



Model (No 12)
Course Specification: Fixed Prosthodontics

Faculty of Dentistry
Farabi Quality Management of Education and Learning - 17/3/2016

University: Mansoura University

Faculty: Faculty of Dentistry

Department: Fixed Prosthodontics

1- Course data:

Course Name: Fixed Prosthodontics Code: P 202 Cb

Specialization: Master of dental science Fixed Prosthodontics

Study year: 2016

Teaching Hours: Lecture: 3 hr / week (for 60 week)
Practical: 7 hr / week (for 60 week)

No. of units: 60

2- Course aims:

1. Provide the students with up to date knowledge in the field of fixed prosthodontics to ensure higher quality in both general and special areas of this field.
2. Prepare a candidate to make the correct, scientifically based and clinically oriented, clinical decisions, diagnosis and treatment planning.
3. Train the graduate student to obtain a novel and meaningful research on a chosen and approved topic which will culminate in a thesis to be presented and defended in an examination by a panel of examiners.
4. Learn the candidate proper techniques of scientific writing carry on the research relatively independently and demonstrate satisfactory, critical thinking ability to execute the research as approved honesty, thoroughness, and intellectual curiosity and to desire to add to knowledge in the chosen area of the research.

3- Intended learning outcomes of course (ILOS):

A) Knowledge and understanding

- a.1 Define basic concepts relating to the fabrication of fixed prosthodontics.
- a.2 Outline the types of fixed restorations.
- a.3 Explain the differences between a removable partial dentures and a fixed restorations.
- a.4 Discuss basic principles for tooth preparation as they related to fixed prosthetics.

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- a.5 Review materials used for the fabrication of fixed metal restorations, including composition and principles for manipulation and safety.
 - a.6 Explain the safe use and maintenance of laboratory instruments and equipment used for the fabrication of fixed restorations.
 - a.7 Describe the principles for impression taking using various methods and materials.
 - a.8 Describe aesthetics form and function as they related to the fabrication of fixed restorations.
 - a.9 State gingival margin preparations and their influence on the fabrication of fixed restorations.
 - a.10 Outline post crowns, including principles relating to their design and fabrication.
 - a.11 State the different adhesive techniques.
 - a.12 Delineate a prosthodontics model for a dental implant.
 - a.13 List the recent advances in dental ceramics.
 - a.14 Express the different designs of laminate veneers.
 - a.15 List the uses of laser technology in fixed prosthodontics.

B) Intellectual skills :

- b.1 Arrange the basic principles of comprehensive diagnosis and treatment plane.
- b.2 Compare the different designs and techniques in construction of fixed prosthesis.
- b.3 Formulate the criteria for a successful restoration and to criticize and evaluate a finished fixed restoration.
- b.4 Predict acceptably all of the clinical procedures involved in fixed prosthodontics construction.
- b.5 Measure the various causes of fixed prosthodontics failures and their management.
- b.6 Evaluate more difficult procedures for the fixed partial denture tooth replacement. They are expected to increase both qualitatively and quantitatively their clinical activities in fixed prosthodontics to prepare for the variety of experiences that will be found in clinical practice.
- b.7 Relate the esthetic criterias in fixed prosthodontics.
- b.8 Plan the different designs and techniques in construction of implant-supported fixed prosthesis.
- b.9 Classify different types of precision attachments and their specific uses.
- b.10 Inspect features of periodontal compromised abutments.
- b.11 Measure protocols of cooperation between the prosthodontics and other specialties.
- b.12 Select clinical activities in fixed prosthodontics.

- c) Professional and practical skills:
- c.1 Show structured opportunity for advanced clinical training and hands-on experiences in fixed prosthodontics.
 - c.2 Illustrate adequate number of cases that will be arranged to assure that the student acquires adequate training in these areas of prosthodontics. As the student advances in training more complicated cases will be assigned for treatment.
 - c.3 Operate clinical sessions which are the means of meeting the prescribed clinical requirements of the graduate students.
 - c.4 Analyze technical difficulties that may be encountered during treatment plan.
 - c.5 Develop the strong component of the clinical session is the “Log Book” in which the details of a comprehensive prosthodontics care must be entered and be open or accessible for evaluation by the teaching staff.
 - c.6 Demonstrate lost functions of stomato-gnathic system namely mastication, speech, appearance and psychological comforts, by understanding biological, biomedical, bioengineering principles
 - c.7 Illustrate clinical and laboratory procedures with understanding of biomaterials, tissue conditions related to prosthesis and have competent dexterity and skill for performing clinical procedures in crown & bridge.

d) General and transferable skills :

- d.1 Utilize of IT including word processing, spread sheets and PowerPoint.
- d.2 Manage the inter personal skills to be able to communicate with patients, instructors and technicians and deliver the information to patients in a professional way
- d.3 Develop psychomotor skills to be able to perform proper treatment under stressful circumstances.
- d.4 Create a high level of competence in the time management .
- d.5 Utilize different resources for information and knowledge.

