



**Islamic University in Najaf - Faculty Of Dentistry
Quality Assurance and Academic Accreditation unit**

Course Description

Department of Chemistry

2024

Course Description Form

1. Course Name:
Prosthodontics
2. Course Code:
3. Semester / Year:
3rd year
4. Description Preparation Date:
16-4-2024

5. Available Attendance Forms:					
Available					
6. Number of Credit Hours (Total) / Number of Units (Total)					
Theoretical 2 laboratory 4					
7. Course administrator's name (mention all, if more than one name)					
Name: Mohamed Elkhafagy Email:					
8. Course Objectives					
Course Objectives	<ul style="list-style-type: none"> • To explore laboratory techniques commonly used in medical chemistry analysis. • To gain practical experience in performing medical chemistry laboratory procedures. • To comprehend the biochemical basis of disease states and diagnostic markers. • To analyze and interpret medical chemistry data to aid in disease diagnosis and monitoring. 				
9. Teaching and Learning Strategies					
Strategy	<p>Lecture-Based teaching: Blackboard illustrations Power point presentation on Data show projector Teacher-student interaction or Question-answer In-lecture Quiz</p> <p>Laboratory based teaching; Demonstration for each laboratory step Monitoring student (Hands-on) performance under guided supervision</p>				
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	To comprehend the various laboratory and clinical procedures involved in the synthesis of	Introduction	Lecture	
2, 3	4	<ul style="list-style-type: none"> • To know the atom structure • To understand natural nucleus 	Inorganic chemistry in dentistry		

4, 5	4	<ul style="list-style-type: none"> • To know the different material used in complete denture. • To be able to identify the different types of stock trays and their use. • To be able to recognize the different custom tray types, construction methods. • To understand their uses according to different impression techniques 	Acid - base balance		
6	2	<ul style="list-style-type: none"> • To Identify type solution • To know solution found in 	Solution		
7	2	<ul style="list-style-type: none"> • To Identify saliva • To Describe their compounds saliva and teeth 	Saliva and teeth		
8	2	<ul style="list-style-type: none"> • To Identify nanoparticle . • To know the used nanoparticle in dentistry • To comprehend between nanoparticle with nanocomposite 	Nanoparticle		
9	2	<ul style="list-style-type: none"> • To Identify importance some inorganic materials • To understand how can used in alloy 	Inorganic filler		
10	2	<ul style="list-style-type: none"> • To Identify different methods used for recording VD of occlusion & rest. • To understand effect of 	Colloidal		
11	2	<ul style="list-style-type: none"> • To Identify chelating therapy And how can used in dentistry materials 	Chelation therapy		
12+1 3	4	<ul style="list-style-type: none"> • To know type of fluids • To understand their components in fluids • to different between fluid in 	Fluids and electrolyte balance		
14+1 5	4	<ul style="list-style-type: none"> • To define pollution . • To understand their importance to study pollution 	Pollutions		

16	2	<ul style="list-style-type: none"> • To know the preparation of articulator before mounting. • To understand the mounting steps sequence for different types of articulators 	Organic materials		
17	2	<ul style="list-style-type: none"> • To know the factors affecting anterior teeth selection. • To Utilize the criteria used for posterior teeth selection 	Polymers		
18	4	<ul style="list-style-type: none"> • To know the factors implemented in anterior teeth arrangement. • To understand the concepts 	Aromatic		
19	2	<ul style="list-style-type: none"> • To know the shape of polished different denture surface. • To understand the concepts and effect of waxing on 	Chemical degradation of dental composites		
22, 23	4	<ul style="list-style-type: none"> • To Discuss different concepts of occlusion. • To Create occlusion using different teeth morphology. 	Proteins and dental health		
24	2	<ul style="list-style-type: none"> • To know the different steps for denture flasking. • To identify possible errors in each step and how to avoid 	Reactions and reagents		
25	2	<ul style="list-style-type: none"> • To Determine source of occlusal interference. • To detect occlusal correction spots and correction method. 	Alcohols and phenols in dentistry		
26		<ul style="list-style-type: none"> • To Identify different tools used. • To Distinguish importance and occurrence 	Carboxylic acids in dentistry		

27, 28	4	<ul style="list-style-type: none"> To understand type radiation To application radiation in medical To understand the causes of compound degradation. To recognize proper storage and handling techniques for different chemicals. 	Radiochemistry		
29, 30	4	<ul style="list-style-type: none"> To define carbohydrate and different between them To understand the both clinical and laboratory 	Carbohydrate		

11. Course Evaluation

First semester 20%

1.5 (attendance, participation & activities) 2.5 (in-lecture written Quiz, assessment & assignments) 4 (laboratory steps evaluation) 5 (1st semester final lab.)

Second semester 20%

1.5 (attendance, participation & activities) 2.5 (in-lecture written Quiz) 4 (laboratory steps evaluation) 5 (1st semester final lab.)

Final 60%

12. Learning and Teaching Resources

Required textbooks	<ul style="list-style-type: none"> Essentials of Complete Denture Prosthodontics 3rd/ 2015 (Reprint 2021). Sheldon Winkler. AITBS Publishers & Distributors, 3rd Ed. 2021
Main references (sources)	<ul style="list-style-type: none"> PDF of lectures PowerPoint presentation.
Recommended books and references (scientific journals, reports...)	<ul style="list-style-type: none"> Textbook Of Prosthodontics. Rangarajan. Elsevier Health Sciences, India. 2nd Ed. 2017.
Electronic References, Websites	<ul style="list-style-type: none"> Maestre-Ferrín, L., Romero-Millán, J., Peñarrocha-Oltra, D., & Peñarrocha-Diago, M. (2012). Virtual articulator for the analysis of dental occlusion: an update. <i>Medicina oral, patología oral y cirugía bucal</i>, 17(1), e160. Tandon, R., Gupta, S., & Agarwal, S. K. (2010). Denture base materials: From past to future. <i>Indian J Dent Sci</i>, 2(2), 33-9.

