

#### Model (No 12) **Course Specification: Removable prosthodontics**

Farabi Quality Management of Education and Learning - 29/10/2015

**University**: Mansoura University Faculty: Faculty of Dentistry

**Department: Removable prosthodontics** 

## 1- Course data :-

Code: Study year: Course name: Removable Prosthodontics P 301 Pr 2015-2016

Specialization: Doctor of Dental Science (Removable Prosthodontics)

Teaching Lecture: 3h/week for 30weeks Clinical: 12h/week for 60 weeks

4h/week for 30weeks Hours:

Number of units: 60

#### 2- Course aims :-

The aim of this course is to

- 1- provide Postgraduate students with knowledge and skills on removable and maxillofacial prosthodontics
- 2- Applying the light on the recent trends in removable prosthodontics.
- 3- Provide students with the basic and new principles in research writing and methodology.
- 4- Provide students with knowledge in the field of removable and maxillofacial prosthodontics and application of analytical and critical approach

## 3- Intended learning outcomes of course (ILOS) :-

## a- Knowledge and understanding

At the end of this course, the postgraduate student will be able to:

- 1. Learn a proper systematic and standardized clinical examination.
- 2. Understanding the basic and recent concepts of impression making and learn special techniques in different prosthetic cases
- 3. Demonstrate knowledge about digital face bow transfer and other digital graphic tracers
- 4. List the recent and digital approaches used to record jaw relation and establish a proper occlusion of the complete and partial denture
- 5. List the requirements of proper esthetics and phonetics and digital smile design
- 6. Summarize problems that can be found in the try-in stage before denture processing
- 7. State the occlusal errors and their management during the insertion of complete dentures to the patients with understanding the post-insertion complaints and its management
- 8. Recognize the need for denture relining and different techniques of denture relining
- 9. Recognize the recent trends in complete dentures
- 10. Illustrate the basic and recent knowledge of how to design a removable partial denture
- 11. Point out the mechanical principles of different removable partial denture classes
- 12. Illustraate the role of digital dental surveyors and its relation to evaluate mouth preparation

- 13. Identify the post insertion complaints and its management with the application of recent trends in removable partial denture
- 14. Understanding the stresses induced by the RPD and how to manage it.
- 15. Identify the different new material, instruments and devices involved in the construction of complete dentures and removable partial dentures as well as their uses
- 16. Understanding the basic and recent principles in maxillofacial prosthodontics including the new trends in maxillofacial prosthesis and materials
- 17. Point out the principles and concepts of implant biomechanics and related occlusal schemes
- 18. Point out the principles of overdenture (tooth/implant ) and the role of digitization in prosthodontics
- 19. Define the principle and ethics of scientific research writing.

## **b-** Intellectual skills

On completing this course, the student will be able to:

- 1. Interpret recent diagnostic data and records for proper diagnosis.
- 2. Classify the recent impression technique according to the condition of the residual ridge.
- 3. Analyse data to work on digital articulator to achieve proper occlusal scheme.
- 4. Differentiate between high and low vertical dimension and assess the needs of balanced occlusion and facebow transfer
- 5. Solve the problems related to inadequate esthetic and phonetics of the trial denture bases
- 6. Assess errors during the try in stage and then during the insertion stage and their correction.
- 7. Distinguish the need for denture relining after insertion selecting the recent trends to solve such problems
- 8. Classify the partial denture cases with achieving good diagnosis and suitable treatment plan including recent trends
- 9. Solve the problems related to lack of retention of maxillofacial prosthesis using recent trends
- 10. Interpret the recent radiographic readings and define proper implant placement with selection of proper occlusal schemes specially in overdentures.
- 11. Select suitable methods of evaluation for his research.

#### c- Professional and practical skills

On completing this course, the postgraduate student will be able to:

- 1. Utilize the proper and recent tools for diagnosis and good treatment plan
- 2. Solve the problems of knife edge ridge and flat ridges during impression making with proper diagnosis.
- 3. Show the functional and digital methods used to establish jaw relation with correct face bow transfer achieving proper occlusal schemes.
- 4. Translate the consequences of inadequate determination of the physiologic rest position and vertical dimension .
- 5. Utilize functional and digital techniques to establish a proper esthetic and phonetic for complete and partial dentures .
- 6. Solve the occlusal errors during the try in stage using clinical remounting
- 7. Apply the rules of selective grinding before denture insertion manage insertion problems.
- 8. Demonstrate the difference between open and closed mouth relining techniques.
- 9. Apply the rules of partial denture designing in each case.
- 10. Demonstrate the biomechanical difference between each partial denture class
- 11. To replace missing teeth with complete or partial removable prostheses to acceptable form, function, and esthetics, while maintaining the integrity of the supporting tissues.
- 12. Interpret role of dental surveyor and design RPDs.

