshop schemes, direct use of digital anatomical evaluations with specific programs for sectional anatomy.	
The Regions of the Neck (IV)		

Recent bibliography:

- Rusu, MC. MANUALE DIDACTICE (2023), note de curs și lucrări practice.
- Snell RS. Clinical Anatomy by Regions. 9th ed. . 2011: Wolters Kluwer Health/Lippincott Williams & Wilkins;.
- Gray H, Standring S, Anand N, et al. Gray's anatomy: the anatomical basis of clinical practice. 41 ed. London, UK: Elsevier; 2016.
- Ellis, H.; Logan, B. M.; Dixon, A. K., Human Sectional Anatomy: Atlas of body sections, CT and MRI images, 3rd edn, The Royal College of Surgeons of England (2010).
- Rouviere H, Delmas A. Anatomie humaine. Tête et cou. Paris: Masson; 1985.

Netter FH, Hansen JT, Lambert DR. Netter's clinical anatomy. 1st ed. Carlstadt, N.J.: Icon Learning Systems; 2005.

8.2. Practical classes/ seminar	Teaching methods	Observations
Sectional anatomy of the neck (I)	1. Master class 2. Demonstrations 3. Exposure of the material according to the analytical program, using multimedia means, overhead projector, Power Point presentations, Photoshop schemes, direct use of digital anatomical evaluations with specific programs for sectional anatomy.	
Sectional anatomy of the neck (II)		
Anatomical changes of the maxilla and mandible, physiological and in edentulous		
The anatomical variability of the anatomical landmarks for nerve blocks		
The anatomical bases of the syndromes of the cranial nerves and the autonomic nervous system of the head (I)		
The anatomical bases of the syndromes of the cranial nerves and the autonomic nervous system of the head (II)		
Colloquium		

Recent bibliography:

- Rusu, MC. MANUALE DIDACTICE (2023), note de curs și lucrări practice.
- Snell RS. Clinical Anatomy by Regions. 9th ed. . 2011: Wolters Kluwer Health/Lippincott Williams & Wilkins;.
- Gray H, Standring S, Anand N, et al. Gray's anatomy: the anatomical basis of clinical practice. 41 ed. London, UK: Elsevier; 2016.
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9. Assessment

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage of final grade
9.4. Lecture	**A. Knowledge for mark 5: 5 grids** **B. Additional knowledge for mark 10; 10 grids**	Grid colloquium (10 questions)	**50%**
9.5. Practical classes/ seminar	**A. Knowledge for mark 5: 5 points**	5 matching grids – 10 points.	**50%**

	B. Additional knowledge for mark 10: 10 points		
9.5.1. Individual project (if any)			
Minimum performance standard			
• Meeting the minimum criteria of practical knowledge • Correct resolution of at least 50% of the topics • Possession of minimal theoretical knowledge			