DISCIPLINE SHEET

1. Study programme

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST
1.2.	FACULTY OF DENTISTRY
1.3.	DEPARTMENT I
1.4.	DISCIPLINE TEETH AND DENTAL ARCHES MORPHOLOGY TEETH AND DENTAL ARCHES MORPHOLOGY
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: TEETH AND DENTAL ARCHES MORPHOLOGY				
2.2.	Discipline code: MD01S06EN				
2.3.	Discipline type (FD/SD/CD): SD				
2.4.	Discipline optionality (COD/ED/FAD): COD				
2.5.	Lectures tenure: Bogdan Mihai GĂLBINAȘU (DDS, DMD, PhD) – Associate Professor				
2.6.	Practical classes / seminar tenure: Veronica Bucur (DMD, PhD) - Lecturer				
2.7. Year of study	I	2.8. Semester	I	2.9. Evaluation (E/C/V)	E

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

I. University training						
3.1. Number of hours per week	6	from which:	3.2. lecture	2	3.3. practical class/ seminar	4
3.4. Total hours in the study curriculum	84	from which:	3.5. lecture	28	3.6. practical class/ seminar	56
II. Preparation/ individual study						
Time distribution						hours
Study of lecture materials, textbooks, books, study of the minimum recommended bibliography						28
Additional documentation activity in the library, on online platforms						14
Specific preparation activities for projects, practical classes, preparation of assignments, reports						14
Preparation for presentations or evaluations, preparation for the final examination						6
Tutoring activity						2
Other activities						2
3.7. Total hours of individual study						66
3.8. Total hours per semester (3.4.+3.7.)						150
3.9. Number of credits						5

4. Prerequisites (where appropriate)

4.1. curriculum	Notions of elementary biology. Notions of dental embryology and anatomy of the head.
4.2. proficiencies	It is not the case.

5. Conditions (where appropriate)

5.1. for lecture activity	- Amphitheatre with projection system - Telephone conversations are not tolerated during the course. - Delay of students in progress will not be tolerated, as it proves to be disruptive to the educational process.
5.2. for practical class/ seminar activity	- Laboratories with specific endowments for practical activities - Telephone conversations are not tolerated during laboratories. - Student delays will not be tolerated, as they prove to be disruptive to the educational process. - Mandatory participation is required in laboratories, with a maximum of 10% of unrequited absences being accepted. - Recovery is allowed according to the Regulation on the professional activity of students enrolled at the U.M.F. "Carol Davila", Chapter VI, Art. 53

6. Learning outcomes*

Knowledge	Skills	Responsibility and autonomy
The student/graduate identifies, defines, describes, and differentiates appropriately the fundamental scientific concepts on which dentistry/dental medicine is based, the characteristics of a healthy human organism, both structural (anatomical, histological, cellular, and molecular) and functional (physiological, biochemical, biophysical), as well as scientific methods, in particular, the	The student/graduate analyzes, evaluates, and applies the knowledge obtained in medical studies and general medical-biological sciences to assess and diagnose the pathology and conditions of human body tissues and, respectively, of the structures of the dento-maxillary apparatus.	The student/graduate applies, analyzes, adapts, and interprets physical, chemical, and biochemical methods that enable the implementation and formation of complex concepts regarding biological systems corresponding to the human organism.

principles of measuring biological functions. Translated with DeepL.com (free version)		

7. Discipline objectives (correlated with learning outcomes)

7.1. General objective	- Learning by students the theoretical and practical notions for restoring the morphology specific to each final dental entity in the dento-maxillary apparatus. - Knowledge by the future dentist of the direct rendering of the lost permanent dental morphology, following the various diseases with loss of hard dental substance. - Students acquire the theoretical notions of permanent morphology so that they can be reproduced by drawing or modelling. Developing professional communication skills to achieve effective collaboration in the development of a subsequent interdisciplinary treatment plan.
7.2. Specific objectives	- Recognition and identification of teeth belonging to the permanent human dentition. - Learning the primary notions regarding intermaxillary occlusion relations. - Acquiring the layout knowledge necessary to reproduce by modeling the theoretical notions of acquired morphology. The expression by drawing of the theoretical notions regarding the morphology of the permanent dental arches.

8. Contents

8.1. Lecture	**Teaching methods**	**Observations**
1. **Tooth embryogenesis**. The period of proliferative growth. Calcification period. Tooth eruption. Dental structures. **Tooth structure**. Enamel. Amelogenesis. Enamel - composition and structure. Dentine. Cementum. Pulp tissue. Periodontium. Alveolar bone.	Interactive presentation of the material according to the curriculum, using multimedia tools, PowerPoint presentations, and educational videos.	Oral presentations, Power-Point presentations
2. Terminology. Terminology in dental morphology.		Oral presentations, Power-Point presentations
3. **Scoring systems.**		Oral presentations, Power-Point presentations
4. **Permanent incisor group characteristics. Dental morphology of the upper incisor group.** Permanent central maxillary incisor.		Oral presentations, Power-Point presentations

