

CHART OF DISCIPLINE/ SYLLABUS

1. Study Program Data

1.1 High Education Institution	“VICTOR BABEȘ” UNIVERSITY OF MEDICINE AND PHARMACY OF TIMIȘOARA
1.2 Faculty	MEDICINE
1.3 Department	III
1.4 Study Domain ¹⁾	DENTAL MEDICINE
1.5 Cycle Studies ²⁾	LICENCE
1.6 Study programme/ Qualification	DENTAL MEDICINE

2. Course Data

2.1.Course/Department	DIGITALISATION IN DENTAL MEDICINE							
2.2 Course tutor	S.L.Dr. Rotar Raul							
2.3 Practical activity tutors								
2.4. Year of study	VI	2.5 Semester	11	2.6 Assessment	Colocviu	2.7 Course rank	Content ³⁾ Mandatory /Compulsory ³⁾	DS DO

3. Duration/Estimated Time (number of hours/ semester of teaching activity)

3.1 Number of hours/ week	1	3.2 lecture/course	1	3.3 laboratory	0
3.4 Total hours of curriculum	14	3.5 lecture/course	14	3.6 laboratory	0
Time distribution for course activities					hours
Study support- manuals, lectures, references and notes					4
Additional documentation – library, dedicated platforms from domain					4
Documentation for seminars/ practical activity/ projects, themes, portfolios and essays					2
Tutoring					
Assessment					1
Other activities					
3.7 Total number of hours for individual study	11				
3.8 Total number of hours per semester	25				
3.9 Number of credits⁵⁾	1				

4. Preconditions (if applicable and requested)

4.1 Courses- studied curriculum / rules for attending the course		
4.2 Practical activities/seminars/projects studied curriculum, basic skills/ rules for attending the course		

5. Condition (if applicable and requested)

5.1 Courses	<ul style="list-style-type: none"> Delay to lecture will not be tolerated as it proves disruptive to the educational process; Lecture presence is mandatory, 30% of absences will be accepted
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5.2 Laboratory/practical activity/ project	<ul style="list-style-type: none"> • Delay to lecture will not be tolerated as it proves disruptive to the educational process; • Laboratory presence is mandatory, 15% of absences will be accepted. Absences can be recovered in the last week of each semester with the permission of the group assistant, only after paying the corresponding tax • Final exam and laboratory exam dates will be set by the head of the department with the consultancy of the students • Practical exam will be held in the last week of the semester in accordance with laboratory curricula • Passing the laboratory exam is mandatory for passing the final exam.
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6. Key competencies and basic skills

Professional Competence	1. Acquiring medical language, useful in the clinical practice 2. Understanding the concept of digital dentistry 3. Understanding of the different systems and devices used in digital dentistry
Transversal Competence	1. Efficient use of communication resources (Internet, online lectures, data bases) 2. Identification of objectives, available resources, working steps as well as possible risks 3. Initiation of research activities in the field of digital dentistry

7. Disciplines/Course objectives (based on the key competences)

7.1 Disciplines/Course general objectives	To explain the evolution of dentistry from conventional to digital, to acquire knowledge about CAD/CAM technologies.
7.2 Disciplines/Course specific objectives	1. Understanding treatment options with digital dentistry 2. Digital techniques of choosing color 3. Preparation types suitable for CAD/CAM restorations 4. Intraoral scanning. Extraoral scanning (model scan). Design of fixed dental prosthesis

8. Content

8.1 Course	Teaching method	Number of hours	Notification
1. Digital dentistry: introduction, terminology. History of digital dentistry	<input type="checkbox"/> Oral lecture, interactive Powerpoint presentations <input type="checkbox"/> Powerpoint presentations with suggestive images and tables for the different digital techniques <input type="checkbox"/> Continuous updates of the lecture material in accordance with the newest devices used in digital dentistry	1	
2. E-learning : from teaching to learning.		1	
3. Organization of a digital dental office and a digital technical laboratory.		1	
4. Examination, diagnostic and treatment plan in dentistry with digital techniques		1	
5. Computerized imaging in dentistry. Digital solutions in implantology, radiology and orthodontics. Practical applications: cone beam CT, surgical guide, stereolithography		1	
6. Materials for prosthetic restorations with CAD CAM technology		1	
7. Modern methods for determination, transmission and reproduction of		1	