- 13. Demonstrate knowledge and skill in applying occlusal concepts when replacing teeth with removable prostheses.
- 14. Understanding the principles underlying the function of RPDs, and understanding of the influence of the opposing occlusion on RPD design.
- 15. Provide appropriate post-placement care for patients receiving removable prostheses.
- 16. Developing practical skills in maxillofacial impressions and prosthesis using the new trends
- 17. Understanding the basic and recent principles of implant placement and developing recent skills in selecting proper occlusal schemes in different overdenture cases.
- 18. Apply different and new testing and clinical/ laboratory evaluation methods related to his research work.

#### d- General and transferable skills

At the end of this course, the student will be able to:

- 1- Work productively in a team.
- 2- Utilize effectively different sources for continuing professional development and life-long learning.
- 3- Display appropriate professional communication skills with patients, colleagues, the rest of the dental team, and other relevant person or groups
- 4- Patients' education and motivation according to their mental attitude.
- 5- Develop time management skills
- 6- Use Modern technologies to improve workflow.
- 7- Develop the ability to lead a team to achieve comprehensive dental care to the patients

#### 4- Course contents :-

No	Topics	Week	
	Complete Denture Course		
1	Recent Diagnostic tools and Treatment plan.	1	
2	Basic and recent impression techniques and theories.	2	
3	Digital Mandibular movements & Articulators	3 and 4	
4	Digital face bow and graphic tracing.	5	
5	Jaw relations.	6 and 7	

6	Try- in.	8
7	Occlusion theories and concepts and occlusal analysis techniques	9 and 10
8	Digital smile design and esthetic in complete denture.	11
9	Insertion of complete denture	12
10	Post insertion complaint and management	13
11	Retention, Support & Stability.	14 and 15
12	Relining & Rebasing techniques.	16 and 17
13	Recent trends in complete denture construction	18
	Removable partial denture course	
14	Examination and evaluation of diagnostic data.	1 and 2
15	Treatment plan.	3 and 4
16	Principles of RPD.	5 ,6 and 7
17	Mouth preparation.	8

18	Impression registration Control of gagging and saliva. Special impression procedures for tooth-tissue supported RPD.	9
19	Digital surveyors. Removable partial denture components.	10 and 11
20	Different Classification Systems Of removable partial denture	12
21	Kennedy classes and design of RPD. Class I	12
22	Class II.	13
23	Class III.	14
24	Class IV & Esthetics for RPD	15
25	Fitting of the framework.	16
26	Establishing of occlusal relationship for RPD	17
27	Try-in of RPD & insertion of RPD.	18
28	Tissue damage caused by RPD.	19

29	Stresses induced by RPD	20	
30	Management of tissue damage.	21 and 22	
31	Patient's complaint &Repair and addition of RPD	23	
32	Recent trends of removable partial dentures	24 and 25	
	Maxillofacial course		
33	Management of congenital cleft palate. (basic and recent)	1 and 2	
34	Recent modalities for managing acquired cleft palate an lip cases Immediate obturator. Temporary obturator. Permanent obturator. Hollow pulp obturator. Roofless obturator Two pieces obturator. Meatal obturator . Obturator for dental cyst.	3 ,4,5 and 6	
35	Stents & Splints.	7 and 8	

36	Prosthetic management of irradiated patients.	9 and 10
37	Recent restoration of Nasal prosthesis	11
38	Recent restoration of Ocular prostheses	12 and 13
39	Recent restoration of Cranial prostheses	14
40	Retention of maxillofacial Prosthesis	15
41	Implants of maxillofacial Prosthesis	16 and 17
42	Recent trends of maxillofacial prostheses	18 and 19
43	Immediate Dentures	20
	Special Prosthodontic Course	
44	Attachment retained removable partial denture (intracoronal)	1
45	Attachment retained removable partial denture (extracoronal)	2
46	Attachment retained overdenture (stud)	3
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47	Attachment retained overdenture (Bar)	4
48	Single denture I	5 and 6
49	Single denture II	7
50	Tooth overdenture I	8
51	Tooth overdenture II	9
52	Tooth overdenture III	10
53	Implant overdenture I (retained)	11
54	Implant overdenture II (supported)	12
55	Implant overdenture III (abutments)	13
56	Geriatric Patients	14
57	Digitation of removable Prosthodontics	15 and 16
58	CAD /CAM removable Prosthodontics	17