5. **Permanent incisor group characteristics. Dental morphology of the upper incisor group.** Permanent maxillary lateral incisor.		Oral presentations, Power-Point presentations
6. **Permanent incisor group characteristics. Dental morphology of the lower incisor group.** Permanent mandibular central incisor. Permanent mandibular lateral incisor.		Oral presentations, Power-Point presentations
7. **Dental morphology of the canine group**. Permanent maxillary canine. Permanent mandibular canine.		Oral presentations, Power-Point presentations
8. Group dental morphology of permanent teeth. Common features of permanent front teeth. Secondary morphology of permanent front teeth. Interdental relations in the frontal area of the arch.		Oral presentations, Power-Point presentations
9. **Group dental morphology of permanent teeth.** Primary morphology of permanent lateral teeth. Maxillary premolars.		Oral presentations, Power-Point presentations
10. **Group dental morphology of permanent teeth.** Mandibular premolars. Common characteristics of premolars		Oral presentations, Power-Point presentations
11. Group dental morphology of permanent teeth. Maxillary molars.		Oral presentations, Power-Point presentations
12. **Group dental morphology of permanent teeth**. Mandibular molars.		Oral presentations, Power-Point presentations
13. **Group dental morphology of permanent teeth.** Common features of molars. Interdental relations in the lateral area of the arch.		Oral presentations, Power-Point presentations
14. **Dental arches as the sum of the position of the teeth.** Positions of the teeth on the arch. Dental arch and growth.		Oral presentations, Power-Point presentations

Recent bibliography:

1. Teeth and dental arches morphology - Course Handouts, PPT format, current year of study
2. Teeth and dental arches morphology - Course and Practical Works Notes, PDF format, current year of study
3. Hilton Riquieri, “Dental Anatomy and Morphology“, QUINTESSENCE PUB, 2019
4. Rashmi GS (Phulari),“Textbook of Dental Anatomy, Physiology & Occlusion“ , Jaypee Brothers Medical Publishers, 2019
5. Rickne C.Scheid, “Woelfel's Dental Anatomy, Enhanced Edition”, Ninth Edition, 2020
6. Stanley J. Nelson, Wheeler s anatomy, physiology and occlusion, Eleventh Edition, Ed. Elsevier 2020

7. G. Richard Scott, Joel D. Irish, "Human Tooth Crown and Root Morphology", Cambridge University Press, 2017		
8.2. Practical classes/ seminar	**Teaching methods**	**Observations**
1. Presentation of the way of carrying out the practical works, necessary tools, introduction, definitions.	Presentation, practical demonstrations, interactive exercises	Handicraft exercise
2. **Upper central incisor.** Primary morphology modelling - teacher demonstration. UCI drawing. Modelling of primary morphology by students.		Handicraft exercise
3. **Upper lateral incisor.** Primary morphology modelling - teacher demonstration. ULI drawing. Modelling of primary morphology by students.		Handicraft exercise
4. **The upper canine.** Primary morphology modelling - teacher demonstration. UC drawing. Modelling of primary morphology by students.		Handicraft exercise
5. **The lower canine.** Primary morphology modelling - teacher demonstration. LC drawing. Modelling of primary morphology by students.		Handicraft exercise
6. Front group recapitulation.**Front group test**.		Craft test
7. **Upper premolars.** Primary morphology modelling - teacher demonstration. Drawing UP-s. Modelling of primary morphology by students.		Handicraft exercise
8. **Lower Premolars.** Primary morphology modelling - teacher demonstration. Drawing LP-s. Modelling of primary morphology by students.		Handicraft exercise
9. **Upper First Molar.** Primary morphology modelling - teacher demonstration. Drawing UFM. Modelling of primary morphology by students.		Handicraft exercise
10. **Upper First Molar test**.		Craft test
11. **Lower First Molar.** Primary morphology modelling - teacher demonstration. Drawing LFM. Modelling of primary morphology by students.		Handicraft exercise
12. L**ower first molar test**		Craft test

13. L**ower second molar.** Primary morphology modelling - teacher demonstration. Drawing LSM. Modelling of primary morphology by students.		Handicraft exercise
14. **Practical exam**	Practical test	Craft test

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1. Teeth and dental arches morphology - Course Handouts, PPT format, current year of study
2. Teeth and dental arches morphology - Course and Practical Works Notes, PDF format, current year of study
3. Hilton Riquieri, "Dental Anatomy and Morphology", QUINTESSENCE PUB, 2019
4. Rashmi GS (Phulari),"Textbook of Dental Anatomy, Physiology & Occlusion" , Jaypee Brothers Medical Publishers, 2019
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7. G. Richard Scott, Joel D. Irish, "Human Tooth Crown and Root Morphology", Cambridge University Press, 2017

9. Assessment

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage of final grade
9.4. Lecture	**Continuity of theoretical training during the semester** **A. Knowledge for mark 5:** elementary knowledge of the theoretical notions concerning the morphology of teeth and dental arches. 50% correct answers to tests/written examination. **B. Additional knowledge for mark 10:** In-depth knowledge of the theoretical concepts concerning the morphology of teeth and dental arches. 100% correct answers written tests/examination	**Grid tests and/or editorial questions** **Written grid exam and/or editorial questions**	20% 60%
9.5. Practical classes/ seminar	**Continuity of laboratory activity during the semester** **A. Knowledge for mark 5:** elementary knowledge of practical notions concerning the	**Practical assessment** oral assessment, current survey formative assessment teacher-student dialog.the student's attitude in the laboratory is appreciated (attendance, punctuality,	

	morphology of teeth and dental arches and evaluation of the practical skills learned. 50% for each component of the assessment. **B. Additional knowledge for mark 10** In-depth knowledge of practical concepts concerning the morphology of teeth and dental arches and assessment of the practical skills learned. 100% in each component of the assessment.	behavior, theoretical preparation in accordance with the work phase, working skills, creativity). **Final practical assessment**	10% 10%
9.5.1. Individual project (if any)			

Minimum performance standard

Acquiring the main notions related to the morphology of teeth and dental arches:

- Morphology of permanent human teeth, common and differential characteristics of dental groups;
- Morphological characteristics of permanent dental arches;
- Primary elements of static occlusion;
- Mandibulo-maxillary reference positions;
- Structure of dental hard tissues.

at least 50% on each assessment component.