

FIȘA DISCIPLINEI

1. Date despre program

1.1 Instituția de învățământ superior	UNIVERSITY OF MEDICINE AND PHARMACY "VICTOR BABEȘ" TIMIȘOARA
1.2 Facultatea	FACULTY OF DENTAL MEDICINE
1.3 Departamentul	I
1.4 Domeniul de studii de ¹⁾	Bachelor
1.5 Ciclul de studii ²⁾	Bachelor
1.6 Programul de studii/ Calificarea	DM

2. Date despre disciplină

2.1. Denumirea disciplinei	Evaluation and forecasting in dental medicine							
2.2 Titularul activităților de curs	Prof. Dr. Sinescu Cosmin							
2.3 Titularul activităților de laborator	Prof. Dr. Sinescu Cosmin							
2.4 Anul de studiu	III	2.5 Semestrul	5	2.6 Tipul de evaluare	Exam	2.7 Regimul disciplinei	Conținut ³⁾	DO
							Obligativitate ³⁾	DO

3. Timpul total estimat (ore pe semestru al activităților didactice)

3.1 Număr de ore pe săptămână	2	3.2 din care: curs	2	3.3 laborator	0
3.4 Total ore din planul de învățământ	28	3.5 din care: curs	28	3.6 laborator	0
Distribuția fondului de timp					ore
Studiul după manual, suport de curs, bibliografie și notițe					0
Documentare suplimentară în bibliotecă, pe platformele electronice de specialitate și pe teren					0
Pregătire seminarii/ laboratoare/ proiecte, teme, referate, portofolii și eseuri					0
Tutoriat					0
Examinări (1 practical exam, 1 final exam)					0
Alte activități					0
3.7 Total ore studiu individual	0				
3.8 Total ore pe semestru	28				
3.9 Numărul de credite ⁵⁾	1				

4. Precondiții (acolo unde este cazul)

4.1 de curriculum	Not the case
4.2 de competențe	Not the case

5. Condiții (acolo unde este cazul)

5.1 de desfășurare a cursului	<ul style="list-style-type: none"> • Telephone conversations are not tolerated during the course. • Delay of students in the course will not be tolerated, as it proves to be disruptive to the educational process. • Mandatory attendance is required, a maximum of 30% absences being accepted in the course.
5.2 de desfășurare a seminarului/ laboratorului/ proiectului	<ul style="list-style-type: none"> • Telephone conversations are not tolerated during the labs. • Delay of students will not be tolerated, as it proves to be disruptive to the educational process. • Mandatory attendance is required in the labs, a maximum of 15% absences being accepted. • Recovery is allowed up to 15% of the total number of paid absences in the last week of the semester, before the practical examination (except for medical cases that will require individual Dean's approval). • Practical exam will be held in the last week of the semester or in the regular session, from the topics of the labs previously displayed.

6. Competențe specifice acumulate

Competențe Profesionale	<ol style="list-style-type: none"> 1. Improving the knowledge of different direct and indirect evaluation methods in dentistry 2. Possibilities of information in libraries and e-libraries 3. The correct making of a poster presentations 4. The ability to develop an oral presentations 5. How to stay informed about cutting edge technologies in dentistry.
Competențe transversale	<ol style="list-style-type: none"> 1. Preoccupation for professional development by engaging critical thinking skills demonstrated by active participation in the course and laboratory. 2. Involvement in scientific research activities by participating in the elaboration of papers, studies, specialty articles. 3. Effective use of information sources and communication and assisted training resources (Internet portals, specialized software applications, databases, on-line courses, etc.) both in Romanian and in an international languages; 4. Ability to work in a team, to interact socially and to carry out their duties with responsibility and professionalism. 5. Openness to learning and continuous medical education.