colour of natural teeth and prosthetic restorations through digital techniques	<input type="checkbox"/> Clear statment of educational objectives before each lecture.		
8. Tooth preparations dentare pentru diferite tipuri de restaurări protetice prin tehnologii CAD CAM		1	
9. CAD CAM technology in prosthetic dentistry. Chair side systems. Digital impressions,		1	
10. Intraoral scanning with PlanScan. Extraoral scanning-model scanning		1	
11. Designing the prothetic restorations(CAD). Analyzing and data transmission.		1	
12. Milling systems : characteristics, advantages and dizadvantages.		1	
13. CAD CAM for dental laboratory.		1	
14. The future of digital dentistry		1	
Mandatory references: ⁶⁾ 1.Tamimi F, Horayama H. Digital restorative dentistry. Ed Spriger, 2019 Optional references: 1.Werner Mormann. State of the Art of CAD/Cam Restorations: 20 Years of Cerec, 2006 2. N.M. Jedynakiewicz.CAD CAM in restorative dentistry, 1993.			
8.2 Seminars/ Laboratory/practical activity/ projects	Teaching-learning, methods	Number of hours	Notification
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4.			
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10.			
11.			
12.			
13.			
14.			
Mandatory references:			

9. Correlations between the content of the course and the requirements of the professional field and relevant employers

The student is familiarised with the existent systems used in digital dentistry, that will serve later on in clinical practice.As a result, the student will gain usefull information and clinical skills, in accordance with the current demands in the field of dentistry, meeting the educational standards imposed by UE.

10. Assessment

Activity	10.1 Assessment criteries	10.2 Assessment methods	10.3 Percentage of the final grade
10.4 Course	<i>Colocviu grila</i> - cunoștințe pentru nota 5: 50% +1 din numărul de puncte al grilei - cunoștințe pentru nota 10:-95% din numărul de puncte al grilei		100%
10.5 Practical activity/seminar	<i>evaluare pe parcurs-seminarizare orală</i> <i>prezentari de articole din tematica cursului</i>		
10.6 Minimum performance standard-basic knowledge			

Date	Signature of the course holder	Signature of the laboratory/seminar holder
Signature of the Head of Discipline		
Date of approval in the Department	Signature of the Head of Department	

- 1) Domeniul de studii - *se alege una din variantele:* Licență/ Masterat/ Doctorat (**se completează conform cu Nomenclatorul domeniilor și al specializărilor/ programelor de studii universitare în vigoare**) ;
- 2) Ciclul de studii - *se alege una din variantele:* Licență/ Master/ Doctorat;
- 3) Regimul disciplinei (conținut) - *se alege una din variantele:* **DF** (disciplină fundamentală)/ **DD** (disciplină din domeniu)/ **DS** (disciplină de specialitate)/ **DC** (disciplină complementară) - *pentru nivelul de licență;* **DAP** (disciplină de aprofundare)/ **DSI** (disciplină de sinteză)/ **DCA** (disciplină de cunoaștere avansată) - *pentru nivelul de masterat;*
- 4) Regimul disciplinei (obligativitate) - *se alege una din variantele:* **DI** (disciplină obligatorie)/ **DO** (disciplină opțională)/ **DFac** (disciplină facultativă);
- 5) Un credit este echivalent cu 25 de ore de studiu (activități didactice și studiu individual).

*nr de ore de studiu individual (punctul 3.7.) = nr total ore (nr credite X 25) minus nr. ore din planul de invatamant (punctul 3.4) minus ore alocate pentru examinari. Aceste ore se impart intre

Studiul după manual, suport de curs, bibliografie și notițe	
Documentare suplimentară în bibliotecă, pe platformele electronice de specialitate și pe teren	
Pregătire seminarii/ laboratoare/ proiecte, teme, referate, portofolii și eseuri	
Tutoriat	

- 6) Pentru specializările și/sau disciplinele a căror tematică se regăsește în bibliografia de rezidențiat, aceasta devine obligatorie. Dintre titlurile bibliografice, 50% trebuie să fie din ultimii 5 ani.