5- Teaching and learning methods:-

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Seminars	$\sqrt{}$	V	-	V
2	Small group discussion	V	V	-	V
3	Clinical sessions (demonstration)	V	V	V	V

## 6- Teaching and learning methods of disables :-

1. No methods

## 7- Activities and sources of teaching and learning:-

S	Activities and resources	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Research work and writing	V	V	V	V
2	Clinical Requirements	V	V	V	V
3	Scientific Seminars	V	V	-	V

## **Sources of teaching and learning:**

- 1-Faculty library
- 2-Lecture rooms
- 3-Clinics
- 4-Labs

## 8- Student assessment :-

## a- Student assessment methods

No	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Final written exam	$\sqrt{}$	V	-	V
۲	Oral exam	V	V	-	V
3	Practical and clinical examination	V	1	V	V

## **b-** Assessment schedule

No	Method	Week
1	Final written exam	Evenue held on Annil on Nevember
2	Oral exam	Exams held on April or November
3	Final Practical and clinical Exam	

# d- Weighting of assessments

No	Method	Weight	Proportion
١	Final written examination	180	(31.5%)
۲	Oral and clinical case presentation exam	190	(33.33%)
3	Practical examination	200	(35.08 %)
4	Total	570	(100%)

## 9- List of references

S	Item	Type
1	1-Prosthodontic treatment of edentulous patient. <b>Zarb</b> 13 <sup>th</sup> Edition. Elsevier	Textbook
2	2-Winkler.ESSENTIALS OF COMPLETE DENTURE PROSTHODONTICS.	Textbook
3	<b>3-CarrAB,and David T</b> . BrownMcCracken's Removable Partial Prosthodontics - Elsevier E-Book on VitalSource, 12th Edition. 2011.	Textbook
4	<b>4-Phoenix RD, Cagna DR, DeFreest CF:</b> Stewart's Clinical Removable Partial Prosthodontics. fourth Edition. Quintessence Publishing Co, Inc. 2008	Textbook
5	5-Journal of prosthetic dentistry	Scientific journal
6	<b>6- Beumer III J, Marunick M T, and Esposito S J.</b> Maxillofacial Rehabilitation: Prosthodontic and Surgical Management of Cancer-Related, Acquired, and Congenital Defects of the Head and Neck, Third Edition. Quintessence Publishing Co, Inc. 2011	Textbook
7	<b>7-Carl E. Misch.</b> Contemporary Implant Dentistry, 3rd Edition 2008	Textbook
8	10.Osborne J, And LammieG.A.Partial Denture.	Textbook

# 10- Matrix of knowledge and skills of the course

No	Topics	Basic knowledge	Intellectual skills	Professional skills	General skills		
	Complete Denture Course						
1	Recent Diagnostic tools and Treatment plan.	a.2	b.1	c.1	d1 d2 d3		
2	Basic and recent impression techniques and theories.	a.3	b.2	c.2	d1 d2 d.3 d.4		
3	Digital Mandibular movements & Articulators	a.4	b.3	c.3	D1 d.2 d.3 d.6		
4	Digital face bow and graphic tracing.	a.5	b.1 b.3 b.4	c.3	d1 d2 d.3 d.6		
5	Jaw relations.	a.4 a.5	b.4	c.3 c.4	D1 d.2 d.3		
6	Try- in.	a.7	b.5 b.6	c.6	d1 d2 d.3		
7	Occlusion theories and concepts and occlusal analysis techniques	a.5	b.3	c.13	d.1 d.2 d.3		
8	Digital smile design and esthetic in complete denture.	a.6	b.5	c.5	d1 d2 d.3 d.6		
9	Insertion of complete denture	a.8	b.6	c.7	d1 d2 d.3 d.4		
10	Post insertion complaint and management	a.8	b.6	c.7	d.1 d.2 d.3 d.4		
11	Retention, Support & Stability.	a.1	b.1	c.1	d1 d2 d.3		

12	Relining & Rebasing techniques.	a.9	b.7	c.8	d1 d2 d.3
13	Recent trends in complete denture construction	a.10	b.7		d.1 d.2 d.3 d.6
	Remo	vable partial	denture cours	e	
14	Examination and evaluation of diagnostic data.	a.2	b.1 b.8	c.1	d1 d2 d.3 d.7
15	Treatment plan.	a.2 a.11	b.2	c.1	d.1 d.2 d.3 d.7
16	Principles of RPD.	a.12	b.8	c.9	d1 d2 d.3
17	Mouth preparation.	a.13	b.8	c.12	d1 d2 d.3
18	Impression registration Control of gagging and saliva. Special impression procedures for tooth-tissue supported RPD.	a.3	b.8	c.2	d.1 d.2 d.3 d.5
19	Digital surveyors. Removable partial denture components.	a.13	b.8	c.12	d1 d2 d.3 d.4
20	Different Classification Systems Of removable partial denture	a.11 a.12	b.8	c.10	d1 d2 d.3
21	Kennedy classes and design of RPD. Class I	a.12	b.8	c.10	d1 d2 d.3