7. Obiectivele disciplinei (reieșind din competențele specifice acumulate)

7.1 Obiectivul general al disciplinei	Acquiring the fundamental notions of cutting edge technologies in dentistry
7.2 Obiectivele specifice	<p>Applications of invasive and noninvasive evaluation methods in dentistry.</p> <p>Cutting edge technologies in dentistry</p> <p>3D Printing in dentistry</p> <p>Optoelectronic systems in dentistry</p>

8. Conținuturi

8.1 Curs	Metode de predare	Număr de ore	Observații
1. The methodology of dental material research	INTERACTIVE LECTURE	2	<ul style="list-style-type: none"> • Interactive oral lecture also presented in Power Point, systematic, accompanied by an extremely rich and suggestive iconography. • The course is annually updated with the latest information from the international specialized literature. • Each course presents the educational objectives at the beginning and ends with summarizing the notions presented.
2. Mechanical properties: forces and deformation		2	
3. Tensile bond strength of the interfaces formed in acrylic dentures		2	
4. Shear bond strength of the interfaces between ceramic materials and composite resins. Shear bond strength of the interfaces between metallic materials and composite resins.		2	
5. Particular aspect of the interaction between the adhesives and dental hard tissues.		2	
6. The investigation of the interfaces between composite materials and dental hard tissues in the class I cavities by optical microscopy...		2	
7. The investigation of the interface between composite materials and dental hard tissues in class II cavities by optical microscopy		2	
8. The investigation of the interfaces between composite materials and dental hard tissues in the class V cavities by optical microscopy.		2	
9. The investigation of the interfaces between veneering materials and metallic infrastructures by optical microscopy.		2	

10. The investigation of direct coronary restoration by means of optical coherence tomography		2	
11. The investigation of fixed partial dentures by means of optical coherence tomography.		2	
12. The investigation of bonded orthodontic attachment and endodontic fillings by means of optical coherence tomography		2	
13. Scanning and modelling techniques in the study of dental materials		2	
14. Holographic and acoustic microscopy, mass spectrometry, laser spectrophotometry, electron microscopy		2	

Bibliografie obligatorie:

1. Romînu M, Bratu D, Florița Z, Lakatos S, Ianeș C, Negruțiu Meda – *Materiale dentare. Noțiuni teoretice și aplicații clinice*. Ed. Brumar, Timișoara, 2003.
2. Bratu D, Colojoară C, Leretter M, Ciosescu Diana, Uram-Țuculescu S, Romînu M – *Materiale dentare. Materiale de laborator de tehnică dentară*. Ed. Helicon, 1994.
3. Romînu M, Florița Z, Negruțiu Meda, Lakatos S, Sinescu C - *Îndreptar de lucrări practice de Materiale Dentare*. Lito UMFT, 2000.
4. Romînu Roxana, Romînu M., Negruțiu Meda, Sinescu C., Pop Daniela, Petrescu Emanuela - *Adela Amelara* Lito UMF Timișoara, 2011.
5. O'Brien Wj - Dental Materials and their selection. Quintessence Books 2008.

9. Coroborarea conținuturilor disciplinei cu așteptările reprezentanților comunităților epistemice, asociațiilor profesionale și angajatori reprezentativi din domeniul aferent programului

The content of the discipline is designed to facilitate the formation of the student, presenting the latest cutting edge technologies in dentistry. One of the main important feature is the fact that the student is capable to work with two optical coherence tomography special designed for dental applications.

10. Evaluare

Tip activitate	10.1 Criterii de evaluare	10.2 Metode de evaluare	10.3 Pondere din nota finală
10.4 Course	<ul style="list-style-type: none"> • For grade 5 students must prove knowledge of the basis of some invasive and noninvasive evaluation methods in dentistry • For grade 10, students must have a thorough knowledge of the cutting edge evaluation and prognostic research methods in dentistry 	<p><i>Continuous evaluation:</i> (appreciation of students' activities during the semester, focusing on aspects of knowledge and synthesis of information)</p> <p><i>Final evaluation:</i> Exam: written multiple choice test (50 questions, one hour).</p>	<p>10%</p> <p>90%</p>

10.6 Standard minim de performanță

The course “Avangard research in dental materials” present the vast domain of dental material’s properties and investigation methods such as: invasive (microscopy and mechanical tests) and non-invasive methods.

Data completării 19.12.2017	Semnătura titularului de curs Dr. Sinescu Cosmin	Semnătura titularului de laborator/stagiu Dr. Sinescu Cosmin
Semnătura șefului de disciplină .Prof: Univ. Dr. Romînu Mihai.....		
Data avizării în departament	Semnătura directorului de departament Prof. Dr.Podariu Angela Codruța	