4. Course contents: -

No	Topics	
1	Diagnosis and treatment plan.	1,2,3
2	Design of tooth supported F.P.D.	4,5,6,7
3	Space problems and its management	8,9,10,11,12
4	Biological and periodontal consideration in tooth preparation.	13,14,15,16
5	Mechanical and esthetic consideration in tooth preparation.	17,18,19

6	Tissue management prior to impression making.	20,21,22
7	Impression materials and techniques.	23,24,25
8	Esthetic considerations in fixed prosthodontics	26,27,28,29
9	Adhesives in fixed prosthodontics	30,31,32,33,34
10	Biomechanical, restorative and esthetic considerations in dental implants	35,36,37,38,39
11	Cantilever bridges	40,41
12	Advanced ceramics(materials and techniques)	42,43,44,45
13	Rehabilitation of severely worn dentition	46,47,48,49,50
14	Laser application in fixed prosthodontics.	51,52
15	Management of the medically compromised /elderly patients	53
16	Restoration of mutilated endodontically treated teeth.	54,55,56
17	Pontic design for fixed prostheses.	57,58
18	Laminate veneers	59,60

5- Teaching and learning methods:-

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Lectures	√	√		
2	Practical demonstration	√		√	√
3	Case description	√	√	√	√
4	Power point presentation			√	√
5	Live show demonstration			√	√

6- Teaching and learning methods of disables :-

- None

7- Activities and sources of teaching and learning :-

S	Activities and resources	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Requirements			√	√
2	Poster presentation			√	√
3	Seminars	√	√		√
4	Workshops			√	√
5	Conference	√	√		√

*** Resources :**

(Dental clinics equipped with units and instruments – Laboratory – Library)

8- Student assessment :-**a- Student assessment methods**

No	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Written examination	√	√		
2	Oral examination	√	√		√
3	Practical examination		√	√	
4	Clinical examination			√	√

b- Assessment schedule

No	Method	Week
1	Written exam	June or November
2	Oral examination	June or November
4	Clinical examination	June or November

c- Weighting of assessments

No	Method	Weight	proportion
1	Written exam	200	50 %
2	Clinical examination	150	40 %
3	Oral examination	50	10 %
	Total	400	100%

9- List of references

S	Item	Type
1	A- Course Notes	- Lecture's power points
2	B- Essential Books (Textbooks):	- Contemporary Fixed Prosthodontics, 5 th edition 2015 by Rosenstiel. - Fundamentals of fixed prosthodontics, 4 th edition 2013 by Herbert T. shillingburg.
3	C- Recommended Journals:	- Prosthetic dental journal. - J.F Dental materials journal. - A Mercian dental association.
4	D- Periodicals, websites, etc.	www.pubmed.com www.sciencedirect.com www.blackwell.com

10- Matrix of knowledge and skills of the course

S	Items	Details	Basic knowledge	Intellectual skills	Professional skills	General skills
	Course contents	Diagnosis and treatment plan.	a.1 a.2 a.3	b.1	c.1 c.2 c.4	d.1,d.2,d.3,d.4, d.5
		Design of tooth supported F.P.D.	a.1 a.5	b.2	c.1 c.2 c.5	d.1,d.2,d.3,d.4, d.5
		Space problems and its management	a.1 a.3	b.2	c.2 c.5	d.1,d.2,d.3,d.4, d.5
		Biological and periodontal consideration in tooth preparation.	a.4	b.3	c.6	d.1,d.2,d.3,d.4, d.5
		Mechanical and esthetic consideration in tooth preparation.	a.4	b.3 b.12	c.6	d.1,d.2,d.3,d.4, d.5
		Tissue management prior to impression making.	a.5 a.6 a.7	b.4	c.3	d.1,d.2,d.3,d.4, d.5
		Impression materials and techniques.	a.5 a.6 a.7	b.12	c.7	d.1,d.2,d.3,d.4, d.5
		Esthetic considerations in fixed prosthodontics	a.8	b.7	c.6	d.1,d.2,d.3,d.4, d.5
		Adhesives in fixed prosthodontics	a.5 a.11			d.1,d.2,d.3,d.4, d.5
		Biomechanical, restorative and esthetic considerations in dental implants	a.8 a.12	b.8	c.7	d.1,d.2,d.3,d.4, d.5
	Cantilever bridges	a.1 a.2			d.1,d.2,d.3,d.4, d.5	

	Advanced ceramics(materials and techniques)	a.13			d.1,d.2,d.3,d.4, d.5
	Rehabilitation of severely worn dentition	a.11	a.5	c.6 c.2	d.1,d.2,d.3,d.4, d.5
	Laser application in fixed prosthodontics.	a.15			d.1,d.2,d.3,d.4, d.5
	Management of the medically compromised /elderly patients		b.10	c.6 c.2	d.1,d.2,d.3,d.4, d.5
	Restoration of mutilated endodontically treated teeth.	a.10	b.11	c.6 c.2	d.1,d.2,d.3,d.4, d.5
	Pontic design for fixed prostheses.	a.9	b.9	c.1	d.1,d.2,d.3,d.4, d.5
	lamine veneers	a.14 a.5			d.1,d.2,d.3,d.4, d.5

Course Coordinator(s): -

Prof Dr. Ahmed Attia

Prof. Dr. Aml Sakrana

Head of department: -

Prof Dr. Mohamed Ghazy