

#### Model (No 12)

#### Course Specification: Removable prosthodontics (pre-clinical complete and partial denture technology)

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

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

**Department: Removable Prosthodontics** 

# 1- Course data :-

Course name:

pre-clinical Study year: Code:304 Pr second year complete/ partial

denture technology

Specialization: Bachelor's degree of dentistry

> Lecture:2h/ per week for 27 weeks

Practical:4h/ per week for 27 weeks

Number of units: 27

### 2- Course aims :-

The aim of this course is to provide students with knowledge and skills on preclinical steps needed for construction removable complete and partial dentures

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

# a- Knowledge and understanding

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

- 1. Demonstrate sound knowledge of the biological and technical aspects of complete and removable partial dentures and their integration with the clinical procedures which will be taught in the succeeding clinical prosthodontic course
- 2. Apply all the laboratory procedures related to the construction of complete dentures
- 3. Repair any broken denture
- 4. List the requirements of proper selection and arrangement of teeth.
- 5. Identify and describe the various components of a removable partial denture
- 6. Illustrate the basic knowledge of how to design a removable partial denture framework
- 7. Apply the basic laboratory procedures related to the construction of the removable partial denture
- 8. Identify the different material, instruments and devices involved in the construction of complete dentures and removable partial dentures as well as their uses.

#### **b-** Intellectual skills

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

- 1. Interpret the nature of anatomical landmarks and prosthetic significance.
- 2. Analyze data for proper tray selection.
- 3. Differentiate between different types of record blocks.
- 4. Distinguish various mandibular movements and their prosthetic significance
- 5. Classify articulators and their uses
- 6. Plan the correct occlusion scheme according to the case
- 7. Assess errors during processing stage and then during the finishing stage and their correction.
- 8. Distinguish the need for denture repair.
- 9. Differentiate between different PPD classes
- 10. Plan the correct metallic framework designs
- 11. Recognize different removable partial denture components and principles of choosing from them.
- 12. Distinguish various steps for construction and repair of removable partial denture

# c- Professional and practical skills

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

- 1-Interpret intraoral and extraoral anatomical landmarks soft tissue and bony Structure.
- 2-interpret the importance of the ridge shape and form and the shape of the palate in complete denture stability and retention
  - 3-Develop proper skills for construction special trays and record blocks
  - 4- Sketch the proper occlusal plane height and orientation for maxillary and mandibular record blocks
  - 5-Design the most fast, easy and accurate method used to mount master casts
  - 6-Solve the flasking errors during the processing step.
  - 7-Apply the rules of partial denture designing in each case
  - 8-Demonstrate the biomechanical difference between each partial denture class

#### d- General and transferable skills

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

- 1- Develop skills on different pre-clinical steps construction
- 2- Work productively in a team.
- 3- Fast management of the team in student competitions

# 4- Course contents :-

No	Topics	Week
1	Introduction to prosthodontics	1
2	Anatomical landmarks	1
3	Record blocks	1
4	Mandibular movements	1
5	Articulators and mounting the casts	1
6	Jaw relation terminology and occlusion	1
7	Selection of artificial teeth	1
8	Arrangement of ant teeth	1
9	Arrangement of post teeth	1
10	Complete denture wax-up	1
11	Post palatal seal and relief	1
12	Flasking procedures and deflasking	1
13	Principles of finishing and polishing	1

14	Denture repair	1
15	Classification of partially edentulous patients	1
16	Surveying	1
17	Components of partial denture :denture base	1
18	Components of partial denture : rests	1
19	Components of partial denture : retention	1
20	Components of partial denture : retention	1
21	Components of partial denture : retention	1
22	Components of partial denture : major and minor connector	1
23	Components of partial denture : Major and minor connector	1
24	Components of partial denture : Indirect retainer and stress breaker	1
25	Designing of metallic framework	2

26	Material used in removable partial denture	2
27	Processing of removable partial denture	2

5- Teaching and learning methods:-

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Lectures (power point presentations)	<b>√</b>	<b>✓</b>		
2	Laboratory sessions (demonstration)		✓	✓	✓
3	Small group teaching in the evaluation		<b>✓</b>	✓	✓