			<b>L</b> 0		d1 d2	
22	Class II.	a.12	b.8	c.10	d1 d2 d.3	
23	Class III.	a.6 a.12	b.8	C10 c.11	d1 d2 d.3	
24	Class IV & Esthetics for RPD	a.17	b.8	c.9	d1 d2 d.3	
25	Fitting of the framework.	a.5	b.8	c.13 c.14	d1 d2 d.3	
26	Establishing of occlusal relationship for RPD	a.14	b.8	c.11 c.15	d1 d2 d.3	
27	Try-in of RPD & insertion of RPD.	a.14	b.8	c.11 c.15	d1 d2 d.3	
28	Tissue damage caused by RPD.	a.15	b.8	c.11 c.15	d1 d2 d.3	
29	Stresses induced by RPD	a.15	b.8	c.11 c.15	d1 d2 d.3	
30	Management of tissue damage.	a.14 a.16	b.8	c.11 c.15	d1 d2 d.3	
31	Patient's complaint &Repair and addition of RPD	a.14	b.8		d1 d2 d.3	
32	Recent trends of removable partial dentures	a.17	b.1 b.9	c.1 c.16	d1 d2 d.3 d.6	
	Maxillofacial course					

33	Management of congenital cleft palate. ( basic and recent)				
		a.17	b.9	c.16	d1 d2 d.3 d.7
34	Recent modalities for managing acquired cleft palate an lip cases Immediate obturator. Temporary obturator. Permanent obturator. Hollow pulp obturator. Roofless obturator Two pieces obturator. Meatal obturator. Obturator for dental cyst.	a.17	b.9	c.16	d1 d2 d.3 d.7
35	Stents & Splints.	a.17	b.9	c.16	d1 d2 d.3
	Prosthetic management of irradiated patients.	a.17	b.9	c.16	d1 d2 d.3 d.7
37	Recent restoration of Nasal prosthesis	a.17	b.9	c.16	d1 d2 d.3 d.7
38	Recent restoration of Ocular prostheses	a.17	b.9	c.16	d1 d2 d.3 d.7

39	Recent restoration of Cranial prostheses	a.17	b.9	c.16	d1 d2 d.3
40	Retention of maxillofacial Prosthesis	a.17 a.18	b.9	c.13 c.16	d1 d2 d.3 d.7
41	Implants of maxillofacial Prosthesis	a.17	b.9	c.16	d1 d2 d.3 d.6
42	Recent trends of maxillofacial prostheses	a.17	b.9	c.16	d1 d2 d.3
43	Immediate Dentures	a.19	b.10	c.17	d1 d2 d.3
	Spec	ial Prostho	dontic Cours	se	
44	Attachment retained removable partial denture (intracoronal)	a.19	b.10	c.17	d1 d2 d.3
45	Attachment retained removable partial denture (extracoronal)	a.19	b.10	c.17	d1 d2 d.3
46	Attachment retained overdenture (stud)	a.19	b.10	c.17	d1 d2 d.3
47	Attachment retained overdenture (Bar)	a.19	b.10	c.17	d1 d2 d.3
48	Single denture I	a.19	b.10	c.17	d1 d2 d.3
49	Single denture II	a.19	b.10	c.17	d1 d2 d.3
50	Tooth overdenture I	a.19	b.10	c.17	d1 d2 d.3
51	Tooth overdenture II	a.19	b.10	c.17	d1 d2 d.3

52	Tooth overdenture III	a.19	b.10	c.13 c.17	d1 d2 d.3
53	Implant overdenture I (retained)	a.19	b.10	c.13 c.17	d1 d2 d.3
54	Implant overdenture II (supported)	a.19	b.10	c.13 c.17	d1 d2 d.3
55	Implant overdenture III (abutments)	a.19	b.10	c.17	d1 d2 d.3
56	Geriatric Patients	a.19	b.10	c.17	d1 d2 d.3
57	Digitation of removable Prosthodontics	a.18	b.9	c.16	d1 d2 d.3 d.6
	CAD /CAM removable Prosthodontics	a.18	b.9	c16	d1 d2 d3 d.6

# **Course Coordinator(s):**

- Prof/Mohamed Fouad

**Head of department:** -Prof / Salah Hegazy