# 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	Students's competition		✓	✓	✓
2	Requirements (laboratory casts)		✓	<b>✓</b>	

# 8- Student assessment :-

# a- Student assessment methods

No	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Final written exam	✓	✓		
۲	Structured Oral exam	✓	✓		
3	Monthly evaluation, requirements and Ongoing MCQ assessment	<b>✓</b>	<b>✓</b>	<b>✓</b>	
4	Practical examination		✓	✓	

# **b-** Assessment schedule

No	Method	Week
1	Final written exam	A 4 4 ho and of 4 ho man
2	Structured Oral exam	At the end of the year
3	Monthly evaluation , requirements and ongoing MCQ assessment	At fourth and seventh week of the first and second term

# d- Weighting of assessments

No	Method	Weight
١	Final written examination	60 (50%)
۲	Structured Oral examination	15 (12.5%)
3	Practical examination	30(25%)
4	Monthly evaluation , requirements and ongoing MCQ assessment	15 (12.5%)
	Total	120 (100%)

# 9- List of references

S	Item	Туре
1	Preclinical complete and partial denture( departement	Notes
2	Textbook of Complete Dentures. Rahn AO ,heartwell CM, 5 <sup>th</sup> edition 1992	Textbook
3	Dental laboratory procedures Vol 1 (complete denture ) Rudd and Morrow	Textbook
4	Dental laboratory procedures software (made by associate lecturers under supervision of staff members)	Notes

# 10- Matrix of knowledge and skills of the course

No	Topics	Week	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Introduction to prosthodontics	1	a.7 a.8	b.1 b.10	c.6	d.1 d.2 d.3
2	Anatomical landmarks	2	a.7 a.8	b.1 b.10	c.6	d.1 d.2 d.3
3	Record blocks	3	a.7 a.8	b.1 b.10	c.7 c.6 c.9	d.1 d.2 d.3

4	Mandibular movements	4	a.7 a.11	b.1 b.10	c.7 c.6 c.9	d.1 d.2 d.3
5	Articulators and mounting the casts	5	a.7 a.11	b.1 b.10	c.7 c.6 c.9	d.1 d.2 d.3
6	Jaw relation terminology and occlusion	6	a.7 a.11 a.8	b.1 b.10	c.7 c.6 c.9	d.1 d.2 d.3
7	Selection of artificial teeth	7	a.7 a.11 a.8	b.1 b.10	c.7 c.6 c.9	d.1 d.2 d.3
8	Arrangement of ant teeth	8	a.7 a.11 a.8	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
9	Arrangement of post teeth	9	a.7 a.11 a.8	b.1 b.10	c.9 c.7 c.6	d.1 d.2 d.3
10	Complete denture wax-up	10	a.7 a.11	b.1 b.10	c.9 c.7 c.6	d.1 d.2 d.3
11	Post palatal seal and relief	11	a.7 a.11	b.1 b.10	c.7 c.9	d.1 d.2 d.3
12	Flasking procedures and deflasking	12	a.7 a.11	b.1 b.10	c.7 c.9	d.1 d.2 d.3
13	Principles of finishing and polishing	13	a.7 a.11	b.1 b.10	c.7 c.9	d.1 d.2 d.3
14	Denture repair	14	a.7 a.11	b.1 b.10	c.7 c.9	d.1 d.2 d.3
15	Classification of partially edentulous patients	15	a.7 a.11 a.8	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
16	Surveying	16	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3

17	Components of partial denture :denture base	17	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
18	Components of partial denture: rets	18	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
19	Components of partial denture: retention	19	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
20	Components of partial denture: retention	20	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
21	Components of partial denture : retention	21	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
22	Components of partial denture: major and minor connector	22	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
23	Components of partial denture: Major and minor connector	23	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
24	Components of partial denture: Indirect retainer and stress breaker	24	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
25	Designing of metallic framework	25	a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
26	Material used in removable partial denture		a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3
27	Processing of removable partial denture		a.7 a.8 a.11	b.1 b.10	c.7 c.9 c.6	d.1 d.2 d.3

Course Coordinator(s):
- Ass/ Prof : Mostafa El-Sayed
-Ass/Prof : Radwa Emira

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